

THE ALASKA RAILROAD

MESSAGE

FROM

THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

THE REPORT OF THE ALASKA RAILROAD, COVERING
THE PERIOD FROM JULY 1, 1924,
TO JUNE 30, 1925



DECEMBER 14, 1925.—Referred to the Committee on the Territories
FEBRUARY 13, 1926.—Ordered to be printed

WASHINGTON
GOVERNMENT PRINTING OFFICE
1926

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MESSAGE

To the CONGRESS OF THE UNITED STATES:

In compliance with the requirements of section 4 of the act of March 12, 1914, I transmit herewith the report of the Alaska Railroad, covering the period from July 1, 1924, to June 30, 1925.

CALVIN COOLIDGE.

THE WHITE HOUSE, *December 14, 1925.*

MESSAGE

To the Congress of the United States:
In compliance with the provisions of section 1 of the act
passed July 1, 1901, and with the intent of the Senate
and covering the period from July 1, 1901, to June 30, 1902,
I have the honor to submit to you this report.

The Commission on the Administration of Justice.

ANNUAL REPORT OF THE ALASKA RAILROAD FISCAL YEAR ENDED JUNE 30, 1925

DEPARTMENT OF THE INTERIOR,
Anchorage, Alaska, August 22, 1925.

GENERAL REMARKS

The fiscal year 1925 was a period of advancement on the Alaska Railroad in efficiency and economy of operation. Careful study was made of all departments for the purpose of eliminating superfluous employees, abolishing all unnecessary positions, consolidating the work of the departments where possible to prevent duplication of work, loading trains and cars to more nearly their capacity, restriction of train service to the actual necessities so far as consistent with reasonable regularity of service, the economical use and purchase of material, the economical handling of work, and similar matters were given careful supervision. Losses in operation have been reviewed and such operations as were being conducted at a loss and could be discontinued were stopped. The most notable example of this is the dining-car service.

Labor-saving methods and devices were established to the extent that funds would permit, such as the improved method of handling coal and ashes at the power plant and hospital, and the installation of a Pelton wheel at Healy for the furnishing of power in the engine house.

Some progress was made in the completion of the railroad by the substitution of permanent steel bridges for wooden trestles, the filling of other trestles, widening cuts and banks, rip-rapping, and the placing of additional gravel under the ties, all of which will result in decreased cost of maintenance in the future.

Further economy can be effected but the amount will be small, except such as can be made by the expenditures for the completion of the railroad and for improvement of fixtures and purchases of equipment and appliances. This field offers attractive opportunities for decreases in maintenance and operation costs.

The economy effected can be shown by comparison of pay rolls. For 1924 the pay roll amounted to \$2,498,430.91 and for 1925 to \$2,051,026.75, a reduction of \$447,403.16, or 17.5 per cent. Revenue received decreased \$45,937 for the year 1925, but when it is explained that this decrease was almost entirely due to the decrease in the shipment of Mayo ore, brought about by a necessity for development work at the Mayo mine, the result is very encouraging, because it shows that with this large decrease in expenditure by the railroad, which in turn means that the purchases made by the employees were correspondingly reduced and shipments over the road for these reasons decreased, there was enough advancement in the business in the railroad belt, aside from the railroad activities, to offset the

decreased purchasing power of employees. Further the decrease shown in revenue was in part due to the elimination of activities on the part of the railroad, such as operation of the dining cars, previously referred to, that were operated at a loss.

The average number of employees in 1924 was 1,056, compared with 981 for 1925.

July 7, 1924, the undersigned was appointed special assistant to the Secretary of the Interior for the purpose of making a careful study of the Alaska Railroad situation and to make an estimate of the cost for the completion of the railroad and make recommendations as to the future policies and methods of operation, organization, etc., of the railroad.

An estimate of \$11,878,781 was made for the cost of completing the railroad and providing such additional facilities and equipment as would be necessary for efficient and economical operation of the line and to enable the railroad to function in accordance with the purposes for which it was constructed, namely, the proper serving of the territory through which it passed for the purpose of the development of the country. All of the work contemplated in the estimate, if completed, will either produce ample returns on the capital invested, in decreased costs of maintenance and operation or will provide the necessary facilities and equipment for the functioning of the road as above stated.

While no rapid development of the resources of the Territory can be looked for in the next few years, there is every indication of a gradual and healthy growth in traffic for the railroad as a result of the development of the resources which is now taking place in a more businesslike and substantial manner than in the past. So that, while there is no prospect that the operation of the railroad can be continued for some years to come without substantial appropriations being made to meet the deficit in operations incurred, there is every reason to believe that eventually the railroad may be operated without such appropriations. The date at which this desired condition will be realized is dependent to a very great extent on the progress that can be made in the completion of the line, and such progress is dependent on the appropriations made for that purpose. The situation as it now exists with reference to maintenance and operation is one of economic waste in that, due to the necessarily hasty construction of the line, the work performed in repairing the line and putting it in shape after the frost has come out of the ground in the spring is not lasting, and the same work has to again be performed the following spring. This condition can only be relieved by placing the railroad in such physical condition that the damage sustained during the winter will be reduced. The most important factors are the replacement of bridges supported on wooden piling with bridges supported on permanent masonry; the replacing of trestles, where necessary, with bridges or culverts and the filling of trestles not necessary; the placing of sufficient ballast under the ties to eliminate the damage to the track now suffered by frost heaves during the winter months due to insufficient ballast; the widening of cuts and fills to decrease the cost of necessary maintenance work incident to narrow cuts and fills and to decrease the expense of removing slides and replacing the sloughing of the banks and fills; the riprapping of banks and the raising of the grade above normal high water to

eliminate the constant temporary repairing due to floods. In addition to saving in maintenance costs the hazards to passengers and employees will be reduced, the losses from destruction of the line by floods, snow slides and rock slides, and the loss of property by fire on which no insurance is carried will be diminished. Numerous improvements, no item of which is very large in itself, can be made that will decrease operating costs; the same is also true of introduction of labor-saving devices and appliances in the various departments.

FINANCIAL

Comparisons of the expenses of the Alaska Railroad for the fiscal year 1925 with the previous fiscal years must be made with the understanding that the 1925 fiscal year accounts are made strictly in accordance with Interstate Commerce Commission rulings as to charges to expenses, and they therefore differ in some particulars from the methods of accounting formerly employed. This change is due to the language of the act appropriating the funds for the maintenance and operation and construction for the fiscal year 1926 and the deficiency appropriation for the past fiscal year. Previously, in the charges for investment in road and equipment, were included the total cost of any improvements or additions. Under the present system the original cost of a structure or fixture that is removed or improved must be directly charged to the expenses of maintenance and only the additional capital investment can be charged to investment for road and equipment. With reference to the statements herewith attached it will be observed that such charges to maintenance of way and structures for replacement of property in kind amounted to \$280,040.24, and this amount should be deducted from the total yearly deficit of \$1,526,714.76. To obtain the actual deficit due to the ordinary maintenance and operation of the road, leaving that deficit \$1,246,674.52, which is a decrease of \$489,901.89 over the fiscal year 1924. In addition to the \$280,040.24 charged to maintenance and operation, the sum of \$484,692.56 was expended for investment in road and equipment, \$16,229.91 for miscellaneous physical property, and \$152,886.83 for bridge steel and other material still available, making a total of \$933,849.54, as contemplated in the total estimate of \$11,878,781 for the completion of the line.

COMPLETION OF THE ALASKA RAILROAD

The following work has been performed in compliance with the program for the completion of the Alaska Railroad:

Bridge No. 1275, Eagle River, rebuilt. New bridge consists of two 74-foot, one 80-foot, and one 40-foot span steel bridge supported on towers.

