TELLTALE

LADY REDCAP - If you see a lady redcap at the NP depot at Missoula, Mont., it isn't your eyes playing tricks on you. It's Mrs. Marie Marrone, who has been at the job since 1956. "I like to help people," that's Mrs. Marrone's philosophy and she is always around to give someone a helping hand with luggage, a cheery smile or a friendly word. Doing a man's work is no novelty to Mrs. Marrone. During World War II, in 1943, when the manpower shortage was acute, she began working for NP as a section hand.

Our Cover...

. . . shows autumn in Northern Pacific country. Bedecked in autumnal hues of gold, red and brown, foliage surrounds just one of the hundreds of beautiful mountain streams in the Montana Rockies. Scenery here greets the rail traveler as he approaches Bozeman, Mont., along the main line of the Northern Pacific.

MEMO ...FROM THE PRESIDENT

On September 30, President Lyndon Johnson met with a small group of Railroad and Brotherhood presidents at the Whitehouse. I was honored to be invited to attend the meeting which was arranged for the specific purpose of discussing rail transportation. The President expressed a keen and sincere interest in rail transportation and its problems.

Along with our long-range program of acquiring additional freight cars of all types, we are continually mindful of the need to keep pace in the area of motive power. In June and July of this year, we received delivery of 15 new 2500-hp diesel-electric locomotives. With the 15 delivered in 1964, we now have a total of 30 of these modern and highly efficient units on our line. There are included in our 1966 budget additional power units.

Much interest has been generated by NP's application to the ICC to build approximately 55 miles of new line between Mesa and Mattawa, Washington. This new line would serve the Wahluke Slope in the Columbia Basin and it is estimated that the new line would be serving over 15,000 people residing in the area by 1975.

Many of you have sons, or have friends or relatives who have sons, in Viet Nam. I am sure you will be interested to know that the railroads are fulfilling their obligations in the movement of supplies to Viet Nam.

In a letter to the AAR, General John J. Lane, commanding officer of the Military Traffic management and Terminal Service, wrote, "I wish again to express my appreciation for the excellent cooperation and support given the Department of Defense by the Association of American Railroads and the U.S. railroads during the recent months. On several occasions unusual requirements have called for special attention by your staff and prompt action by the railroads. The response to these unusual situations, in each instance, has been exemplary!"

A cherished American tradition this month is the observance of the Thanksgiving holiday. All of us in this great country of ours have reason to be thankful. I hope that you and your families will enjoy a happy Thanksgiving day.

Robert H. Macfarlane

PUBLIC AFFAIRS MEMBER - Richard A. Beulke, right, NP assistant secretary and public affairs director, chats with Harry Hall, Michigan State Chamber of Commerce president, during recent public affairs committee meeting of U.S. Chamber of Commerce in Washington. Beulke, member of the committee, participated in the discussion of effective public affairs programs.

How Railroad Retirement Differs from Social Security Taxes

Rail employes often ask why railroad retirement taxes are so high compared with social security taxes. That some difference should exist is understood, for most know that our system affords far more liberal benefits than social security. But most, too, wonder why the disparity is as great as it is.

For our purpose here, regard both rail retirement benefits and taxes as having two parts: (1) the social security part and (2) the additional or excess part. The social security part of the benefit consists of the amount which SS would have paid on the basis of the rail service involved, had such service been covered under that system all along. Similarly, the SS part of our tax is computed under SS rates, with the excess covering the extra benefits.

The SS parts of the benefits and taxes pose no problem because we, as a group, receive the same treatment as workers covered directly by the SS benefit program. The only question remaining, then, is whether the extra rail benefits are worth the extra taxes.

Studies made by RRB actuaries

reveal that, if bought from private sources, the extra benefits would cost a rail employe far more than he now pays in additional taxes. A 1962 study made for active employes showed that for one as young as 30 years of age, the extra benefits may be worth almost three times his own additional taxes. For older employes, the corresponding ratios were much higher.

To be more specific, here are some of the advantages under our system which those covered by the SS program do not enjoy:

1. Rail workers are protected not only against total disability but against disability for their regular job as well. Under SS workers get benefits only if totally disabled.

2. Long-service rail employes may retire at age 60 with a reduced annuity, but under SS the earliest age is 62.

3. Widows of rail workers may receive an unreduced benefit at age 60, compared with age 62 for widows under the SS program.

Railroad Retirement

DON WEGLER, Northern Pacific brakeman at St. Paul, has been recently appointed to the Governor's Advisory Council on Children and Youth as Chairman of the Youth Traffic Safety Committee.

