



Dispatch

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

Volume 1, No. 3

JULY 1988

NOTES from the General Manager . . .

This column consists of organizational matters of concern to the general membership.

Comments or questions about these matters should be directed to the General Manager, or Staff Assistants listed in these newsletters.

This section aims to provide better communication and operation for all MILWEST members.

By Art Jacobsen

1988 Annual Meet

The location of our next annual meet has been the topic of much discussion by the Advisory Council. The 1988 meet will be held in Spokane, as voted at the last meeting. (However, in the future the meet will not be held in the same city two years in a row.)

It will be held the weekend of the Spokane Swap Meet from Friday night through Saturday night, October 21-22. The event will have a more formal agenda than our first meet. Activities may include an afternoon tour of an operating railroad that once was part of Milwaukee Lines West.

A flyer with registration and schedule details will be in the next DISPATCH.

MILWEST and the Milwaukee Road Historical Association

During the eight months since the organization of MILWEST there has been discussion regarding the relationship of our group to the MRHA. This has included specific mention of "merging" or establishing a basis of cooperation with the senior association. Two points have emerged from this discussion, which has included correspondence and brief discussions with MRHA officials.

The first point is that MILWEST was organized as an independent body. This has been reiterated in this publication, and remains the basis of our activities to date. Future issues of the DISPATCH will cover various non-MILW items, which are of no interest to the MRHA.

The second point is that the MRHA, formerly the Milwaukee Road Railfan's Association, was founded by, and is composed primarily of, Lines East members, whose interests naturally reflect the area where they reside and the railroad operated. They are far more likely to associate "Milwaukee Road" with high-speed double-track main line and streamlined steam and diesel Hiawathas, whereas MILWEST members are more likely to think first of catenary, box motors, Little Joes and mile-plus-long freights.

The main thing here is that while we are all talking about the same railroad, there is a significant difference in operational and geographic characteristics. The "official" attitude of the MRHA towards MILWEST essentially

is one of general indifference, based largely on the fact that the primary interest of the vast majority of their members is former Lines East history. Thus, there is no further need to discuss "mergers," as clearly neither group would benefit at this time.

When I attended the 1988 MRHA Annual Meet in Mason City, IA June 17-18, their officers did allow our MILWEST display to be set up briefly before the banquet, on the condition their application forms would be similarly displayed at our Spokane Meet this October. Considering that MRHA's "official" attitude is one of indifference, this is a rather significant concession.

Despite the differences between the two groups, a number of us are members of both organizations.

For those of you not in the MRHA, it was founded in 1968 in the Chicago area. I have been a member since January, 1971. Anyone interested in the only organization that covers the former Milwaukee Road in its entirety should write to me or to Wendell E. Murphy, Treasurer/Office Manager, MRHA, 7504 West Ruby Avenue, Milwaukee, WI 53218-5458. MRHA dues are \$14 per year.

Bill Wilkerson recovering

One of the best-known former CMStP&P/MILW employees, Bill Wilkerson of Miles City, was "booked-off" on the "sicklist" the first half of June. After suffering a completely unexpected major "coronary episode" and recovering for two weeks in intensive care, Bill is back home and back at his typewriter.

We all wish Bill the best for a quick and uncomplicated recovery.

MILWEST DISPATCH

This issue features:

Page 1: Notes from the General Manager

Page 4: L3 Memories by Bill Wilkerson

Page 8: Passenger trains on Milwaukee rails today

From the Editor:

With this issue, we welcome Bill Wilkerson as a regular contributor to the DISPATCH. Bill gives us insight into the daily lives of those who ran the Milwaukee, and fleshes out facts with human interest stories. I love good yarns, and I hope you do, too.

If any of you have news, reminiscences, or other items pertinent to the Milwaukee west of Moberidge, I would be proud to include them in the DISPATCH. Thanks.

Keith

Part I contained the prototype background and general modifications. Part II completes the detailing, painting and lettering for both the "as-delivered" (1968-71) and "freight" (1971-80) versions. Any questions or comments about this article should be directed to the author.

Milwaukee Road — EMD FP-45

By ED LYNCH — (Part II)

Many detailing features depend on the time period the model represents. Basically there were two distinct eras for Milwaukee FP-45's: The as-delivered version from 1968/69 to mid-1971, and the freight version from mid-1971 through storage and retirement following the embargo and abandonments of 1980. Modellers of the final years of electrified operations can use either version.

Details common to both versions

Final body and frame details involve carving or scraping off, and filing smooth various cast-on details. Remove the exhaust stack, grabirons and lift ring "bumps." Replace the exhaust stack with PSC's 3977 or 3978.

Drill holes for individual grabirons and lift rings. Also drill holes for the handrails for the cab and engine compartment doors (locations are cast into the step braces under the doors). Note that the large swinging engine compartment doors have no handrails.

Next, improve the step on the fuel tank below the door to the forward engine compartment on the fireman's side. Athearn's fuel tank casting has only a ridge outlining the step, so drill and cut it in a rectangular shape using the ridge for a guide, to a depth between .125" and .135" using No. 50 and No. 60 drills and a very small milling bit. Form the stirrup step above the fuel tank from a standard 1/2" flat staple, and attach it to the step braces cast on the bottom of the shell. Replace the flat-looking cast-on air reservoirs on both sides of the body shell with individual air reservoirs (PA 3201 or TP 45).

You may wish to replace the trucks' cast-on brake cylinders. You can add brake pipes using either WCS 8013 or wire. Mount the air compressor intake (DW139) just ahead of the fuel tank on the engineer's side of the frame. Mount the bell on the frame just inside the pilot step on the engineer's side.

Additional replacements for cast-on details include sand hatches (DA 3001) on the upper edges of the

nose "bevel" and classification lights (DA 1019) on the rear and above the cab. Add sight glasses (PSC 39010 or 39011 or WCS 8012) to the fuel tank about .035" back from the forward end. Drill mounting holes for fuel gauges (DA 3101 about .30" in from both ends on the engineer's side, and just ahead of the step on the fireman's side (install the gauges after painting). Add fuel fillers (DW 166) to the right-rear and left-forward ends.