Bridge No. 3707, ferry, over Nenana River, rebuilt. New bridge consists of two 200-foot steel truss spans and one 80-foot steel half through girder.

Bridge D-10, Healy River Spur, over Nenana River, rebuilt. New bridge consists of four 80-foot steel half through girders.

Work started on filling the trestle approaches at bridges 3707 and D-10 and on the masonry for bridge 3609 at Dry Creek.

Concrete piles built at Anchorage for bridge 4321.

Engine house moved from Nenana to Healy.

Three cottages and dormitory moved from Chickaloon to Curry.

Car-repair shop built at Anchorage.

Old boiler house at Anchorage remodeled for use as a coal-testing laboratory for Bureau of Mines.

Cooling tower built and trestle changed at Anchorage power plant.

Snowshed 714 extended 100 feet at south end and 52 feet on north end.

Snowshed 531 extended 48 feet.

Track between miles 3 and 6 raised from $3\frac{1}{2}$ to 6 feet to place it above the flood level of the glacial streams; 172 cubic yards gravel and 47,956 cubic yards rock used.

Approximately 108,471 crossties renewed.

The completion of the above items of work will result in decreased future costs of maintenance.

A slightly better showing of accomplishments in our bridge work would have been made if we had not had to rebuild bridge 49.3, which was almost totally destroyed by a snow slide. The construction forces had to be taken from their regular work to rebuild this bridge. The cost of such rebuilding was \$18,141. This case affords a good illustration of why the cost of maintenance of the Alaska Railroad is high, due to the temporary nature of many of the structures. The proper construction at this point would be an arch culvert and solid fill, which would not have been damaged by the snow slide. Necessity for opening the road for travel made it impracticable to build a culvert and make a solid fill at this time as it would have taken several months to accomplish this, while the wooden trestle was replaced in a period of 12 days.

Work for the completion of the Alaska Railroad will be energetically prosecuted during the remaining season of the calendar year to the limit that the appropriations for completion will permit. But if the maintenance and operation costs are to be reduced the appropriations should be made to allow of a continued program for such completion to be followed until the road can be said to be completed.

A monthly average of 120 men has been employed on construction work during the fiscal year.

TRAIN OPERATION

From the beginning of the fiscal year until August 31 three passenger trains a week in each direction were operated between Seward and Fairbanks with dining and sleeping car service, the trains making a continuous run between the two terminals. On August 31 this service was changed to two passenger trains a week in each direction between the two terminals and dining car and sleeping car service discontinued, the trains remaining overnight at the Curry Hotel and stopping for the noonday meal at Anchorage and Healy. On June 21, 1925, the summer schedule was put into effect, of three trains per week in each direction, between the two terminals, but without dining and sleeping car service, the trains remaining overnight at Curry and stopping for meals en route. In both the summer schedules a train was run in each direction on Sunday between Anchorage and Seward for the purpose of affording a connection to the Alaska steamships, which are scheduled to leave Seward in the

summer months for Seattle at 4 p. m. on Sunday. This Sunday schedule is so arranged that a round trip can be made, from Seward to Moraine, and quite a few tourists or round-trip passengers on the steamships have availed themselves of this opportunity to get a glimpse of Alaskan scenery. The passenger trains leaving Seward on Sunday and Monday and arriving there on Saturday and Sunday are operating parlor observation cars, which are also operated on midweek trains, but only when there are a sufficient number of passengers to justify such operation.

From July 1 until August 31 three freight trains a week in each direction were scheduled to go between Seward and Fairbanks. On the latter date the schedules were discontinued, and the freight trains were run as extras as needed. With the present summer business the freight service is adequately taken care of by the running of two freight trains per week in each direction between the terminals, with only an occasional additional freight movement being made.

While the trains are referred to above as passenger and freight trains, as a matter of fact they may all be considered mixed trains. The practice has been established of hauling as many freight cars on the various so-called passenger trains as are available and can be made a part of the train without increasing the train load to such an extent as to interfere with reasonable service. All freight trains carry male passengers if any wish to avail themselves of this service and if sufficient knowledge is obtained in advance of a party large enough to justify it, the passenger coach is attached to the freight train. Such a coach is operated regularly on the freight train between Fairbanks and Healy.

Gas car 104, with a seating capacity of 14 passengers, is kept available at Anchorage for charter and is frequently used by small parties who wish to travel at times when there are no available passenger trains.

On the Chickaloon branch mixed service, from the first of the fiscal year until August 31, consisted of three round trips per week, effective the latter date the service was cut to two round trips per week. Effective April 27, due to the temporary closing of the Evan Jones coal mine, this service was reduced to one round trip per week. Mixed train service consisting of two round trips per week was maintained on the Chickaloon branch with exception of the month of February when one round trip was made per week.

Gas car service for the handling of passengers between Fairbanks station and the Alaska Agricultural College started September 5 and was discontinued June 11.

Train operations were conducted with but few serious delays. The most serious delays encountered were as follows:

December 12, passenger train No. 3 was tied up at night at Healy on account of snow blockade and No. 4 tied up at night at Curry. Both trains ran through to their destination on the following day. January 16, train No. 4 delayed 3 hours 43 minutes account of snow trouble. January 20, train No. 3 arrived at Curry 17 hours 55 minutes late, and No. 4 arrived at Fairbanks 16 hours 5 minutes late, account of snow conditions. April 25, a heavy snow slide broke down three bents in snowshed at mile 48.2, practically tying up the line until the morning of April 27. April 28, a snowslide almost entirely destroyed bridge 49.3, and operations on that part of the

line were not again resumed until May 10, necessitating the steamship *Watson* of the Pacific Steamship Line and the *Northwestern* of the Alaska Steamship Line coming to Anchorage to discharge a cargo and passengers. The most serious accident was the derailment of the engine and two cars on train No. 2 at 3.45 p. m., April 9, at mile post 66.3, due to the engine striking a small rock slide which was covered with snow. April 28, engine No. 3 and three cars were derailed at mile post 331½ account of shims in track spreading on the gravel; train delayed 2 hours 45 minutes.

May 14, an ice gorge in the Susitna River delayed train No. 4 24 hours, and May 16 the ice again broke and track was not again passable until May 19. The track at this point is not sufficiently high above the Susitna River, and interruptions at this point may be expected anytime there is a flood in the river.

MAINTENANCE OF WAY DEPARTMENT

The history of the maintenance of way department is that of a constant struggle against adverse conditions. The work performed in the summer season is to a great extent destroyed by the severe winter conditions due to excessive heaving of the roadbed in cold weather and snow and rock slides and floods. The general condition of the track and structures at the end of this fiscal year was far better than it was a year ago and at this time compares favorably with railroads of like traffic, so far as the line and surface of the track and the physical condition of the various types of structures are concerned.

The most serious and the largest rock slide in the history of the railroad occurred October 6 at mile 15 on the Chickaloon Branch. This slide covered the track to a depth of 30 feet for a distance of 350 feet. The slide was so large that instead of attempting to remove it the track was graded around it. This was completed and travel resumed October 13.

Thirty-two snow slides, varying in depth from 2 to 30 feet over the track and from 30 to 1,000 feet in length along the track occurred during the year; 17 of these slides were in April and 8 in May.

An average of 357 men was employed in this department.

MECHANICAL DEPARTMENT

There was employed in this department an average of 237 men during the fiscal year.

