

Detroit & Mackinac RS3 468 switches the *Chief Wawatam* on October 7, 1976. After the formation of Conrail, *Chief Wawatam* operations were managed by the Soo Line, the carferry's northern connection. In 1976 this was handed over to the D&M, even though the D&M hauled relatively few of the cars crossing the Straits of Mackinac.



BY LOUIS R. SAILLARD
PHOTOS BY THE AUTHOR

ON FEBRUARY 20, 1978, I WAS WITH the crew of a southbound Michigan Northern Railway (MIGN) 18-car freight near Elmira, Mich., 60 miles south of Mackinaw City. Our locomotive was leased Chesapeake & Ohio GP9 No. 6088. Behind our live Geep was a dead MIGN Alco RS3, ex-Chicago & North Western No. 1617. In fact, all members of the railroad's locomotive fleet were then dead with electrical failures of one kind or another. The tonnage moving over the 245-mile MIGN that day was behind one of a pair of leased C&O Geeps.

The train crew's task that winter afternoon was to double the train, mostly overhead lumber, up the 1.4 percent grade and reassemble it at the Elmira siding. The temperature was in the 20s and the sky was overcast. There was a foot of snow on the ground and it was packed into every surface and walkway of the Geep. The cold trailing Alco was virtually covered with the white stuff.

I pushed the snow away from the cab door and broke out of the 6088's cab into the late afternoon chill at Elmira. With a snowplow extra also working the railroad, and men busy around the clock, Michigan Northern was short of crews. Our conductor, Paul Benson, was making one of his first trips in train service, and I walked the train with him during the brake test to help any way I could.

Returning to 6088's cab, I pulled one of the Cokes we had iced in the snow on the engineer's walkway, and found it frozen. Snow had penetrated my boots, so I sat on the fireman's seatbox and draped my damp socks over the cab heater. Engineer Alex Huff (also MIGN's Vice President of Operations) studied my shabby state from across the cab and remarked with a smile, "Welcome to Michigan."

NORTH TO

THE CHIEF



ABOVE: After the railroad's decision not to participate in an industry-wide rate increase in September 1977, traffic on the railroad boomed and the road went locomotive shopping. Alco RS3 No. 2037, still in Southern paint, and ex-Seaboard Coast Line Baldwin RS12 No. 215 in Michigan Northern green and white prepare to take a 20-car train of overhead lumber south from Cadillac, Mich., in October 1978. RIGHT: In about as rare a locomotive consist as could be found anywhere in 1978, ex-D&H Baldwin shank No. 1216, Michigan Northern RS2 1501, and ex-C&NW RS3 1517 lead a northbound train near Oden, Mich., with Little Traverse Bay in the background.



Rising Above the Chaos

In the mid-1970s Michigan's railroads were an industry in turmoil. Consolidated Rail Corp. (Conrail) was authorized by Congress to acquire thousands of miles of troubled rail in the Northeast and Midwest once operated by seven bankrupt Class I railroads. Set to take over on April 1, 1976, Conrail could by law elect not to retain any routes it determined to be unprofitable, and many of the lines in Michigan fell into that unfortunate category. Conrail decided not to operate the 220 miles of Penn Central track from Comstock Park (just north of Grand Rapids) to Mackinaw City at the tip of the state's lower peninsula. Also excluded was a 23-mile branch from Walton Junction to Traverse City. Thus, in December of 1975, Michigan Northern Railway was formed by a group of ambitious young railroaders to operate the trains on track which would be leased by the State of Michigan from the trustees

of the bankrupt Penn Central estate.

Operations began at Cadillac (the approximate mid-point of the main line) on a snowy April 1, 1976. The MIGN locomotive fleet initially consisted of a pair of Alco RS3s purchased from the Southern Railway. The railroad's office was in a rented store front furnished with card tables and folding chairs, overlooking the Cadillac city park. The office was later moved to a nicely renovated old Pennsylvania Railroad freight house next to the tracks at Cadillac. Since repainting the locomotives was not an immediate priority, the new line gained a lot of initial railfan attention by running locomotives in Southern Railway paint and lettering far from their original home. Initially, freight traffic over the new Michigan Northern was minimal, although the company claimed to haul 25 percent more cars in its first two months than Penn Central had hauled in the same period a year before.

