

Dedicated to the historic preservation and/or modeling of the former CMStP&P/Milw. "Lines West"

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OPERATING IN THE MILWAUKEE ROAD SUBSTATIONS By Jack Barger

EDITORS NOTE: This text is from the personal recollections and anecdotes as told by Mr. Jack Barger, Ex-Milwaukee Road Substation Operator. These comments were recorded and transcribed by Ed Burton at the MilWest Annual Meet - 1993 - Cle Elum, Washington. This article will run over several 1994 issues of the Dispatch.

PREFACE, by ED BURTON: On the 14th of August, 1993, in conjunction with the annual MilWest meet in Cle Elum, we were able to tour the former MILW substation at Cle Elum. The Cle Elum substation is only one of a few original brick substations remaining on the Milwaukee Road corridor across Montana, Idaho, and Washington. It is the only remaining peaked roof facility amongst the remaining flat roof buildings.

Mr. David Fluke, the trustee for the owners of the substation, kindly opened the brick substation at Cle Elum for our inspection on Saturday, 15 August, 1993. However, perhaps "opened" is rather a misnomer, for Mr. Fluke, on his own time and at his own expense, went to CleElum a day ahead of time and cut down the large growth of weeds that surrounded the building.

Fortunately, with the exception of some minor weather caused brickwork damage, and the fact that nearly every windowpane is broken out, the building is in good repair. To be sure, the local pigeon population has made their homes in the lofty heights of the building, as the COPIOUS amounts of their droppings attested to. But other than that, and the trash left from when the building was stripped, it is still a breathtaking sight both internally and externally! In fact, some of us die-hards could actually smell the warm transformer oil and hear the whine of the motor generator (Cle Elum only had one MG set).

Of special note was the presence of Mr. Jack Barger, a long

FEATURES THIS ISSUE

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Page 9: A review of the most recent publication of "The Nation Pays Again". time operator in the Milwaukee's extensive string of substations across the Pacific Northwest. He graced the Friday evening slide show with his knowledge, recollections, and stories of his times served as an operator and fireman on our favorite railroad!

This day was quite educational to those of us who were able to be present, and made even more poignant by the personal anecdotes provided by Mr. Barger. We appreciate both his and Mr. Fluke's contribution to the meet.

I tape recorded his narrative during the tour of the Cle Elum substation. The transcript of the recording follows.

JB: (Jack Barger) I see that the handles inside are different that the East end (meaning the Easternmost substations). They don't have any GROUND SWITCHES outside here either, they must have taken them down. Those two insulators on the end were where the ground switches were, and those two things on the other end are HORN GAPS. You see where the little ears go around, when lightning would come down or when high currents travel through a wire, it has a tendency to want to not bend at the corner and follow the copper, it just arcs across the one, that's ground. Its the path of least resistance anyway.

The clapper levers were set up on those insulators on the end. That was your EAST TIE big "O" CLAPPER SWITCH. And that pipe running down through the roof, you can see the pipe coming through, that's what closed them, and they were closed inside the office.

It was also the same on the west. The one in the middle was the tie that tied the two together on the trolley. So you had the AIR GAP out here on your trolley wire. They were actually insulated from each other and not electrically connected until you closed that TIE SWITCH.

If a train was coming by pulling heavy current, and he went over that AIR GAP, he would draw an arc, and they did that a couple of time and burned the trolley in two, and tore the trolley down on top of the train! This happened every once in awhile!

The best one was at Rocker, Montana, when they put the four units together on the Milwaukee, and we had a gap there. The Butte Anaconda and Pacific Railway voltage was 2300 and ours was 3400. They were backing into Rocker to pick up

something of the BA&P and they jumped the gap! He had the pantographs up on both ends of the unit instead of just one end. Jumping the gap tied to two voltages together and things got exciting.

It knocked out the Missouri River substation and the Janney substation. It burnt the trolley in two but it didn't hurt the locomotive.

EB: (Ed Burton) Didn't they have to stay inside the locomotive until they could throw the wire over?

JB: Oh no, it tripped the stations out and everything was dead. Until one of them tried to come back on the line and things started firing up again! On DC you have to realize this, a ground on the trolley a long way off was just like a load! And with the types of relaying they didn't have the sense to know what it was, and your just pumping power into the ground. But with AC, you have something that the relay system senses that something different is wrong, because it is cycling at 60 cycles per second.

EB: Due to the size of the contact patch at any given moment between the pantograph and the trolley wire, such a small patch, how in the world could all that current make it?

JB: Yea, its amazing, and how its moving too you know!

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Managing Editor, Rocky Gibbs, 444 W. 15th Ave. Spokane, WA 99203-2110 Someone was asking me how often do they have to replace the trolley. It was amazing! There was one place in Steinheimer's book where it tells how much wear was on it. I figured probably 3/16th of an inch from when they put it in until 1950.

AJ: (Art Jacobsen) That's one reason the Milwaukee used DOUBLE CONTACT WIRE on all its lines.

