

LAKE SUPERIOR TRANSPORTATION CLUB
LAKE SUPERIOR MUSEUM OF TRANSPORTATION

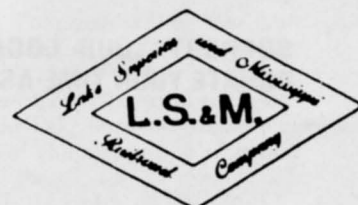


Laker

SPRING, 1989



Lake Superior and Mississippi Railroad



THE LAKER

Spring, 1989



Editorial Comment

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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The Lake Superior Transportation Club is operated by members of the Lake Superior Transportation Club and is incorporated under the laws of the State of Minnesota as a non-profit corporation for the purpose of operating and maintaining an excursion trail and related activities.

LS&M OFFICERS

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COVER PHOTO

With its nose covered with ice, DM&IR SD-38AC #205 leads an empty taconite extra north out of Two Harbors on the Iron Range Division. The three units are working hard to conquer the 1.5% grade on this snowy December, 1988 day. *Dave Schauer*

Egide Walschaerts, a Belgian, developed and patented a valve gear in 1844. It was used in this country starting in 1905 to replace the Stephenson valve gear on heavier locomotives. It was first applied to a locomotive in 1848.

**SUPPORT YOUR LOCAL TOURIST RAILROAD —
DONATE YOUR TIME AS A VOLUNTEER**

"No comment. I'm taking some time off. You people put out the next issue of the Laker."

That was the reply when a reporter asked the editor for his column. So, there is no editorial comment.

FROM THE PRESIDENT . . .

A tale of two railroads is about to unfold. One involves an existing, successful operation while the other is a plan based on the future. A future that is scheduled to begin in June of next year (1990). Of course I'm talking about the LS&M and the Lake Front Line (LFL).

1990 will also mark the 10 year anniversary of excursion trains on the LS&M, arguably the most historic AND scenic line in the Twin Ports. As the summer of 1989 approaches, the LS&M once again will be faced with the obligation to serve over ten thousand passengers, another excellent season is predicted. Our volunteer core has greatly expanded in the last year and a good turn-out is expected for the 1989 season.

The real question begins in 1990, when the LFL begins operations. Undoubtedly the LFL will be very aggressive in the marketing of tourists, hence the LS&M will be affected somewhat. This will certainly be something to watch. But remember, because of the nature of the LS&M (low overhead), we will be able to operate with fewer riders.

The LS&M is an excellent compliment to the Lake Superior Zoo, and because of this, the supply of tourists will always be strong in the western part of Duluth. Watch for a more aggressive LS&M marketing campaign this year, the last year that the LS&M will be able to call itself "Duluth's excursion railroad." Stay tuned for further developments . . .

A few local railroad notes:

- Did you catch the nice article in the May issue of Trains on the new Boylston relocation? Club member Otto Dobnick wrote the fine story.
- The DM&IR has just released the most recent SD rebuilt, #309. The rebuild program to upgrade the older SD-9/18's is in full swing after a hiatus during the mid-1980's steel slump.
- The Soo Line rails through Moose Lake shine once again after being closed during the winter. The Soo is considering abandoning the line between Superior and Glenwood and began to ship grain over the BN from the Twin Cities to the Twin Ports while letting the Glenwood line gather snow. This spring, however, saw a return of grain trains to the Glenwood route. You could kind of say the line came out of winter hibernation. Get your shots of the line now!
- An interesting visitor to Rice's Point yard was an Otter Tail Valley GP in orange and brown. The unit was spotted on April 10 going to Proctor for some electrical work.
- All-rail ore trains on the Wisconsin Central, WC SD-45's on the DM&IR. Interesting, very interesting.

Until next time . . .
Dave Schauer

FERNER RE-ELECTED TO MUSEUM BOARD, KING FAMILY DONATES BOOKS

The board of directors for the Lake Superior Museum of Transportation met on January 30 at the Depot to discuss a number of items. Present were President **Wayne C. Olsen**, Vice President **Leo McDonnell**, Secretary **Bill Van Evera**, Treasurer **Bob Sederberg**, **Don Shank**, **Phil Budd**, **Wayne Hatton**, **Byron Olsen**, **Tom Gannon**, **Larry Sommer**, **Lenard Draper**, and **Dave Schauer**.

The history of the gift shop in the rail museum was discussed and sales figures indicate that sales have been down since the Depot store on the Michigan Street level opened in competition with the rail museum store.

The transportation museum was declared a non-smoking area in line with St. Louis County policy.

It was also reported that **Dorothy King**, wife of **Frank King**, has donated 300 books and other items, mostly of railroad interest, to the museum and pointed out that some of these items may be duplicates or not of historical interest, but are saleable. The museum has authority to sell them and split the proceeds with the King family.

Tom Gannon reported that training classes for engineers and firemen are continuing and there are 20 people in the course working under **Lee Tuskey**. **Dave Schauer**, president of the Transportation Club, reported on its considerable activities. **Don Shank** reported that the actual closing of the sale of the Lakeshore Line property will be on Feb. 23.

A motion was made to ask the director to write to Ironworld requesting a return of the 7-Spot or for the proposed lease terms to retain it as a display at Ironworld. The 7-Spot is an 0-4-0 Porter saddle tanker that was put into operating condition to be used at Ironworld. Arrangements were made for Ironworld to lease the locomotive, but because of mechanical problems and lack of funds to repair the locomotive, it has become a static display unit. It was used to shuffle slag buggies at the former Minnesota Steel Co., forerunner of U.S. Steel and Wire Co. in Gary-New Duluth.

Clint Ferner, general manager of the DM&IR, was nominated and re-elected to the board. He had been chairman of the board in past years but had resigned to avoid conflict of interest in negotiations for the Regional Rail Authority to acquire possession of the Lakeshore Line.

The possibility of getting another F unit, participation in the Depot Fund Drive, financial problems, re-labeling of exhibits in Car 19, a way to show appreciation to **Casey O'Neil**, the North Shore Line, the subject of non-profit organizations having to pay a sales tax, and other subjects were also discussed at the museum board meeting.

If the rail museum is to receive funds from the Depot Fund Drive, then it is expected that members of the rail museum and the LSTC to help with the annual phone-a-thon. During the March fund drive, at least three members of the LSTC spent time at the US West building phoning prospective contributors to the Depot Fund Drive. The phone lists were compiled from membership lists of the various agencies housed in the Depot complex.

