

LAKE SUPERIOR TRANSPORTATION CLUB
LAKE SUPERIOR MUSEUM OF TRANSPORTATION

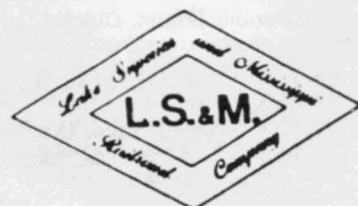


Laker

SUMMER, 1990



Lake Superior and Mississippi Railroad



THE LAKER

Summer, 1990

The Laker is the official publication of the Lake Superior Transportation Club, an organization of volunteers for the Lake Superior Museum of Transportation, located at 506 West Michigan Street, Duluth, Minnesota, 55802, and is published by and for its members four times a year. Inquiries and articles for publication may be sent to its editor, Jergen Fuhr, 4301 Jay Street, Duluth, Minnesota 55804-1457. The LSTC was formed for the purpose of preserving, restoring and operating various types of railroad equipment and related items, models to prototypes, and to be of service to the public in the education and use of rail transportation

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Editorial Comment

Again our apologies to those whose names were spelled wrong in the last issue of the Laker — **John Larkin, Merrill Hendrickson, Tom Griffith** in the list of contributing members, and **Leo M. McDonnell** in the masthead. And the **NRHS. Tim Schandel's** name was left out in the story about members attending the preservation symposium in California. The editor tries to be as thorough and accurate as possible in producing a quality piece of journalism. But when he is off to do some work at the museum or help out on excursion trains and leaves the proof-reading and editing to staff members ... well, like it has been said before, good help is hard to find.

A public hearing was held in the St. Louis County board room on June 11 to hear and answer questions from local residents about the North Shore Scenic Railroad. Rail Authority members did their best to calm any fears about a number of things that residents in the Lakeside and Lester Park areas had concerning the operation of the new line.

In addressing the board, one business man said "What is good for tourism is good for us. Our concern is that you do it right. Tourism is fragile and we question the Grandma's Marathon train. There are miles where the tracks are nowhere near the highway." An owner of an eating establishment with outdoor tables near Fitger's was concerned about the dirt and smoke that would emanate from the passing train.

A woman whose property abuts the rail line in Lester Park asked that should the Duluth & Iron Range Railroad ever move a tank car of gasoline past her house, she would like to be notified so she would not plan to light her barbecue. A part of their garage, a fence and evergreen trees were on the railroad right-of-way. The trees and fence were removed.

A former DM&IR track worker was concerned about safety and track inspections and another woman was worried about the safety of her children. Some residents were afraid that neighborhood kids would try to hop rides on the train as it passed through the area and motorists, not used to seeing trains the last several years, would ignore the grade crossing signs.

Leo McDonnell told the small audience that the LS&M has been operating an excursion train West Duluth for the past ten years, have grade crossings and have not had an accident. "The parents in West Duluth are very knowledgeable and diligent in teaching their children about playing in or near railroad tracks, and I expect the parents of Lakeside will do the same."

In responding to the fear of grade crossing accidents, Leo asked, "What is the first thing you learn in driver's ed? Stop, look and listen!. You stop, you look and you listen. A habit is no excuse for violating the law."

Don Shank also spoke to the gathering, stating that the Duluth & Iron Range Railroad would take seven to ten cars, maybe 15 at the most, for Louisiana-Pacific on two round trips per week. As to the condition of the tracks, he said the line is laid with 115-pound rail. There were 15,000 new ties laid between the Depot and 26th Avenue East, and 5200 ties were replaced on the rest of the line.

The rail line is class two which restricts speed limits to 30 miles per hour in the country, 20 in the city limits, though the line
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is adequate for a class three which permits an even faster speed limit.

Commissioner **Gary Doty** informed the gathering that the reason rail authorities are formed is to preserve an abandoned rail for potential economic development, agriculture, freight and passenger use. **Bruce Ojard**, project engineer for the Rail Authority, stated that the latest in grade crossing technology will be employed in the installation of new motion-sensor signals.

In a rebuff of some complaints that the Authority had not notified residents of the reactivation of the rail line, chairperson **Liz Prebich** stated that a public hearing was advertised for Ordean Junior High School last January and notices were to be sent to all residents abutting the right-of-way. Nineteen people showed up. She also stated that all meetings of the Rail Authority are open to the public.

The tracks through the eastern part of Duluth were laid over 100 years ago by the former Duluth and Iron Range Railroad. Fifteen daily suburban trains used the line between 1887 and 1892 when the Duluth Street Railway extended a line into Lester Park. Passenger trains (an RDC the last two years) operated over the line until 1962 and freight trains continued until 1982. The last excursion train to use the line was in July, 1984, the centennial of the DM&IR.

After having a railroad for the past 100 years, it seems rather strange how people get used to not having trains in their back yards and not stopping at grade crossings so quickly. No one has said there will never be any trains running on those tracks. As long as there are tracks, one should assume that a train could possibly come by, unless they have deteriorated to a point as to make them unusable.

There were plans at one time for the railroad right-of-way to be bought and transformed into a freeway. In cities where freeways have cut through residential areas, huge sound barriers have been put up, blocking not only the sound, but the view as well. Would they have complained about that?

Railroads were a way of life, a means of transportation before the airplane and the automobile, a means of getting to remote areas inaccessible by any other means. The steel wheel on a steel rail is still the most economical and efficient means of getting people and goods from point A to point B. But how soon some people forget.

The Rail Authority was formed on July 14, 1986. It was learned recently that the start of freight service on the North Shore Scenic Railroad will be delayed because of the difficulty in obtaining liability insurance.

COVER PHOTO . . .

A publicity photo of the EMD FT 103 demonstrator that has been making the rounds to mark the 50th anniversary of the historic locomotive that pioneered the change from steam to diesel power. The 103 A-B was on display in Duluth July 2-4 in the Museum.