JB: On the Mainlines, year

AJ: The mainline is double contact. Now the sidings were all single contact wire. The mainlines were double because of the high currents and the big locomotives.

JB: And then they doubled the FEEDERS also, up over the hills. When they first got the Joe's, we were coming out of Harlowton on a Joe, and it was hotter than the dickens, and we were about to Valencia, and the engineer said "look at that trolley!" It was hanging just like a wet noodle (illustrates with his hands). We're drawing all that current from Two Dot from one direction and we were loosening that wire up. He shut her down and coasted. We came to a stop with the trolley sagging. In about 45 minutes, the trolley tightened right back up. But we had been annealing that trolley so they put up a double feeder all the way to Harlowton to help carry the current.

AJ: That's the only reason it didn't wear so much, the power runs through on the periphery and not through the center of it. If you find a way to get into the middle of a wire without getting electrocuted, you would find no electricity in the center of that solid conductor.

JB: Trollies were pretty tough, in the wintertime we'd get the heavy frost on the trolley, generally the heavy current and the heat of it would melt the ice off. But at times, it would just burn grooves in the pantograghs. They put graphite grease on them and everything to help lubricate them. It conducted electricity too. They didn't have too much trouble. The Joe's were the worst because of the high current.

AJ: Overall, there wasn't a whole lot of rubbing on it until things got worn because the current would act as a buffer itself.

JB: Right, yes, in theory-wise. You think about these experiments that they've done to find out what was actually happening, and they proved what was really going on. I remember one time somebody got smart, climbed the poles between the cutoff between Grace and Cedric, and they got up and cut the DC feeders off at both ends, rolled it up, and had it in their truck and out of there overnight, and the next train came the next day. Talk about a wet noodle, they had to shut the railroad down until they did something about the wire. They cut the train in two and took half of it to the top of the hill and brought another one back. But they had stolen twoand one-half miles of 250 circular mil copper cable overnight. They went up there and it had rained. You couldn't see any signs that anyone had been in the area, so they got away with it. They later found it up in Canada somewhere, cut up in pieces. So they finally caught them, I just don't know where.

EB: If they had to take out a span to work on something, they could drop the pantograph and the speed of the train would carry them past.

JB: Oh yeah, I could tell that story. They had the trolley pulled out of line on that bridge just out of Valencia. They were re-piling or doing something, they had to run the pilings you know. So they pulled the trolley out of line, and we were doubleheading a passenger train/troop train up to Loweth, and we were coming back light with the Westinghouse locomotive. Going up, Ross forgot to drop the front pan, he had it up when we went to back up. He tore it right off!. And coming back from Loweth after we had cut off, I told Ross as we went through Martinsdale, "don't forget to drop the damn pan when we get down there", and damned if he didn't forget it. We had to coast into Harlowton and the switch engine had to come out and pull us into the roundhouse. Both pans were gone. Good ol' Ross.

Well, if you want to go inside I'll show you around. (now inside) You see this rubber matting here. I don't know if it would save your life or not, it probably would have in its day, but I wouldn't trust it. It was used in front of all the control paneling. It was pure rubber. I'm amazed to see a piece still lying around. They tell me, I didn't realize before, that Cle Elum was a one MG station. They built it for two, and it had both pit openings in the floor in which to place the MG sets.

Evidently, there is wood over that hole there and there's wood over this hole.

They had blowers in the basement that ran off the 2300 volts which came from the low side of the transformers, that cooled the generators. They had big squirrel-cage fans on them. And they automatically came on line when you started up the machines and put it on the running switch. The switch panels

built off the wall, and the tanks were in there beside the enclosures. You can see the bolt holes. They were built and covered with doors so we could take them off. They were OIL SWITCH TANKS and the turnbuckle control that controlled the switches were on turnbuckle type connections so that when you moved the STARTING SWITCH to start the machine and start the generator rotating. The synchronous motor in the middle is what we were putting current into, 750 volts, three-phase, when you closed the starting switch. After that it went through a little oil breaker which had tanks on them. We used to drop those tanks and do maintenance on them about every

two or three months. We'd put new contacts on the blades because they'd burn from when you closed the switch, or especially when you opened it. You'd break that current the synchronous motors were pulling and arc these contacts.

As soon as the synchronous motor got up to speed, or while coming up to speed, you'd go around and check your oil rings. They had oil cups and you'd look into them to see if the ring was turning and lubricating. They were all old babbitt bearings in these generators. They had those bearings on each side of the synchronous motor, plus on the other end where the exciter was on the end of your DC generator. As soon as it was up to speed, you'd go over and close the little switch in the middle of the panel and when your field indicators came up to the right readings, you'd drop the starting switch out and quickly throw the running switch in. This would tie it onto the other three legs of the out of the transformer which was a full 2300 volts. Now this was totally electrically sperate from anything you were doing with the trolley. This is just the AC side of the machine.