The president of the board stated that two national conventions will be held in Duluth in July. The Great Northern Historical Society will meet July 13 to 15 and the Northern Pacific Historical Society will meet immediately following on July 14 to 16.

Also the board has offered to host the 1992 national convention

MUSEUM, LS&M EQUIPMENT TO BE KEPT BUSY THIS SUMMER

The passenger equipment of the Lake Superior & Mississippi and the Lake Superior Museum of Transportation is going to have a heavy schedule this coming summer.

In addition to the regularly scheduled excursion trips on the LS&M beginning July 1 for ten weekends, three special events and possibly a fourth, are planned.

Plans have been finalized with the Duluth and Northeastern to run a series of excursion trips from Cloquet to Saginaw in connection with Cloquet's Lumberjack Days on June 24 and 25, similar to last year's operation.

The DWP has asked the use of the cars for an employee's picnic on August sixth. In past years, the DWP has sponsored Christmas parties for its employees aboard the train, but discontinued the practice because of the expense and problems of having to heat the train.

The BN has also asked for the use of our open-window coaches for a shuttle train in connection with Superior Days and an open house at the BN rail facilities in Superior. Excursion trips from downtown Superior to Saunders were suggested.

It is also hoped that a mainline trip can be planned for in September on an area railroad, possibly going to the Iron Range.

CONGRATULATIONS TO . . .

Mr. and Mrs. David Bruns on the birth of their daughter, **Katie Loraine**, born August 31, 1988.

DeWayne Tomasek on acquiring his journeyman status as an air traffic controller, completing five years of training at the Duluth facility. A "surprise" party was held in his honor on March 16 at the Afterburner with members of the LSTC and museum staff in attendance.

Susan Dorin and **Randy Buck** who were united in marriage on April 1 in Superior's Cathedral of Christ the King. Susan is the daughter of **Pat** and **Karen Dorin** of Superior.

OUR SYMPATHIES AND PRAYERS GO TO . . .

Cliff Johnson of Duluth on the loss of his wife in March after a long illness.

Tom Sullivan, Two Harbors, on the loss of his wife, **Shirley**, on March 30 in a Two Harbors hospital from an illness.

of the Tourist Railway Association. That year will be the 100th anniversary of the Depot and the opening of the Missabe Range.

The next meeting of the board will be on May 11, prior to the annual meeting of the membership of the Lake Superior Museum of Transportation with the dedication of china car 68, a reception and dinner.

CAR 29 TERMED "PREMIER CAR" EXTENSIVE RESTORATION CONTINUES, "BEING DONE RIGHT"

The most extensive restoration work yet performed by the members of the LSTC/LS&M on a piece of rolling stock is continuing on car 29 in the rail museum. It was said of the former DM&IR solarium car that when it is finished, it will be the LS&M's "premier car", and that it is being "done right from the beginning."

Over the years club members have restored many pieces of rolling stock, both freight and passenger. The various pieces of freight equipment had cosmetic work done, being used only for display purposes or for a closet on wheels in which to hide things, rather than for revenue service.

The various pieces of passenger equipment have been restored for use on museum-sponsored excursion trips or on the LS&M and for use by area railroads for special events. Some of the equipment needed little to put into useable service with varying degrees of restoration depending on their time out of service, exposure to the elements and the condition of the car upon its arrival at the museum.

Grand Trunk coach 5327, the oldest coach in the museum's collection having been built in 1910, was used in work-train service and was in good shape on its arrival. The car had been remodeled at some time during its revenue service and today resembles a more modern post-WWII coach. The roof line had been changed, eliminating the clerestory for a one-piece rounded roof. The windows had been enlarged and fitted with double paned sealed glass. Over the years, the seal allowed moisture to get in between some panes and etched the glass, which required the replacing of those windows that had become etched.

Ice air conditioning was installed in the coach with four ice bunkers slung beneath the car. When in use, the bunkers can hold up to 3000 pounds of ice, the ice water being circulated through cooling coils in the ceiling were forced air carries it into the car interior.

Except for holes cut into the ceiling for heaters while the car was used in work-train service, the car needed little restoration. A new sub floor had been installed and a floor contractor was hired to put down new linoleum tiles. Seats were obtained from a former BN coach that was being scrapped in Stillwater. The car came in its work-train red and later sent to the DWP car shop in Virginia to be painted in the familiar black and white paint scheme of the CN. Chemical toilets were installed in both ends.

CNW parlor car 6700 was also in good shape upon its arrival, needing a minimum of work. Being without seats, 22 reclining/revolving single seats were obtained from a Milwaukee car headed for the scrap yard and installed in the parlor car after a flooring and carpet contractor installed new carpeting. The car has had considerable mechanical work and new paint applied by the E&LS in Wells, Michigan and has made several trips between Duluth and Wells.

SP&S baggage car 66 was also in good condition and useable upon its arrival. In recent years, members have put in a new floor in the vestibule, replaced the floor covering a fish rack at one end of the car and repainted the interior. The car had been converted from a sleeper in its earlier days, and after its conversion to a baggage car, had fish racks installed at one end and the vestibule removed. The other end still has a vestibule and the car is used for concessions during excursion trips. The car also has seen a new coat of Pullman green paint on it in recent years.

CN coach 5375, a former commuter car used out of Montreal, was also in fair condition. This car had also been sent to the DWP in



David Schauer stands on scaffold painting the roof of the LS&M car 29 after wire brushing and priming with a rust-preventive paint.

Virginia to be repainted in the former CN color scheme of two-tone green with the maple leaf insignia and gold striping. More recently, after being used a number of years, the seats needed some work which was done by the Duluth Transit Authority.

And coaches with metal ceilings being subjected to extremes in temperatures from simmering sun to shivering sub-zero snows, may have to have their ceilings repainted, being that paint will not expand and contract with the metal ceiling. This happened in the CN car necessitating the repainting of the ceiling in recent years. The DM&IR car shop in Proctor has recently installed a newer freight-service brake system in the car to replace the out-moded system it formerly had to bring the coach up to FRA standards. The car is an open window car and the windows still present a problem with extensive work needed to replace window posts and sash. The car has walk-over seats in the middle with longitudinal seats at either end.