The headlight above the cab was a combination oscillating warning light and rear-of-train market light, used for crossing approaches and reversing movements into passenger terminals. Athearn's version is essentially correct, although its appearance is a bit too small. PSC's Pyle National Gyralight (3933 or 3934) is correct in appearance and adaptable for lens jewels.

Details for as-delivered version

When these locos first appeared on the Lines West main, they were still class 36.EP-6 units with all their steam equipment. The cast-on details on the roof at the rear of the Athearn shells are incorrectly placed except for the blowoff vent cluster. Remove the axially-mounted rectangular exhaust stack parallel to the fireman's side, and the small hatch

MILWEST Management

MILWEST was organized at a meeting in Spokane, WA on October 24, 1987. It is composed of individuals interested in the historic preservation and/or modelling of the (former) CM&PS/CM&StP/CMStP&P/MILW Lines West. Officers elected were:

Art Jacobsen, General Manager
1870 Easy Street
Helena, MT 59601-1172

Ron Hamilton, Secretary
532 S. W. Rimrock, No. 3
Redmond, OR 97756

Ed Lynch, Ass't General Manager
4001 5th Ave. North
Great Falls, MT 59401

Keith Newsom, Editor
417 South Rogers Street
Olympia, WA 98502

Kirk Petty, Staff Assistant
P. O. Box 423
Ranchester, WY 92839

Gerry Quinn, Staff Assistant
South 2208 Conklin Court
Veradale, WA 99037

Rick Yaremko, Treasurer
116 DeerCross Road, SE
Calgary, AB, Canada T2J 687



Ed Lynch's FP-45 No. 5 displays the post-1974/75 large lettering freight scheme. (Photo by Art Jacobsen)

cover at the rear, a being careful not to damage the cluster of three blowoff vent pipes near the stack. The air intake for the boiler at the very rear of the roof is identical to the EMD dash-2 series dynamic brake vent (DA 1904). The round boiler stack cover on the engineer's side is similar to the part from the DW 118 set.

The as-delivered version did not have winterization/"heater" covers on the forward radiator fans. PSC makes the correct radiator intake fans (3965 or 3966), packaged in pairs. The as-delivered version did not have external speed recorder cables.

Details for freight version

The freight version had the boiler and most of the attendant roof detail removed. Usually the old boiler air intake at the very rear of the roof was retained for additional radiator cooling. Also, a winterization/"heater" cover was installed over the forward radiator intake fan. This can be scratchbuilt using .020" styrene and scale screen, or the Miniatures by Eric H-13 hatch can be used. M/u stands are DA 1502, cut off just above the large round plug receptacle and mounted on the pilot platforms, just flush and outside the inside-left-forward and right-rear handrail stanchions. Some of the freight version units had the top Gyalight plated over, which you can simulate with .010" styrene.

Painting

The paint scheme depends on the time period modelled. The as-delivered version lasted only a few months in its original UP/passenger scheme on the Lines West. The Athearn paint job is reasonably accurate in pattern, but too light in color tone. Harbor mist gray should cover the pilot platforms, fuel tank and roof. Trucks are silver, and the flat nose area is anti-glare/non-skid dull green.

The freight version is the standard black and orange, with black from the pilot decks down including trucks and fuel tank, and above the bottom of the side windows all the way around.

If you are using Scalecoat paint, the best mix for the orange is a 2 oz. bottle of No. 16 reefer orange plus 6 to 10 drops of No. 10 black. For airbrushing, Scalecoat should be mixed 3 parts paint to 1 part thinner, and baked twelve hours after each coat under a 100 watt light placed at least 12" away.

If you are using Floquil paint, mix a 1 oz. bottle of No. 162 Milwaukee orange with 2 drops of No. 10 engine black. For airbrushing, Floquil should be mixed 2 parts paint to 1 part glaze to 1 part thinner, and dried at least six hours between coats.

Spray the lightest color over the body shell first. After the third coat, inspect for flaws in the finish. After filling and sanding any flaws, continue spraying, allowing for full curing time between coats. Don't mask for the darker areas until the last light-color coat has dried at least 24 hours.

After painting, add the Nathan P-3 air horns directly over the top headlight, the "firecracker" radio antenna just ahead of the cab doors and offset toward the engineer's side, and cab side mirrors just behind the wing windows. The freight version also had a rotating beacon centered over the engineer's side of the cab roof. Install the round fuel gauges, grabirons, handrails and lenses.

Lettering

The as-delivered version used UP Cities red lettering with black outline over the yellow carbody areas. Refer to the photo for placement of letters and numbers.

The freight version had two basic schemes plus a variation. The earlier scheme had heralds on the cab and the loco number in black railroad Roman on the rear boiler compartment's lower panel. Loco No. 3 was the variation on this scheme, with THE MILWAUKEE ROAD in black extended railroad Roman centered along the lower panel over the prime-mover area (similar to Milwaukee freight B-units' maroon lettering on EMD F-types and F-M C-liners). The later freight scheme from 1974-75 had large black MILWAUKEE ROAD lettering centered over the prime-mover compartment, with white railroad Roman numerals above and also centered on the black area of the back.

None of these class 36.EMF-6 locos was ever painted in the Hiawatha/'MILWAUKEE' scheme.

PARTS LIST

Details

Item

EMD FP-45, powered
EMD classification light
EMD lift ring/eyebolt
EMD high m/u stand (FV)
EMD boiler air intake (dynamic brake vent)
Grabirons with nuts
Coupler lift bars with brackets
EMD sand filler hatches
EMD fuel gauges
EMD single air reservoirs (pair)
Brake cylinders
Rotary beacon (FV)
Steam generator set (ADV)
EMD air filter set (large unit)
"Firecracker" radio antenna
EMD road unit fuel fillers
CPR modern winterization hatch (FV)
Clear headlight lens (.078")
Red and clear lenses (.082") for Gyalight
EMD Pyle-National Gyalight
EMD radiator intake fans
EMD exhaust stack
EMD fuel tank sight glass
EMD Nathan P-3 air horn set
Cab mirrors with brackets
EMD air brake pipe