MilWest members at the Cle Elum substation, August 1993

The next thing you would do is go over to your panel up here at whichever machine you were going to start. The first thing I used to do was to go around and check my voltage level of what voltage I wanted to come to anyway, when it went on the automatiline cally. There was a little control that they had designed that was under this old.., no, that isn't a lightning arrestor there, that's probably where the volt

meter was. They had a voltage recording chart in that box there. These stations were all different. But anyway, the first thing you would do is close the negative breaker, which was the "JR" breaker on the Eastern side. That was where the high feed of your DC generator connected to the rail. The next thing was to close the positive breaker which tied the DC to the buss that goes to the trolley. Then you could plug in your field switches and your exciter, which is your high end exciter, which is your DC feeder exciter on the end of the shaft on this end of the generator. Then you would bring your voltage up on the exciter and on your DC generator you turn the rheostat,

bring your voltage up and plug your voltmeter into either the trolley volts or the generator volts. You plug it in and your trolley voltage would come up to what it was. We wanted to go on-line at exactly the same voltage because when you connect two voltages of DC together, if you have the exact voltage and you don't have them apart, then you risk it. But that was the last thing you checked.

As soon as you got your generator up to the correct

Oil circuit breakers at East Portal MT, circa 1919, Gene Lyle collection

voltage, you'd plug back into the trolley, and if it hadn't changed, you'd close the disconnect switch which would put the machine on-line, and then you'd raise the voltage up, or if

it was automatic, it would raise the voltage and you'd start picking up amperage on your indicating amp meter above you. You had an indicating amp meter there to show you how much current your DC generator was putting out.

If you had a train coming out of....where would be the next station down....Cle Elum....coming out of Kittitas, as soon as he'd go by that station, you'd start to pick up a little bit of the current from the train. The farther he came, the higher your

current would go. On the heavier grades, why, as soon as your machine go to say 800 amps, the big machines would carry a load of 1000 amps of DC. The smaller machines like at Piedmont, Janney, and Avery, were three smaller machines good for 750 amps per machine. These here, the bigger GE sets were rated at 1200 amps when built, but they were only rated at 1000 amps by the time I was operating. For example, East Portal had three big generators and when you had two trains coming up both sides you would have a full 3000 amps load! In fact, the closer they got to you, they would start cutting voltage automatically because of the voltage control. As soon as they reached the peak of their current capacity, they would automatically start lowering the voltage. The closer the trains came to the station the lower your voltage would get. They could load you down to 2500 volts from 3400.

What was fun when you had a meet at East Portal and you had a guy coming east up the hill, generally, the guy going up the hill is going to head into the siding, that's the way we handled it unless the train was too long, which meant they would saw by each other. Anyway, they'd head in. The other guy would go into regeneration going down the hill. When you went into regeneration, we had these BALANCING RELAYS that helped a little bit. When one would start and you had two machines on-line, and they're all going into regeneration, that's in the opposite direction. Your lines of flux in your generators would

turn in the other direction and your DC generators would become motors. Your synchronous motor in the center would actually become a generator and it would feed back through the transformer into the 100,000 volt line. So your making money there!

They had what they called shorting...they had little shorting coils that would automatically, when one machine would start regenerating too much, it would cut out so that the other one could catch up with it and try to keep them together,

because what would happen was that when a train would come out of the tunnel (in regeneration), and if you had a cold machine, it would try to grab all the load. You could just go into the corner and you could hear the ol' commutator throwing sparks and just start singing at you, and you'd back off and try to get it and catch them and get them together because the thing wouldn't automatically override it enough to get even.

I always tried to keep on-line, especially if the other guy was coming on shift, so that they (the generator sets) were all warm. Just as well put it on rather than have to bite it! Because when they flashed over and tripped out, tripped the machine off line when they were going down in regenerating, and when the other guy going down to Avery, he starts regenerating on you, and you have Avery on the phone saying "pick up as much as you can," you know, "lower it down as low as you can get your voltage!" Because if the Avery operator lowered his voltage, he would start picking up some of that regeneration from you so you wouldn't have all that extra load on you.

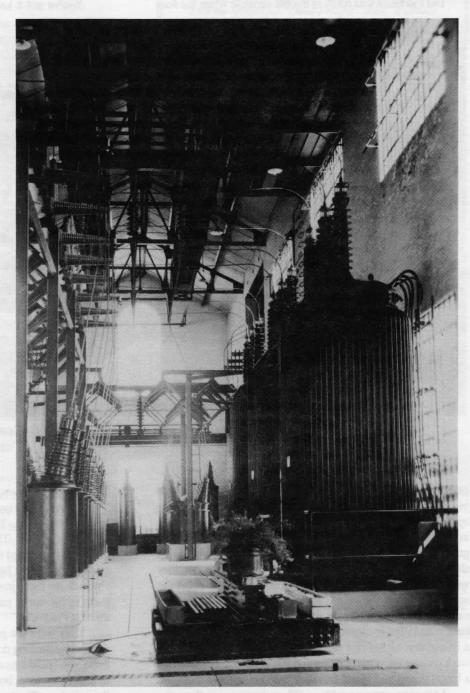
Piedmont was a bad one. Oh yea, it was just like a hydro plant, the only thing is we weren't using water to turn that generator like in a hydro plant, we were using a train going down the trail and his traction motors to turn these DC motors to turn the generator that put the power back.