Michigan Northern's first winter brought both good fortune and operational challenges. The winter of 1976-1977 (and the two winters that followed) were unusually cold, and the Great Lakes were nearly entirely frozen over. The good fortune came in the form of an Algoma Steel Company coal boat which was scheduled to be loaded from railcars at Toledo, Ohio, and sail to the Algoma steel mill at Sault Ste. Marie, Ontario, but early ice blockage of Lake Erie and Lake Huron removed water transportation as an option until spring. The coal was reconsigned via an all rail route to Canada, and the result was four trains (221 cars) of coal delivered by the Chesapeake & Ohio to MIGN at Reed City in February of 1977.

Michigan Northern was, of course, glad to have the revenue during a slow time, but with only three operable locomotives (the original ex-Southern RS3s and a recently purchased RS2 from

Michigan Northern

Illustration by Otto M. Vondrak. Not all railroads and stations shown. Not an official map. ©2015 White River Productions



(Green Bay & Western) a boat load of coal might be considered too much of a good thing. Moreover, the Chesapeake & Ohio interchange track at Reed City could not accommodate trains the length of the coal move, so the Chessie System delivered the cars by pulling through the interchange track and backing onto the MIGN mainline. The Michigan Northern was successfully blocked at the C&O connection until the cars could be moved north. Two of the Alcos were immediately put to work hauling 20-car trains to the available yard space at Cadillac (29 miles), and the third Alco was used on a snowplow train to help keep the railroad open.

The entire tale of snow blockage, locomotive failure, and an unfortunate altercation between a wing of the snowplow and a highway overpass is a worthy story in itself, but MIGN's Alex Huff summed it up with, "Although it took us almost all winter, we were able to get the coal to Algoma Steel via the Soo Line." As spring 1977 arrived, the tired railroaders of Michigan Northern looked forward to some well-deserved rest.

The hull in business lasted until September. That month the Interstate Commerce Commission granted the nation's railroads a five percent general freight rate increase. Michigan Northern, however, decided not to raise rates, but to "flag out" of the otherwise industry-wide policy. By an obscure quirk in the ICC regulations then in force, the results were far reaching. By ICC rules, any long haul carload shipment which made even a small part of its journey over a flagged out railroad would benefit from the lower rate for its entire route. A carload of lumber from the Pacific Northwest to the East could save about \$150 by being routed over Michigan Northern. While other railroads that lost the traffic howled in protest, 1978 saw some 3000 carloads routed via Michigan Northern.

To handle this increase in business, Michigan Northern went locomotive shopping, and the old PRR enginehouse at North Cadillac was soon surrounded with two additional RS3s from Chicago & North Western and other units. Unfortunately, one of the original acquisitions, Central of Georgia RS3 No. 151, suffered an electrical cabinet fire and was retired in March 1977. The search for additional locomotives continued.

In early 1978, John Kunzie's Castrolite Corp. of Woodstock, Ill., purchased the last two remaining Baldwin RF16 "Sharknose" cab units, Nos. 1205 and 1218, from the Delaware & Hudson. The units were soon leased to MIGN and were delivered to the railroad by the C&O at Reed City on April 17, 1978. Unfortunately, while the units were able to operate together for a few trips, the 1205 proved to be an operational disap-

pointment. Despite the replacement of a scored crankshaft by MIGN, it was mostly seen out of service beside the enginehouse at North Cadillac.

The Baldwin locomotive influence continued when MIGN purchased three RS12s from the Seaboard Coast Line at Jacksonville, Fla., a few months after the sharks arrived. By late 1978, Michigan Northern rostered ten locomotives including five Alcos and five Baldwins. The enginehouse at North Cadillac was becoming a genuine railfan destination.

Motive Power Shuffle

Other railroads were officially opposed to MIGN's "flag out" policy that attracted business at the expense of other carriers, but neighboring Chesapeake & Ohio also benefited from the MIGN's increased traffic and began to quietly help with the locomotive shortages. Two Geeps were rented from Chessie System following the early 1978 locomotive failures

previously discussed. Four C&O Geeps were made available during the July 4 weekend when MIGN was choked with overhead lumber traffic. That weekend saw one of the longest trains in company history, consisting of 70 carloads of lumber from Cadillac to the Conrail connection at Comstock Park.

While documentation is no longer available, the longest train on the south end of the railroad was probably 88 loads south from Cadillac, which is also remembered for breaking a coupler knuckle at Ashton (20 miles south of Cadillac), much to the displeasure of conductor Paul Bensen. Former MIGN sales

manager Glen Ashley recalled that in one week the company moved 280 loads south from Cadillac; he has speculated that the old Pennsylvania Railroad had not moved that many loads on the line in the same period of time for decades, if ever.