Two locomotives were given class 2 repairs; 4, class 4 repairs; 25, class 5 repairs; 37, class 6 repairs; and 1,409 heavy-running repairs were made. The condition of the locomotives is very satisfactory and is better than their condition a year ago. There were no serious delays to trains due to locomotive failures and the total time lost in road operation from such failures for the entire year was only 3 hours 45 minutes.

The repairing of the snowplows, cranes, and steam shovels and other appliances used chiefly by the maintenance of way department is an important portion of the work done by the mechanical department. Two rotary snowplows were given a thorough overhauling, and extensive repairs were made to cranes and steam shovels. This

equipment is in better condition than it was last year. Gas car 104 was overhauled and has been operating successfully and is a source of some revenue to the railroad.

A Pelton wheel was constructed for the Healy engine house and the successful operation obviated the necessity for the burning of coal for the production of electric current at that point.

The car department, in addition to the ordinary running repairs, gave 47 freight cars heavy repairs, 60 Oliver dump cars received extensive repairs, coach No. 4, parlor observation cars "Kenai" and "Nenana" were rebuilt, a supply car was built, 56 dining-room chairs were completed, and work started on 10 rockers, 36 cabinets, and 10 writing desks for use at the Curry Hotel.

In addition to the ordinary repairs to floating equipment the steamboat *Gen. J. W. Jacobs* was changed from a wood burner to a coal burner. The gas boat *Matanuska*, in the river service, was given a thorough overhauling. The steam engine in the tug *Eklutna* was changed to a gas engine and the boat reconditioned. The steam tug *Anne W.* was loaned to the Coast and Geodetic Survey for use in the operations of the Coast and Geodetic Survey steamship *Discoverer*. Some repairs had to be made to place this boat in condition for launching as it had not been used for several years.

Changes were made in the power plant to allow of the cheaper handling of coal to the boilers and a cheaper method of disposing of the ashes, which will result in some economies.

Warehouse No. 2 in which is kept the supplies for the mechanical and maintenance of way departments, was as a matter of economy and more efficient operation placed in charge of the mechanical department instead of being directly under the general storekeeper.

TELEGRAPH AND TELEPHONE DEPARTMENT

There were no serious difficulties or interruptions except for three days in October on account of the poor condition of the wires between Curry and Broad Pass. A line is being built between these two points, 15 miles having been completed this fiscal year. Repairs were also made to the lines between Mile 168 and Anchorage, 129 and 168, Matanuska and 31-A on the Chickaloon branch. During the fiscal year 1926 additional repairs and renewals will be made, and a program of renewals will be necessary to be followed for several years to put the lines in a satisfactory physical condition.

RIVER BOAT SERVICE

The river boat traffic was not as heavy this year as in the previous fiscal year, due to large stocks of supplies being carried over by the merchants and operators on the river from the previous year. The increase in shipments this season indicates that this surplus stock is now exhausted.

Tons of freight handled in 1924, 3,543.

Tons of freight handled in 1925, 3,125.

Passengers handled in 1924, 792.

Passengers handled in 1925, 833.

The allowance to the river boat service for their revenue results in this operation being conducted at a loss but the total revenue

received for the entire transportation, including both rail and river, is profitable.

If appropriations could be received for the construction of a modern Diesel engine steamboat, one boat would be sufficient to handle the entire river traffic, not only between Nenana and Holy Cross but the run could be extended to St. Michael, and by the operation of such a boat the deficit now resulting from the present operation would be practically eliminated.

The operation for this season is conducted in the same manner as last season, namely, one round trip per week between Nenana and Holy Cross; but instead of the two boats engaged in this service running the entire distance, one boat, the *Jacobs*, runs on the Tanana and upper Yukon and the *Davis* on the lower Yukon, these boats exchanging passengers and cargo at meeting point. As the cargo is carried on barges this can readily be done. The purpose of this is on account of burning coal on the *Jacobs* and does not necessitate the carrying of sufficient coal for the entire round trip from Nenana to Holy Cross. The burning of coal is resulting in economy in fuel.

The last sailing for the season out of Nenana was made on September 24, 1924, and the first sailing this season was made May 31, 1925.

TRAFFIC

The most noticeable feature in traffic this season was the loss of the Mayo ore, due to development work being performed in the Mayo district, and the increase in mining and dredging machinery and building material for the development of placer mining in the Fairbanks district. The local sawmills, along the rail line, have enjoyed a better business than heretofore. Inbound shipments of cannery supplies and outbound shipments of fish were also handled as new business, due to the closing of the Anchorage Dock.

Total tons of commercial freight handled in 1925 were 53,865, a decrease of 5,667 tons, or 9.5 per cent. This decrease was due almost entirely to decreased shipments of Mayo ore, of which 6,892 tons were shipped in 1924 and but 1,372 tons in 1925. Commercial coal shipments increased from 27,884 tons in 1924 to 28,426 tons in 1925. Commercial loading of vessels at Anchorage in 1924 amounted to 1,532 tons and in 1925 to 2,104 tons; and at Seward 1,016 tons in 1924 and 1,492 tons in 1925.

Rail freight revenue in 1925 was \$412,194, a decrease of \$20,980, or 4.8 per cent.

Rail passengers handled in 1925 were 48,300, a decrease of 1,165, or 2.4 per cent. Rail passenger revenue was \$171,552, an increase of \$2,413, or 1.4 per cent.

Agricultural activities did not show any particular increase over the preceding year.

TOURIST BUSINESS

Tourist business indicates an increase over past season but our records are not such as to make absolute comparison possible.

The Frank Reedy tourist party, of Dallas, Tex., numbering about 94 people, was the only tourist party moved by special train over our line.

Increased interest is being shown by the tourist agencies in Alaskan trips. During the fiscal year 1925 we handled one party of tourists who came in from Skagway over the White Pass & Yukon Railroad, down the river from Dawson by steamboat to Nenana, and over The Alaska Railroad to Seward. The fiscal year report for 1926 will show an increase of travel by this route.

ANCHORAGE DOCK

This dock was not operated during the season of 1925 except for outbound shipments of coal.

Satisfactory arrangements were made with the steamship companies whereby it is possible for the railroad to deliver freight to Anchorage at costs, which, with the exception as to some commodities, compare favorably with the rates enjoyed by the shipper and consignee under the all-water rates previously in effect between Anchorage and Seattle, with the added advantage to the people of Anchorage that the shipments could be made at any time during the year and not only during the period of open navigation. This arrangement is advantageous to the Territory in that earnings of the railroad will be increased, and as those earnings are chiefly expended in Alaska there will be additional business transacted in the Territory above that which would result if the expenditures for freight were made directly to the steamship companies.

CHARGES FOR TRANSPORTATION FOR OTHER DEPARTMENTS OF THE GOVERNMENT

On March 18, 1925, the Comptroller General issued a ruling that the Alaska Railroad could not transport the freight for the other departments of the Government or carry employees of the Government without charge, as had formerly been the practice, because such practice was, in his opinion, using the appropriations made for the maintenance and operation of the Alaska Railroad for a purpose for which it was not intended. Therefore, tariff rates have been assessed against the other departments of the Government for all transportation furnished in accordance with this ruling, but in our statements for the fiscal year 1925 we have not included the bills rendered against the various departments of the Government in our earnings. The charges against the other departments, when received, will be credited against the expense of our operation. The amount charged against the other departments for the fiscal year 1925, amounted to approximately \$23,000 and has not been included in any of the attached financial statements. Credit will be taken in the fiscal year 1926.

GENERAL STOREKEEPER

The general storekeeper purchased 58,698.1 tons of coal for use on the Alaska Railroad and resale to employees. This was approximately 2,000 tons more than the deliveries for the previous year. The total amount of coal consumed was 60,020.2 tons, which is 4,276.9 tons less than the coal consumed for the year ended June 30, 1924. The additional amount of coal used to that purchased was taken from storage.