Union Pacific Railroad



ELECTRO-MOTIVE FT 103 DEMO DISPLAYED AT RAILROAD MUSEUM

The Electro-Motive Division of General Motors has put their FT Demonstrator 103 on display in several cities around the country. On Monday morning, July 2, it came to Duluth for a three-day display at the Museum through the Fourth.

A printed sheet from EMD for publicity purposes had this to say about the locomotive:

The historic unit has been called the single greatest locomotive of the 20th Century. The 103 pioneered the conversion from steam to diesel power on America's railroads by proving that diesels could do twice the work of steam at half the cost.

The FT 103 was originally a four unit, 5400 horsepower locomotive. It consisted of two 2700 horsepower "sections" comprised of a cab unit and a booster permanently connected with a drawbar. Each cab and booster unit was equipped with a 567 series 16 cylinder diesel engine rated at 1350 horsepower. Electro-Motive only sold the FT model as two, three, or four unit sets of 2700, 4050, or 5400 horsepower. They were never intended to be sold as a single unit.

The locomotive left McCook with little fanfare in November of 1939, to begin a gruelling 83,764 mile demonstration run. The 103 ran over 20 different railroads from sea level to 10,000 ft. in sub-zero temperatures and scorching desert heat. During this eleven month trip through 35 states, no train was ever delayed or cancelled due to any mechanical difficulty.

As a result of this dramatic run, American railroads went through a revolution in motive power. Diesels took over virtually 100% of the freight, passenger and switching work in the next 21 years. The 103 was subsequently reconditioned and sold to the Southern Railroad in 1941, and the four units were renumbered #6100, 6150, 6151, and 6104. They continued in service for more than 20 years before being retired.

The FT model was sold to 25 different railroads while in production from 1941 through 1945. A total of 555 cab units and 541 boosters were built during this time. The Santa Fe Railroad was the first to place an order for FT, and, with more than 320 on its roster, also owned the most.

Of the original four unit set, only the lead "A" unit exists today. This locomotive is now owned by the National Museum of Transport, St. Louis, Missouri. The "B" unit on display was built in the early 1940's for the Southern Railroad and is one of very few FT B's in existence. It is on loan from the Virginia Museum of Transportation in Roanoke, Va.

As EMD marks the 50th anniversary of the historic FT 103, we also look to the future as we celebrate the past. The EMD legacy of quality, advanced design and customer satisfaction remains. A Proud Tradition Continues.

The statistics for the FT 103 are: 193 feet long; 912,000 pounds; 4800 gallons fuel oil; (4) 16 cyl. 567 series engines 1350 H.P. at 800 RPM (1 in each unit for a total 5400 H.P.); geared for 75 MPH; rated at 228,000 pounds tractive effort; 4 driving axles on each unit — total of 16.

It was in 1886 that the standardization of American railroads in the south was completed, enabling interchange of cars throughout the entire country for the first time. It was December 24, 1873, that the first through passenger train operated from Chicago to New Orleans. The train was ferried across the Ohio River and the car trucks had to be changed at Cairo, Illinois, because of a change in track gauge.

CHINESE STEAM LOCOMOTIVE FACTORY SUBJECT OF NEW PHOTO EXHIBIT

Northern Pacific baggage car 255 has been turned into an art gallery and has exhibited several photo and painting exhibits. Currently being shown is a series of photographs taken by Neelon Crawford in a steam locomotive erecting shop in China during the years 1981 to 1986. The photographs are a study of the parts and processes involved in the manufacturing of a locomotive. China is the last country in the world to build steam locomotives and the last two steamers to be built anywhere are pictured in the collection.

Some of the prints are photogravures, a process which uses a copper etching plate prepared with a photo-sensitive tissue. The process produces a remarkable tonal range which is unobtainable with the standard silver print process. The photo display is through the courtesy of the Jayne H. Baum Gallery of New York.

Crawford worked extensively in several different media the past 20 years including stained glass and short 16 mm film subjects. In 1978 he increased his emphasis on still images and is now devoting most of his time in that field of art.

When asked about his fascination with photographing steam locomotives in China, Crawford replied:

"From a slightly different perspective, I have viewed the development of steam as the beginning of the mad dash mankind is making toward the Goddess of High Technology. The steam engine may be the last machine that can be readily understood by an average person — the large round driving wheels driven by the pistons pushing the heavy connecting rods as steam expands into the cylinders. It all happens in the open right there where the observers may see what is going on."

There were two factories building steam locomotives in China. The largest was at Datung with a work force of 6,000 which assembled 10,000 parts to create a locomotive every day. The QJ 2-10-2s produced at Datung were used in mainline service all around China.

The smaller plant at Tangshan produced about 80 SY 2-8-2s a year which were used for secondary roads and industrial plants. Two of the SY class were sent to the U.S. for use in tourist train service, one on the Boone & Scenic Valley Railroad in Iowa. The Tangshan plant also produces 500 passenger cars per year.

The logo for the Chinese National Railroad is a red star with a cross section of a locomotive boiler in the center. Inside the boiler is a cross section of a rail. The two cross sections also relate to Chinese character writing — the boiler cross section relates to "people" and the rail cross section relates to the character of "working."

The photo exhibit car is outside the Museum on track five and is open during regular museum hours.

FLURRY OF ACTIVITIES AT MUSEUM SIGNALS COMING TOURIST SEASON

As winter fades into spring and spring gives way to summer and the tourist season looms on the horizon, those businesses and operations that are connected with the tourist industry start, or perhaps pick up the tempo somewhat to be ready for the summer season. The Museum has also seen an increase in activities

as staff and volunteers rush to get the various pieces of equipment ready for the excursion train operating season.

It's not that staff and volunteers have been sitting on their hands during the winter months, nosiree. It's just that the approach of the operating season seems to increase in speed the closer it gets, something like the Doppler effect.