Appointed by Minnesota Governor Karl Rolvaag, Wegler is a member of NP's St. Paul division safety committee.

The work of the Traffic Safety Committee is to study those factors affecting youthful drivers, to promote and develop good driving practices and to encourage the development of local and statewide programs to promote safe driving.

• • •

108 GOLFERS participated in the 10th Annual Western District NP Golf Tournament held at Tacoma's Elks Allenmore Golf Club. Winners were A. R. Genin, low gross; E. T. Aune, low net, and R. C. Pickrell, winner of Peoria handicap system. J. J. Ackley was chairman of the event.

• • •

SPECIALLY BAKED fruit cakes, an NP holiday tradition, are once again available for sale to the public this year.

The delicious cakes, made at NP's St. Paul Commissary from the original recipe adopted in 1873, call for generous amounts of raisins, currants and candied fruits. Packed in colorful Yuletide tins, they make delightful Christmas gifts.

Prices are $3.90 for the three-pound tins and $6.50 for the five-pounders, express or parcel post prepaid. Add $1.75 more for shipment outside the continental U.S.

All orders should be addressed to W. F. Paar, dining car superintendent, Northern Pacific Railway, St. Paul, Minn. 55101.

Computers Speed Many Tasks at NP.....
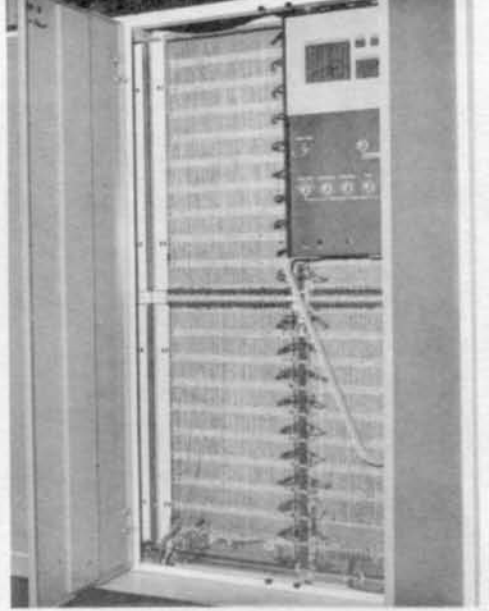
INTERNAL CIRCUITRY inside computer unit shows complex wiring necessary for operation. Test panel at top right is service aid for IBM engineer consultant's use.
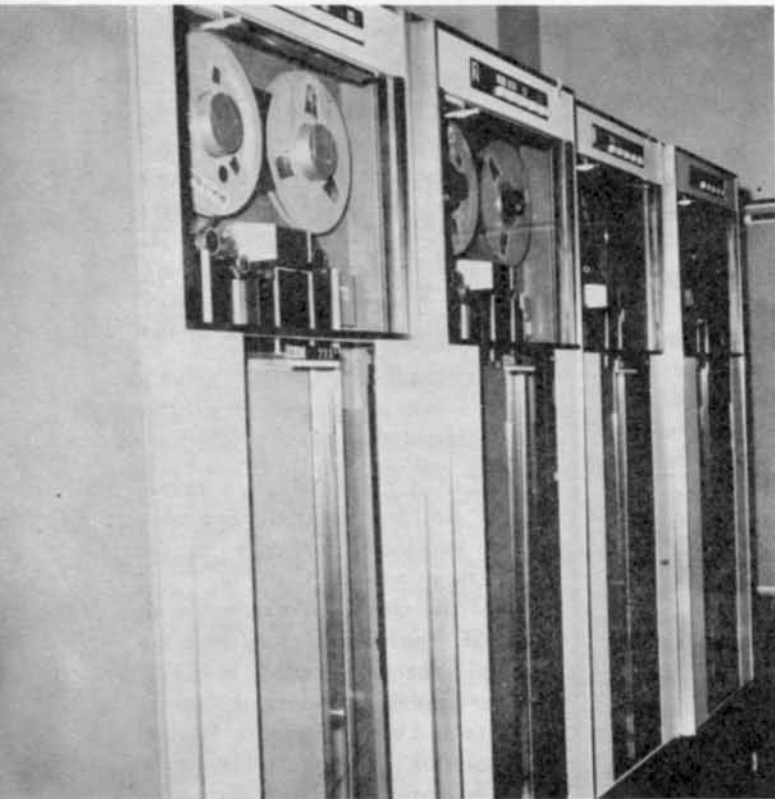
FOUR MAGNETIC TAPE DRIVES perform various input or output functions according to the type of programming desired. Tapes can absorb or file data for future use; or transmit data into the computer system for immediate use.