One thousand five hundred and fifty-five cords of wood were purchased for use on river steamboats, as compared with 2,975 cords purchased the last fiscal year. There were 579 cords available for use this year that had been previously purchased. The decrease in wood purchases is due to a more economical handling of wood and the substitution of coal on one of our river steamboats.

Piling purchased to the amount of 20,005,000 feet, at an average cost of 17 cents per foot, as compared with 43,175,000 feet for the last fiscal year.

Under contract placed, 77,626 crossties were received to June 30, 1925. It is estimated that 36,000 additional ties will be delivered on this contract, bringing the total number of ties purchased for the fiscal year up to 113,626.

GENERAL PURCHASING AGENT

During the fiscal year the purchasing agent at Seattle issued 1,779 purchase orders, for which the total amount paid was \$736,819.57. Six sales orders were placed to the amount of \$3,675.56. Inspection was conducted, the amount of charges being \$4,929.82; paid out for transportation and supplies, \$167,781.34; for the transportation of passengers, \$5,261.30; the expense of the office, including branch office, \$26,430.32, making the total amount of money transactions, including cost of office, handled by the general purchasing agent of \$944,897.72.

ACCOUNTING DEPARTMENT

Considerable progress was made during the year in the simplification of methods of accounting, largely made possible by the consolidation of our appropriations into one fund. As of July 1, 1924, there were 35 employees in that department and at the present time there are 23. A portion of the work, however, has been transferred to other departments, but such transfer has only resulted in the increase of two clerks in other departments.

CURRY HOTEL

The Curry Hotel during the fiscal year 1925 was operated at a deficit of \$4,324. The operations for the months of May and June show a profit, and the same is true of the first month of the fiscal year 1926, so it is quite probable that this hotel can be operated during the fiscal year 1926 without a deficit. The hotel proves one of the best attractions along the railroad and is highly appreciated by the traveling public.

COAL-MINING ACTIVITIES

The Eska mine was not operated during the fiscal year 1925 and all coal was obtained from private operators.

The Evan Jones coal mine was closed from the 1st of May to the end of the fiscal year, due to the fact that contract had been completed to the Alaska Railroad and there was sufficient coal in storage for our operations, but this mine was opened again about August 1.

The Premier mine operated fairly continuously, but with many financial difficulties, during the fiscal year. The Baxter-Bedell mine operated intermittently.

The Alaska-Matanuska mine, located about 3 miles from the end of the Moose Creek spur, drove a tunnel and made preparations for operation as soon as the extension to the Moose Creek spur is completed, which will be about the middle of September, 1925.

The Healy River Coal Corporation operated continuously through the year.

OTHER MINING ACTIVITIES

Placer mining.—The Fairbanks Exploration Co. has obtained control, by purchase or option, of large tracts of placer ground in the Fairbanks district and is making preparations for future operations.

The Tanana Valley Gold Dredging Co. has started construction on a dredge for operation on Fish Creek, in the Fairbanks district, but it is doubtful if the dredge will be completed before next season.

Other developments of similar character are probable in the near future.

Quartz mining.—Quartz mines along the railroad are expecting to have a better season this year than last.

There is every indication that developments in both placer and quartz mining from now on will be conducted in a more businesslike and efficient manner than in the past.

ANCHORAGE BASE HOSPITAL

The Anchorage base hospital operated at a total cost of \$46,754.74, or \$6.90 per patient-day. The loss to the railroad for this operation was \$22,615.27.

Effective May 1, the services of the chief surgeon were discontinued and his duties were taken over by the medical officer of the Seventh Infantry located at Anchorage.

A slight decrease has been effected in the force at the hospital. These changes will decrease the cost of operation, but if the deficiency in operation of the hospital is to be met, increases in the rates charged will have to be made.

The patient-days for the fiscal year were 6,777, divided as follows: Employees of the Alaska Railroad given free service and soldiers of the United States Army, 3,278; employees' families, employees not free and other branches of the service, 895½; private patients, 2,603½; total number of patients admitted, 1,007; total operations performed, 246 (this does not include minor surgery done in the surgeon's office).

ACCIDENTS

The most serious accidents to our trains are referred to under "Train operations."

In train service there was a total of 12 derailments and 1 runaway. We also had one accident due to the overturning of a crane.

There were 59 injuries to persons in all classes of service, which resulted in any loss of time; two of these resulted in death and 15 of a disability of 30 days or over.

There were no fires of any consequence during the year.

THE ISSUING OF PASSES

The act creating the Alaska Railroad prescribes that passes may be issued to employees of the Alaska Railroad in accordance with the section of the interstate commerce law dealing with that subject. In the past it has been the interpretation of this act that the Alaska Railroad could issue passes to its employees and to employees of other railroads in accordance with the law governing common carriers and that passes could be issued to officers of other departments of the Government.

On July 30, 1924, the Attorney General handed down a decision that under the law as written passes could only be issued to employees of the Alaska Railroad and the dependent members of their families, and that they could not be issued to employees of other railroads, nor should the Alaska Railroad management ask for or receive passes for officers or employees from other common carriers.

This ruling took away from the employees of the Alaska Railroad the privilege they had previously enjoyed of obtaining passes from railroads in the United States and receiving decreased rates for steamship transportation, which prevented them, by reason of the additional expense, of as freely traveling to the States as they had before, and this has been a cause for considerable dissatisfaction.

It is suggested that proper legislation be enacted that will restore to employees the courtesy of pass privileges on the steamship lines and railroads in the United States which they formerly enjoyed. It is also desirable that the Alaska Railroad in return have this extended to employees of the steamship lines and the railroads of the United States; the courtesy of allowing such employees as may desire to travel over the line of the Alaska Railroad.

WAGE INCREASE

Effective January 1, 1925, a wage increase of approximately \$1 per day was granted men in train and engine service, this due to the fact that the men in this service were not receiving wages as high in proportion to the standard rates of wages paid other classes of employees on the Alaska Railroad, and because of the general increase of wages having been made on the roads outside to the men in train and engine service. For the same reasons a small increase was granted train dispatchers, agents, and operators.

PERSONNEL

On July 7, 1924, the Secretary of the Interior appointed the undersigned as special assistant to the Secretary of the Interior for the purpose of visiting Alaska and making a report to him on the conditions surrounding the Alaska Railroad and its operation.

A study of the situation was started on arrival in Alaska July 29, and on August 26 it was thought advisable and for the good of the service and for the better handling of the problems confronting that the special assistant to the Secretary of the Interior take over the active operation of the railroad. General Manager Landis requested, and was granted, a leave of absence on that date, and later tendered his resignation to the Secretary of the Interior, which was accepted as of November 13, 1924.

On November 1, the undersigned was called to Washington, D. C., to attend the hearings before the congressional committee and to confer with the Secretary of the Interior, and the operation of the railroad in Alaska was placed in charge of Mr. H. Horn, superintendent of track, bridges, and buildings, under the title of acting general manager.

On December 19, 1924, the undersigned was appointed general manager of the Alaska Railroad.

Other changes in personnel during the fiscal year are as follows:

August 27, Mr. J. H. Hughes was relieved as superintendent of commissary and stores and was appointed special agent, performing special duties assigned to him, which position was abolished January 1, 1925, and Mr. Hughes was relieved from service.

September 30, 1924, Mr. B. E. Crow, general agent, was relieved from service.

Mr. E. Van Gundy, assistant to the general manager, left the service on September 26, and the position of assistant to the general manager was abolished.

