



TELLTALE COLUMN

Published monthly by the Advertising & Publicity Dept., Northern Pacific Railway, Saint Paul 1, Minn., W. A. Gustafson, Manager.



COLLEGE REGENT - Norman M. Lorentzsen, General Manager of NP's Lines West, Seattle, was elected recently to the board of regents of the Pacific Lutheran University in Tacoma for a threeyear term. Active in the work of the church. Lorentzsen was elected at the convention of the North Pacific District of the American Lutheran Church, corporate owner of the 3.000-student University. A graduate of Concordia College, Moorhead, Minn., Lorentzsen joined the NP in 1938. He was named Rocky Mountain Superintendent in 1954, and became Idaho Division head in 1957. He was promoted to his present position last year.

Our Cover . . .

. . . shows cut made through solid rock ridge, part of new NP line change nearing completion between Athol and Granite, Idaho. The rock cut, 70 feet deep by 600 long, replaces a nearby restrictive tunnel. This straighter, more direct route will shorten the line by 1.8 miles and save six minutes running time between the two western towns. Turn to pages 4-5 of this issue to see how Northern Pacific tackled this gigantic project, the metamorphosis of Granite.

MEMO ... FROM THE PRESIDENT

Results of Northern Pacific's U.S. Payroll Savings Bond drive are now complete. It is gratifying to report that a total of 2, 628 new savers enrolled in the program and that 558 present savers increased their monthly investment in U.S. Payroll Savings Bonds. We can be proud to have over 50% of the total NP employes participating in this program. I would like to express my sincere appreciation to all who helped make this record possible.

本 本 *

A reduced rate on wheat for export to Japan, approved by the Northern Pacific and other railroads serving the hard red spring wheat areas of Montana, North and South Dakota and parts of Minnesota, was made effective on June 11. This rate applies to shipment to Pacific Northwest ports.

With the prospects of shipping millions of bushels of wheat to Japan, the new rate will help strengthen the economy of these wheat growing areas by providing a new outlet for their crop.

The first car of wheat via Northern Pacific under the new rate was shipped out of Elliot, North Dakota, on June 15 to Portland.

本本当

In his May 17 Message to Congress on excise taxes and user charges, President Johnson made this statement, "I therefore recommend new and additional transportation user charges. These proposals are designed to:

-- move toward elimination of inequities among the several modes of transportation

-- recover a larger part of the outlays by Federal Government for services and facilities which mainly benefit special groups.''

It is to be hoped that Congress will take appropriate action and shift part of the tax burden of publicly provided roads, airports and waterways to users who benefit by them.

20 24 3

Merger proceedings moved one step closer to a final decision last month. On June 16 and 17, oral arguments on the proposed merger were heard before the full I.C.C. in Washington, D.C. The Commission is not expected to make a final ruling before late this year, pending study by it of the hearing transcripts and briefs filed by more than a score of interested parties.

Alus Hacfalone



DECADE OF SERVICE - Northern Pacific's Western Passenger Traffic Manager M. L. Thomson presents Stewardess-Nurse Supervisor Joan Reitz with a bouquet of ten roses at King Street Station in Seattle. The gesture was in celebration of the 10th anniversary of NP's Stewardess-Nurse Service in June. During the past ten years, 10.2 "Sues" have served aboard the Vista-Dome NORTH COAST LIMITED.

W.J. Luchsinger Retires; Stevenson Named NP Vice President-Traffic

Appointment of E. M. Stevenson. Vice President-Traffic for the Northern Pacific Railway, has been announced by Robert S. Macfarlane. President.

Stevenson succeeds W. J. Luch-





Luchsinger

Stevenson

singer, who retired on June 30. A native of Pittsburgh, Pa., Stevenson joined NP at Spokane in 1935. In 1937, he was transferred to Seattle and subsequently was Freight Agent, Commercial Agent, Foreign Freight and General Freight Agent.

Moved to Tacoma, he was successively General Freight Agent and Passenger Agent. In 1960, he was transferred to New York as Eastern Freight Traffic Manager. He came to St. Paul in 1961 as Assistant Vice President-Traffic, a post he held up to his present appointment as Vice President.

W. J. Luchsinger, Vice President-Traffic, retired June 30 with more than 49 years with the company.

Born in Fargo, N.D., he attended high school at Jamestown, N.D., and the North Dakota State University.

Luchsinger began his career with the railroad in 1916 as a Telegrapher at Ypsilanti, N.D. He has served with the railroad continuously since that time, except for a period of two years as a pilot in the U.S. Army Air Corps in World War I.