Manufacturer and Part Number

Athearn 3620 (undecorated) or 3622 (Milwaukee passenger)
DA 1019
DA 1101 (P) or 2206 (wire)
DA 1502
DA 1904
DA 2201
DA 2204
DA 3001
DA 3101
DA 3201 or Trackside Parts 45
DA 2801 or PSC 3479 or UP 82
DW 106
DW 118
DW 139
DW 157 or WCS 8006
DW 166
Miniatures by Eric H-13
MVP 25
MVP 28
PSC 3933 (P) or 3934 (B)
PSC 3965 (B) or 3966 (P)
PSC 3977 (B) or 3978 (P)
PSC 39010 (B) or 39011 (P) or WCS 8012
PSC 39084
UP 77
WCS 8013

(Continued on Page 4)

*(Continued from Page 4)***Abbreviations:**

ADV (as-delivered version), FV (freight version), DA (Detail Associates), DW (Details West), MVP (M. V. Products), PSC (Pacific Scale Company), UP (Utah Pacific), WCS (Warren's Custom Service), B (brass) P (plastic)

Paint and Lettering**As-delivered version:**

UP Armour yellow
UP Harbor mist gray
Silver
Glaze (only if Floquil paint used)
Decals

Floquil 166 or Scalecoat 22
Floquil 167 or Scalecoat 32
Floquil 100 or Scalecoat 23
Floquil 0005
Microscale 87389 Milwaukee E-9
passenger (discontinued) or
Walthers 43930 or Champion EH-54

Freight version:

Black

Orange

Glaze (only if Floquil paint used)
Decals

Floquil 10 (engine black) or
Scalecoat 10 (black)
Floquil 162 (Milwaukee orange)
or Scalecoat 16 (reefer orange)
Floquil 0005
Walthers 43761 or Champion
(number unknown)

"Pend Orielle Railroad"**By Roger Ingbreetsen**

Mainline Modeler, Vol. 9, No. 4 (April, 1988), pp. 52-57

This article describes operation on the Pend Orielle Valley Railroad (POVA), the ex-Idaho, Washington & Northern line between Newport and Metaline Falls, WA, and includes some very nice color photography. The line currently operates at night, leaving Metaline Falls about 6:00 p.m. and returning early the next morning. The train operates two to three times per week using one of the two ex-NP/BN GP-9s rebuilt by CEECO. The Newport depot, an I&WN design still in Milwaukee two-tone gray, is now the Pend Orielle County museum. Depots at Cusick and Ione have been relocated but are still intact, and the Metaline Falls depot site is now occupied by the POVA enginehouse and office.

Mainline Modeler is published monthly by Hundman Publishing, 5115 Monticello Drive, Edmonds, WA 98020. Cost is \$2.95/issue or \$29.50 per year.

— Art Jacobsen

L3 Memories

By Bill Wilkerson

Recently a model railroad fan wrote to me inquiring about several features on the Milwaukee's L3 locomotives. One of his questions was, "what was the little tank behind the big air tank on the right side and what was it used for?" I wrote and told him it was an auxiliary air tank for the power reverse gear. It had a check valve in the supply line so if you lost the main reservoir air, you could still operate the locomotive to get it into a side track. I told him I had been on only one L3 that lost the main reservoir air and that night a dozen auxiliary air tanks wouldn't have done us any good. It sparked a memory that I thought readers might find interesting.

The Night the 377 Broke a Main Pin

In the spring of 1950 or 1951 (I can't remember which), I was firing for Gus Perry on the Middle District between Miles City and Melstone, 112 miles. We were still 100% steam in freight and the Melstone Helper job was still on. It had been raining off and on all day at Melstone, and at the time we were called, sometime after 4:00 p.m., it was raining fairly hard and looked like it would rain all night.

We were called for a dead freight east, with a main line change. The Harlo crew cut the 377 off just west of the west switch to clear the county road, and came down to the engine service area. This was about 200 feet west of the depot and about 1,500 feet east of the

west switch. The cinder pit crew cleaned the fire and ash pans and greased the rods. They had a big air-powered grease gun that used stick grease, and got the air by attaching a hose to the main reservoir. We then backed up a couple hundred feet, took coal and water at the coal dock, and then backed up to couple onto the train.

The helper L3 was in the engine track north of the main line just west of the depot. It came out onto the main line and after getting coal and water, it coupled onto us.

Melstone was on a downgrade east, so the two L3's rolled down to about the 100-car mark east of the depot and stopped to make the air test. When the

brakes released on the caboose, the conductor gave them a highball with a fusee and threw it high in the air to make sure they would see it. By this time it was fairly dark and a fusee shows up much better than the lanterns. Gus whistled off and pulled out the slack. When he had the slack, both L3's really went to work. It was two miles of straight track downhill to the Musselshell River bridge, and they wanted to get up to 50 MPH or faster when they went over the bridge and started uphill.

I always enjoyed taking a run for the hill out of Melstone. The engineers would be beating hell out of the engines trying to get up all the speed they could.

I would have the stoker firing all the coal the fire could handle. We sure used to put some black clouds in the sky leaving Melstone. The 377 had a Duplex stoker, as did most of the L3's. The Duplex had two barrels about 4 feet long, set at about a 30 degree angle. Each barrel was cast iron and about a foot in diameter. One barrel was on each side of the firebox door. A single steam cylinder pushed and pulled a long gear rack back and forth. The augers in each barrel and the main conveyor from the tender were powered from this cylinder. As the piston pushed, the gears on the rack would turn the augers a couple of turns and bring the coal up until it slid down over the steam jet that blew it out over the distributor plate on each side. This would distribute coal over that half of the firebox. When the piston pulled back, the dogs would ratchet back over the engaging gear teeth so the auger didn't turn backward. It would make a heavy clank as the dogs engaged the teeth, then a grinding sound as the coal augered up and was blown into the firebox. You had about a two-inch peephole on the side of each barrel so you could see that the coal was sliding down over the plate and wasn't plugged up. You could disengage either barrel by lifting up on the locking ring. There was a distributor plate between the two barrels so you could regulate the amount of coal that went to either side, and of course you had a number 5 scoop shovel to take care of what the stoker didn't.