On the north end of the railroad, engineer Paul Baumgartner remembered a southbound train of 81 lumber loads, 15 empty pipe gondolas picked up online at Kalkaska, and two miscellaneous empties, for a total of 98 cars. On the head end were the five MIGN Alcos and three leased C&O Geeps. Unfortunately the crew didn't have enough m.u. cables



RIGHT: Michigan Northern's locomotive maintenance facility was located at the old Pennsylvania Railroad one-stall enginehouse at North Cadillac. In February 1977 the enginehouse is seen surrounded by Alco roadswitchers, a Jordan Spreader modified with a high front blade for snow plowing, and the inevitable winter snow. BELOW: Winter railroading is tough in Michigan for shortlines and Class I carriers alike. A Chesapeake & Ohio crew works into the night to re-rail C&O snowplow SP-21 and GP9 No. 6021 which derailed on an ice-filled crossing at Bellaire, Mich., 60 miles north of Cadillac.



ABOVE: Elmira Hill was the ruling grade southbound between Mackinaw City and Cadillac. Huntworth was a long passing siding just south of Elmira where southbound cars could be set out by trains doubling the hill. In steam days an enginehouse and turntable serviced helper engines here. A southbound Michigan Northern train headed by leased C&O GP9 6088 and dead Alco RS3 1517 set out the first half of an 18-car train at Huntworth before going back north for the remaining cars. Crewmen are seen shoveling out the switch at the south end of the siding, and taking the opportunity to clear snow off the walkway of the C&O locomotive on February 20, 1978.

to tie everything together, so one Alco was left inoperable. The train headed up Gilbert Hill toward Cadillac with seven operating units, probably an all-time MIGN record. Three of the Alcos later shut down after being throttled back at the crest of the grade. This was a common early problem which engine crews later learned to handle, allowing the engines to keep running and cool down slowly as the train coasted into Cadillac.

The temporary addition of the well-maintained C&O EMD power lightened the job of the tired railroaders at Michigan Northern, but not all were fans. When engineer Stan Bogen was asked in early 1978, he replied, "They're alright, I guess, but they'll pull only so much and then they lay down. The Alcos will keep lugging until the pistons come flying out through the stack."

The Alcos, of course, were the drama queens of any railroad. Engineer Greg Bunce recalls coming south from Mackinaw City with all five Alcos and 50-plus cars. It was, he says, "One of the very rare times when all five Alcos were functional, although [ex-C&NW] 1617

had partially plugged radiators and was limited. I remember going across the crossing in Petoskey in front of the J.C. Penney store and shaking the store windows. It was a pretty impressive show of noise and smoke through the middle of town."

North to the Chief

But the phenomenon that was Michigan Northern went beyond the rolling locomotive museum centered at North Cadillac. The MIGN's northern connection was not a railroad at all, but a 1911 hand-fired, coal-burning carferry named *Chief Wawatam*. The *Chief* operated nine miles across the Straits of Mackinac connecting with the Soo Line at St. Ignace, the southern tip of Michigan's upper peninsula.

Before MIGN's traffic boom the boat made one round trip a week, generally leaving St. Ignace at 9:00 a.m. on Thursday. In 1976 it hauled 420 cars. By early 1978, it was sailing four or more days a week, delivering over 400 cars a month to MIGN. The *Chief* was the last hand-fired coal-burning boat in the United

States commercial registry.

"Much of the history of the Great Lakes carferries," wrote George Hilton, "is concerned with their continual battle with the ice." Ice covers the Straits of Mackinac approximately four months every year. The *Chief's* owner, Mackinac Transportation Co., was a consortium of railroads that converged at the Straits. The owners included Detroit, Mackinac & Marquette (later Duluth, South Shore & Atlantic, then Soo Line); Grand Rapids & Indiana (later Pennsylvania Railroad, Penn Central, and Michigan Northern); and Michigan Central (later New York Central, Penn Central, and Detroit & Mackinac).

Chief Wawatam was the largest boat owned by Mackinac Transportation and also the longest-lived. It arrived at St. Ignace on October 18, 1911, and would steam between the two peninsulas for slightly more than 78 years.