Promoted to Traveling Freight Agent in 1920, he became Chief Clerk to the Assistant General Freight Agent at St. Paul in 1925. He was Assistant General Freight Agent in St. Paul and Duluth before his transfer to New York as Eastern Freight Traffic Manager in 1951. He returned to St. Paul as General Freight Traffic Manager in 1956 and was appointed Vice President-Traffic in 1961.

Nipper news hite

NORTHERN PACIFIC Beneficial Association would like to extend special thanks to the following persons for their generous donations to the NPBA Hospital:

IN ST. PAUL - Miss Florence E. Petter, retired Stenographer, St. Paul, \$500, for medical equipment; Family of Mrs. Ethel Bentz, former Dietary employe at St. Paul Hospital, \$225, in her memory, for equipment in dining room of new wing; J. F. Polzak, former patient, \$100, in appreciation of care he received.

IN TACOMA - Oscar W. Erickson, former NP Carman, Yakima, \$250, provided this amount in his will,

JIM CARLASCIO, a 170 bowler on Northern Pacific's Jamestown team, attained a season single game high of 279, highest in city league play last season. Carlascio, Conductor at Jamestown, also was second in the city for total pins, 673 for three game series.

K. A. DAHL of Dilworth repeated as this year's winner of the NP Fargo Division Golf Tourney at Jamestown. Carding a low gross of 77, Dahl was followed by George Whitford of Fargo with an 81. Calloway handicap winner was Jerry Brake of Jamestown with a net 69. Thirtytwo attended the tournament held June 12 at the Jamestown Country Club.

FOR THE SECOND straight year, a Northern Pacific dining menu has been selected as one of the outstanding in its catagory by the National Restaurant Association in Chicago. W. F. Paar, NP Dining Superintendent, received the award for submitting a children's menu in the 1965 "Menu Idea Exchange" contest sponsored by the Associa-The menu was displayed at the NRA Chicago convention in May.



CARVING OUT the rock cut, a big power shovel loads truck with rock blasted from surrounding ridge. Tons of rocks were hauled to the swamp area and used as fill. Cover picture shows cut after completion.

Old Line

Gas Line

Athol

To Seatle

Above Grade

Below Grade

GRA

A Northern Pacific line change, shortening the distance between Granite and Athol, Idaho, by 1.8 miles and approximately six minutes running time, will be completed this year at a cost of \$3 million.

While the reduction in distance is not great, there are other advantages which make this major investment highly practical and economically sound.

The original route between Granite and Athol was laid out in 1880. Because of grades and costs involved, it followed the line of least resistance.

In 1892, NP engineers rerouted its line to the one presently in use. It crosses a wide valley on a 1200-foot trestle, tunnels 434 feet through a rock ridge and curves around a great hill. The curves and bridge impose severe speed restrictions and the tunnel restricts the size of the loads that can be accommodated.

While these restrictions were recognized during the 1892 line change, the route was selected simply because earth-moving equipment had not yet been developed which would make it economically feasible to take a straighter, more direct route.

With the need for greater speed to shorten shipping times become more and more critical, preliminary studies were begun in 1962 to investigate the possibility of a new line change between Athol and Granite.

Before the new line could be constructed, NP engineers, geologists and drilling crews had to make extensive studies of the area and the subsoil to determine the feasibility of a straighter, more direct route.

The most direct route through this area required cutting through a large terminal moraine. The cut required would be ninety-five feet deep at its deepest point and would be over one and one-half miles long. The excavation for this cut would be over two and one-half million cubic yards.

The new routing called for crossing a valley to the east, presently spanned by our Granite bridge. To eliminate the speed restricting viaduct, plans called for

NP Line Change

crossing the valley on fill obtained from the big cut.

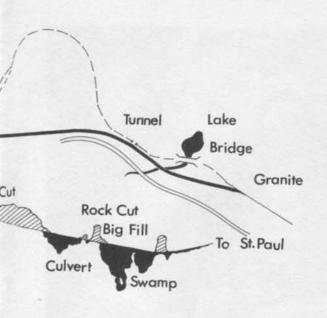
At the bottom of the valley, however, was a swamp area which would have to be excavated to solid rock or an adequate gravel base to support the tremendous weight of the fill. Test drillings located an area across the swamp where solid rock or adequate gravel base were, on the average, about 25 feet under the ground level of the swamp.

Preliminary testing was completed at a cost of fiftythousand dollars and management authorized the expenditure of three million dollars for the line change, thus began the metamorphosis of Granite.