LS&M personnel have been working on solarium car 29 for the past two winters and are in the final stages of completion. The car won't be fully completed for the 1990 season, but will be far enough along to be usable and start earning some revenue. The painting of the interior had been finished in May and the underlayment laid in preparation for a new floor covering. Anderson Linoleum installed the nine-foot wide vinyl on June 7th.

LS&M members began installing the walk-over seats the following Saturday after the arm rests, isle ends and bases had been repainted a light green to match the interior of the car. They had been red. Some of the seat cushions and back rests are upholstered in a dark green mohair, while others are a green naugahyde. Plans are to eventually finish all the seats in a green mohair.

The wiring was finished and light fixtures installed. A five-kilowatt generator will be installed in the near future to supply power for lighting and a water heater that will enable the car to be heated using baseboard heating panels. The car will be train-lined in the meantime. There will be a few other minor things to finish next fall and winter after the tourist season is done.

Staff and volunteers have also picked up the pace to get the motive power into operating condition. The Museum's resident restoration specialist, **Zeke Fields**, has been overseeing several projects and dividing his time between the GN 400 (Hustle Muscle), the SW-9 No. 935, the Budd Car, and occasionally going out to the LS&M shop in West Duluth to give advice and keeping in touch with the progress of the D&NM No. 14. LS&M members have been working on their locomotive No. 46 and No. 14 has had boiler work done at Fraser shipyard and the locomotive will be returned to the Museum soon to have the cab and accessories put back on.

The governor on the GN 400 had been taken off and tested and after a few other repairs, the SD-45's engine was cranked. Following several tries, the 3600 H.P. V-20 engine sputtered and ran for a few seconds in the Museum on May 31 after being silent for five years. The following day it was moved outside and run several times. A leak in the water pump and a few problems with the turbocharger were found. **Ron Erickson** and **Lee Oviatt** have been helping with the 400. Erickson was formerly with the BN and is now the general manager of the North Shore Scenic Railroad and was also the rules instructor. Oviatt is with the Missabe.

Lee Rushenberg has returned to Duluth and has been concentrating on getting the 935 up to FRA standards. The air tanks on the SW-9 were removed and drilled, brake valve cleaned and checked and other checks carried out to assure the locomotive is safe to operate.

Staffers Zeke, Ron and **Tom Gannon** have been working on the Budd Car to get that piece of equipment into operating condition and FRA legal. The air conditioning system has been charged and put into working order, operating gauges and brake valves removed and reconditioned plus some engine work. The Budd Car, No. 9169, was from the Blue Mountain and Reading Railroad.

The coming tourist season also means it is time to get the coaches cleaned and club members have cleaned the seats and the interiors of coaches 33 and 85, removing the coal dust that accumulates from being stored near a coal dock in West Duluth.

JOE MINNICH GUEST SPEAKER AT ANNUAL LSMT MEETING, DRAPER, MCGIFFERT HONORED

Lake Superior Museum of Transportation held its annual membership meeting and dinner on May 3 in the Depot, starting out with a social hour at 6:00 in the railroad museum with music supplied by the **Mike Meier Duo**.

A roast beef dinner was catered by Sammy's in the Great Hall of the Depot, followed by the annual meeting of the membership in the Duluth Playhouse Auditorium. Museum President **Wayne C. Olsen** opened the meeting with a few remarks as to the status of various pieces of Museum equipment, particularly the restoration progress and repairs being made on GN 400 (Hustle Muscle), the SW-9 No. 935 and D&NM No. 14. Wayne had also mentioned some of the planned events that will be coming up this summer: The Grandma's Marathon excursion train, Depot railroad days, Two Harbors railroad days and several charter trips for groups holding conventions in Duluth.

Mr. Olsen had also reported that there are 348 members of the Museum and that "Hundreds of hours are being given in volunteer work by members of the Lake Superior Transportation Club and the Lake Superior and Mississippi Railroad in the restoration and repair of various pieces of equipment."

Bob Sederberg gave the financial report, stating that the financial position of the Museum is in good shape and that the books are in order. Members of the board of directors of the Museum were introduced to the membership.



Joe and Francis Minnich of the Tourist Railway Association, Inc. (TRAIIn), speak to the annual meeting of the Lake Superior Museum of Transportation in the Duluth Playhouse.

Following the business meeting, **Joe Minnich** of the Tourist Railway Association Incorporated (TRAIIn) gave "An Overview of the Tourist Railway Industry," showing a number of slides that he had taken of many of the tourist railroads about the country. He calls his presentation the "Dog and Pony Show."

"In 1990 there are over 370 members of TRAIIn, including two tourist railways in England," said Mr. Minnich. After describing what the Tourist Railway Association is all about and its objectives, Mr. Minnich presented views of some of the narrow gauge
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Don Shank (back to camera) presents a model of a DM&IR caboose to Turk McGiffert and Lenard Draper (right) follow-

ing the annual meeting of the LSMT on May 3.

MUSEUM CARS USED FOR MID-SUMMER MUSIC FESTIVAL, NRHS TRIP

BN coaches A13 and 14 and DM&IR's Minnesota II were sent to Minneapolis for use on the Soo Line to transport people to the Mid-Summer Music Festival, a bi-annual affair held at Hyland Park. Immediately following the festival use, the cars were used on North Star Chapter, NRHS, excursion trips to Owen and Amery, Wisconsin on the weekend of June 14 and 15.

Prior to the Minneapolis trip, A13 and 14 were in Escanaba, Michigan, having some improvements made to their electrical system.

The cars were modified to be used on HEP for air conditioning and lighting. A heating system will be added later to provide heat for chilly days in the fall and spring. The system will not be adequate enough for use in mid-winter. The new electric heating system will replace the old steam heat system.

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railroads in Colorado, the Durango and Silverton Scenic Railroad, the Georgetown Loop, also the 64-mile Cumbres and Toltec Railroad in New Mexico.