EB: Was there a case where the Milwaukee generated more power than they used?

JB: Yes, somebody was going to ask me how much. When I was firing on the old locomotives, we

used to take readings on each unit when we left Deer Lodge. When we came over the top of the hill, we'd regenerate clear down to Piedmont, I think it was eighteen and one-half or maybe nineteen miles, we'd write down what was the kilowatt-

hour meter was on each unit. Because they'd reverse too, the meters could go backwards as they don't have any detent. A detent is a locking device that automatically stops it from reversing. If you worked in the power system, you'd understand what they use it for. Anyway, it was just a detent to keep the meter from turning backwards. But these meters would go



Transformer room at East Portal MT after completion of construction. circa 1919. Gene Lyle collection.

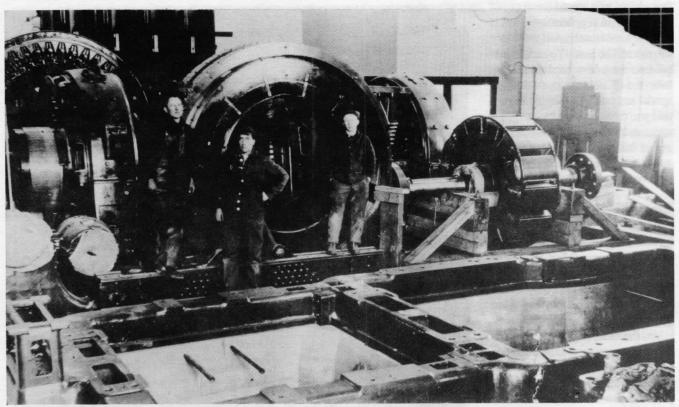
in either direction, the same way in the substations, we took readings on them too.

Going from, say, Butte to Donald on the Continental Divide hill, we would probably regenerate back almost forty percent of the power used going up the hill on the side, so we were making money with that train, going down the other side not using the brakes. In the later years, when they had longer trains, some of the old locomotives I guess were having problems, we had problems at that time too, but they had to use brakes part time.

But Piedmont was really in trouble because when the Joes

hill, like a passenger train and a big freight train with a helper motor and the head end being two big Joes and a four unit helper and a Joe, E21 on there, you'd regenerate so high on the passenger train so high that Piedmont couldn't hold them. They'd have Eustis come on the line and lower their voltage as much as they could, you know, to help.

You've got a loose line there, just like water in a pipe



Workers putting together MG sets at Drexel MT, 1916. Gene Lyle collection

came, with the 300 amp armatures on those big Joes, they'd just come screaming down there and they liked to regenerate up to 68 mph. They were beautiful for the poor old conductor in the caboose when they were going down a water grade, he's got that gentle ride, he'd go to sleep back there. You didn't sleep in a caboose before that, especially on the NP when they would slack in and slack out! I don't know why they didn't put seat belts and cushions for your head or a helmet. I rode a caboose once, I'll never do it again! They'll kill ya! There's been men killed in a caboose because of slack running. I lost a friend that hit his ribs on the table, he was doing the book work coming into Deer Lodge, and the slack ran in. He broke a blood vessel and blood clot went into his brain.

Motoring was no problem. When they were pulling, the voltage control and everything else took care of itself. It would cut voltage automatically. Whatever you had it set at. I'd go back out and sit down and read a book. Just watch the amps and see where he was at and look for the block signals to see when he was coming by.

Piedmont was bad for regeneration because they had three little machines. If you had two trains coming down the with DC, you know, you've got nowhere to push against. That's why we'd bring Eustis on and Janney would stay on as long as he could. Then they bought what we called the "Screamin' Mimi's". They put them in at Piedmont. They were units with high speed fans on them. Those fans made so much noise, I don't know how I kept from going deaf the first week I was down there just listening to the screaming. They built them in the upper part of the windows on those two frames there at Piedmont.

They were the grids out of diesel locomotives that they use for regenerating down hill, dynamic brake grids. They put those high speed fans on them to dissipate the heat out to give us another cushion, but that's just wasted power out going out the window. That's what they did to solve the problem at Piedmont so they could handle the trains coming down the hill. Each grid would take 350 amps.

EB: Would the circuit breakers be the only protection if you overloaded the system?

JB: If you overloaded, you had the circuit breakers that would open up. Feeder breakers were set for 3500 amps, and

each machine's breakers were set for about 1500 amps, I think. Its been a long time, I've forgotten a lot.

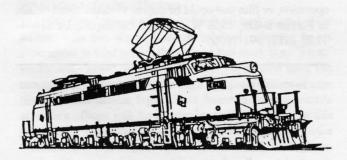
EB: If the circuit breakers worked on both sides, and the train was going into regeneration, and there was no power used, would that mean he would lose his regeneration? That there was no way for the load to be let off in the station was off-line?