From the Musselshell River bridge, you still had another mile of straight track before you went into a deep cut and curve to the right, then a long curve to the left and another to the right and you were at the west switch at Bascom. The grade and reverse curves would have you slowed down to about 10 MPH. Whatever speed you had at the county road crossing about the middle of the Bascom passing track, you could usually hold for about five miles until you got east of old Hibbard. At best, it would be about 10 MPH and then you would lose a couple of miles per hour around the sharper curves east of Hibbard and up through the big cut to Sumatra. From Bascom, the engines had been working right down in the corner and wide open. The roar of the exhaust from two L3's made a nice sound to my thinking. The top of the hill

was east of the depot at Sumatra, about halfway through the passing track.

The reason the road engineer made his test at Melstone and was handling the air on the second engine was so he didn't have to stop at Sumatra and cut off the helper engine. The brakeman would climb out of the cab and walk along the running board to the pilot and pull the pin. There was no air connection to the helper — he was just pulling. The helper would then make a mad dash to the east switch, the fireman would drop off and throw the switch as soon as he cleared, and the helper engineer would reverse his engine and hurry into the passing track in time to clear the road engine. He only had about 50 car lengths (1,200 to 1,500 feet) and the road engine was still pulling on the train about 5 MPH. This was called a Dutch drop and was strictly against the rules. Sometimes it would be pretty close, but I never heard of anyone getting sideswiped and the road engine could always stop if the helper didn't make it.

Proper operating procedure according to the rule book would have the lead engineer handle the air. He would then have to stop at the Sumatra east switch, cut off and get in the clear while the road engineer made a brake test. This would be a delay of at least fifteen minutes. Fifteen minutes on a tonnage train could be the difference between making a station farther on when running against a Time Table or wait order train. If he didn't have the extra five or ten minutes, he was setting himself up for at least a 45-minute delay at the station he had to stay at. This could have a domino effect for the rest of the trip. You were paid by the mile, so each delay was money out of your pocket, or you were laying there for nothing. You had your mileage assignment the minute you started, so the faster you got to the other terminal, the better.

With two L3's and a tonnage train, about the best you could do was one hour and ten minutes from Melstone to Sumatra. The company finally ordered the helper on the rear end and told the conductors they could ride either the caboose or the engine. They stayed on the caboose and we never had any trouble. Pushing on the caboose made the difference of five to ten minutes getting up the hill because of less flange drag on the curves. It was safer as they could push us to the depot and cut off on the main-

line with no more Dutch drops.

All of the cabooses had steel frames. The Northern Pacific at Livingston used big 2-8-8-4 Mallets that were twice as powerful as an L3 and pushed on the cabooses up grades that were three times as steep. I have pictures of the NP using two big Mallets pushing on the caboose, so while our conductors objected on safety grounds, there was nothing unsafe about it, and it sure speeded up train movements.

It was after 9:00 p.m. when we stopped at Vananda for coal. Vananda had bad water, so we never took water there going east unless we had to. We had an auxiliary water tender and could easily make Forsyth for good water.

The 377 had the usual pounding of driving boxes and clanking of rod noises when we drifted up to the Vananda coal dock. Gus made a ground inspection and oiled around while I took coal. Gus wanted to make Miles City for passenger train No. 17 at midnight, so when he got the slack he really went to work on the 377. The grade drops off pretty good east of Vananda until Porcupine Creek, and we could make 50 MPH all the way to Forsyth. From Forsyth on, our tonnage would hold us to about 30 MPH. We were doing about 20 MPH over the east switch at Vananda when Gus came over to my side to listen and asked me if it sounded different. I told him it seemed to me that we had a different pound from someplace. We decided that maybe a driving box wedge had worked down or something. Gus said it would either "get better or worse and probably worse, so let's get the damn thing to Miles City!" The L3's didn't have speedometers, but you could judge your speed pretty close by the sound. If you could identify the exhausts, you were under 50 and you could always time the mile posts. In about 3 miles we could tell by the exhaust that we were pretty close to 50 MPH. About the time Gus started to ease off on the throttle, all hell broke loose. There was a loud bang on my side. I saw the running board ahead of me jump up, there were several alarming jolts, gravel was hitting the engine and metal was grinding against metal. The L3's had two seats on the left side and the brakeman sat behind the fireman. We both made a dive for the right

(Continued on Next Page)

L3 Memories

(Continued from Preceding Page)

side. Gus jerked the brake handle into emergency, and for what seemed a lifetime, the engine kept jumping and rocking until it finally came to a stop.

When we started to get off the left side, we could see that something had been plowing dirt and splintering ties.

I got off and started playing my flashlight along the driving wheels because I thought we had gone on the ground. We were still on the rails, but our flashlights illuminated the worst mess I have ever seen. The first thing I saw was the main rod on the ground. Shining our lights farther forward picked up the twisted crosshead yoke, broken crosshead, bent piston rod, and the piston that was out on the ground and had been plowing gravel. The piston and what was left of the rear cylinder head were wedged against the cylinder by the bottom crosshead guide which was bent down at about a 20-30 degree angle.

All three of us asked the same question at the same time: "What the hell happened?" The rear cylinder head had been shattered and torn completely off the cylinder. The combination lever and union link were holding the broken crosshead and the front of the main rod at an awkward angle. The Walschaert link, eccentric rod and eccentric crank were still together and the main pin was still fastened to the eccentric crank and dragging on the ground. The back of the air tank had a big dent in the bottom and had been pushed up 12 to 18 inches and bent the running board up. The pipe from the compressor had broken and the air compressor was pumping at top speed. Outside of that, we were in pretty good shape.

Gus was a big man and very good natured. He looked at the mess and said, "Well, Bill, it's on your side. You fix it." That broke the tension and we all laughed.

I told him I would center the valve and have it ready to run on one side just as soon as he got the main rod loaded on the back of the tender. That was a good safe bet. The main rod was 10 feet, 8 inches between centers and probably weighed around a thousand pounds. Gus decided that only a damn fool would stand out in the rain and get all wet when he couldn't do anything. We agreed and all got back in the warm, dry cab. Besides, we had to shut the air

pump off.