During the past several decades, the phrase "Mechanization" and "Electronic Data Processing" have become by-words in American industry. Although these words are relatively new to many companies, the Northern Pacific has been associated with these systems and procedures for many years.

The first mechanization of NP accounting procedures began in 1927 with the installation of Moon-Hopkins bookkeeping machines on the Lake Superior Division. They were used for payroll processing. During that same year, National Cash Register accounting machines were purchased for other procedures.

In 1939, NP mechanized its accounting procedures further by use of a punch card system. The initial machine room, established in the office of the auditor of freight accounts, housed eight rented International Business machines. Today a separate department has been established under a manager of data processing which utilizes many electronically-operated IBM machines, including key punch, tabulators, sorters and interpretive equipment. NP's data processing department is divided into three units, a key punch section, tabulating section and the 1410 computer room.

Located in a special air-conditioned, temperature-controlled room is the heart of NP's data processing department, the 1410 IBM magnetic tape data processing system. Maintained and serviced by IBM, Northern Pacific leases this system from International Business Machine Corporation.

"Computerization has completely revolutionized today's accounting procedures," notes G. C. Krahn, manager of NP's data processing department, housed on the third floor of the St. Paul General Office. "Utilization of these machines is unlimited," he added. "Projects which were impossible to undertake years ago due to the number of man-hours involved can now be accomplished in a relatively short time. Although computers have enabled the mass calculation of statistical data to a high degree of speed never before possible, it
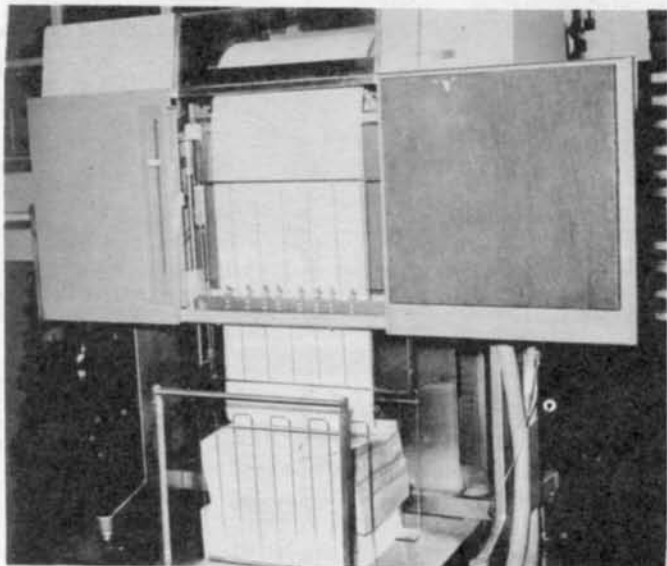
CONSOLE OPERATOR watches keyboard for information from computer system as data is processed. Programming is controlled at the console, and it can convey messages to the operator in event of any computer trouble with the programming.

ELECTRONIC COMPUTERS lined up side-by-side in NP's 1410 room appear as sentinels on duty. Always ready and capable, these machines respond quickly and accurately to directions given them by the data processing programs.

is difficult to measure accurately the total savings in man-hours and money because of the many diversified applications of the data processing systems."
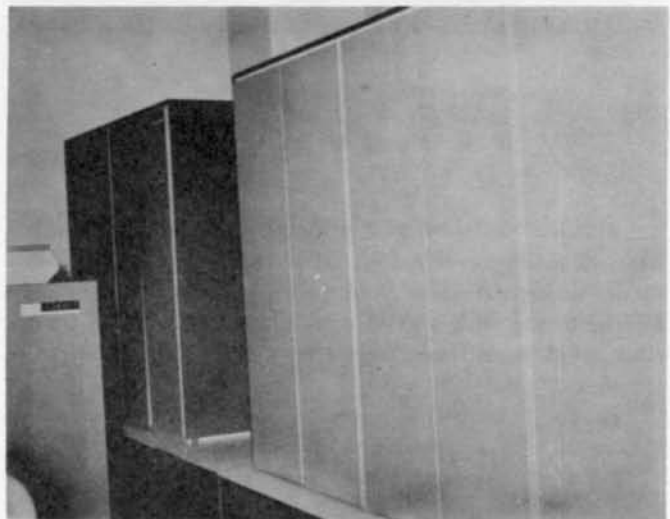
Electronic data processing began on the Northern Pacific in September 1950 when an IBM 604 electronic calculator was installed. This machine could add, subtract, multiply and divide with any combination of these methods made in one or more runs through the machine. The basic input data for this machine was on punch cards.