The *Chief*, with four tracks and a 26-car capacity, was the company's primary boat, relegating her sister ships to standby service much of the time. But with the advantage of the bow propeller, all the



TOP: Interesting locomotives were common on the Soo Line in St. Ignace. On February 23, 1978, the *Chief Wawatam* was switched by two leased Lake Superior & Ishpeming U23Cs. ABOVE: The pilot house of the *Chief Wawatam* on February 23, 1978. LEFT: A Soo Line F-unit and Geep stand by to switch cars off the ferry at St. Ignace on October 7, 1976.

boats (the company ultimately owned four) could earn their keep each winter as ice breakers on the Great Lakes while the *Chief Wawatam* generally ferried the railroad cars between St. Ignace and Mackinaw City.

Things were routine when a friend and I rode the *Chief* northbound on Thursday, February 23, 1978. Since the boat had not sailed the previous day, the sheet ice was about 14 inches thick across the Straits, and some reversing of the engines was necessary to batter our way through. Below decks the loud, deep rasping sound of ice scraping against the riveted steel hull was impressive indeed.

The attractions of the old boat were numerous. The many brass fittings were nicely polished, and there were large well-painted open spaces below decks where passengers and around-the-clock crews once congregated. The last passenger trains to cross the Straits on the

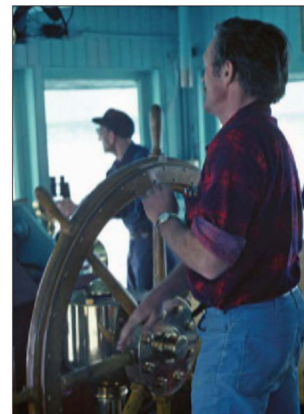
Chief were DSS&A Nos. 1 and 2, the *Lake Superior Limited*, which ran between Mackinaw City and Marquette. These trains were cut back to eliminate the Straits crossing in August 1955.

But the real show was deep below in the boiler room, where human stokers were firing the boilers as they always had — with shovels. The railroad enthusiast accustomed to the high firing rate of locomotive boilers might think the firing rate of a steamship boiler to be rather leisurely. Nevertheless, the fire doors were high above deck level and lifting shovels of coal that distance made for a strenuous job.

In his masterful blend of steamship technical data and romance titled *The Only Way to Cross*, John Maxtone-Graham wrote, "Although passengers were always encouraged to tour the ships that carried them... boiler rooms were seldom included on the itinerary. It was not be-

cause of the heat and noise, but rather that stoke-holds were the crucibles of company ambition, where nothing that might distract from the deadly serious work should intrude. No matter what schedules might be selected in company board rooms, no matter what speed requests might be rung down from the spotless bridge, both owner and master relied completely on the endurance, brawn and skill of those awesome men who kept up the steam."

After taking photos in the boiler room, a short but extremely muscular fireman asked if I might like to borrow a shovel and toss a couple of scoops of coal into the boilers, just so I could say I did. I would not have asked for such a privilege — and certainly did not consider my effort a contribution — but could not turn the invitation down. More than 35 years later I still recall his kindness. He was obviously proud of his work, as



ABOVE: The *Chief Wawatam* burned about 40 tons of coal a day when sailing, all of which was shoveled into the six boilers by hand. In summer it used only two 13-foot diameter propellers in the stern, but in winter it used an additional 12-foot propeller in the bow to aid icebreaking. TOP RIGHT: In the pilot house, except for a few modern additions such as radar, gyrocompass, and radio, the scene is probably one that Mark Twain would have recognized. Wheelman Gordon Trainer is at the helm as the *Chief* approaches the end of its journey at St. Ignace. RIGHT: The *Chief Wawatam* arrives at the Soo Line connection at St. Ignace on October 7, 1976.



he should have. I wish I had asked his name.

The *Chief Wawatam* was approaching St. Ignace when we climbed to the pilot house. Captain Roderick J. Graham greeted us with a friendly, "I was wondering where you boys were." When I explained we had spent much of the trip in the boiler room, he observed, "How about that? You haven't seen anything like that since you saw the movie on the *Titanic*." In those days, "the movie" was the 1958 "A Night to Remember," based on Walter Lord's 1956 book of the same name. While I did later re-visit Michigan Northern and the Straits of Mackinac, I never saw *Chief Wawatam* sail again.