DM&IR coach 33 was saved from the scrap heap at the last minute, and has undergone considerable renovation over the years. Members had removed the windows, stripped the paint off the sash and the walls up to the luggage racks. New light fixtures had to be installed and after being used for some years, the walk-over seats were removed and reupholstered by a member of the Duluth Transit Authority. While the seats were out, the floor was sanded and a new linoleum strip was laid down the aisle. The floor to either side was painted a dark green as well as the wall up to the window sills. The ceiling is still in the original color of cream with gray trim. Chemical toilets were also installed in both ends of the car.

Former DM&N coach 85 recently purchased from the Missabe by the LS&M was restored to service last winter and used on the LS&M for the first time during the 1988 excursion season. The car had been in work-train service, being converted to a locker-bunk car. On its arrival at the museum, members had to remove the bunks and lockers, the Coleman heaters and fuel tanks and patch the holes in the roof where the chimneys had been taken out. The outside storm windows had been removed, the exterior changed from work-train red to Pullman green at the Missabe car shop, the ceiling had been repainted white to cover the battleship grey. The grey paint on the walls is in good shape and was left as is. Reclining

seats were purchased and installed after repainting the floor and a chemical toilet installed at one end.

Then comes the restoration of the solarium car 29. This car had also been used in work-train service, serving as a bunk-kitchen car and had been remodeled some what for that purpose.

The car was originally built as a coach in 1912 by American Car and Foundry. It was remodeled as a solarium car by the Missabe in 1939 to be used on the tail end of its passenger trains.

Window posts had been removed from one end of the car to make large windows in the rear-end lounge area and large windows had been put in the end on either side of a door. The vestibule had been removed from the tail end, and a partition had been installed to separate the lounge area from the coach area with the lounge having free-standing seats facing the center. The rest of the car had reclining seats which most likely replaced the walk-overs during the 1939 remodeling into a solarium car.

In its remodeling into work-train service, the partition had been removed and a plywood partition was installed to separate the kitchen area from the sleeping area. Switch boxes and conduit had been installed at one end, holes drilled in the floor for kitchen and sanitary facilities and in the ceiling for heaters, and in the wall for venting the kitchen. The car had been gutted when the LS&M had taken possession, but a great deal of cleaning was needed. The car also has a screen enclosure a few inches out from the clerestory windows with copper screens. And after years of storage near the ore and coal docks, fine dust had blown in between the screen and clerestory windows and trapping the moisture, requiring vacuuming and using powered wire brushes to remove the rust. The clerestory windows were removed to be stripped and the window sills primed with a rust-preventive paint.

And again, having a steel ceiling and being exposed to extremes in temperatures, the paint was flaking off and had to be removed. The ceiling was sand-blasted, the paint removed from the walls with stripper. Many of the window sills had rusted through, requiring new wood to be installed underneath and new sheet metal on top, plus the lower two inches of the window posts.

Under the guidance of the restoration specialist **Zeke Fields**, apprentice welder **Greg Vreeland** has been doing considerable amount

of welding to replace the rusted window sills. Greg is a museum staff member and the time he spends on the car is charged to the LS&M.

Greg has also done a great job in replacing the floor and steps in the vestibule end and patching holes in the end walls of the vestibule. A buffer and diaphragm plate were also installed.

What was thought to be smoke arising from inside the wall of the car after Greg had done some welding prompted the removal of the wall paneling to see if there way anything burning inside the wall. It turned out to be fine dust arising from the horse-hair insulation and on further inspection, portions of the insulation were very wet, which in turn prompted the complete removal of all insulation, which was a mixture of horse-hair, cotton and a small section of styrofoam.

After removal of the insulation, the bottom of the wall cavity was found to contain considerable amounts of sand, rust, bolts, and very wet, requiring a lot of scraping, digging out the crud and vacuuming after it dried out. The rusted window sills had allowed rain to get inside the walls for many years. The wall cavities will be primed with a rust-preventive and expensive paint, styrofoam insulation will be installed and new paneling put back on. The walls are being stripped and the ceiling repainted with walls left in a natural wood finish. The lounge area may be left painted.

New window frames will be made to replace many that have rotted out, and a partition installed to separate the lounge area from the rest of the car, similar to the original solarium car. The floor is covered with a hard composition board that will be taken up after the walls and ceiling are finished.

The roof has had rust spots scraped and primed and has received a finish coat of black. As soon as seats can be found, the car may be used while still in its work-train red color, but it is planned to have the car painted in Pullman green and lettered for the LS&M as was done on car 85. And if any of our readers know of any seats that are available, the LS&M would like to know. With each restoration job that the members perform through the years, a little more is learned and as it has been said, car 29 is being done right from the beginning, with the large majority of the work necessitated by exposure to the elements and the remodeling from revenue service to work train and back to revenue service. But when finished, it will be our "premiere car."



Strippers Bill Mickelsen and Wayne Olsen removed paint from the clerestory windows of car 29 while Zeke Fields supervises. Coach

No. 3 behind is part of the William Crooks train.



Marvin Nielsen removes paint from the woodwork below the clerestory windows of car 29.



Ralph Andres cuts a piece of styrofoam to fit in the wall cavities of car 29 for insulation should the car ever have to be heated.

LUMBERJACK EXCURSION TRAIN



CLOQUET TO SAGINAW AND RETURN

SPONSORED BY THE LAKE SUPERIOR MUSEUM OF TRANSPORTATION
AND
THE DULUTH AND NORTHEASTERN RAILROAD

SATURDAY, JUNE 24, 1989
and
SUNDAY, JUNE 25, 1989

Diesel locomotive No. 35 of the Duluth and Northeastern Railroad will pull trains from Cloquet's Dunlap Island over the St. Louis River to Saginaw and return. Each round trip of 22 miles will take about 2 hours. Proceeds to benefit the Lake Superior Museum of Transportation, and the Cloquet Area Chamber of Commerce.

SCHEDULE:

Saturday:

Depart Cloquet

9:30 a.m.

12:30 p.m.

3:30 p.m.

Sunday: Depart Cloquet

12:30 p.m.

3:30 p.m.

The excursion train will consist of both air conditioned and open window coaches, a baggage car serving snacks, beverages, and souvenirs, and a parlor car for the first class passengers. All space is limited and will be sold on a first come, first served basis. For more information, call the Lake Superior Museum of Transportation at (218) 727-0687.