A second 604 was put into service in 1954. Both were replaced in 1957 by a 650 magnetic drum processing machine. At this time, the present air-conditioned room was constructed to house the new electronic equipment.

In recent years, great advancements have been made in machines and systems designed to handle the vast volume of data in the business world. What is new today

HIGH-SPEED PRINTER, seen in operation, stacks up a pile of printed data which has emerged from front center of machine. Printed data is end result of program operation which the computer system has processed.

becomes obsolete tomorrow.

"A steady upgrading of equipment has taken place since 1957," said Krahn. "An IBM 1401 data processing system replaced the 650 early in 1961; and a 1410 system, currently in use, replaced the 1401 in July 1963."

The 1410 IBM magnetic tape data processing system, which updated the new engineering concept of the 1401, has completely transistorized components. This system includes four magnetic tape drivers, a six-unit main computer, high-speed printer, a combination card read and card punch unit and a control console.

Known as the input and output units of the data processing system, the component machines varying in size from six feet high to fifteen feet long are lined up side-by-side in a U-formation which occupies almost one-half of the room space. Transmission power cables, connecting one machine to another, are covered by walk-over platforms.

Magnetic tape provides an extremely fast input and/or output to a computer system. Each large tape reel can hold up to 2400 feet of magnetic tape. The four tape drives can store or "file" an infinite amount of data fed to it via punch cards through the card-read machine, or from other component sources.

Capable of printing 1100 lines per minute, the high-speed printer resembles a huge teletype machine with an opening in the center where printed data emerges on wide rolls of paper. Data, printed from a revolving chain-type mechanism, looks similar to typewriter impressions.

Internally, the 1410 computer has the ability of manipulating and calculating data at very rapid speeds. The ability to read information into or out of a system at high speed is essential to obtain the full utilization of

Computers

Promotions

Richard D. Larsen, Seattle, has been appointed western manager of industrial development for the Northern Pacific effective November 1. Larsen succeeds Marvin Nixon who served as western manager of industrial development from September 1, 1961, until his death October 27, 1965.

J. P. Tubridy has been appointed labor relations assistant with headquarters at St. Paul October 1.

H. W. Johnstone, former trainmaster at Fargo, has been named as trainmaster, Yellowstone division, with headquarters at Billings. He succeeds A. B. Riley, who recently retired under company pension rules after serving the NP for more than 43 years.

M. E. Hagen was appointed trainmaster, Fargo division, to succeed Johnstone at Fargo, North Dakota.

Railroad Retirement

4. Rail employes are guaranteed they and their families will always receive as much in benefits as they will have paid in retirement taxes. For example, if a rail employe who had worked continuously under the act since 1936 (at maximum creditable compensation) would die without drawing any benefits and should he not be survived by a widow, a minor or disabled child, or anyone entitled to receive monthly benefits, the Board would pay a residual benefit which, as of Jan. 1, can be as high as $6,922. This would be paid to his designated beneficiary or estate. Under social security, given the same set of circumstances, the sum of $255 as a lump-sum death benefit would be paid, with no further payments ever to be made on his account.

5. Except for disability annuitants under age 65, a railroad annuitant may work for pay after retirement regardless of how much he earns, provided the work is not for a railroad or for his last nonrail employer. Under SS, however, a beneficiary under 72 will generally lose part or all of his benefits if his earnings exceed set limits.

The current average RR annuity being paid is $138, or 75 per cent more than the average benefit to retired workers under SS. Maximum annuity now receivable under RRB benefits is $216 a month; the SS maximum in the usual case is less than $127 a month. Furthermore, under present provisions, future rail employe annuities can be as high as $350 a month and, in some cases, even higher. In contrast, the present SS law has an absolute maximum of $127 a month for all time to come.

Admittedly, there is more to the story than this, but lack of space prevents a full discussion. Further questions should be directed to the nearest Board office.

CAPITOL CONFERENCE - Merlyn N. Trued, Assistant Secretary to the Treasury for International Affairs, and Robert S. Macfarlane, NP president, confer during a meeting of the Economic Policy Committee in Washington, D.C.