We decided we were about halfway between Vananda and Antwerp. Bucky Rogers was head brakeman and said he would put on his raincoat and walk about a half mile over to the highway and flag down a ride to get to Forsyth and report our trouble. In a little while we saw headlights coming east on the highway and Bucky lit a red fusee and flagged it down. He got to Forsyth in time to notify the dispatcher to hold No. 17 at Miles City. The agent lived upstairs in the depot and the section men lived in company houses on the right-of-way east of the depot. In case of any serious trouble on the railroad, you always call the trusty section men, so Bucky woke up the section foreman. Don't feel sorry for Bucky out in the rain. He was no fool, and the section foreman's wife fixed them both a nice meal while they were waiting for the section crew to get assembled. We didn't get anything to eat until we got home about 10:00 a.m.

He knew that section men never go to work without eating a good meal first, and they always have enough for an extra.

The conductor walked up and told us we had plowed gravel for the full length of the train. We had broken off signal bonding wires, but he hadn't found any broken rails and everything was still on the track. Bucky was ready to go for help, so the conductor decided to walk back to the caboose on the south side to make sure it was all right.

Gus and I tried to figure out what

had happened and wrote down everything on the back of a work report in case there was an investigation.

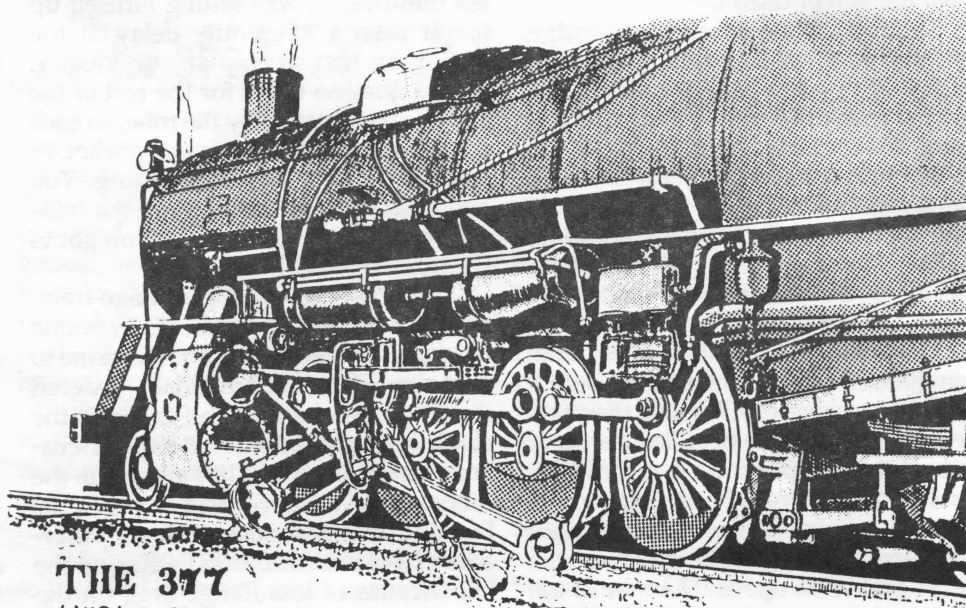
We figured (I was doing all the worrying and 90% of the figuring) that the main pin must have been broken or bent far enough to be working back and forth in the side rod when we left Vananda. Each stroke back and forth would flex it more until it finally broke off. We figured this accounted for the different sound leaving Vananda. The brass bushings were both gone so we couldn't tell if they had broken or not.

With any accident, you have to start with what you end up with and work back. We ended up with the piston, main rod and eccentric crank dragging on the ground. We figured we had better figure out a good explanation why they were on the ground.

If the main pin broke at the start of the piston's back stroke, that let the piston hit the rear cylinder head with such force that it broke it out around all the bolt holes. We had about a ton of uncontrolled weight moving at a high rate of speed. The crosshead guides were bolted to the back of the cylinder head and to the crosshead yoke that supported the back of the guides.

The force exerted by the piston, crosshead and main rod was great enough to bend the yoke back far enough to let the piston come out of the cylinder. When the yoke bent, it also changed the angle of the guides, so it let the piston drop to the ground. With no main pin, the main rod should have

(Continued on Next Page)



THE 377
WHEN IT STOPPED

(Drawing by W. H. Wilkerson)

continued to move right straight back and it would have, except when the yoke bent, it changed the guide angle and formed a wedge, stopping the crosshead. The combination lever and union link were attached to the crosshead and helped stop it. I don't think they were heavy enough to have stopped the main rod if the yoke hadn't bent and formed a wedge. This would also account for the crosshead being broken. When the crosshead stopped, I think the back end of the main rod flew up and smashed into the air tank.

The combination lever would pull the valve back against the rear head. This in turn would push the radius rod and link back and lock them. The eccentric rod and crank pins held and the stub of the main pin was bolted to the eccentric crank, so we had all that together. The guide yoke was a heavy steel casting with reinforced flanges. It bolted to the top of the main engine frame and supported the Walschaert link frame and hung down to support the back of the top and bottom guides. The weakest point was just below the Walschaert frame, and that is where it bent. The bend was high enough so it let the yoke bend enough to change the angle of the guides and let the piston drop out of the cylinder. If the combination lever hadn't helped restrain the crosshead, it probably would have bent back far enough to break the yoke. Then we would have lost the main rod, crosshead and piston. I don't think the combination lever and union link could have stopped all that weight without the wedge formed by the guides and supported by the yoke.

I was trying to figure out intelligent answers and got down on the ground a couple of times to check out my theories. I made several sketches to figure out what could and what couldn't have happened. I would explain my thinking to Gus and why it had to be this way and not that way. He agreed and grunted and finally gave me some good advice that I have remembered to this day. He said, "Bill, don't ever think that something can't happen on a locomotive or railroad, because it's probably already happened a hundred times before." He also told me that he didn't own one damn bolt on this engine and he wasn't going to fix it. With that all figured out, he tried to get a little sleep until help arrived. Nothing bothered Gus!

The section men came up in their motor car about 1:00 a.m. and started

appraising the damage to the track. The crew from the Miles City shop arrived in a truck about an hour later. They promptly got stuck trying to drive across a gumbo hayfield. It had rained long enough so the gumbo was like grease. They finally had to carry the gas bottles and cutting torch about a half mile to get to the 377. The Roadmaster and Trainmaster both drove up, but left their cars parked on the highway shoulder and walked over. The relief L3 and crew got there about daylight. They had backed up light from Miles City.