JB: Oh right, yea! If a train came over the hill say, at East Portal, and I shut the substation down, he's a substation himself, and he's trying to push in something, he's got nothing to do, he just runs away! Gee, he's got the trolley there, a lot of pipe to fill with water! He can't do it! He's got no place to push it! He's gotta have that something to work against. That's why they trip out, you know, and flash us over and they'd get slowed down, they'd hit the air brakes and automatically away they'd go, you know, get slowed down, then they'd start notching out field to get their field built up and come back into regeneration. If I was back on the line, no problem, he's OK, away they'd go regenerating again.

AJ: It puts an open circuit as soon as he has an open loop. JB: That's right, you have nothing to pump back into. I was on a train one time, we were going down into Piedmont, and we had about 20 cars of high test aviation fuel right behind the locomotive. It was a big old four-unit. I don't remember who the engineer was, it makes no difference. We tripped out of regeneration, and the helper was still regenerating. I don't know what happened, something happened in our locomotive, I think, it had to be, because the helper was still regenerating, and the slack ran out before he could grab her with the air. We jerked a drawbar out about eight cars back, and a tanker went on the ground, moved sideways, pitched her over, tipped one tank car over and the other piled into it. We put about six of them on the ground and never ruptured a one! If we had, the fire department would still be working! This is what would happen, you see. That was the thing's you'd have to watch for.

EB: How fast were you going when you did it?

JB: We were about 18 mph when this happened, and you got all that train behind you. You have so much tonnage behind you. Our trains were running 6800 to 7000 tons, about 120 to 128 cars on those trains coming down a two percent grade. - Jack Barger as transcribed by Ed Burton. Editors note: Part II of this article will appear in the August issue of the Dispatch.



DFW

This column serves for miscellaneous new items about the former MILWAUKEE ROAD's operations.

Like the symbol for "Dead Freight - West" it utilizes the subjects found here are a "catch-all" from a variety of sources.

ANNUAL MEET INFORMATION, AUGUST 12-13, 1994. DEER LODGE, MT

Following is a listing of some of the motels local to the Deer Lodge area. We strongly advise you to make your reservations ASAP as most of these motels run at capacity from mid-May to mid-September. The area code for Montana is 406.

DEER LODGE:

Downtowner Motel	846-1021		
Scharf's Motor Inn	846-2810		
Super8	846-2370	(800) 800-8000	
Western Bug Sky Inn	846-2590		
KOA campground	846-1629		

ANACONDA, 30 minutes away:

Brown Derby Inn	563-5072
Georgetown Lake Lodge	563-7020
Trade Winds	563-3428
Vagabond Lodge	563-5257
Marcus Daily	563-3411
7 Gables Resort	563-5052
Big Sky campground	563-2967
Georgetown Lake campground	563-7020

BUTTE, 45 minutes away:

494-	3500	
494-6660		
800 :	528-1234	
494-7000	800 325-2525	
494-6000	800 800-8000	
Huntingtons Haven campground		
782-	0663	
	494- 800 : 494-7000 494-6000 campground	

DRUMMOND, 1 hour away:

Sky Motel	288-3206
Star Motel	288-3272
Wagon Wheel Motel	288-3201

Please make your reservations as soon as you can as most lodgings in this area run at capacity all summer long. We look forward ro seeing you at the Annual Meet.

Notes from the General Manager

Greetings from Great Falls. I again want to encourage everyone to attend the MilWest Annual Meet in Deer Lodge this August. It promises to be one our best ever.

I want us to think of '94 as the "Year of the Electrics" as a commemoration of the 20th anniversary of the end of the electrification in June, 1974. Our Annual Meet Deer Lodge, the E-70 project, all are part of this theme. In the Dispatch as well, we will give emphasis to subjects related to the electrification, all year. Those who attend the Annual Meet are encouraged to bring any Milwaukee items for exhibit, slides and photos for viewing, models for viewing or for the contest, but with special interest in any electrification related items.

On April 30, 1994, we held a work session on the E-70 at Deer Lodge. I first of all wish to express hearty thanks to the following MilWest members (and some spouses) who came and worked hard doing some very dirty work. Tony and Patty Dell, Pasco, WA; Ed Burton and Rocky Gibbs, Spokane, WA; Bob and Patty Avritt, Great Falls, MT; Larry Zeutschel and Tom Miller, Helena, MT; Tom Radoman, Butte, MT; Tom Norman, Alberton, MT; Greg Staley, Great Falls, MT, and myself. We also thank PCM&A Foundation for providing trash receptacles for the debris, and we thank Montana Power Co. for the use of a service truck with a welder on it.

We cleaned off the roof and side details. There was as much as seven inches of dirt accumulated on the top. As the top is mostly small nooks and crannies, we had to use small scoops, trowels, chisels, screwdrivers, and vacuum cleaners to get the crud out. Mixed in with it was broken parts, pine needles, and accumulated melted graphite. We also cleaned up the cab and front nose inside. It was filthy! We repaired some slight metal damage on the rear nose, prepped the number boards, and removed for replacement the broken glass from the left front cab window and right front nose number board. Radoman, Norman, and Gibbs swapped the front and rear pantographs because of a broken hinge bracket on the front pan. Swapping the pans will now let us raise the front pan for special occasions with a complete hinge.