Safety Score Board

January 1 thru Sept. 31, 1965

RANK	REPORTABLE INJURIES		CAS. RATIO	
	1965	1964	1965	1964
STANDING BY DISTRICT				
1. Eastern District	112	105	13.88	12.34
2. Western District	123	73	14.89	8.44
STANDING BY DIVISION				
1. Rocky Mountain	19	16	9.07	7.07
2. Idaho	26	18	10.46	6.75
3. Yellowstone	27	24	10.73	8.93
4. Lake Superior	16	16	11.49	11.50
5. Fargo	18	11	12.10	7.08
6. St. Paul	51	54	19.10	18.76
7. Tacoma	78	39	21.21	10.47
STANDING BY MAIN SHOP				
1. Como	1	6	2.76	15.56
2. Livingston	1	1	2.94	2.87
3. Brainerd	2	1	4.24	2.08
4. South Tacoma	2	1	5.31	2.39
STANDING BY CLASS OF EMPLOYEE				
1. Stationmen	10	15	2.41	3.59
2. Shopmen	6	6	4.83	4.67
3. Enginemen	9	9	5.11	4.33
4. Bridgemen	5	14	6.86	17.46
5. Carmen	14	10	7.84	5.59
6. Trackmen	40	25	11.78	6.95
7. Trainmen	64	39	35.41	21.34
8. Yardmen	87	60	59.41	37.39
MISCELLANEOUS DEPARTMENTS				
1. Mechanical Engr.	0	0	0.00	0.00
2. General Office & Miscl.	3	0	1.18	0.00
3. Dining Car	2	4	4.16	8.70
4. Signal	2	2	5.36	5.70
5. Chief Special Agent	1	0	6.13	0.00
6. Communications	2	2	6.25	5.71
7. Store	8	5	12.75	7.55
8. Electrical Engr.	1	1	15.65	14.72
9. Engineering	8	3	25.22	9.67
TOTAL FOR SYSTEM	270	210	11.67	8.69
Train and Yard Accidents	192	121		
Motor Car Accidents	29	24		

STILLWATER RETIREMENT - B. D. Taylor, NP switchman, hitches his last ride on the day of his retirement. Taylor completed 41 years of service without a reportable injury.

NP RETIREES - H. P. Albertson, Brainerd scrap foreman, left, and J. A. Peterson, perishable freight clerk at Billings, retired recently after serving the NP for 46 and 42 years, respectively.

MILL CITIAN RETIRES - Al Delaney, car stenographer since 1954, was honored recently at retirement party given by fellow NP associates. Delaney, who served the NP for 30 years, poses with his wife during Minneapolis held luncheon.

Retirements Continued

J. J. Scherbenske	B&B Carpenter	Fargo	21
Wm. E. Schmudlach	Section Foreman	Billings	35
Mary A. Sweetman	Stenographer - Accounting Department	St. Paul	32
Beltram D. Taylor	Switchman	Stillwater	40
Edward W. Thill	Chief Draftsman	St. Paul	21
A. M. Topham	Locomotive Engineer	Staples	47
Harvey A. Walsh	Machinist	St. Paul	28