The shop crew cut the piston rod and rolled the piston out of the way. They had a tough time trying to get the crosshead pin cut so they could drop the main rod. The Trainmaster decided we should deadhead to Miles City with him in the station wagon as our sixteen hours was about up. When we left, the shop men were still cutting and beating on the crosshead pin. They finally got the 377 fixed so the other L3 could pull it. Antwerp siding was gone by then, but they had left about a 10-car stub track on the east end. The other L3 pushed the 377 in there and went back and got the train. They finally got over to Cold Springs to meet a very late 17. The Roadmaster had put a 10 MPH slow order on the damaged track, but it was passable. We had splintered the tops of about 3,000 ties and dug a trench about a foot deep. Miles City sent out a work train with ties and other supplies, and they pulled the 377 into Miles City at about 10 MPH.

Miles City shop fixed the 377 up and had it back in service in about a month. I don't know if they had to put a new cylinder on or weld it up, or if it was even broken. I know the cylinder head was badly broken, so I imagine it would have broken the cylinder around all the studs that held the head in place. I think while it was in the shop it got a big N3 tender off a scrapped N3-s 2-6-6-2 Mallet. They were scrapping them on the coast and sending their tenders to Miles City to put on L3's. They would come in two at a time, coupled together, so they had a drawbar on each end. They ran a rubber hose for the air line between them and hauled them next to the caboose. Whatever engine was in the shop when tenders arrived, got them.

The Master Mechanic had Gus and me in his office the next day to give him statements. He agreed with our version of what happened and assured us we

were not at fault in any way. When they cleaned up the broken main pin, it showed that it had been hot and was tempered blue. It wasn't hot when it broke and still had lots of grease on it.

Whoever had repaired the pin after it was hot was at fault. They probably just pumped it full of grease, or at the most, put in a new brass bushing. A big shop like Miles City with a drop pit and wheel press was the only place it could be repaired. They would have to drop the wheels out from under the locomotive, take them into the back shop and put them on the big wheel press. After the pin was pressed out, they would have to turn a new one and press it back in. All of this took tons of pressure per square inch.

The 377 continued to work on the Trans-Missouri division and as far east as Minneapolis until it was retired in July 1953. It had been built by the American Locomotive Company in 1919 and was part of an order of 100 the Milwaukee received in 1918 and 1919. Its' construction number was 61168 and it was delivered in May 1919 as the 8675. The L3's were USRA heavy Mikado 2-8-2 type locomotives. There were 233 of them built as a standard design for the United States Railroad Administration during World War I when they had control of the nation's railroads. The USRA developed standard designs for several types of locomotives needed by the railroads and had them mass produced. This saved valuable time and money and helped win the war.

The L3's were very good locomotives and handled the bulk of the Trans-Missouri division tonnage for over 30 years. 36 of the 100 L3's were assigned to the Miles City shop to maintain. Every engineman and trainman who worked on the Trans-Missouri from 1918 to 1955 has both good and bad memories of the L3's. This is one of mine.

Bad-Orders: REPAIRED

We manage to produce a few boo-boos each issue. Here are the corrections for Volume 1, No. 2:

Page 1, WAYBILLS, second paragraph: Pend Orielle was badly misspelled.

Page 2, MILWEST Management: Rick Yaremko's last name was misspelled.

Page 8, DFW, last sentence: should refer to No. 165.

DFW

This column serves for miscellaneous news 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.

The Morton Time Machine



On Sunday, April 24, 1988, the first passenger train in 39 years reached Morton, WA. The train, run by the Mt. Rainier Scenic Railroad, consisted of their No. 5 Mikado, built by Porter in 1924, an open-air car for the hardy, two coaches, a first-class coach, and an open-platform observation. The run originated at Elbe, and required doubleheading by Heisler No. 91 over grades which reached 3.12 percent. The 40-mile round trip ran mostly through deep forests, with many high crossings over sparkling mountain streams. It was great to ride the back platform, watching the scenery slide by and listening to the engines work.

The Morton branch, now owned by the Chehalis Western Railway, a Weyerhaeuser line, was begun in 1904 by the Tacoma & Eastern and reached Morton in 1910. It was purchased by the CM&StP in 1918.

The Mt. Rainier Scenic Railroad runs weekend trips from Elbe to Mineral, seven miles up the line. For details, contact them at (206) 569-2588 or P. O. Box 921, Elbe, WA 98330.

— Keith Newsom

Dinner in the Diner

How about a time machine with a diner attached? The Mt. Rainier Railroad Dining Company, in conjunction with the Mt. Rainier Scenic Railroad, began their Morton Dinner Train on June 11th. The four-hour, 40-mile round trip leaves Elbe, WA at 5:30 p.m. every Saturday through September 3rd. In addition to all the great features of a steam-powered varnish trip on Milwaukee tracks through the forest, you are treated to a prime rib dinner with all the trimmings in a 60-year-old UP diner.

Our MILWEST Muncher, Larry Wilson, reports the trip and dinner were very good, indeed. The proprietors say they might add Sunday brunch trips this fall. For details and reservations, call (206) 569-2588 or write P. O. Box 921, Elbe, WA 98330.

— Keith Newsom

Central Montana Rail

Central Montana Rail (CMR) operates 47 miles of CM&StP/CMStP&P/MILW North Montana Line trackage between Spring Junction/Hanover and Geraldine. CMR recently completed a new 1.02 mile connection to the former GN Lewistown line west of Spring Creek Junction — a 1.5 percent ruling

grade which swings around a 7 1/2 degree curve to the west switch of Kingston siding. The rail is 100 lb. relay from UP's Shoshone-Sun Valley branch.