We also met with the painting contractor and outlined the paint/stripe details. He has already removed the orange paint and we under it found traces of the original maroon, as well as the previous (to that) dark green that it was painted when it was the GE demonstrator. We had to perform this cleaning so that the contractor can sandblast the top of the unit. Depending on weather, the E-70 should be painted by the end of May or early June.

As a reward for our hard work of the day, that night we took photos as we tried out three mercury-vapor lights that were later turned over to PCM&A Foundation for eventual installation as illumination for the E-70. I can only say that

even with the orange paint mostly removed, the E-70 looked majestic illuminated with those lights.

Our next work session will be on June 11-12, 1994. This will be after the unit is painted. Our work will be to paint the cab interior and apply the detail stenciling (bearing caps, etc.), and any other finish work left to do. We need volunteers for this session so please step forward and help us to properly finish the E-70. Call me at (406) 452-1527 for details and to sign-up.

Another vital subject I mentioned last issue was the need for a new General Manager to be elected this year as I will be stepping down, preparing for my return to California late this year. To date, no one has thrown their name in the hat for consideration. COME ON PEOPLE! We must have a new GM this year and it needs to be someone who resides within the geographic area that MilWest serves. This is a by-law stipulation for all board members, the reasoning being that persons living within the geographic area will most likely be able to attend the Annual Meet each year. If you believe in MilWest and what it gives you, please consider stepping forward as a candidate for GM and give some effort to leading it to new endeavors in the future. We have almost 350 members and I have to believe that there is at least one person out there willing to give some time to help preserve the memory of the Milwaukee Lines West. - Ed Lynch.

Waybills

WANTED: Milw Road "Train-in-Bow" pattern china pieces; CM&PS items and other old railroad items and express company items. Write to D.R. Papendick, Box 284, Hot Springs, SD 57747.

SEARCHING FOR: Anyone who may know a Charles Burnham of Chicago, IL. He has signed up as a MilWest member but the Secretary has his address incorrect. If anyone can contact him, tell him to contact the MilWest Secretary, Ron Hamilton (see address in masthead on page 2) so he can get his address corrected.

WANTED: VHS video showing MILW Bi-Polars in operation, or film that could be copied to video. Send details to Forrest Baker, 1558 W. Garfield, Davenport, IA 52804-1750. (319) 391-7870.

THE NATION PAYS AGAIN

by Judge Thomas H. Ploss **Thomas H. Ploss 1983, 1984, 1986, 1991

A reveiw by Art Jacobsen

\$30.00 (U. S.) ppd. from John A. Elliott, 24 So. Montana, Helena, MT 59601; 221 pages; 12 photos (8 color); 5 maps.

There are probably very few observers of The MILWAU-KEE Road's recent (post-1980) history who have not at least heard some passing reference to this work. It (ostensibly) pertains to be an expose of the causes the railroad's demise. To say it is "controversial" is probably an overt understatement. However, there have also been a great deal of unfounded accusations, rumors, and (grossly) speculative assumptions regarding this book since it first appeared over a decade ago. This is not to say that this work is wholly without errors or bias. It's three main versions (for 1984, 1986, and 1991) have a distant resemblance to the former "Great Soviet Encyclopedia" editions of the decades between 1930 and 1960. That this review has a hint of skepticism is not entirely unintentional.

The NATION PAYS AGAIN has twelve main chapters, with separate introductory, epilogue, and annotated sections. Parts of these have seen extensive revisions between the three main editions. Rather than detail a lengthy paragraph-by-paragraph comparison of the 1984 and 1991 editions, this review will concentrate on the latest (and currently available) version. This latest version is hardbound, and it also includes the following sections not found in the earlier releases - "Foreword"; "List of Published Decisions"; "Glossary of Abbreviations"; "Index"; Postscripts; and an "Addendum" Also included with the 1991 text is a list of illustrations.

The "Foreword" in the latest (1991) edition was written by former CMStP&P employee and current - MILWEST - member John A. Elliott. This interesting autobiographical, but at times rambling, sketch sort of compliments the rest of the work in its own unusual fashion. When asked about this book in the past, it's so often been summarized as follows: "What went wrong with The MILWAUKEE ROAD according to ME (Judge Thomas H. Ploss)!" It has also been characterized as an overlong essay of fine propaganda. So in brief, this book's "tone" is both somewhat partial and argumentative rather than the usual "just the facts" piece found in the more typical publications of railroad history.

This "tone" is no doubt due to the legal background of the author, who has the distracting habit of referring to his experiences in third person throughout this work (i.e.: "Ploss" witnessed, heard, or did whatever). Those who have (by necessity or design) waded through massive volumes of case histories and similar legal tomes found in most reputable attorney's offices will find a similar style of writing in this publication. The occasional paragraphs that contain an entire sentence or two make this one of the more difficult books to read. However, this is not to say that the contents are

uninteresting - it's just difficult to get a good understanding at the first reading. In fact one should not try to read this work "straight through" at the first opportunity.