Retirements

Henry P. Albertson	Scrap Yard Foreman	Brainerd	46
Wm. A. Andersen	Diesel Shop Foreman	Livingston	49
Wilburt W. Anderson	Demurrage Clerk	Superior	48
James H. Armstrong	Conductor	Glendive	31
William A. Barnett	Locomotive Crane Engineer	So. Tacoma	46
William Borgie	Locomotive Engineer	Livingston	48
Joseph A. Boss	Machinist	St. Paul	47
George I. Cantrell	Section Laborer	Yakima	21
Albert J. Delaney	Car Stenographer	Minneapolis	30
Harold I. Dokken	Car Inspector	Tacoma	28
William G. Ehlers	Telegrapher	Tacoma	21
Earl J. Ek	Coach Trimmer Foreman	St. Paul	48
Adolph J. Germann	Carman	Brainerd	30
Vinton L. Guthrie	Assistant Signal Engineer	Livingston	42
Otto J. Hable	Accountant - Manager Disbursement Accounting	St. Paul	49
Howard Halpny	Roundhouse Laborer	Tacoma	20
A. H. Hanschen	Telegrapher	Little Falls	49
John C. Harr	Section Laborer	Fargo	20
Floyd L. Harrison	Sheet Metal Worker Helper	St. Paul	39
Christie H. Howard	Agent-Telegrapher	Wilsall	49
Carl B. Jacobson	Chief Special Agent	St. Paul	45
Edwin O. Jenson	Section Laborer	Minneapolis	21
Frank L. Johnson	Machinist	Livingston	43
Gerald W. Johnson	Agent	Puyallup	42
R. Bryant Johnson	Assistant Superintendent of Communications	St. Paul	24
T. G. Joranger	Conductor	Minneapolis	46
A. P. Kwapich	Carman	Minneapolis	29
Richard E. Lee	Dispatcher	Spokane	56
Kenneth A. Leen	Box Packer	Auburn	43
Karl M. Lien	Switchman	Missoula	21
Joseph J. Loran	Carman	So. Tacoma	47
Knute E. Linder	Sheet Metal Worker Helper	St. Paul	40
Rose A. Maether	Record Clerk - Car Accounting	St. Paul	47
Hugo M. Marquard	Brakeman	Paradise	25
Edward E. Mattison	Truckman	St. Paul	37
John B. Mertes	Brakeman	Spokane	20
Glen A. McDonald	Welder	Livingston	50
Lester W. Miller	Conductor	Fargo	48
Sterley A. Miller	Foreman-Wireman	Livingston	38
William Nikituk	Painter Helper	St. Paul	20
Alvin C. Officer	Machinist	Livingston	38
John A. Peterson	Perishable Freight Clerk	Billings	42
Roman L. Polski	Car Foreman	Auburn	46
Ira B. Pue	Carman	Pasco	21
Myles A. Purfeerst	Conductor	Laurel	28
A. H. Quackenbush	Locomotive Engineer	Pasco	24
Frank J. Raab	Stationery Helper	St. Paul	23

KEY PUNCH OPERATOR punches required data on cards as they move along channel in front of her. NP uses approximately 40 IBM key punch machines in its data processing department, headquartered in the St. Paul General Office building.

Computers

Continued from Page 5

the computing unit.

Before any data can be processed through this system, a program must be set up to tell the computer what it must do. NP presently employs a staff of six to program its accounting operations. Programming is set up on key punch cards fed into the computer system by the 1410 operator, who controls and operates the system from a central console in the room.

A keyboard resembling that of a typewriter is centered in the console, backed with several panels which flash signals and information to the operator showing the progress of the program in operation. The operator can transmit orders and corrections to the computer as he wishes on the keyboard.

For example, take a typical NP payroll programmed to the 1410 computer system. How does the computer handle this? Data necessary to process a company payroll comes from three main sources, a gross pay tape, a master name file tape and deduction cards. The gross pay tape contains the employes' time calculated previously and transferred onto this tape from punch cards. On the master name tape is all personal data relating to the employe, including his name and number of state and federal tax exemptions. This is a perpetual file changed only when the employe's personal data changes. All employe deductions (insurance, savings bonds, etc.) are punched in advance on separate cards, ready to be digested into the computer system.

Data processing takes place when the three data sources, the two tapes and the deduction cards, are synchronized from the tape drives and card-read machine into the computer's electronic memory which calculates the new data and transmits it to the high speed printer

where the printed payroll data comes out ready for use. All this action takes place in a matter of seconds.

Currently NP's computerization programs include: complete payroll; freight and passenger revenue accounting; car and station accounting; store department annual inventory, timber inventory, and other statistics.

Plans for future computer application call for mechanization of material and supplies accounting, which will include a perpetual inventory. Future goals include automatic ordering of supplies by computer; new customer statistics for the freight traffic department including an up-to-the-minute record of all shipments by all locations; faster car tracing and a perpetual car inventory for better utilization.

When this coordinated accounting-operating-traffic department communication system is accomplished, it will enable management to make decisions based on current information rather than historical. Traffic agency offices will be freed of reporting duties so they can have more time for solicitation functions. It will also be an invaluable tool in the pricing function of the rates and divisions department.

Future upgrading of data processing equipment is planned for 1966. NP has ordered the latest IBM computer system available, the new 360 machine, which will eliminate several of the present accounting machines when delivered next year. Currently, four IBM tabulators and a number of sorters and interpreter machines are used in NP's tabulating section. The 360 combines many of the duties of these accounting machines in its computer operations.

NP's president Macfarlane outlines NP's computer policy in this way: "We will explore and develop computerization as fast as feasible. The system must show desirability. A better job is only accomplished when there is a desire and effort to improve. We will continue to seek new and better methods, new and better equipment. Progress for the Northern Pacific will continue."

IBM ACCOUNTING MACHINE, one of several used in the tabulating section of St. Paul Data Processing department, tabulates data at a high rate of speed. Machine like this will eventually be replaced by a new computer system.