November 1, 1924, Mr. Robert Huntley was appointed general storekeeper.

November 6, 1924, Mr. C. D. Pollock resigned as bridge engineer and Mr. C. H. Holmes was appointed to that position.

March 1, 1925, Mr. H. Horn, superintendent of track, bridges, and buildings, was appointed assistant general manager.

Effective May 1, 1925, Dr. J. B. Beeson resigned as chief surgeon of the Anchorage base hospital and Capt. A. D. Haverstock was appointed chief of staff. Dr. J. B. Beeson was appointed consulting surgeon and Mr. H. G. Abercrombie appointed superintendent.

DEPARTMENT REPORTS

There are inclosed herewith the following reports for the fiscal year 1925: Operating statistics, miscellaneous traffic statistics, statement of appropriations, report of Anchorage base hospital, report of transportation department, report of maintenance of way and bridge and building department, report of mechanical department, report of general purchasing agent, report of stores department, and report of mining tributary to the Alaska Railroad.

Yours very truly,

NOEL W. SMITH, *General Manager.*

Hon. HUBERT WORK,

Secretary of the Interior, Washington, D. C.

Operating statistics for fiscal year July 1, 1924, to June 30, 1925, inclusive

Item No.		July, 1924	August, 1924	September, 1924	October, 1924	November, 1924	December, 1924	January, 1925	February, 1925	March, 1925	April, 1925	May, 1925	June, 1925
1	Average mileages of road operated—miles.....	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7
	TRAIN-MILES												
11	Freight: Ordinary.....	9,376	8,354	7,728	8,868	8,017	7,513	9,021	7,628	8,593	8,074	7,274	7,233
12	Light.....											112	225
13	Total.....	9,376	8,354	7,728	8,868	8,017	7,513	9,021	7,628	8,593	8,074	7,386	7,458
14	Passenger.....	13,382	13,128	8,830	9,602	8,800	9,598	9,528	8,453	3,664	996	1,068	426
15	Mixed.....	5,996	5,726	6,228	5,436	4,896	4,326	4,556	1,446	7,170	9,857	10,189	13,390
16	Special.....	1,246	206				114						
17	Total transportation service.....	30,000	27,414	22,786	23,906	21,713	21,551	23,105	17,527	19,427	18,927	18,643	21,274
18	Work service.....	5,711	8,120	8,667	13,663	11,068	9,525	4,479	4,708	5,802	3,550	4,698	1,404
	LOCOMOTIVE-MILES												
21	Freight: Principal.....	9,376	8,354	7,728	8,868	8,017	7,513	6,653	7,628	8,593	8,074	7,386	7,458
22	Helper.....			394			440	2,368	474	198		615	947
23	Light.....			260									223
24	Total.....	9,376	8,354	8,382	8,868	8,017	7,953	9,021	8,102	8,791	8,074	8,001	8,628
25	Passenger: Principal.....	13,382	13,128	8,830	9,602	8,800	9,598	9,528	8,587	3,664	996	1,068	426
29	Mixed train: Principal.....	5,996	5,726	6,228	5,436	4,896	4,326	4,556	1,446	7,170	9,857	10,189	13,390
30	Helper.....										80	248	
32	Total.....	5,996	5,726	6,228	5,436	4,896	4,326	4,556	1,446	7,170	9,937	10,437	13,390
33	Special: Principal.....	1,246	206				114						
37	Train switching.....	259	132			412	446	725	612	630	569	1,128	480

38	Yard switching:												
39	Freight	1,379	1,360	1,258	1,320	1,157	1,145	1,193	1,384	1,701	1,253	1,267	1,282
39	Passenger	153	151	140	147	129	127	133	154	189	139	141	142
40	Total	1,532	1,511	1,398	1,467	1,286	1,272	1,326	1,538	1,890	1,392	1,408	1,424
41	Total transportation service	31,791	29,057	24,838	25,373	23,411	23,709	25,156	20,285	22,145	20,968	22,042	24,348
42	Work service	5,711	8,120	8,829	13,663	11,068	12,107	4,479	4,708	5,802	3,550	4,698	1,404
CAR-MILES													
Freight train:													
51	Loaded	79,311	82,025	75,728	89,872	75,333	61,069	58,227	62,790	72,464	74,962	81,948	87,703
52	Empty	31,848	29,573	28,022	24,818	29,601	21,199	19,844	31,049	41,644	46,931	44,863	37,374
53	Sum of loaded and empty	111,159	111,598	103,750	114,690	104,934	82,268	78,071	93,839	114,108	121,893	126,811	125,077
54	Freight train: Caboose	9,456	8,354	7,504	8,868	8,017	7,487	6,653	7,762	8,515	8,053	7,496	7,458
55	Total	120,615	119,952	111,254	123,558	112,951	89,755	84,724	101,601	122,623	129,946	134,307	132,535
Passenger train:													
56	Passenger	28,294	27,110	19,552	19,840	17,370	18,122	15,170	12,753	5,266	996	1,068	426
57	Sleeping, parlor, and observation	23,244	24,352	4,740	3,216	712							
58	Dining	6,474	3,746	114									
59	Other	14,466	14,972	9,140	8,460	8,450	9,122	8,916	10,600	3,646			
	Total	72,478	70,180	33,546	31,516	26,532	27,244	24,086	23,353	8,912	996	1,068	426
Mixed Train:													
Freight—													
61	Loaded	36,495	35,617	44,358	34,139	35,156	30,578	31,460	7,479	13,646	26,167	29,244	36,230
62	Empty	15,450	18,120	21,360	20,067	21,081	22,619	20,427	6,688	5,940	8,349	13,596	19,512
63	Caboose	4,742	4,511	5,258	4,669	4,122	3,402	3,814	956	1,142	1,624	1,708	2,308
64	Passenger	7,167	6,793	6,922	6,013	5,370	4,888	4,195	1,582	10,129	15,146	15,140	23,245
65	Sleeping, parlor, and observation												6,060
67	Other passenger train	1,658	1,679	1,924	1,585	1,546	1,578	3,692	956	8,902	9,018	11,169	13,950
68	Total	65,512	66,720	79,822	66,473	67,275	63,065	63,588	17,661	39,759	60,304	70,857	101,305
Special train:													
72	Passenger	2,336	452				114						
73	Sleeping, parlor, and observation	1,168											
74	Dining	940											
75	Other passenger train	2,222											
76	Total	6,666	452				114						
77	Total transportation service	265,271	257,304	224,622	221,547	206,758	180,178	172,398	142,615	171,294	191,246	206,232	234,266
78	Work service	89,667	125,000	148,297	234,482	166,638	162,594	4,479	8,252	19,366	10,265	16,227	6,770

Operating statistics for fiscal year July 1, 1924, to June 30, 1925, inclusive—Continued