Kingston has been the interchange with BN since BN began operation over the North Montana Line by way of Sipple-Moore-Lewistown last September. Cars are also interchanged at Hanover when the Kingston siding is filled. CMR has an option to purchase the Hanover-North Lewistown track (about 6 miles), and is to take possession of the former GN line from Kingston to Moccasin (on the ex-GN Great Falls-Mossmain line). The addition of the Kingston-Moccasin line would raise CMR's track mileage to an even 60. Unfortunately, it means that trains would no longer operate over the 1,600 ft. long wood and steel trestle over Spring Creek Coulee between Spring Creek Junction and Hanover — the largest of its type left in Montana.

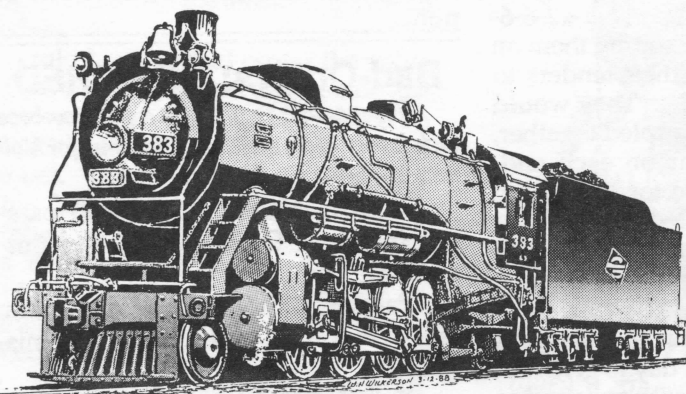
CMR's shop and office building were built in 1985 on the site of the North Montana Line depot in Denton. CMR operates Monday through Friday. Most traffic is two- to four-car fertilizer loads in-bound, with varying numbers of empty C-6s. Grain shipments out are seasonal, varying from a dozen to over 60 cars.