A recommended approach for comprehending this work is to begin reading a chapter or two, then pause to compare what is written with other sources or personal knowledge. One is just as likely to find a highly amusing example of inept management as the random historical error. Of course it is the latter that tends to shade this work with a hint of misgiving. Examples of both are found on its very first pages.

The "Introduction" makes reference to an earlier work written by another attorney involved with the CM&StP's 1925 bankruptcy - The Investor Pays by Max Lowenthal. Herein lies the argument that the 1905 - 1909 Puget Sound Extension was "The Great Mistake" by the (former) CM&StP Ry. That book's argument centers on the extraordinary high cost of this Extension being foisted upon the "railroad's ignorant and naive management. This, in turn, was alleged to be the sole cause of what was the largest bankruptcy of the time.

In this same section one finds that the "'Great Northern' and 'Northern Pacific" . "had both been built by robberbaron" (sic) "James J. Hill." (emphasis added)! Also, one finds that the 1927 sale of the bankrupt CM&StP is claimed to have taken place "on the steps of the courthouse of Butte, Montana." For the record, the NP was constructed by Henry Villard and was associated with the Gould financial interests --J. J. Hill did not acquire the NP until nearly a decade after its completion. Also, Butte does not have its own "courthouse" per se although there is a Federal Building containing a U.S. District Court. The Nov. 22, 1927 sale was held on the steps of the CM&StP's passenger station in Butte.

Historical facts and arguments aside, one should not make the mistake of dismissing. this publication "out-of-hand". Taken for what it's worth -- the view of a former General Attorney for the MILW's Law Dept. as to "why" the railroad came to such a debacle -- this book is advantageous to the reflective MILW historian. At the least, it provides an "inside look" at the railroad's management for the decade up to, and three years following its filing for bankruptcy in December, 1977. Concurrent with that period was the aborted "Milwaukee - NorthWestern" merger of 1967, 68, and the BN merger of 1970, the various legal actions filed by the MILW against the BN, the ending of electrified operations, and the (oft-times whimsical) attempts by the MILW to "sell itself".

Those who have been considering purchasing this: work but have not yet done so may decide to "get it" as it may be in a final form. Others with an earlier edition may find the latest to be interesting (at least) for making comparisons, and a bit more helpful with its indexing, illustrations list, and footnotes. It also has a List of Published Decisions containing excerpts from various court records following the last bankruptcy (c.1979 - 1985), and "decodes" the author's acronym "Denbostein". A new Addendum section contains a copy of the U.S. Court of Appeals (7th Circuit) final decision of August 20, 1986 approving the sale of the MILW's remains. A copy of the same court's decision on the "last" legal action against the MILW (or actually the owner of its remains), and

a ten-page letter from the litigant in same to a Congressman wraps-up this latest version of <u>THE NATION PAYS AGAIN</u>.

Being this work is difficult to read, it. also presents a major challenge for doing any kind of review. No serious review(s) of its contents can be recalled in the decade since this book was first published. There was mention of it in an editorial reference in the former "Newsletter" of the MRHA some years ago. There have also been the smatterings of commentary (or hearsay) about it at the various gatherings of those having an interest in the MILW. This is not to say that the major railfan publications .(TRAINS, and RAILFAN) magazines as examples) have "panned" this work. It's just that whatever review(s) may have been published made no outstanding remarks or lasting impressions.

This lack of interest in, or avoidance of this book is unfortunate as it deserves a cursory examination at the very least. Its various detractors, who regard it as one of the more "unfortunate" books to be published, would have one believe it not worthy of consideration. There are also those who regard it as "the final word" on the demise of THE MILWAU-KEE ROAD, and claim that its turgid and often rambling text "reveals all" of an alleged "conspiracy".

A work of this sort is, by its very nature, bound to foment partisan opinion. Essentially, it is the work of an individual with personal reasons for writing it in an unconventional manner.