He also spoke of the "granddaddy of all tourist railroads," the Strassburg Railroad that can also manufacture a complete locomotive. His slides were of many tourist operations and museums, including the Conway Scenic Railroad of North Conway, New Hampshire, and the Texas State Railroad of Palestine, Texas, and how the Texas State Railroad was a great economy booster for the area in which it operates.

Also shown were slides of the Illinois Railroad Museum that has a hundred trolley cars, 30 of which are in operating condition, and three steam operating locomotives, and the Cass Scenic Railroad in Cass, West Virginia. The tourist railroad is the largest employer in Cass County.

The East Broadtop in Orbisonia, Pennsylvania, the Madd River and NKP Railroad Museum of Bellevue, Ohio, and the Mid-Continent Railroad Museum of North Freedom, Wisconsin, and the CNW 10-wheeler, the 1385, were among the many other slides that were shown and described during Mr. Minnich's presentation. He then opened the meeting to any questions from the audience.

Frances Minnich brought greetings from the Tourist Railway Industry, stating that she was looking forward to holding the 1991 TRAI convention in Duluth.

Special recognition was given to **R.N. McGiffert** and **Lenard Draper** for their service to the Museum in past years. Turk McGiffert was instrumental in finding the McGiffert log loader in California, having it disassembled, shipped to Duluth, reassembled, painted and put on display at the Railroad Museum.

Lenard has been a member of the board of directors since its inception, and having worked for the Marsh and McClennan Insurance Company, was the Museum's insurance advisor. Lenard was named Board Member Imeritus. Each of the gentlemen were presented a model of a Duluth, Missabe and Iron Range Caboose by **Don Shank**, former general manager of the DM&IR.

Locomotive No. 999 made the world's first 100-mile-per-hour record run on May 10, 1893.

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CHINA CAR DONATIONS

A check was received for the china car project from Judy Vak, treasurer of the Omaha Chapter, National Association of Railway Business Women in memory of deceased members of their chapter:

Lavenia Allen

Hazel Heaston

Dorothy Stevens

Beulah Ball

Marie Jensen

STATE BAR ASSOCIATION CHARTER FIRST TRAIN INTO TWO HARBORS DEPOT

The Minnesota State Bar Association chartered the Museum's train for a special trip from Duluth to Two Harbors on June 29. It was the first passenger train to be seen in downtown Two Harbors in nearly six years and now that the North Shore Scenic Railroad is in operation, the scene may be more commonplace.

The legal group used coaches 33, 85, the Minnesota II and baggage car 66, the train powered by Hustle Muscle. The group left Duluth about 1:30, arriving in Two Harbors at 3:00 and spent a half hour watching the loading of an ore carrier at nearby dock, viewing the steam tug Edna G, or visiting the Lake County Museum which now occupies the former Two Harbors depot.

Two elderly ladies who came to the depot for some train watching were heard to say "It certainly is nice to see a train back in here again. We hope you come again."

MECHANICAL PROBLEMS GIVE BUDD CAR SCHEDULE SHAKY START FOR SUMMER

The summer schedule for the former Blue Mountain and Reading RDC No. 9169 has gotten off to a shaky start due to mechanical problems. Transmission problems on a test run into Two Harbors on June 21 made it difficult for the car to negotiate the curving incline out of the Two Harbors depot.

On a later weekday trip to Lakeside, the car lost its air pressure and called for a tow. Air pressure was restored and the 9169 made it back to the depot under its own power.

On June 29, the day that the car was to go to Two Harbors as part of its regular schedule, one engine overheated causing damage to the engine. The engine was repaired over the weekend and it was expected to be back in service on July 2 for weekday trips in Duluth and trips to downtown Two Harbors are expected to begin July 6.

The 9169 is to let the Duluth passengers remain in Two Harbors for shopping or lunch while it takes Two Harbors people for a short ride to Knife River. After returning to Two Harbors, the Duluth passengers then board for the return trip back to Duluth.

The North Scenic Railroad had to borrow the Hustle Muscle and three cars from the Museum and LS&M for its Friday morning operation to replace the sick RDC.

MUSEUM MEMBERSHIP VARIED, LIVE STEAMERS ARE FEW BUT A VERY UNIQUE GROUP

The membership of the Lake Superior Transportation Club is made up of individuals with a variety of interests pertaining to railroads in some form or another. Some are scale modelers and devote a large portion of their time to working on their own model railroad at home or on the club's layout in the Museum. And model railroads can be built in a variety of sizes, from the smallest Z scale to number one gauge and standard gauge. And the layout can vary from a simple loop to a mini railroad empire.

And then there are those members who are interested in the restoration and operation of full scale equipment and spend much of their time on the various pieces of rolling stock and motive power to keep it all in operating condition and adding more usable cars to the roster.

But in between the two classes is a small group of modelers, not very numerous and little known in our area. When they build a model of a locomotive or rolling stock, they don't do it on the kitchen table or a desk in the corner of the basement. They need a large workshop, with possibly a machine lathe, milling machine, drill press, carpentry tools. And when the model is finished, the builder may also need a pickup truck or a trailer to carry it in.

They are the live steamers, modelers who go to great lengths to build very detailed steam or diesel model locomotives in one of several gauges or scales, the most popular being the $\frac{3}{4}$, 1 and $1\frac{1}{2}$ -inch scales. The $\frac{3}{4}$ -inch scale is 1/16 full size, 1 inch is 1/12 and $1\frac{1}{2}$ inch is 1/8 full size.

A very active group of about 130 live steamers living mostly in the Twin Cities area have a layout located south of Hudson, Wisconsin, covering $9\frac{1}{2}$ acres of gently rolling hills which makes for an interesting operation complete with tunnels and bridges.