Plans for Project 'Granite Metamorphosed' called for the new line to start at the north edge of Granite and end at the north end of Athol. The new line would be one and eight-tenths miles shorter and would have two

BIG CUT during construction stage shows belt loader in action. Crawler tractor, pulling loader, starts filling another large earth mover as loaded unit pulls away for the dump site.







COMPLETED CULVERT, shown partly covered with butuminous coating (dark area), was entirely assembled on the site. 604 feet long, the culvert was covered with 115 feet of fill when the project ended.

E LINE CHANGE

lears Completion

hundred and eighty-seven degrees less central angle of curves. The maximum degree of curve would be one degree and twenty-minutes as compared with the eight degrees on the present line. Where it formerly required ten to fifteen minutes for a train to go from Granite to Athol, on the new relocations the trip would be made in four or five minutes.

Surveying was begun in the fall of 1963 and continued on through the winter so that construction could begin in the spring of 1964. Working in the deep snow presented many problems but the surveying work was completed before spring.

Construction crews moved into the area on June 1, and the work of clearing and grading was begun. Preliminary work began with the removal of trees and brush from the proposed right of way to clear the way for

DUM FING FILL, earth mover, at left, dumps its load over section of fill area. Grader, in center, spreads and levels fill material into uniform layers. Fill in this area was 80 feet deep.



dozers, loaders and trucks to begin excavation for the big cut.

With excavation of the big cut underway, a huge dragline was moved into the swamp to remove the peat and silt to an average depth of 25 feet to reach a solid base. As work progressed in the swamp area, large trucks hauled away the wet, spongy soil, making room for the fill to come.

A stream flowing from Lake Granite called for installation of a culvert under the fill to carry the flow of water. The engineers specified a culvert 120 inches in diameter and 604 feet long. At the completion of the job, the culvert was covered by fill to a height of 115 feet.

Because of its extreme size, the culvert was constructed on the site. It was laid on a carefully prepared bed which had been compacted to provide an adequate and uniform foundation. Fill was deposited around the culvert and compacted by rollers and vibrators. A special coating was also applied to the metal.

A problem of another kind to be overcome in the construction of the new line was a ridge of solid rock requiring a cut, much of which had to be blasted out with dynamite. The cut called for a 56-foot base width with vertical sides and a 10-foot wide bench 25 to 30 feet above the tracks. The base width provides room for the use of off-track maintenance equipment. The cut, 70 feet deep and 600 feet long, required the removal of over 80,000 cubic yards of rock.

The rock cut was close to the present tunnel which was used daily. The proximity to the tunnel required explosions to be restricted to a safe level by use of delay caps and size of the shots. Precautionary measures included inspection of the tunnel after each blast.

NP Line Change

Continued on Page 8



Promotions



C. G. Wattam, City Freight Agent for the Northern Pacific in St. Paul, has been appointed General Agent with headquarters in Toronto, Ontario.

C. L. Kath succeeds Wattam in St. Paul, and G. N. Kutzera of Cleveland will succeed Kath as Service Agent (TOFC) in St. Paul.

In other recent changes, A. H. Pearson, former Assistant Car Foreman, Glendive, was promoted there to Car Foreman.

NP-Backed Junior Achievers Win Annual Banquet Awards

Northern Pacific sponsored Junior Achievement companies wound up their 1964-65 year at recent "Future Unlimited" award banquets in Seattle, Tacoma and Missoula.

SEATTLE

Topsel, NP-guided Junior Achievement company, walked off with a host of honors at Seattle's JA banquet held in May.

Winner of one of 12 Executive Awards, Topsel had the Treasurer of the Year, and runners-up for both President and Sales Vice President of the Year. Two Junior Executive Awards were also presented.

Total yearly sales were over \$890, sixth highest of 40 Seattle JA companies. Products sold were beeswax candles, aluminum meat lifters and scrubpuffs. Topsel met two hours every Monday night under NP advisors Bruce Rice, Industrial Development; Don Van Cleave, Traffic; Frank Culp, Engineering, and Jerry Parker of Timber & Western Lands.

TACOMA

NoPaCo, Northern Pacific-counseled JA firm in Tacoma, received the Company of the Year, Best Annual Report and Vice President of Production Awards at the Winthrop Hotel on May 26.

Company grossed \$1,118 in sales, largest of any Tacoma JA firm; had the individual salesman record, and returned its stockholders' investment plus a 10 per cent dividend.

MISSOUL A

Monadco, NP Junior Achievers in Missoula, was named Company of the Year at the city's recent Florence Hotel banquet.