Send this form with remittance payable to:

Lake Superior Museum of Transportation
506 West Michigan Street • Duluth, Minnesota 55802

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____

Please reserve tickets for me as follows:

.....For Saturday, June 24, 1989 - 9:30 a.m.

.....For Saturday, June 24, 1989 - 12:30 p.m.

.....For Saturday, June 24, 1989 - 3:30 p.m.

.....For Sunday, June 25, 1989 - 12:30 p.m.

.....For Sunday, June 25, 1989 - 3:30 p.m.

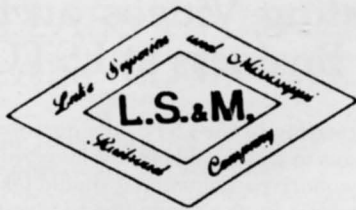
Number of Tickets _____ Total Dollars _____

_____ Adults @ \$7.00 = _____

_____ Child under 12 at \$5.00 = _____

_____ Senior @ \$6.00 = _____

_____ First Class @ \$15.00 = _____



LS&M NEWS

ZEKE FIELDS ELECTED TO BOARD, EQUIPMENT REPORT, OTHER TOPICS, DISCUSSED AT LS&M ANNUAL MEETING

Duluth's only regularly scheduled tourist train organization held its annual meeting on March 11 at nine a.m. in the Depot's board room. The reason for the early hour was to not waste the day that could be used for some productive work such as the restoration of car 29, the Melbourne trolley or the tender for No. 14.

President Mark Olson called the meeting to order with 24 members present. (Every member of the LSTC is automatically a member of the LS&M.)

Under reports, the group was informed that new air tanks have been made for the LS&M's locomotive No. 46. The tanks have been drilled, and hydroed, and after painting will be installed on the locomotive. Brake equipment still has to be checked, tested and brought up to FRA standards.

Greg Vreeland reported on the progress on car 29: The ceiling has been sandblasted, the vestibule rebuilt, paint has been stripped, the wall cavities coated with a rust-preventive paint, the window sills repaired and styrofoam insulation will be installed in the walls before replacing the paneling.

Bill Mickelsen reported that Randy Schandel has been installing a Honda generator under baggage car 66 which will be used to keep the batteries charged. The train could be train-lined to also keep the batteries of the other cars charged.

Dick Hanson reported on the track work, stating the 35 carloads of ballast were dumped last fall and will have to be tamped beneath the tracks before operations begin in July. He also reported on work being done on the tamper heads.

Mark Olson reported on the work being done on the Fordson tractor's back-hoe and that the "slam-bang" track aligner and the spiker need work to bring them up to good working condition.

It was reported by Leo McDonnell that a quarter mile of 90-pound rail in good condition is on slag point, a finger of land jutting out into Spirit Lake. He is arranging for acquisition of the rail. With the proper paper work, the rail is ours if we go out on the point to get it. It is also hoped to get a flat car that is currently in the former U.S. Steel Mill in Gary-New Duluth. At one time there were plans to build a dock on slag point and run a rail line up to the mill.

Only one open position was available on the board of directors of the LS&M, due to the resignation of Kurt Haubrich who recently moved to St. Paul. DeWayne Tomasek and Zeke Fields were nominated, and Zeke was voted to board as vice president, mechanical. DeWayne continues to be a director.

Leo McDonnell also reported on the North Shore Line and where we stand in connection with the new tourist line. He stated that

the Regional Rail Authority had decided on two things — That Jack Haley will operate a dinner train and the board is looking for a private operator for the excursion train. The operator will have the option to lease museum equipment and will contract with the museum to bring all equipment up to FRA standards. "If not the museum, someone else will," stated Leo.

Also the county will be the landlords and two contractors will be hired, one to operate the dinner train, the other to operate the excursion train.

The Lake Superior Zoo, across Grand Avenue from the LS&M's terminal, has a multi-million dollar expansion going. The excursion railroad has generated ticket sales for the zoo and visa-versa. It has been stated by some individuals that "You guys are going to stay out there." And it was stressed to the membership "If you want us to stay out there, to preserve the historical significance of the line — then come out and help us."

The authority also plans to get a RDC car from Reading, Pennsylvania and three Lackawanna cars. The RDC will run to Two Harbors, back to Knife River, again to Two Harbors and back to Duluth in the afternoon. The former Minntac diesel 935 may be used on weekdays, steam on weekends and the dinner train may operate a lunch train also on weekends.

There is also talk of Georgia-Pacific using the line to haul pulp to Duluth.

Considerable discussion, questions and answers was had in relation to with how much participation there will be with the North Shore Line.

Discussion followed on what the LS&M might do to help the LSTC and the railroad museum, whether to buy more video tapes and/or books for the library, or to purchase additional equipment for the model railroad. David Wood mentioned that he had donated several locomotives to the model railroad some years back that are still in need of painting.

A motion was made and carried to have the locomotives painted and used on the layout and a de-humidifier be purchased for the model building. It is also possible a model of the LS&M's locomotive No. 46 be bought for the model railroad. The amount of money is to be decided by the LS&M board at next meeting.

LS&M BOARD CONVENES, REORGANIZES

The board of directors of the Lake Superior & Mississippi Railroad met on March 20 to reorganize and discuss coming events, schedules and actions taken at the annual meeting.

Mark Olsen remains president; Wayne Olsen, secretary, Bill Mickelsen, treasurer; Leo McDonnell, vice president, administration; Zeke Fields, vice president, mechanical; David Carlson, vice president, operations; Dick Hanson, vice president, engineering; David Schauer, vice president, public relations, Jergen Fuhr, director; DeWayne Tomasek, Bob Sailstad, directors-at-large.

As to the summer schedule, the LS&M will host a special train for the Arrowhead Civic Club on August 19. The special train for handicapped children will be at 9:00 a.m., prior to the regular operating schedule and getting the children back to the Zoo for lunch and a tour of the Zoo grounds.

The D&NE trip was discussed and communication from the BN requesting the use of LS&M/museum equipment to operate an ex-
(Continued on Next Page)

ANNUAL MEETING, DEDICATION OF CHINA CAR SET FOR MAY 11

What has perhaps been the most extensive restoration work done on a single display piece of museum equipment had finally come to a finish.

It will be seven years in July that car W-114 was brought into the museum for a group of dedicated people to begin work on to turn it into a magnificent display car for china and silver settings from many different railroads and marine transportation.