End of the Line

The loss of *Chief Wawatam* as Michigan Northern's upper connection was only one development that brought about the ultimate demise of the compa-

ny. On Tuesday, October 14, 1980 (four years before the end of carferry operation), President Jimmy Carter signed the Staggers Rail Act of 1980 into law. The Staggers Act is generally credited with catapulting American railroads into a new era of deregulated prosperity. But since Michigan Northern's freight rate "discount" was dependent on a quirk in ICC rate-making rules that disappeared after Staggers, the whole house of cards came tumbling down. The lumber traffic, which had supported Michigan Northern, disappeared.

At about the same time as the passing of the Staggers Act, the State of Michigan began scaling down its rail subsidy program, which was becoming increasingly expensive. The state was then subsidizing not only the Michigan Northern and the *Chief Wawatam*, but also the Michigan Interstate Railroad, operators of the former Ann Arbor Railroad.

The total payments by the State of Michigan for MIGN's track lease from Penn Central, operating deficits, and taxes peaked in fiscal year 1980-81 at just under \$4.5 million. State funds provided for the same expenses in 1981-82 were \$3.6 million, a decrease of 20 percent.

In February 1982, the State of Michigan terminated the subsidy on 35 miles of Michigan Northern track between Petoskey and Mackinaw City. These funds paid for the rental of the track and property from Penn Central Corp. Michigan Northern determined that this northern connection with the *Chief Wawatam* and the Soo Line was critical to the entire operation and began paying the rental of \$11,000 a month out of operating funds.

But while the MIGN declined in some parts of its operation, there was expansion in others. On February 20, 1982, the railroad took over operation of 37 miles

of C&O track connecting with the Traverse City branch and with the main line at Petoskey, which had been cut off by C&O abandonments and purchased by the State of Michigan.

Additionally, on January 2, 1983, MIGN took over operation of the *Chief Wawatam*, through a new subsidiary called "The Boat Company." The *Chief's* northern connection, Soo Line, had controlled the assets of the Mackinac Transportation Co. since the formation of Conrail, but operations were later handed over to Detroit & Mackinac in August 1976. Since D&M received only a small fraction of the boat's traffic, this responsibility was transferred to a more involved connection, Michigan Northern, for the boat's final 20 months of operation.

On August 21, 1984, 37 feet of the earthen fill at the St. Ignace carferry landing collapsed, causing approximately \$250,000 in damage. The Soo Line decided not to make repairs. Carferry service came to an abrupt end across the Straits after 97 years. The *Chiefs* sat idle at Mackinaw City for four years while preservation efforts were debated.

A study of alternative uses for the

boat was jointly financed by the Michigan Department of Transportation and the Michigan Department of Natural Resources and was conducted by Temple, Barker & Sloane of Lexington, Mass. The study primarily looked at three possible uses for the *Chief*: (1) as a museum and tourist shops at the Straits of Mackinac; (2) as a traveling museum steamer or being towed to various locations on the Great Lakes; and (3) as a passenger excursion boat offering one-day or multi-day cruises.

The April 1986 report proved to be a remarkably insightful document, spelling out the costs and regulatory restrictions which each plan could expect. For the museum option, for example, the report said in part: "There should be no false expectations that the vessel will pay for itself easily as a museum. Admission may defray a large part of the museum operating expenses, but the ship is a large, complex structure in need of much maintenance. The five-month tourist season is short. It is difficult to envision the ship being well-maintained without subsidy or endowment."

The *Chief Wawatam* was ultimately sold to Purvis Marine of Sault Ste. Ma-

rie, Ont., for \$110,000 and cut down into a barge. Jonathan Eppley of the *St. Ignace News* later wrote, "In her waning years as a barge, she was used mostly to haul steel to Chicago, Detroit, and Windsor, Ont., and the sight of her familiar black hull being towed through the Straits elicited both excitement and sorrow from those who knew her, a pathetic remnant of a once proud era."

Eppley also reported the scrapping of *Chief Wawatam* for the same paper on November 12, 2009. He eloquently summarized a 73-year nautical career and observed, "In her heyday, the *Chief* was a lifeline to security and commerce between the peninsulas."