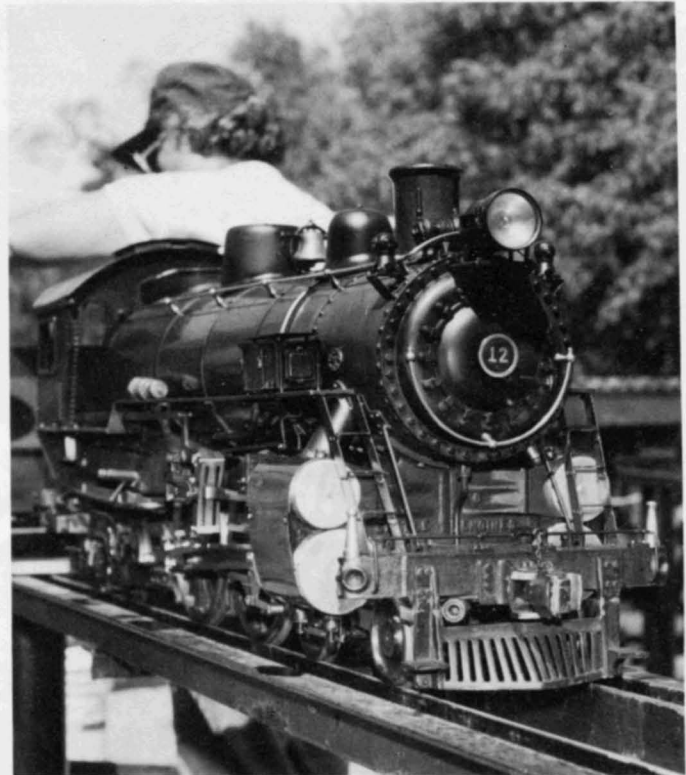
The group is called the St. Croix Valley Railroad and members currently operate in the 1 and $1\frac{1}{2}$ -inch scales, though there are tracks for a $\frac{3}{4}$ -inch train. Because of the small size of the $\frac{3}{4}$ scale equipment, riders need to dangle their legs over the side and $\frac{3}{4}$ scale trains are on a trestle or elevated roadbed. The 1 and $1\frac{1}{2}$ -inch trains at Hudson are all on the ground which makes for added realism.

The elevated $\frac{3}{4}$ scale has 900 feet of track, the 1 inch line, 4036 feet and the $1\frac{1}{2}$ 1849 feet with another 500 feet to be added soon. The roadbed has been prepared and a tunnel built.

On a June tenth operating day, the group had three very nice Atlantics, one from Pennsylvania. The owner was on his way home from a national meet in California on the Memorial Day weekend and was invited to stop by in Wisconsin. Also operating was a Great Northern 2-8-2, its smoke box front adorned with air compressors, and a very handsome Great Northern Alco RS-3 complete with electronic sound effects, battery operated with wired remote controls. The engineer rode on a flat car behind the engine or could walk along side the track to operate the unit while doing some switching. The sound effects gave it a touch of realism; the sound of an idling diesel as it stood motionless, and a bell and air horn sounds.

Also operating that day was a yard goat with a gasoline engine-hydraulic drive and a Burlington road switcher, also a hydraulic drive unit.

The trains were made up of a variety of freight cars for show, and several flat cars and passenger cars for riders. An interurban type shelter serves as the bi-level station, one level for the 1 inch and the other for the $1\frac{1}{2}$ scale trains. The group also has



An Atlantic locomotive in one-inch scale rests in the steaming bay of the St. Croix Valley Railroad getting its fire dumped, ashes removed and water drained prior to its return trip with its owner to Pennsylvania. The name on the cylinder casting just below the smoke box is Little Engines.

built a long engine house which will hold many cars and locomotives, a double-garage size storage and repair facility and another building for refreshments and socializing. A ticket booth near the gate is used when the railroad is open to the public on the last Sunday of the month during the summer.

To move the equipment from pickup truck or trailer on to the tracks, a portable hydraulic lift is used. The locomotive is then moved to an outdoor roundhouse, a steaming bay, built on three levels. In the center is a turntable that is also a hydraulic lift. This lift takes the locomotive from the low level of the loading dock, is then raised about four feet to a steaming bay where the locomotive is coaled, watered, fired and allowed to build up steam pressure of 80 to 100 pounds before moving on its own power. It is then put back on the turntable and raised again to the third level and moved out onto the main line and to the station to pick up cars or passengers.

When the public rides, a conductor is on the train and carries a whistle and flag to warn any approaching train of a derailment or accident and is concerned about the safety of the passengers.

Former LSTC member **Mark Kirschenman** operated a 10-wheeler that he and his father had built, patterned after a Wabash. The locomotive had a whistle under the cab roof that closely resembled that of a Southern Pacific Daylight.

A ride around the $1\frac{1}{2}$ -inch loop took us through a tunnel made from a large steel culvert with railroad ties making the tunnel portal. Then over an inverted truss bridge, through a pine forest, up a slight grade called Summit and back to the station.

Though the tracks and equipment are miniature replicas of a full-size railroad and walking about the grounds and looking down on the rails may make one feel like a giant, yet the smell of steam and coal smoke is real and full-size and the engineer of a miniature steam locomotive can get just as dirty as any engineer of a full-size steam locomotive.



The sign directing visitors to the gallery car 255 photo display. In the background is the GN 400 SD-45, its side doors open while staff members work of the 3600 h.p. V-20 engine. This was the first day that the engine had been run

for any length of time since its retirement. The Mack in front of the SD-45 had pulled the 400 out of the Museum before starting.



A one-inch scale Great Northern RS-3 Alco on the St. Croix Valley Railroad is electric. The operator rides behind on a flat car, using a wired control box. The locomotive has realistic sound effects of a diesel engine, air horn and bell.



Bruce Routh, former BN engineer and newly appointed member of the LS&M board, was at the controls of Hustle Muscle for its inaugural run on the North Shore Line during Grandma's Marathon Special.

The Pennsylvania Railroad's "Big Engine," the 6100, with a 6-4-4-6 wheel arrangement, had a boiler pressure of 300 pounds. Its seven-foot drivers were calculated to achieve sustained speeds in excess of 100 miles per hour. It could do little else but go fast.