The W-114 was in a rather sad condition, having been exposed to the elements for many years after being retired as a crew car for the DM&IR. It began its life in 1908 as a 78-seat coach, one of four purchased from the American Car & Foundry by the Duluth, Missabe & Northern and the last of the wood-sided coaches. The car had been converted to a combination car in 1927 and to a crew car in the early forties.

Much stripping of paint from the interior revealed some beautiful inlaid woodwork on the walls, and the number 68 in gold-leaf over the door, its original number as a coach. There were also a few of the stained-glass windows in the clerestory and the upper part of the arch windows. Using these as patterns, additional windows were made to replace the missing ones. Some of the woodwork inside and outside had to be replaced, and with the addition of display cabinets, glass-enclosed dining tables and many hours of hard work by the women of the NARBW, retirees from the DM&IR and others, the car is now ready for its dedication.

The dedication will be in conjunction with the annual meeting of the Lake Superior Museum of Transportation on May 11, with a social hour and dedication beginning at 5:00. The dedication celebration banquet will be held in the Great Hall of the Radisson Hotel at 6:30. Guest speaker will be Richard Luckin, media resource specialist for Adolph Coors Co. of Golden, Colorado. He has authored a book, "Dining on Rails," an encyclopedia of railroad china, also "Tea Pot Treasury," and is working on a third book.

Excursion train from downtown Superior on August 19 and from the DWP requesting the use of four cars for an employee picnic special to the Range. The E&LS will be sending the observation Dolly Madison and a commuter car for use on the D&NE trip in June. It is hoped the LS&M can borrow a car(s) for its upcoming busy summer schedule to enable it and the museum to honor the requests for the area railroads to serve the public on the planned excursion trips.

The board passed a motion to have five locomotives painted for the model railroad, as per action taken at the annual meeting, with **Dave Wood** and **Dave Carlson** to decide on a painter and the price. It was also moved to purchase a dehumidifier and air-conditioner for the model railroad building and to purchase additional videos for the LSTC.

Work continues on the repair of maintenance-of-way equipment and one truck has yet to be pulled out from under No. 46 for repairs. Jamar Sheetmetal donated the labor with the LS&M purchasing the material to rebuild the air tanks for No. 46. The old tanks were so thin they could not be drilled and would not hold a hydrostatic test. The new tanks are made of quarter-inch steel plate.



Interesting Videos on BN, Other Business at LSTC Meeting

At a recent meeting of the LSTC, the question arose of whether the LSTC wants to and should become involved in the North Shore Line and how much participation it should take. It was moved to have the president form a committee to investigate and possibly poll the members.

New members **Nick Blotti**, **Don Larson** and **Bruce Routh** were welcomed. Nick has been active with the Lakehead Harvest Reunion which displays various steam engines and tractors at Esko each year. Don is a former BN railroad employee.

Final approval was had from the D&NE on its June fan trip in connection with Cloquet Lumberjack Days and the 75th anniversary of service by the D&NE to the area, it was reported at the March meeting.

Tom Gannon reported that the Melbourne trolley should be finished in about a month and sent up to Ironworld and the tender for D&NM locomotive No. 14 is being rebuilt.

February had been an expensive month for the LS&M which is reimbursing the museum for the time that **Greg Vreeland** puts in on the restoration of car 29 and materials and repairs to the equipment.

Following the March meeting, two videos on the BN were shown. The first was about the Advance Railroad Electronic System (ARES), a satellite communication system linking dispatcher and locomotive engineer.

A dispatcher has several video display terminals showing the trackage in his area and the movement of a train and its location. The satellite tracking system can pinpoint a train's location with an accuracy of within 25 meters and relay the information to the dispatcher. The dispatcher has the capability of slowing or even stopping the train should the engineer not heed his orders to slow or stop or fail to see an obstruction on the track.

A VDT in the cab of the locomotive shows the engine crew the speed of the train, a profile of the track with grade percentages, a map of the area showing grade crossings, sidings, branch lines, signal posts, mile markers and other information. Also shown are the various engine read-outs, such as oil and fuel pressure, load amperes, throttle setting, and warnings of abnormal fuel and lubrication pressures. Brake pressures at both ends of the train and a host of other information is shown by the Locomotive Analysis and Recording System (LARS), a part of the Rockwell ARES equipment being installed on BN locomotives.

A second video, BN on Camera, shows how a BN track crew fought bitter bone-chilling cold of a minus 40 degrees to repair the northern tracks through Montana after a disastrous derailment. The southern route was also blocked by a collision, cutting off all rail traffic through Montana for several days.

The BN has also begun a "Adopt a School" program in which BN employees donate time in tutoring slow learners and the second video showed the program in action at the Oaklawn grade school in Fort Worth, Texas.

The Baker valve gear was invented by Abner D. Baker in 1903. Known as the Baker-Pilliod gear, it was first developed for traction engines and applied to locomotives in 1908. It was improved in 1911 and known then as the Baker valve gear.

STEAM CLASS FINISHES, MORE PLANNED IN THE FALL

D&NM No. 14 is hot, having just tied up after the first of a two-day series of steam operations. An individual is asked to watch the locomotive overnight, keep the fire hot, steam pressure up to be ready to go in the morning.

When the engine crew reports for work in the morning, the engine watch reports a leak in one of the valves.

"Which valve?"

"Oh, the one that operates the . . . uh, the . . . whatjamajig."

Or, as **Carl Ekholm** related at one session:

He had started with the 'Peg in '35. One morning he was to check on a locomotive. There were 100 lbs. of pressure in the boiler, water in the glass was standing still, and a check of the boiler cocks showed no water. Calling attention to his foreman, he was told to drop the fire quick. After five days of cooling down, it was found that the crown sheet was just beginning to warp. The engine watch had shut off the valve on the water glass.