Item No.		July, 1924	August, 1924	September, 1924	October, 1924	November, 1924	December, 1924	January, 1925	February, 1925	March, 1925	April, 1925	May, 1925	June, 1925
FREIGHT SERVICE													
	Tons revenue freight:												
81	Coal.....	621	1, 196	1, 772	2, 559	2, 371	3, 460	3, 600	2, 871	2, 902	3, 041	2, 373	1, 660
81½	Government.....										166	189	156
81-	Miscellaneous.....	2, 467	2, 948	2, 663	2, 324	1, 694	1, 533	1, 650	1, 465	1, 786	2, 264	2, 184	2, 461
82	Tons nonrevenue freight.....	13, 390	15, 234	12, 820	14, 637	14, 600	11, 553	9, 504	6, 877	7, 758	6, 806	7, 848	9, 608
83	Total.....	16, 478	19, 378	17, 255	19, 520	18, 665	16, 546	14, 754	11, 213	12, 446	12, 277	12, 594	13, 885
	Ton-miles:												
84	Revenue freight.....	726, 677	871, 320	868, 295	525, 709	536, 033	605, 995	559, 113	515, 227	583, 547	901, 520	852, 304	911, 611
84½	Government freight.....										43, 420	46, 747	25, 742
85	Nonrevenue freight.....	824, 472	1, 160, 478	1, 273, 484	1, 827, 002	1, 704, 169	1, 150, 976	1, 036, 227	824, 430	1, 274, 457	1, 040, 890	1, 029, 084	382, 774
86	Total.....	1, 551, 149	2, 031, 798	2, 141, 779	2, 352, 711	2, 240, 202	1, 756, 971	1, 595, 340	1, 339, 657	1, 858, 004	1, 985, 830	1, 928, 135	1, 320, 127
PASSENGER SERVICE													
91	Passengers carried, revenue.....	3, 645	2, 952	3, 814	3, 772	4, 385	4, 151	4, 581	4, 521	4, 855	4, 578	3, 974	3, 074
92	Passenger-miles, revenue.....	541, 061	323, 751	260, 779	255, 077	166, 602	160, 612	116, 909	156, 865	210, 104	210, 614	258, 431	332, 745
REVENUES AND EXPENSES													
101	Freight revenue.....	\$35, 515.46	\$41, 473.55	\$51, 231.98	\$30, 937.21	\$29, 090.76	\$23, 230.88	\$20, 946.11	\$19, 371.16	\$26, 452.70	\$36, 326.33	\$45, 884.80	\$51, 733.23
102	Passenger revenue.....	\$30, 873.05	\$18, 623.70	\$14, 901.40	\$15, 098.50	\$9, 400.80	\$8, 464.35	\$6, 570.10	\$8, 964.43	\$12, 263.46	\$12, 414.26	\$14, 858.66	\$19, 119.36
103	Passenger service train revenue.....	\$36, 805.34	\$23, 996.78	\$18, 403.39	\$18, 718.06	\$12, 704.36	\$11, 869.47	\$9, 755.71	\$12, 216.67	\$15, 696.13	\$15, 761.16	\$17, 628.60	\$22, 913.43
104	Operating revenues.....	\$85, 843.13	\$79, 884.92	\$86, 780.85	\$67, 492.92	\$56, 126.55	\$49, 912.73	\$44, 478.19	\$43, 657.48	\$54, 648.03	\$64, 130.54	\$76, 138.43	\$88, 326.05
105	Operating expenses.....	\$212, 826.95	\$252, 268.19	\$188, 207.53	\$172, 048.24	\$147, 392.57	\$159, 239.67	\$150, 199.69	\$162, 062.30	\$129, 980.14	\$138, 214.12	\$158, 142.15	\$172, 632.79
106	Net operating revenues.....	\$126, 983.82	\$172, 385.27	\$101, 426.68	\$105, 455.32	\$91, 266.02	\$109, 326.94	\$106, 721.60	\$118, 404.82	\$76, 532.11	\$74, 083.69	\$81, 983.72	\$84, 306.74
AVERAGES PER MILE OF ROAD													
111	Freight train-miles.....	17.24	15.37	14.21	16.31	14.75	13.82	16.59	14.03	15.80	14.85	13.58	13.72
112	Passenger train-miles.....	24.61	24.15	16.24	17.66	16.18	17.65	17.52	15.55	6.74	1.83	1.96	78
113	Mixed train-miles.....	11.03	10.53	11.45	10.00	9.00	7.96	8.38	2.66	13.19	18.13	18.74	24.63
114	Special train-miles.....	2.29	.38				.21						
115	Transportation service train-miles.....	55.18	50.42	41.91	43.97	39.93	39.64	42.50	32.24	35.73	34.81	34.29	39.13
116	Work train-miles.....	10.50	14.93	15.94	25.13	20.36	17.52	8.24	8.66	10.67	6.53	8.64	2.58
117	Locomotive-miles, transportation.....	58.47	53.44	45.68	46.69	43.06	43.61	46.27	37.31	40.73	38.57	40.54	44.78
118	Freight service car-miles.....	326.10	327.75	335.17	335.54	318.76	269.18	258.28	214.68	263.66	305.47	328.96	350.53
119	Passenger service car-miles.....	161.80	145.49	77.97	69.03	61.52	59.31	58.81	47.62	51.39	46.28	50.35	80.34
120	Freight revenue.....	\$65.32	\$76.28	\$94.23	\$56.90	\$53.50	\$42.73	\$38.53	\$35.63	\$48.65	\$66.81	\$84.39	\$95.15
121	Passenger service train revenue.....	\$67.69	\$44.14	\$33.85	\$34.43	\$23.37	\$21.83	\$17.94	\$22.47	\$28.87	\$28.99	\$32.42	\$42.14

122	Operating revenues.....	\$157.89	\$146.92	\$159.61	\$124.14	\$103.23	\$91.80	\$81.81	\$80.30	\$100.51	\$117.95	\$140.07	\$162.45
123	Operating expenses.....	\$391.44	\$463.98	\$346.16	\$318.09	\$271.09	\$292.88	\$276.25	\$298.07	\$239.07	\$254.21	\$290.86	\$317.51
124	Net operating revenues.....	\$233.55	\$317.06	\$186.55	\$193.96	\$167.86	\$201.08	\$194.44	\$217.77	\$158.56	\$135.26	\$150.79	\$155.06
	Ton-miles:												
125	Revenue freight.....	1,336.54	1,602.57	1,597.01	966.91	985.90	1,114.58	1,028.35	947.63	1,073.29	1,658.12	1,567.60	1,676.68
125½	Government freight.....										79.86	85.98	47.35
126	All freight.....	2,852.95	3,736.98	3,939.26	432.72	412.03	323.15	2,934.23	2,463.96	3,417.33	3,652.44	3,546.32	2,428.04
127	Passenger-miles, revenue.....	995.14	595.45	479.64	469.15	306.42	295.41	215.02	288.51	386.43	387.37	475.32	612.00
	AVERAGES PER TRAIN-MILE												
	Loaded freight-car miles:												
131	Freight train.....	8.46	9.82	9.80	10.13	9.40	8.13	6.45	8.23	8.43	9.28	11.10	11.76
132	Mixed train.....	6.09	6.22	7.12	6.28	7.18	7.07	6.91	5.17	1.90	2.65	2.87	2.71
	Empty freight-car-miles:												
133	Freight train.....	3.40	3.54	3.63	2.80	3.69	2.82	2.20	4.07	4.85	5.81	6.07	5.01
134	Mixed trains.....	2.58	3.16	3.43	3.69	4.31	5.23	4.48	4.63	.83	.85	1.33	1.46
	Ton-miles:												
135	Revenue freight.....	47.27	61.88	62.22	39.52	41.51	51.19	41.18	56.78	37.02	50.28	48.50	43.73
135½	Government freight.....										2.42	2.66	1.23
136	All freight.....	100.91	144.30	153.47	164.48	129.13	148.41	117.50	147.64	117.87	110.75	109.71	63.32
	Passenger-train, car-miles:												
137	Passenger trains.....	5.42	5.35	3.80	3.28	3.02	2.84	2.53	2.76	2.43	1.00	1.00	1.00
138	Mixed trains.....	1.47	1.48	1.42	1.40	1.41	1.49	1.73	1.76	2.65	2.45	2.58	3.23
139	Revenue passenger-miles.....	27.92	17.17	17.32	16.96	12.16	11.53	8.30	15.85	19.39	19.41	25.20	24.08
140	Freight revenue.....	\$2.31	\$2.95	\$3.67	\$2.16	\$2.25	\$1.96	\$1.55	\$2.13	\$1.68	\$2.03	\$2.61	\$2.48
141	Passenger service, train revenue.....	\$1.90	\$1.27	\$1.22	\$1.24	\$0.93	\$0.85	\$0.69	\$1.23	\$1.45	\$1.45	\$1.67	\$1.66
142	Operating revenues.....	\$2.86	\$2.91	\$3.81	\$2.82	\$2.58	\$2.32	\$1.93	\$2.49	\$2.81	\$3.39	\$4.09	\$4.15
143	Operating expenses.....	\$7.09	\$9.20	\$8.26	\$7.23	\$6.79	\$7.39	\$6.50	\$9.25	\$6.69	\$7.30	\$8.48	\$8.11
144	Net operating revenues.....	\$4.23	\$6.29	\$4.45	\$4.41	\$4.21	\$5.07	\$4.67	\$6.76	\$3.88	\$3.91	\$4.39	\$3.96
	AVERAGES PER LOCOMOTIVE-MILE												
151	Train miles, freight trains.....	1.00	1.00	.92	1.00	1.00	.94	1.00	.94	.98	1.00	.92	.86
152	Car-miles, freight trains.....	12.86	14.36	13.27	13.93	14.09	11.29	9.39	12.54	13.95	10.09	16.79	15.36
153	Train-miles, passenger trains.....	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.98	1.00	1.00	1.00	1.00
154	Car-miles, passenger trains.....	5.42	5.35	3.80	3.28	3.02	2.84	2.53	2.72	2.43	1.00	1.00	1.00
155	Train-miles, mixed trains.....	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.96	.98	1.00
156	Car-miles, mixed trains.....	10.93	11.65	12.82	12.23	13.74	14.58	13.96	12.21	5.55	6.07	6.79	7.57
157	Train-miles, special trains.....	1.00	1.00				1.00						
158	Car-miles, special trains.....	5.35	2.19				1.00						
	AVERAGES PER LOADED FREIGHT CAR-MILE												
	Ton-miles:												
161	Revenue freight.....	6.27	7.41	7.23	4.24	4.85	6.61	6.23	7.33	6.78	8.91	7.67	7.36
161½	Government freight.....										.43	.42	.21
162	All freight.....	13.39	17.27	17.84	18.97	20.28	19.17	17.79	19.06	21.58	19.64	17.34	10.65
163	Freight revenue.....	\$0.30669	\$0.35254	\$0.42663	\$0.24947	\$0.26329	\$0.25348	\$0.23355	\$0.27567	\$0.30720	\$0.35921	\$0.41266	\$0.41743