PHIL ROLLE ELECTED TO BOARD, OTHER OFFICERS RE-ELECTED

Philip Rolle of Norwest bank was recently elected as treasurer to the board of directors of the Lake Superior Museum of Transportation. At the June 12 meeting **Wayne Olsen** was elected president; **Richard Neumann**, vice president and **William Van Evera**, secretary.

An agreement between the Museum had been finalized and executed, providing for the Museum to pay the insurance premium for DIRCO of \$3,750 for liability. The premium is to be refunded if total revenue on the line during this first season does not exceed \$110,000. The LS&M carries its own insurance for its operations.

Scott Keenan, Grandma's Marathon director, appeared at the meeting with some concerns about advertising the special excursion train and the scheduling. He was assured that proper scheduling would be arranged so as not to interfere with the racers at the only grade crossing near Lemon Drop Hill. He said he liked the idea of a special train for the marathon and suggested that the train carry runners to the starting line in the future.

Tom Gannon discussed the need for more indoor space for exhibits and for more explanations about the history of railroading in the area. He stated that the Glacier Corporation, a BN subsidiary, has property that could be used for an additional building. The museum has three times the number of items that can be put inside and display space is very limited.

In other board actions:

- The DM&IR stated it will rent a locomotive to the museum in emergency situations for \$65 a day.
- The Minnesota Historical Society has asked for an excursion train September 18 or 19. The request was accepted and supported.
- A Brown Hoist crane has been offered to the museum from Arrowhead Blacktop.
- The Depot Foundation has awarded \$2,500 toward a request for \$6,000 for additional improvements in gallery car 255. An air conditioning system is being installed.
- Negotiations continue with the BN on a natural gas powered locomotive which has been retired from service.
- A motion made and supported to plan an excursion trip for the public to Two Harbors on July 14 for Railroad Days.

GN 400 FLEXES ITS MUSCLES; MARATHON TRAIN DOES WELL ON NORTH SHORE SCENIC RAILROAD

The nineteenth of June, two days before the summer solstice, felt more like the end of October with a bone-chilling wind off the Big Lake. The two passenger cars were cold and standing in the doorway of baggage car 66 was even worse. But the unpredictable weather of Duluth was tempered somewhat by the excitement of riding on the first train to operate over the former DM&IR tracks between Duluth and Two Harbors in six years. It was the first train over the new North Shore Scenic Railroad. The last one was the DM&IR special excursion to celebrate the 100th anniversary of the Missabe in 1984.

It was also the first time that GN 400, Hustle Muscle, had a train tacked onto its coupler and operated in five years. The trip was a shake-down to let the SD-45 flex its muscles, making sure it would perform well for Grandma's Marathon Special, to test the tracks and familiarize the engine and train crew of the line and equipment. **Bruce Routh**, former BN engineer, and **Ron**

Erickson, former traveling engineer for the BN and now general manager of the North Shore Scenic Railroad, were in the cab.

Leo McDonnell, director of the Museum, and **Ron Erickson**, welcomed the few people on board and described the day's operation. Television cameras recorded the event for the news media and publicity for the upcoming marathon special.

Hustle Muscle's engine was cranked on May 31, burped and ran for a few seconds inside the Museum. The following day it was towed outside, started and run several times. Problems with the turbocharger showed up and it appeared that the unit would have to be replaced. But a phone call to Kansas City suggested that the filter between the engine exhaust and turbo be taken out, cleaned, and the engine run at notch eight to blow the crud out. And out it came, red hot sparks and pieces of carbon, the filter cleaned and returned and the turbo ran beautifully.

The SD-45 was run back and forth in the Museum's yard, out under the freeway, on the newly laid-crossover connecting the Museum's yard lead and the tracks along the bayfront and as far as the steam plant on Lake Avenue. The big locomotive served as a yard switcher on June 22 making up the excursion train. **Bruce Routh** again served as engineer and **DeWayne Tomasek** was his assistant on the excursion train.

Equipment from the E&LS, LS&M, DM&IR and the Museum was used. The Dolly Madison and Ranier Club observations were at the ends with coaches 33, 85, BNA13 and 14, Minnesota II, CNW lounge 6700, baggage-sleeper W-24 and baggage car 66 and the power car. The media were quartered in the W-24 and the Rail Authority used the Minnesota II and 6700.

The train picked up the passengers near the auditorium parking lot to save time, leaving at 6:45 a.m., arriving at Marble Siding at 7:45. Passengers were able to detrain to watch the start of the marathon at 8:00 (the wheelchairs left at 7:55) and were aboard for the 8:10 departure. The train caught up with the front runners, paced them until Knife River where the tracks and the highway part company. At Palmers, the excursion train paused on a trestle for about 15 minutes where the highway and tracks are again in close proximity giving the passengers another view of the race.

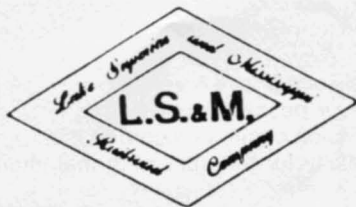
The train then hurried to 40th Avenue East in Duluth, discharged the passengers into waiting school buses for the remainder of the trip to Grandma's parking lot to view the finish of the race.

Because of the temporary grade crossing near Lemon Drop hill, there was concern over whether the train could reach the crossing before the first wheelchairs arrived. Being limited to 30 miles per hour, ten miles in town, it would be impossible to make the crossing before the racers, and it appeared that the special excursion may have to be called off. The arrangements with the bus company saved the day and everyone had a chance to see both the start of the race and the finish and parts in between.

Passengers cheered for their favorite runners, were in a festive mood and the weather was ideal. The whole event was a first time experimental thing and went off very well. Though the train was not a sell out (first class was sold out), the success of the 1990 Grandma's Marathon excursion train will help to insure the return of marathon excursion trains in the future.