Members of the LSTC have completed a seven-week series of seminars to acquaint them with the names of the various parts of

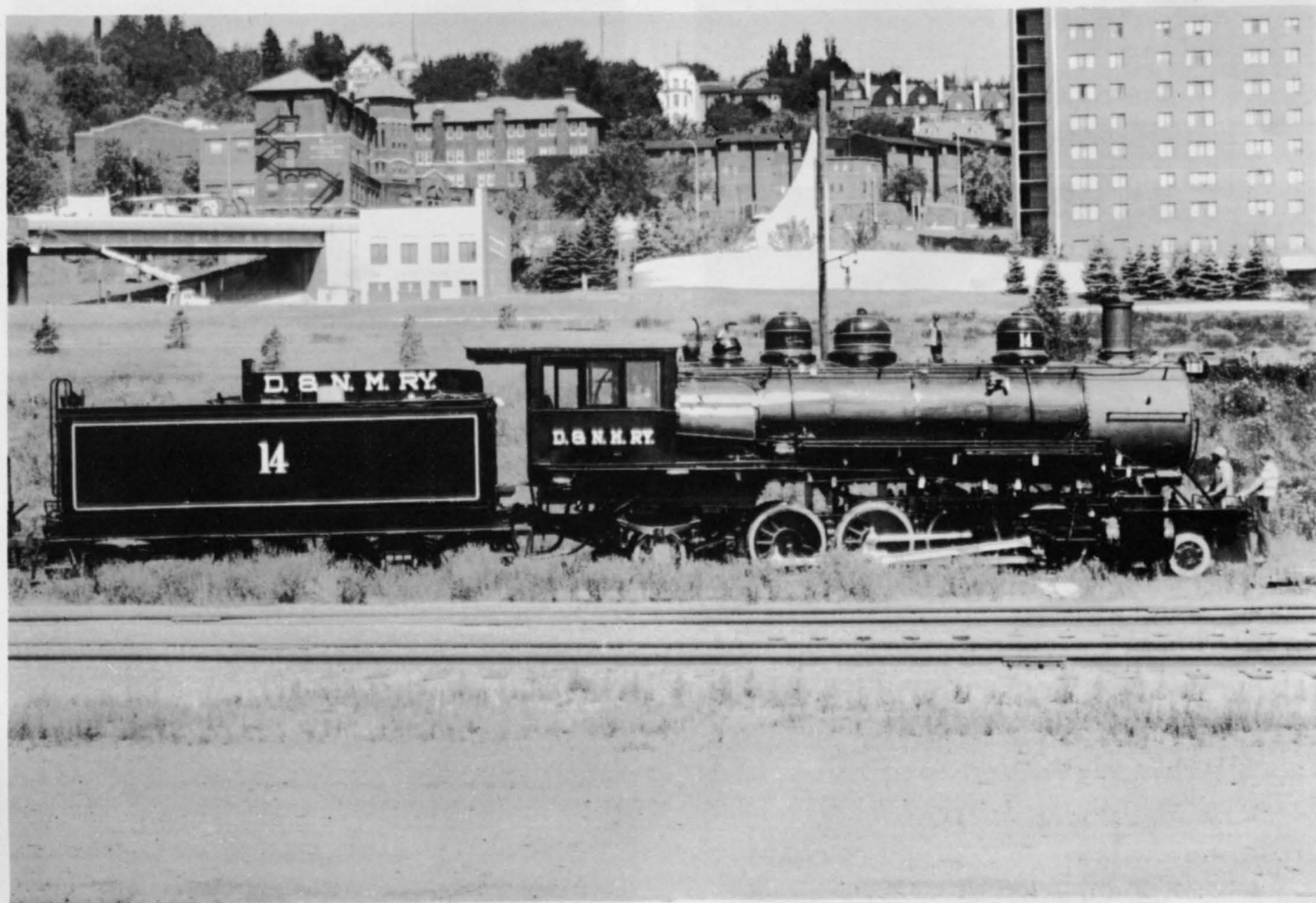
a steam locomotive, how a steam locomotive works and to prevent such incidences as the above from happening.

Starting out with forty, the class dwindled to about half, those who were really interested in the operation of a steam locomotive. At the end of the series, the class took a test made up of 200 questions asking to name various parts of the locomotive. After a two-week break during Easter, a class on the signals used by conductors and brakemen with **Wayne Hoffman**, a retired conductor from the DM&IR.

A class on the 6 ET brake system and another class led by **Tim** and **Randy Schandell** on the operation and maintenance of passenger equipment will finish up the series of train operation. **Lee Tuskey** led the classes on steam locomotives who reminded the students that it is not all fun and games. "I want to see some of you down here on Saturdays or Wednesday nights, volunteering some time." There is always the need for restoration, repairs to the equipment.

A code class had been planned, but the instructor was unable to be present, so the class was canceled.

At one session, **Lloyd Berger**, a former Soo Line engineer, gave a brief description of what an engineer and fireman must do as they walk around the engine prior to its operation, checking for leaks, lubricating the engine and other things to watch for. Said Lloyd, "You can have your diesels. Give me steam."



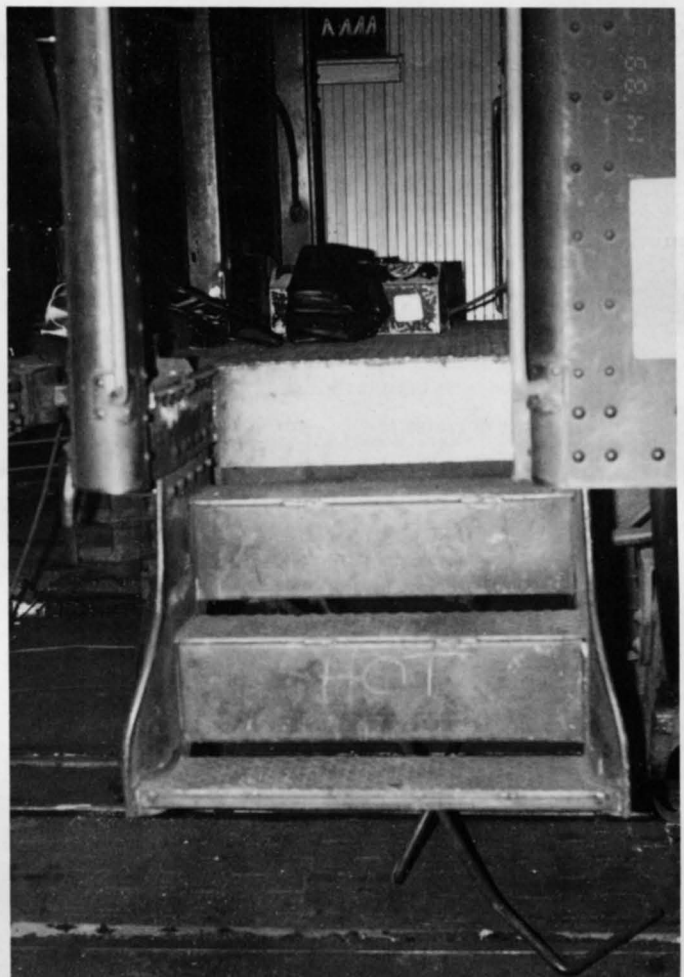
D&NM No. 14 is towed out of the museum prior to its stripping and the beginning of its restoration. The various parts are tagged and soon the tender will be disconnected, the cab removed, all jacketing, appliances removed and the locomotive sent to Fraser Shipyard for repairs to the firebox where it has been during the

winter. Look for the Mikado to be looking like this again, with the addition of smoke from its stack and whisps of steam from its cylinders.