Operating statistics for fiscal year July 1, 1924, to June 30, 1925, inclusive—Continued

Item No.		July, 1924	August, 1924	September, 1924	October, 1924	November, 1924	December, 1924	January, 1925	February, 1925	March, 1925	April, 1925	May, 1925	June, 1925
AVERAGES PER CAR-MILE—PASSENGER													
171	Passenger miles, revenue.....	9.22	5.56	8.35	8.77	7.10	6.98	6.04	10.94	13.65	13.05	15.94	11.19
172	Passenger revenue.....	\$0.52590	\$0.31969	\$0.47739	\$0.51940	\$0.40085	\$0.36786	\$0.33928	\$0.62535	\$0.79659	\$0.76907	\$0.91675	\$0.64308
MISCELLANEOUS AVERAGES													
Miles hauled:													
181	Revenue freight.....	235.32	210.26	195.78	107.66	131.87	121.37	106.50	118.83	124.48	169.94	187.03	221.21
181½	Government freight.....												
182	Nonrevenue freight.....	61.57	70.18	99.34	124.82	116.72	99.63	109.03	119.88	164.28	261.57	247.34	165.01
183	All freight.....	94.13	104.85	124.13	120.53	120.02	106.19	108.13	119.47	149.29	152.94	131.13	39.84
184	Miles carried, revenue passengers.....	148.44	109.67	68.37	67.62	37.99	38.69	25.52	34.70	43.28	161.75	153.10	95.08
	Revenue:												
185	Per ton of freight.....	\$11.50112	\$10.00810	\$11.55174	\$6.33569	\$7.15640	\$4.65269	\$3.98974	\$4.46752	\$5.64264	\$6.84756	\$10.06908	\$12.55356
186	Per ton-mile of freight.....	\$0.04887	\$0.04760	\$0.05900	\$0.05884	\$0.05427	\$0.03833	\$0.03746	\$0.03760	\$0.04533	\$0.04029	\$0.05384	\$0.05675
187	Per passenger.....	\$8.46997	\$6.30884	\$3.90702	\$4.00273	\$2.14385	\$2.03911	\$1.43421	\$1.98284	\$2.52594	\$2.71291	\$3.73897	\$6.21970
188	Per passenger-mile.....	\$0.05706	\$0.05752	\$0.05714	\$0.05919	\$0.05643	\$0.05270	\$0.05620	\$0.05837	\$0.05871	\$0.05894	\$0.05750	\$0.05746
189	Operating ratio..... per cent..	247.92	315.79	216.88	256.25	262.61	319.04	337.69	371.21	237.85	215.52	207.65	195.45

Certified by:
F. H. LOUNSBURY,
Auditor of Station Accounts.
 Approved:
B. H. BARNDOLLAR,
Examiner of Accounts.

ANCHORAGE, ALASKA, August 6, 1925.

Miscellaneous traffic statistics for the fiscal year July 1, 1924, to June 30, 1925, inclusive