The first resemblance to any kind of a rail line in the U.S. goes back to 1807 when Silas Whitney operated a horse-drawn and gravity tramway on Beacon Hill in Boston.

**THERE IS ALWAYS PLENTY OF WORK FOR EVERYONE,
WE NEVER RUN OUT AT YOUR LOCAL MUSEUM OR
TOURIST RAILROAD**



LS&M SAYS THANK YOU TO VOLUNTEERS FOR THEIR SERVICES

Potato salad, hot dogs and beans were the order of a very warm day, as 170 people rode into Knife River aboard a special picnic train on the Fourth of July.

It was a way of saying thank you from the Lake Superior & Mississippi Railroad to the volunteers and railroad widows, fatherless children and significant others who let their menfolk disappear into the bowels of the railroad museum to spend countless hours in performing tasks of restoration, repair, cleaning and operating excursion trains.

Members have devoted a lot of time on car 29, the 935, GN 400, No. 46, the road maintenance machinery and the many other pieces of equipment that need maintenance and repair to keep them in working condition to meet FRA standards.

It was also a way of saying thank you to the BN and other local railroads for supplying goods and services to get the equipment into operating condition.

The picnic special traveled over the North Shore Scenic Railroad, stopped at Knife River to drop off tables and chairs, continued on to Marble Siding and returned to Knife River for a two-hour stop, permitting time for lunch and a walk down to the public beach.

The idea originated with **Zeke Fields** and **Bill DeRoche** arranged for the catered picnic with Emily's Knife River Inn and General Store.

It was hoped to give solarium car 29 a test run, but time was getting short to switch the coach out of the work area and put on the train for the 10:45 departure. The last coat of paint was applied in the vestibule and an air test was done minutes before departure.

CAR 29 NEARING COMPLETION, LS&M NO. 46 BACK IN SERVICE

Members of the Lake Superior and Mississippi Railroad, plus a few other volunteers who have come to help occasionally, have been hustling to get the former DM&IR solarium car 29 back into service and have it ready for the 1990 operating schedule which began June 30. But there was just too many loose ends and small things that had to be done to make the car finished enough to be used.

Except for some woodwork around the large windows in the solarium end and wiring, the interior of the car is finished. The light fixtures were put back up and the seats from the Napa Valley Wine Train were installed. Anderson Linoleum of Duluth had put down a new nine-foot wide vinyl floor covering.

A toilet is yet to be installed and plans are to install a water heater to be powered by a five-kilowatt generator slung beneath the car for heating purposes, using baseboard panels. As of the end of June, one side has yet to be painted and lettered. The brake system and running gear have also to be checked out before

the car is put into service. Approximately \$25,000 has been spent on the car over the past two years on restoration.

President **Mark Olson** has been spending a lot of time at the LS&M shop getting No. 46 back into service. Last August, No. 46 ran with one traction motor. After the operating season was finished, the motor was removed and sent to an electric shop to be rewound and to have new brushes and a brush holder installed. With the new pit, putting the traction motor back in was easier than taking it out. The locomotive will be used for track work during the summer and for passenger service when the LS&M moves back to its West Duluth line in September. The locomotive needs its FRA papers. The former Minntac SW-9 is used for the Lakefront operation.

Dick Hanson has been working on the maintenance-of-way equipment and has been doing track work for Hallett Dock and will be doing track work for the LS&M.

Dave Carlson has submitted his resignation from the board, stating that his work schedule makes it difficult to be of adequate service to the LS&M. Dave was in charge of calling train crews for the operating weekends. **Bruce Routh**, former BN engineer, was appointed to fill the vacancy. Bruce had been the engineer for the LS&M excursion train several times last summer.

On June 30, the LS&M began its summer operating schedule for 1990 out of the Depot in downtown Duluth as a courtesy to the Regional Rail Authority who had not contracted with a permanent operator for its weekend excursion trains. The summer schedule is for July and August, with four trains on Saturdays and three on Sundays. The excursion trips are a 10-mile round trip along the Lakefront Line to Lakeside.

LS&M BEGINS TEMPORARY SUMMER SCHEDULE ON LAKEFRONT LINE

The first weekend of operation, June 30-July 1, for the Lake Superior & Mississippi Railroad, using the Lakefront line, went off without a hitch except for a couple of glitches in the locomotive. Though it was Railroad Days at the Museum, the crowds were not exactly wall-to-wall and the first five trips on the excursion train were not exactly sell-outs. The weather on Saturday was warm, a little cooler on Sunday, but other attractions in the area competed for the tourists, and it takes potential customers a while to get used to the fact that the train is operating and to plan accordingly.

The advertising brochures put out by the North Shore Scenic Railroad which includes the LS&M weekend schedule were not delivered until in June. Lack of advertising could have had some effect on the turnout.

The LS&M carried a total of 733 over the two days, just under 50% of its capacity of 218 per trip. The equipment being used is DM&IR coach 33, SP&S baggage 66, LS&M coach 85 and DM&IR coach Minnesota II. Because of repairs being made to the ex-Minntac SW-9 No. 935 in the LS&M shop, the Great Northern SD-45 was used for the weekend excursions.

Tickets were sold in the former Amtrak ticket office. Though the patronage was mediocre, the return on each fare was high, averaging \$5.31 per person on ticket prices of \$6, \$5 and \$4. The excursion train operates from the Museum to 47th Avenue East in Lakeside and return for the one hour and 15 minutes, 10 mile ride.

The schedule calls for trips every Saturday and Sunday through July and August. Plans are to return to the LS&M line in West Duluth for a special trip in September.



The turntable on one of the corner modules at Hibbing's Irongate Mall model show in April. Steve Ruce Photo.

REPORT ON IRONGATE MODEL SHOW, OTHER EVENTS AT MAY LSTC MEETING

After the usual secretary's and treasurer's reports, **Dave Carlson** gave a report on the LSTC's participation in a model show held at the Irongate Mall in Hibbing on April 29-30.