— Art Jacobsen

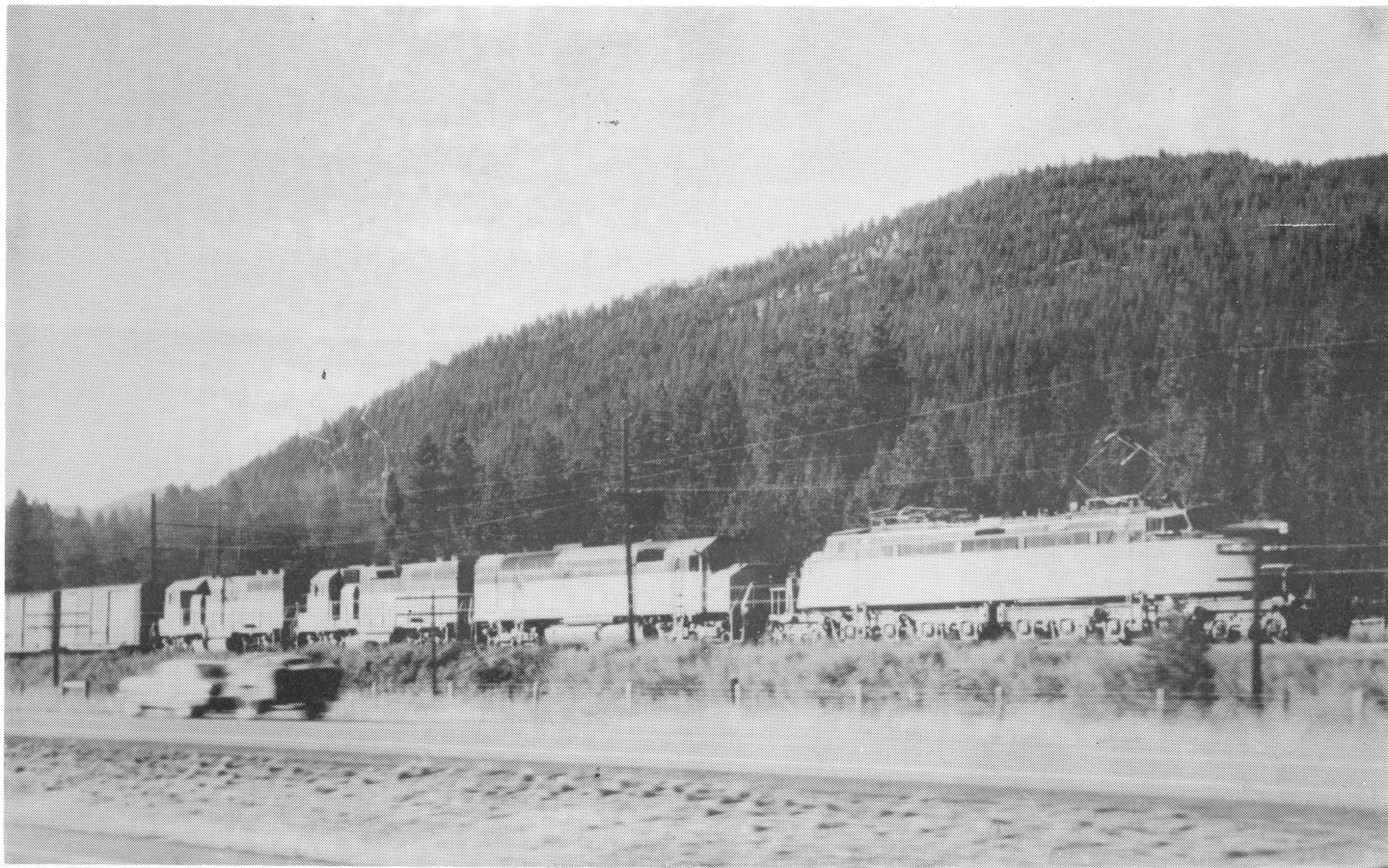
Volume 1, No. 3
JULY 1988

MilWest Dispatch

417 South Rogers Street
Olympia, WA 98502



Milwaukee Road Class L3 Locomotive with the 18,000 gallon tender



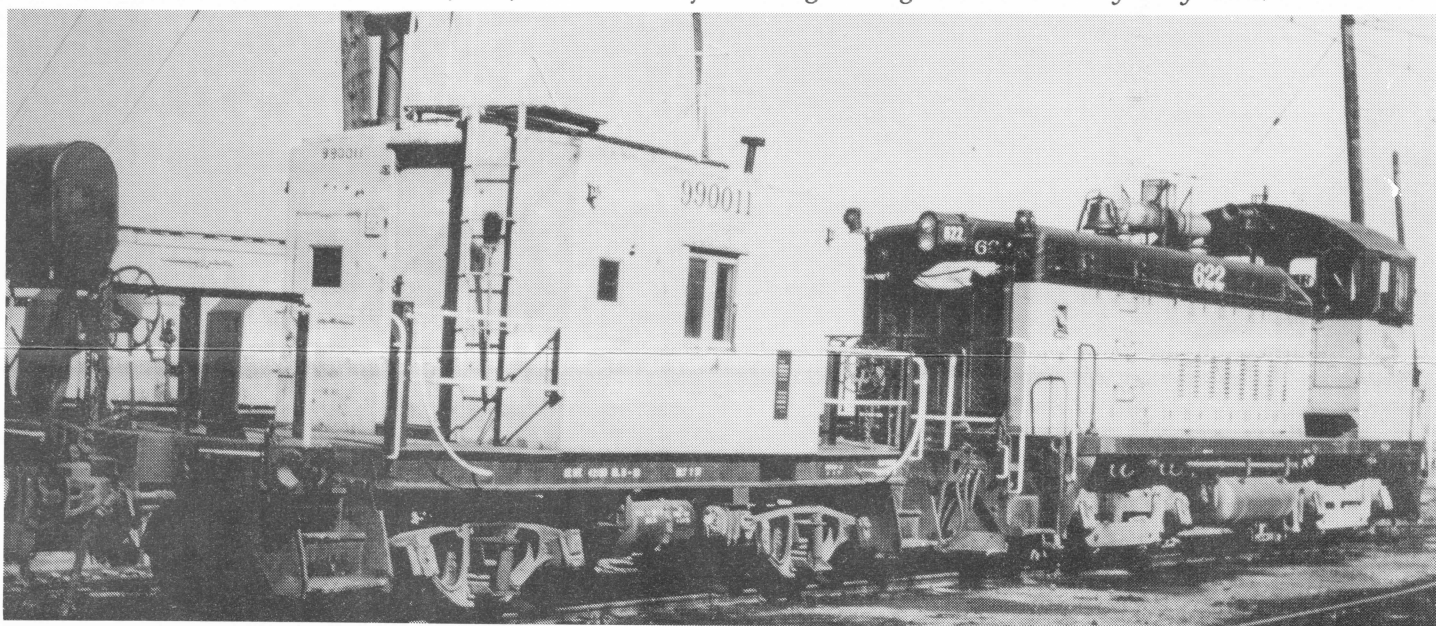
MILW No. 264 with E-20/3/2053/2060 west of Cobden, August 1971. (Slide by Larry Lewis)



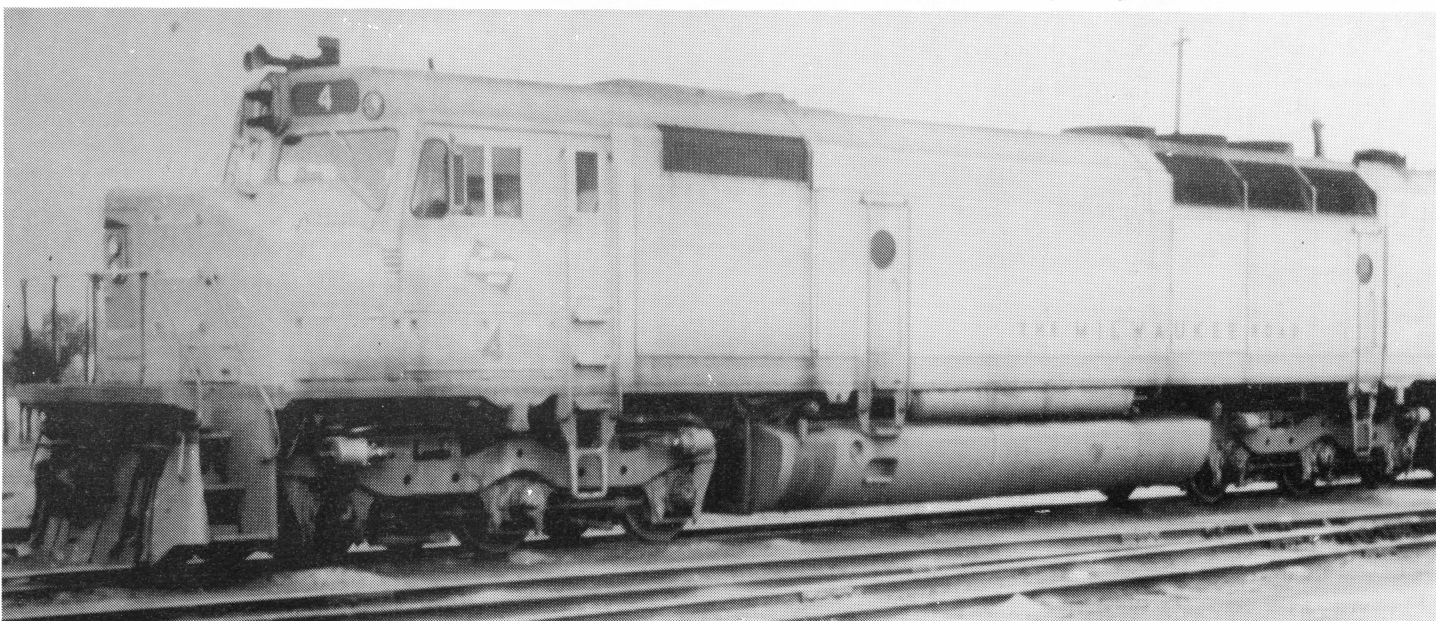
MILW FP 45's No. 5/No. 4/SW 1200 at Lyndale Avenue, Minneapolis, 8-9-76. (Art Jacobsen slide)



MILW No. 263 with E-72/2062/No. 2 east end of Deer Lodge in August 1971. (Slide by Larry Lewis)



MILW transfer caboose 99011/SW9-622, Butte Yard in June 1974. (Slide by Larry Lewis)



MILW FP-45 No. 4 at Minneapolis passenger station on Sept. 15, 1970. (Slide by John Luckfield, Art Jacobsen collection)