The gradual cut in state subsidy beginning in 1981 and the loss of the *Chief Wawatam* connection in 1984 obviously placed the future of Michigan Northern in question. There were, however, bright spots in the picture. In early 1982 Michigan Northern fell heir to a large sand move from Yuma, Mich., to a Ford Motor Co. foundry at Cleveland. The sand was originally loaded on the Ann Arbor Railroad, 20 miles west of Cadillac. With the shutdown of the AA, the sand was trucked to Cadillac and loaded into



ABOVE: In its first year of operation, Michigan Northern traffic was minimal. Ex-Southern Railway RS3 No. 2037 is southbound on October 8, 1976, at Stanwood (51 miles south of Cadillac) with four boxcars in tow. OPPOSITE: Michigan Northern's last run south of Cadillac on September 29, 1984, arrives at Fuller Junction, the railroad's Conrail connection at Grand Rapids, with a pair of GP7s, Nos. 1603 and 1608, leading. The crew was Paul Benson, engineer, and Dave Sandell, conductor. Michigan Northern would continue to operate a 35-mile segment of track from Mackinaw City to Petoskey for the next two years. PHOTO BY ALEX HUFF



Conrail hopper cars in the MIGN yard. The traffic was substantial; within a year the railroad was reportedly running trains of 25-30 cars of sand from Cadillac to Comstock Park three days a week. Motive power was generally a MIGN GP7 and a leased ex-Ann Arbor GP35 — second generation diesel power on MIGN was a rare event.

In early 1984 a truck transfer facility went into operation at Pellston, 17 miles from Mackinaw City. Algoma Steel began trucking 25-ton steel ingots from Sault Ste. Marie, Ont., and loading an estimated 35 cars a week for shipment, via the C&O at Reed City, to a steel mill in Pennsylvania. Trucking across the Straits of Mackinac over the highway suspension bridge was determined to be cheaper than an all rail route from Canada, although not the cheapest way in summer when the Great Lakes were open for navigation.

Ultimately, it was a political decision that forced the end of Michigan Northern operations. To keep operating costs at a bare minimum, Michigan Northern was a non-union railroad at a time when such companies were much less common than in later years. Initially this was accepted by all concerned, but after a change in state administration, there was strong political pressure to award state operating contracts to union-represented companies. The contract to operate all track south of Petoskey was transferred to the Tuscola & Saginaw Bay Railway (TSBY), a 44-mile Michigan shortline, whose employees were represented by a maritime union. The change was effective Monday, October 1, 1984, and the previous weekend the MIGN made its final run south, a Cadillac to Comstock Park turn with GP7s 1603 and 1608. On Sunday, September 30, the company material at Cadillac was loaded up and

that evening all equipment was moved to the steel loading area at Pellston. The MIGN now operated only the 35 miles of track from Mackinaw City to Petoskey, which MIGN had been leasing directly from the Penn Central trustees and had been operating without state subsidy.

The End of an Era

The Pellston truck transfer facility remained active until April 1987, with Michigan Northern shutting steel ingots to the TSBY connection. On the last run, April 12, 1987, three loads were delivered and the GP7 returned light. About a mile south of Pellston, the locomotive ran out of fuel. Engineer "Andy" Anderson and his conductor walked home.

Ultimately the Tuscola & Saginaw Bay was purchased by Federated Railways, Inc., and its name was changed to Great Lakes Central Railroad in March 2006; GLC is now the largest regional railroad in the state of Michigan, operating 400 miles of track. On November 18, 2013, Federated Railways became part of Watco Companies, a shortline holding company based in Pittsburg, Kan., which operates 30 shortline railroads with 4400 miles of track, along with contract switching operations and equipment repair facilities.

In its 11-year history Michigan Northern took a rocky ride across Michigan, battling ice, snow, equipment failure and, perhaps most ominously, the uncertainty of political quagmire. One may note that, despite the obstacles, the company accomplished its designated work, adapting to great changes in railroading and facing down opposition from many corners.

On one particular February midnight in 1978, a Michigan Northern train crew switched cars of lumber just south of Pellston. The dark scene was lighted by the locomotive headlight, weak railroad hand lanterns, the distant flicker of the local airport's rotating beacon, and a sky so clear and calm that billions and billions of stars (the ones Carl Sagan told us about) seemed just out of reach. The snow resembled powdered glass, reflecting the starlight and, because of the below-zero cold, it barked under foot like sand on a beach. Michigan is a tough place to railroad in winter, yet is sometimes so incomparably beautiful that railroaders would not want to work anywhere else. ■

The author would like to thank Beth Andrus, former president of Michigan Northern, and Alex Huff IV, former MIGN Vice-president of Operations, for their hospitality during the company's years of operation and their assistance in telling its story.