—Photo by D. Tomasek



Joe Trader uses a power grinder to remove rust from the window sills of the clerestory windows of car 29.



The vestibule steps and deck were replaced using safety-tread steel plate on car 29.

A BRIEF HISTORY OF BN PREDECESSORS

The first of the transcontinentals through the northern tier of states was the Northern Pacific, chartered by an act of Congress in 1864 to which President Abraham Lincoln fixed his signature. Ground was broken for construction of a main line from the Great Lakes to Puget Sound in 1870 near Carlton. Construction also began at Kalama, Washington, and the two crews met in 1883 at Gold Creek, Montana, driving in the last spike on the northern transcontinental railroad. The momentous occasion heralded the opening of the northern tier of states to mass settlement.

Surveying on a more northerly route than the NP, the Great Northern was completed to the West Coast in 1893 with a shorter route and easier grades.

Being a virtually virgin territory, there was hardly enough business for the income and future of the young railroad. So the dynamic James J. Hill launched a vigorous and farsighted program to encourage land settlement and an agricultural economy. It earned Mr. Hill the name of "Empire Builder."

A group of grain millers in Aurora, Illinois, while having no empire in mind, wanted a short railroad to ship their products to Chicago markets and were granted a charter to construct a railroad in 1849.

In 1864, they became the Chicago, Burlington & Quincy with consolidations of smaller lines and during the '60s and '70s extended

GN, NP HISTORICAL SOCIETIES TO MEET HERE IN JULY

It will be a first to have both the Northern Pacific and the Great Northern Historical Societies meet in Duluth back to back. The GN group will meet in July 13-15 and will be headquartered at the Holiday Inn.

The NP group will meet on July 14-16 and will be headquartered at the Radisson. Some of the members of the LSTC are making plans and arrangements for the two groups. The LS&M is hoping to be able to operate a special train for the NP group. The tracks that the LS&M operate on were once a part of the Northern Pacific prior to the merger in 1970. The NP had acquired the tracks along the river from the original Lake Superior & Mississippi Railroad to give the NP access to downtown Duluth, and a continuous rail line from the Head of the Lakes to the Pacific coast.

through Iowa, Missouri, Nebraska. It reached Denver in 1882, connected with St. Paul in 1886 and in 1901, the NP and GN bought nearly all the outstanding stock of the Burlington.

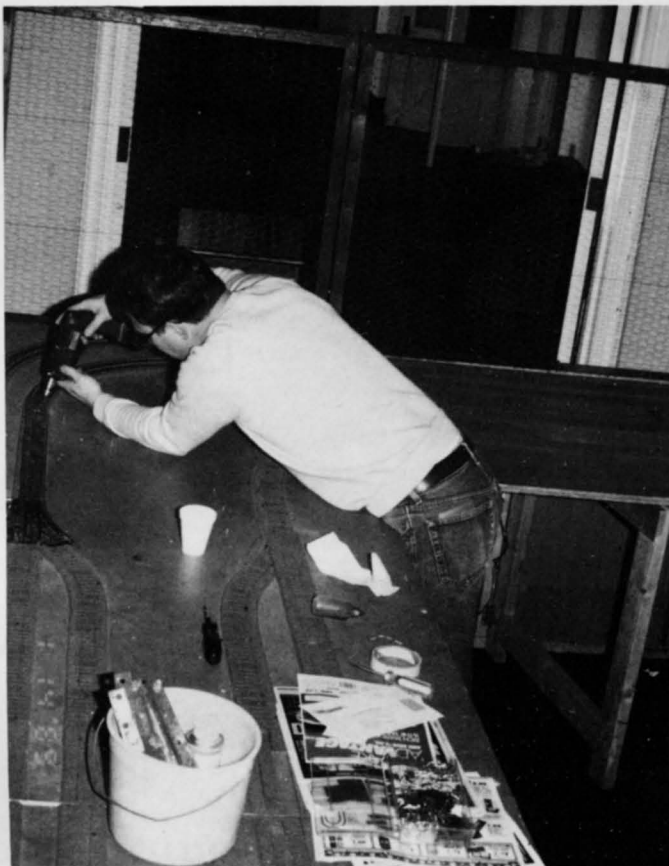
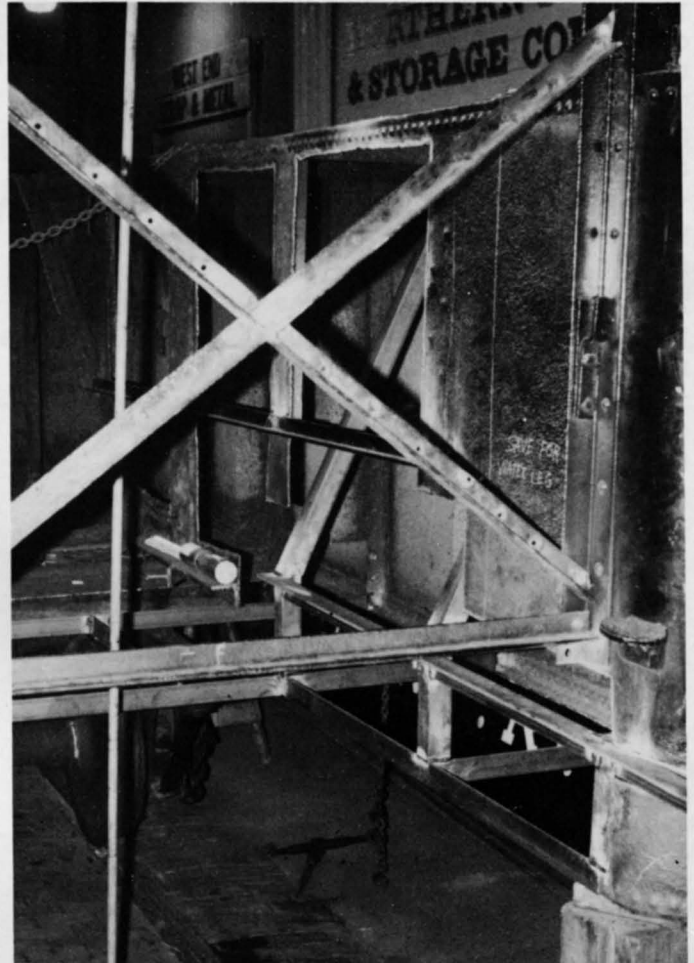
To share in the growing development in Oregon, a railroad was built between the cities of Spokane, Portland and Seattle. The 938-mile railroad took the name of the cities it serves, becoming operational in 1909.