The club had brought four modules and **Bruce Kettunen** from Mountain Iron brought the corners and eight modules to make a layout about 40 feet long. The model railroad display was in conjunction with the Range RC model airplane club. **Chuck Corwin, Steve** and **Wally Ruce** and **Ron Soder** helped set up the modules with Dave.

Dave also reported that a flea market and model show are being planned for in the fall. Wiring changes are being done on the Museum's model railroad, the bridges are about done and more work needed on the ore dock and the town.

Dale Carlson reported that the club has 233 members — 22 new members, 35 contributing, 119 voting, 55 associate and 2 junior members.

Mark Olson informed the group that the lease on the West Duluth tracks had been renewed and the insurance is also in place which allows the LS&M to operate on the West Duluth line. The LS&M is looking to operate two weekends in September and that everything is go for the temporary operation on the North Shore Line.

Gallery car 255 has a new photo exhibit by Neelon Crawford of steam locomotives in China. **Tom Gannon** reported they look very Baldwin-like. Except for some Chinese writing, the photos could have been taken in any American locomotive plant.

Bruce then finished the May meeting with some videos of the BN on the Iron Range, the last natural ore train on the Missabe and the Nashwauk depot in 1941.

Also shown were pictures of the Duluth Lift Bridge during World War II showing an ore boat and barge going through the canal

GREAT NORTHERN HISTORICAL SOCIETY MEMBERS GET ACQUAINTED WITH GN 400

Peter Thompson, president of the Great Northern Historical Society, and his wife paid a visit to the Duluth to ride behind Hustle Muscle on the special excursion for Grandma's Marathon. The GNHS was given the SD-45 by the Burlington Northern and had the locomotive repainted into the former Great Northern paint scheme of Omaha orange and Pullman green. The painting was done in Grand Forks, North Dakota.

Larry and **Connie Hoffman**, Berkley, Michigan, rode the cab of GN 400 on the first Sunday, July 1, for the LS&M between the Depot and Lakeside. Larry filmed the trip with his video camera and then chased the train during the second trip for additional footage.

The Hoffmans stopped in Duluth on their way to a GNHS convention in Montana and plan to show the video there. Connie holds the papers of ownership for the big locomotive.

FORBAY — LITTLE KNOWN AND VANISHED MP COMMUNITY

During the first half of the 20th century, an unincorporated village existed near the Minnesota Power Company's Thomson hydroelectric dam. The people who resided in the village were known as the Forbay people, Forbay being the name of the village. The residents were employees of the power company and worked at the dam.

In 1905, the Great Northern Power Company, predecessor to Minnesota Power, began building the Thomson dam in the St. Louis River Valley, and being all but inaccessible to the automobile, a rail line had to be built from the community of Fond du Lac, up river to the Fond du Lac dam, to the Thomson dam site. Supplies for the construction of the dam were carried by train and employees by a gasoline-powered trolley-like car. Later, a gas-powered Mack rail bus was used, operating three times a day for more than 40 years.

The Mack vehicle, No. 195, made its last run from Fond du Lac to Thomson on October 5, 1949. It was sold in November by MP&L for \$500 in scrap. The spring of 1950 saw a tremendous amount of melt water rush down the St. Louis River, washing out portions of the rail line and the company retired the rail spur.

In the early '60's, the power company got out of the rental business, and the houses at Thomson were sold and moved. The main settlement had seven single-family homes on level land adjacent to the hydro station, a superintendent's home and a two-story hotel for single employees. A camphouse located just below the lower gate house served as a mess hall for the construction workers. The village also had a one-room school house with living quarters for the teacher upstairs. The school was closed in 1931.

and a sign warning citizens that no cameras were allowed near the ship canal.

Bruce stated that the natural ore cars and cabooses on the DM&IR are now gone and that there are seven taconite mines and one natural ore mine on the Range. Chuck Corwin also showed some slides of BN ore trains at Gunn Junction and the Kelly Lake local.

COMING EVENTS

- July 14 — Two Harbors Railroad Days with special excursion train from Duluth.
 Aug. 1-5 — Soo Line Historical Convention, Sault Ste. Marie, Michigan.
 Aug. 15-16 — Shriner's Convention, Duluth, with special excursion train to Two Harbors.
 Sept. 18 or 19 — Planned excursion trip for Minnesota Historical Society.
 Sept. 28 — First meeting of LSTC, Depot. Meetings to be held last Friday of the month through November.

CONTRIBUTING MEMBERS

The following members have become contributing members for the current year of 1990.

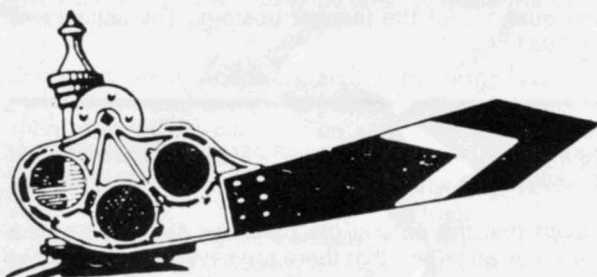
Carl Ekholm	Donald Shank
Gerald Dobey	Robert Sailstad
Steven Lorenz	J. J. Kreuzberger
Duane Benoit	Thomas Lamphier
Merril Hendrickson	Tom Casper
Gordon Mott	Douglas Buell
David Schauer	David Mikelson
Daniel Mackey	DeWayne Tomasek
John Magill	David Bruns
Jergen Fuhr	Donald Weesner
Thomas Hoff	John Boutin
Tom Griffith	John Larkin
Leo McDonnell	Otto Dobnick
Martin Fair	W. A. Bally
James Annett	Bob Ball
Peter Fifield	Tim Zager
William Graham	David Schmieding
Stephen Olmsted, Ph.D.	



A crew from Railroad Services of Lakeville, Minnesota, relay the trail track, an extension of track one adjacent to the Museum. Overhead and behind is the Fifth Avenue West interchange with I-35 which is below.

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