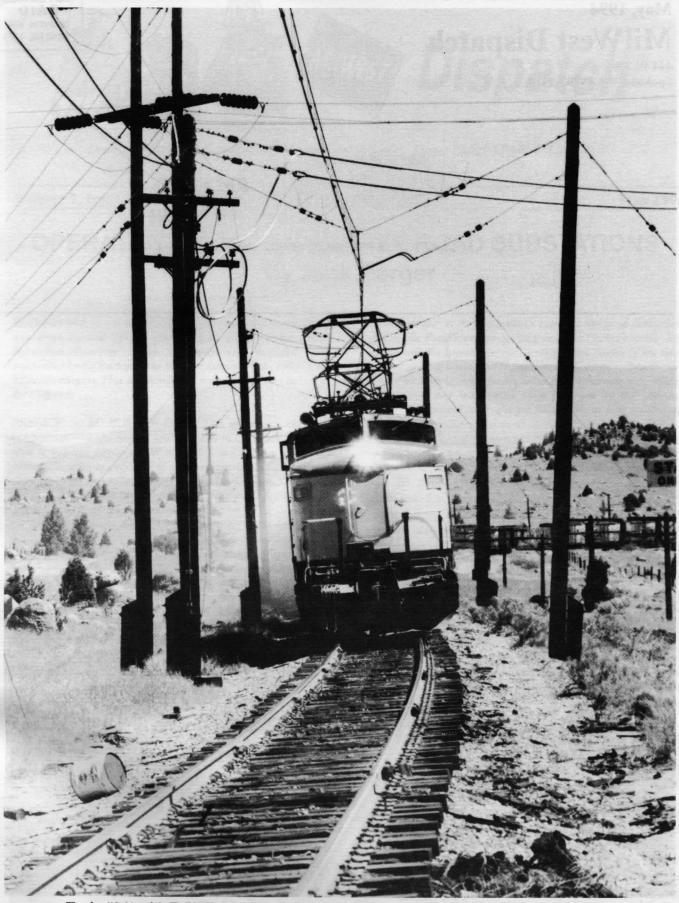
Rather than try to build any case "for" or "against" what the author intended in the publication, this review and commentary concludes with the following six observations:

- 1. The author makes particular use of both Lowenthal's <u>The Investor Pays</u> and Derleth's <u>THE MILWAUKEE ROAD Its First 100 Years</u> in chapters II and III. Throughout all the principal chapters, and the remainder of the book he constantly "name-drops". At least he does the courtesy of introducing various personages, their real (or sometimes fictional) name, and their association to the MILW at the time. However, nearly all of these individuals are given (not altogether favorable) characterizations.
- 2. The author is (or at the time of the original text's publication was) not very familiar with the MILW's (former) "Lines West". He (apparently) made only two "official" trips on the main line west of Mobridge (in late 1966, and ten years later). One example is inferred in the fifth chapter when he makes reference to the "completion" of the MILW's "electrified line" in 1914". Also, he claims the "electric engines" shown in prints on "freight and passenger trains" on the walls of the office of the then V.P. of Operations "were still in use". This concerns events in early October, 1966, and it would be interesting to know just what."electric engines" were shown. All of the class EP-2 and EP-3 passenger motors had been off the MILW's roster years before! That the author was able to identify the class EF-4 "Little Joes" was partly due to a late-1966 cab ride in one west from Harlowton. However, his remarks on its appearance, and the electrified operations in general leave one wondering if he had more than a vague idea of what was being observed! Despite this, he did not share the

opinion of Lowenthal and others that the "Lines West should never have been built".

- 3. Ploss was no "stranger" to railroading, he had worked for the CB&Q (as a rate clerk), and had written briefs both for the MP-C&EI merger case and a rate case before taking on his position with the MILW. However, it should be recognized that his views on the latter (as reflected in this book) were generally limited to its legal aspects. He makes no claim to be a "railfan", and the text for this book was written some time after he had left the MILW.
- 4. This is perhaps the best (and is certainly a rare) descriptive work on the railroad's former general offices in the upper floors of Chicago's Union Station. While these were not on the "Lines West", all major decisions concerning the former railroad (including the "Lines West") were made in these settings. The author, goes into much detail of both, the major office's appearance, and their occupants (in the Fall of 1966). Some of the descriptions of their contents (these are in chapter V) and various denizens therein are <u>priceless</u> from a historical context.
- 5. The best part of this work is in its sixth through twelfth chapters. The author reviews the stifling of the MILW C&NW merger, the failures of the Northern Lines Merger and Louisville gateways conditions, the inept; (or at times highly irregular) management, and the last bankruptcy. It is in the latter (chapter XII) that the claim is made about a BN scheme to "destroy": the MILW. Included are several reproductions of official BN memos (dated between 1966 and 1974) with some interesting statements. These generally concern BN's intentions and responses towards the MILW's "gateways" conditions in allowing the former's merger. While these indicate specific directives in an aggressive campaign by BN to take as much traffic away from the MILW as possible, there are no clear statements of the threats alluded by the author (i.e.: "retaliations"; "abandonments"; "terminations"; etc.). However, the implications that the BN was actively engaged in these and other (highly illegal) endeavors are not without basis.
- 6. A few words on the photographs -- their reproduction quality is somewhat better in the 1991 edition than in the earlier versions. Also the majority of these are in color, and had not been published elsewhere. None, however, are of much use other than as "vignettes" illustrating an often grandiloquent text. Apparently, it was the author's intent to include these as enticements towards the railfan market.

In summation, <u>THE NATION PAYS AGAIN</u> is an interesting work in and of itself. Parts of it are certainly worthy of historical references, while other portions must be viewed with reserve. It should be remembered that it's author was attorney, and as such should also be viewed as a special plea. - Art Jacobsen.



Train #261 with E-79, E-21, 3013, 3034, 296. Last westbound electric freight near Cedric. June 14, 1974. Dick Dorn photo. Ed Lynch collection.

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