In the mid-fifties, talks began about a merger between two railroads, and on March 2, 1970, the NP, the GN, the CB&Q and the SP&S merged into one new company, the Burlington Northern Railroad.

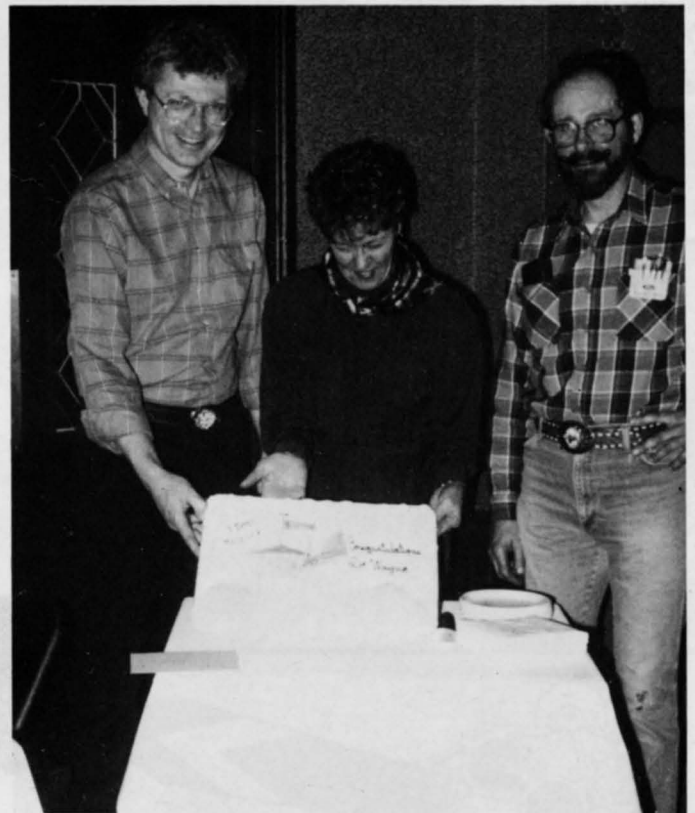


Zeke Fields works on the tender of D&NM No. 14, which is being rebuilt. The coal bunker is being shortened and widened, reducing the distance the fireman has to walk to get a shovel-full of coal. The coal and water capacity is unaltered. What the water legs loose is compensated for by additional space behind the coal bunker. Here the tender rests on a six-wheel passenger truck. The right photo shows the left side of the tender and the left water leg with the cross-bracing to hold the two sides together during the remodeling.

—Left photo by D. Tomasek



Dale Carlson is dismantling the Lionel train display after the Christmas holidays. The layout will be stored until next Christmas.



Party time, and members of the LSTC use any excuse for a party — such as DeWayne Tomasek (left) is elevated to a Journeyman status in the air traffic controllers. Claudia Busch and Zeke Fields join in to show that cake at the Afterburner restaurant.

PHOTO CONTEST ANNOUNCED

The DM&IR veterans association has announced a photo contest, May 1 to August 1, 1989. Six prizes will be given in the amounts of \$300, \$200, \$100, \$75, \$50 and \$25, respectively.

Photos must be color prints at least 5" by 7" and negatives must accompany the prints.

They must be related to the operation of the Missabe, a horizontal format, and previously entered photos may not be used.

All photos and negatives become the property of the DM&IR Veterans Employees' Association and up to three photos may be submitted.

The contest is open to all active and retired employees of the Missabe and immediate families and members of the LSTC.

Due to time limitations for the publication of the calendar, all photos must be received by August 1, 1989.

Entries must be mailed to ROBERT JOHNSON, SECRETARY, DM&IR VETERANS ASSOCIATION, 900 MISSABE BUILDING, DULUTH, MINNESOTA, 55802.

COMING EVENTS

May 11 — Annual meeting of the LSMT, dedication of china car and banquet

May 26 — Last meeting of the LSTC for the summer.

June 24-25 — D&NE excursion trips, Cloquet to Saginaw.

July 1 — LS&M begins its summer schedule.

July 13-15 — GN Historical Society convention.

July 14-16 — NP Historical Society convention.

August 13 — DWP employees picnic.

August 19 — Arrowhead Civic Club excursion train.

August 19 — BN excursion trips, Superior.

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CONTRIBUTING MEMBERS

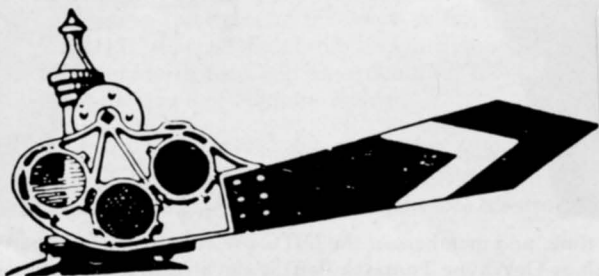
Pursuant to action taken at the annual meeting of the Lake Superior Transportation Club establishing a new category, the following have become contributing members:

Dan Mackey	Lenard Draper
Dave Schauer	Otto Dobnick
Tim Zager	Jergen Fuhr
Valley Models	John Magill
DeWayne Tomasek	Donald Wessner
Don Shank	Robert Ball
John Larken	William Graham
Dave Mikelson	Stephen Olmstad

As of March 31, the LSTC has 18 new members, 127 renewals; 16 contributing, 74 voting, 5 junior and 50 associates.

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