Monadco, which produced shoe shine kits, had the Officer, Secretary, and Salesman of the Year. A \$100 Horace A. Moses Award was presented the company's president for outstanding achievement. Moses founded the JA movement in 1919.

NP advisory personnel were Harold Broers, City Freight Agent; Fred Knuchel, Agent, and Dick Roth, General Agent, who also was on the city's JA board of directors.



KATE SHELLEY AWARD - Twin City Chapter president, Miss Kathleen Lawler of Northern Pacific, accepts Grand Award trophy from Nancy Ford, special features editor of Modern Railroads magazine, at recent NARBW convention in Portland.

Twin City Railway Women Win Top Kate Shelley Award

Railroad women who performed outstanding public service activities in the past year were honored at Portland, Oregon, recently with the presentation of the 1965 Kate Shelley awards.

The Twin Cities Chapter of the National Association of Railway Business Women received a trophy as the Grand Award winner in the annual competition sponsored by Modern Railroads magazine.

The Twin Cities Chapter won the highest honor primarily for sponsoring a public affairs dinner where 275 persons, representing nearly 90 civic and other organizations, heard a panel discussion by top railroad executives.



NP SERVICE AWARDS, representing 10.5 years in one department, were presented three District Stores' employes at the St. Paul Como Store recently. Displaying service awards are: left to right; D. E. Baird, Chauffeur (25 yr. pin); R. Petro, Stockman(45 yr. tiebar), F.J. Curtis. Chauffeur (35 yr. chain). F. E. Marvin, District Storekeeper, made the presentation at department party in May.



ALDER RETIRES - G. W. Alder, Car Foreman in St. Paul, right, receives "good-luck" retirement wishes from his Como Shop Superintendent D. T. Capistrant during his last day on the job. Alder retired June 1 after 48 years with the NP.

Safety Score Board

January 1 thru May 31, 1965

RANK	REPOR INJU 1965	TABLE RIES 1964	CAS. 1	RATIO 1964
STANDING BY DISTRICT				
Western District Eastern District	64 64	39 54	14.40 14.89	8. 24 12.03
STANDING BY DIVISION				
1. Idaho 2. Rocky Mountain 3. Yellowstone 4. Fargo 5. Lake Superior 6. St. Paul 7. Tacoma	12 10 15 10 12 27 42	10 6 13 6 12 23 23	8.78 9.08 11.32 13.14 16.01 18.45 21,25	6.85 5.03 8.98 7.64 16.63 15.01 11.07
STANDING BY MAIN SHO	P			
1. Brainerd 2. Como 3. Livingston 4. South Tacoma	0 1 1 2	1 4 0 1	0.00 4.74 5.09 9.36	3.68 17.78 0.00 4.41
STANDING BY CLASS OF	EMPLOYE			
1. Bridgemen 2. Stationmen 3. Enginemen 4. Shopmen 5. Carmen 6. Trackmen 7. Trainmen 8. Yardmen	1 6 7 5 9 15 33 52	7 8 4 5 3 15 18 33	2.47 2.63 7.01 7.15 8.97 9.32 34.30 65.49	15.87 3.47 2.44 6.90 3.00 8.97 18.45 37.91
MISCELLANEOUS DEPAR	RTMENTS			
1. Mechanical Engr. 2. General Office & Mis 3. Dining Car 4. Signal Dept. 5. Communications 6. Chief Special Agent 7. Store Dept. 8. Electrical Engr. 9. Engineering	0 3 1 1 1 1 6 1 5	0 0 2 1 2 0 4 1 2	0.00 2.08 4.32 4.86 5.54 11.15 16.98 26.67 27.71	
TOTAL FOR SYSTEM	153	90	12.09	8.62
Train and Yard Accidents Motor Car Accidents	100	96 10		



Retirements



Roy E. Butterfield	Section Foreman	Gate	25
Frank Clossen	Locomotive Engineer	Staples	53
Thomas J. Erwin	Locomotive Engineer	Tacoma	47
William O. Fischer	Section Laborer	Hebron	22
John D. Gruar	Switchman	Pasco	21
Mabel A. Hedberg	Messenger	Tacoma	21
Chester L.Henderson	Section Laborer	Foxhome	45
Paul G. Hendrickson	Locomotive Engineer	Spokane	22
George C. Hotrum, Jr.	Truck Driver- Northern Pacific Transport Co.	Missoula	28
George T. Howley	Clerk	Minneapolis	46
Carl F. Jensen	Brakeman	Spokane	20
John R. Johnson	Locomotive Fireman	Lewiston	20
Frank R. Knight	Brakeman	Livingston	20
George Langlee	Store Deliverymun	Duluth	39
Harry A. Long	Assistant Night Train Supervisor	St. Paul	49
C. P. McLaughlin	Locomotive Engineer	E. Grand Forks	49
Patrick H. Mulloy	Locomotive Engineer	Staples	43
Elmer J. Robideau	Switchman	Fargo	37
John B. Ross	Brakeman	Tacoma	20
Arthur C. Schubert	Claim Clerk	Minneapolis	53
William C. Simpson	Locomotive Engineer	Seattle	47
Ben L. Wiley	Locomotive Fireman	Tacoma	20





Nelson birdies 18th hole

Gene accepts trophy

Nelson Wins Fifth Golf Title

Gene Nelson, the swingin' Switchman of Duluth, stroked a one over par 73 to retain NP's Eastern District Golf crown at a recent tourney at Gall's, north of St. Paul.

Capturing his fifth straight title, the husky Swede permanently retired one trophy in 1963. This marks the second year in a row he has won the present prize.

Runner-up W. R. Bjorklund pressed the perennial champ with a 77. Men's low net honors went to Dick Larson, who carded a 60 under the Peoria handicap system used at the event. Jim Moore and H. A. Peterson tied for second with 61 each. All are from the St. Paul Office.

Betty Kinney of St. Paul took women's low gross honors, 125 played in the 1965 event.

7



BIG FILL area, looking west of Granite, is seen crossing the swamp area at the upper right of picture. Earth movers, dozers,

and trucks fill and grade stretch of road bed in foreground.

NP Line Change

Continued from Page 5

Crews, using a special car, went through the tunnel and examined it to insure that no new cracks or weakening had appeared.

Tons of rocks, loosened by the blasting, were shovelloaded into trucks and transported to the swamp to be used as fill. Rocks and gravel were unloaded in separate piles at the site of the fill. Dozers then mixed the gravel and rock and spread it out in 2-foot layers in the fill. Each layer was compacted by several passes of a 50-ton roller to minimize voids and reduce settlement in the fill.

At the peak of the filling operations, loaded trucks crossed a specified intersection in the fill area at the rate of one every twenty seconds. This volume was made possible by the use of a great number of trucks and scrapers and two belt loaders working in the big cut. Combined, these two belt loaders were capable of loading 20 cubic yards in 20 seconds.

In the big cut, measures were taken to provide safe operation of trains. The bottom of the cut is 54 feet wide, allowing for ample space to protect tracks and use of off-track equipment for maintenance work. At the top, the big cut is 330 feet across.

In sharp contrast, the big fill across the swamp towers upward to a height of 160 feet to make it one of the highest railroad fills in the United States, if not in the entire world.

All of the fill material came from the big cut, and could well be called an "engineers dream." It was a wellgraded, medium to coarse gravel with 5 to 10 per cent of silty clay fines. It couldn't have been better for the purpose if it had been provided by specifications.

North of Athol, near the west end of the line change,

the route crossed a large natural gas transmission line, a 36-inch pipe operating at 900 pounds pressure. It was necessary to encase the pipe without interrupting the flow of gas. Since conventional casing could not be used due to a curve in the piping at this point, casing was done by placing a reinforced concrete slab under the pipe and erecting a steel arch over it.

An additional item of work vital to the line change was the extension of the siding at Athol. This entire line change is in centralized traffic control territory and it was necessary to lengthen the siding to accommodate the longer, faster trains which will operate here in the future.

On December 15, 1964, winter closed down the entire project. At the time of the shutdown, 70 per cent of the work was completed. Work began again this year on March 15. Final grading was completed in June, and the line will be operational by this fall.

Construction work on the project was handled by Schultz and Lindsey Construction Company of Fargo, with Northern Pacific doing the engineering. Not including the three months' winter layoff, construction time to date has totaled nine months, a remarkably short period considering the many and varied operations involved in the line change.

The remaining work of laying track, bridge revision and putting the line into operation will be done by Railway Company personnel.

In summary, the line change will make the route shorter by one and eight-tenths miles, a saving of six minutes, at a cost of approximately three million dollars. While this may seem to be a high price for such a minimum mileage change, the benefit will come from three areas . . . a shortening of time . . . elimination of a high, long bridge and elimination of the tunnel removing a restrictive bottleneck. The new routing will provide easier, faster and better riding for passengers and freight on a shorter section of modern high speed railroad.