	July, 1924	August, 1924	Septem- ber, 1924	October, 1924	Novem- ber, 1924	Decem- ber, 1924	January, 1925	February, 1925	March, 1925	April, 1925	May, 1925	June, 1925
PASSENGER TRAFFIC STATISTICS												
Road mileage operated.....	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7
Passenger train miles.....	13,382	13,128	8,830	9,602	8,800	9,598	9,528	8,453	3,664	996	1,068	426
Mixed train miles.....	5,996	5,726	6,228	5,436	4,896	4,326	4,556	1,446	7,170	9,857	10,189	13,390
Passenger car miles—passenger trains.....	51,538	51,462	24,292	23,056	18,082	18,122	15,170	12,753	5,266	996	1,068	426
Passenger car miles—mixed trains.....	7,167	6,793	6,922	6,013	5,370	4,888	4,195	1,582	10,129	15,146	15,140	23,245
Total revenue passengers carried.....	3,645	2,952	3,814	3,772	4,385	4,151	4,581	4,521	4,855	4,576	3,974	3,074
Number of revenue passengers carried 1 mile.....	541,061	323,751	260,779	255,077	166,602	160,612	116,909	156,865	210,104	210,614	258,431	332,745
Number of revenue passengers carried 1 mile per mile of road.....	995	595	480	469	306	295	215	289	386	387	475	612
Average distance per passenger carried.....	148.44	109.67	68.37	67.62	37.99	38.69	25.52	34.70	43.28	46.03	65.03	108.24
Total passenger revenue.....	\$30,873.05	\$18,623.70	\$14,901.40	\$15,098.50	\$9,400.80	\$8,464.35	\$6,570.10	\$8,964.43	\$12,263.46	\$12,414.26	\$14,858.66	\$19,119.36
Revenue per passenger.....	\$8.47	\$6.31	\$3.91	\$4.00	\$2.14	\$2.04	\$1.43	\$1.98	\$2.53	\$2.71	\$3.74	\$6.22
Average revenue per passenger per mile.....	\$0.05706	\$0.05762	\$0.05714	\$0.05919	\$0.05643	\$0.05270	\$0.05620	\$0.05715	\$0.05837	\$0.05894	\$0.05750	\$0.05746
Average revenue per train-mile, passen- ger and mixed.....	\$1.59	\$0.99	\$0.99	\$1.00	\$0.69	\$0.67	\$0.47	\$0.91	\$1.13	\$1.14	\$1.76	\$1.38
Passenger service train revenue per mile of road.....	\$67.69	\$44.14	\$33.85	\$34.43	\$23.37	\$21.83	\$17.94	\$22.47	\$28.87	\$28.99	\$32.42	\$42.14
Average number revenue passengers per train-mile.....	27.92	17.17	17.32	16.96	12.16	11.53	8.30	15.85	19.39	19.41	25.20	24.08
Average revenue per car-mile.....	\$0.52590	\$0.31969	\$0.47739	\$0.51940	\$0.40085	\$0.36786	\$0.33928	\$0.62535	\$0.79659	\$0.76907	\$0.91675	\$0.64308
FREIGHT TRAFFIC STATISTICS												
Road mileage operated.....	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7	543.7
Freight train miles.....	9,376	8,354	7,728	8,868	8,017	7,513	9,021	7,628	8,593	8,074	7,386	7,458
Mixed train miles.....	5,996	5,726	6,228	5,436	4,896	4,326	4,556	1,446	7,170	9,857	10,189	13,390
Loaded cars one mile:												
Freight trains.....	79,311	82,025	75,728	89,872	75,333	61,009	58,227	62,790	72,464	74,962	81,948	87,703
Mixed trains.....	36,495	35,617	44,358	34,139	35,156	30,578	31,400	7,479	13,646	26,167	29,244	36,230
Empty cars 1 mile:												
Freight trains.....	31,848	29,573	28,022	24,818	29,601	21,199	19,844	31,049	41,644	46,931	44,863	37,374
Mixed trains.....	15,450	18,120	21,360	20,067	21,081	22,619	20,427	6,688	5,940	8,349	13,596	19,512
All cars 1 mile.....	163,104	165,335	169,468	168,896	161,171	135,465	129,958	108,006	133,694	156,409	169,651	180,819
Percentage of loaded to total car miles.....	71	71	71	73	69	68	69	65	64	65	66	68
Tons of revenue freight carried:												
Coal.....	621	1,196	1,772	2,559	2,371	3,460	3,600	2,871	2,902	3,041	2,373	1,660
Government.....											189	156
Miscellaneous.....	2,467	2,948	2,063	2,324	1,694	1,533	1,650	1,465	1,786	2,264	2,184	2,461
One mile.....	726,677	871,320	868,285	525,709	536,033	605,995	559,113	515,227	583,547	901,520	852,304	911,611
One mile per mile of road.....	1,336.54	1,602.57	1,597.01	966.91	985.90	1,114.58	1,028.35	947.63	1,073.29	1,658.12	1,567.60	1,676.68

Miscellaneous traffic statistics for the fiscal year July 1, 1924, to June 30, 1925, inclusive—Continued

	July, 1924	August, 1924	Septem- ber, 1924	October, 1924	Novem- ber, 1924	Decem- ber, 1924	January, 1925	February, 1925	March, 1925	April, 1925	May, 1925	June, 1925
FREIGHT TRAFFIC STATISTICS—continued												
Average distance hauled per revenue ton.....	235.32	210.26	195.78	107.66	131.87	121.37	106.50	118.83	124.48	169.94	187.03	221.21
Total freight revenue.....	\$35,515.46	\$41,473.55	\$51,231.98	\$30,937.21	\$29,090.76	\$23,230.88	\$20,946.11	\$19,371.16	\$26,452.70	\$36,326.33	\$45,884.80	\$51,733.23
Average revenue:												
Per ton per mile.....	\$0.4887	\$0.04760	\$0.05900	\$0.05884	\$0.05427	\$0.03833	\$0.03746	\$0.03760	\$0.04533	\$0.04029	\$0.05384	\$0.05675
Per train mile.....	\$2.31	\$2.95	\$3.67	\$2.16	\$2.25	\$1.96	\$1.55	\$2.13	\$1.68	\$2.03	\$2.61	\$2.48
Tons per loaded car mile.....	6.27	7.41	7.23	4.24	4.85	6.61	6.23	7.33	6.78	8.91	7.67	7.36
Per loaded car mile.....	\$0.30669	\$0.35254	\$0.42663	\$0.24947	\$0.26329	\$0.25348	\$0.23355	\$0.27567	\$0.30720	\$0.35921	\$0.41266	\$0.41743
Tons per car mile, loaded and empty..	4.46	5.27	5.12	3.11	3.32	4.47	4.30	4.77	4.36	5.76	5.02	5.04
Tons per train mile.....	47.27	61.88	62.22	39.52	41.51	51.19	41.18	56.78	37.02	50.28	48.50	43.73
Per mile of road.....	\$65.32	\$76.28	\$94.23	\$56.90	\$53.50	\$42.73	\$38.53	\$35.63	\$48.65	\$66.81	\$84.39	\$95.15

Certified by:

F. H. LOUNSBURY,
Auditor of Station Accounts.

Approved:

B. H. BAMDOLLAR,
Examiner of Accounts.

AUGUST 5, 1925.

Statement of appropriations

[Act approved March 12, 1914, 38 Stat. 305]

Appropriation of United States Treasury funds:

Construction and operation of railroads in Alaska—	
Act of Mar. 12, 1914 (32 Stat. 205)-----	\$1,000,000.00
Act of Mar. 3, 1915 (30 Stat. 381)-----	2,000,000.00
Act of Feb. 26, 1916 (39 Stat. 23)-----	2,000,000.00
Act of July 1, 1916 (39 Stat. 306)-----	6,247,620.00
Public resolution of Mar. 4, 1917 (39 Stat. 1203)-----	3,000,000.00
Act of June 12, 1917 (40 Stat. 150)-----	7,500,000.00
Act of Oct. 6, 1917 (40 Stat. 372)-----	4,000,000.00
Act of July 1, 1916 (40 Stat. 676)-----	5,250,000.00
Act of July 11, 1919 (41 Stat. 51)-----	1,964,351.00
Act of July 19, 1919 (41 Stat. 202)-----	2,038,029.00
Act of Nov. 4, 1919 (41 Stat. 335)-----	6,000,000.00
Act of June 5, 1920 (41 Stat. 916)-----	7,000,000.00
Act of Mar. 4, 1921 (41 Stat. 1405)-----	4,000,000.00
Total-----	52,000,000.00
Construction and equipment of railroads in Alaska, 1922-23----	3,110,210.00
Construction and equipment of railroads in Alaska, 1923-24----	889,140.00
Construction and equipment of railroads in Alaska, 1924- Dec. 31, 1924-----	865,000.00
Maintenance and operation of railroads in Alaska, 1923-----	1,400,000.00
Maintenance and operation of railroads in Alaska, 1924-----	1,245,000.00
Maintenance and operation of railroads in Alaska, 1925-----	1,003,400.00
Operation of river steamers in Alaska, 1924-----	50,000.00
Operation of river steamers in Alaska, 1925-----	25,000.00
Printing and binding, Interior Department, 1924-----	6,106.78
Printing and binding, Interior Department, 1925-----	7,199.88
Alaska railroad fund-----	800,000.00
Increase in compensation-----	23,701.63
Fuel and transportation, Bureau of Supplies and Accounts, 1921 (coal washery)-----	243,000.00
Proceeds of sales of town lots in Alaska, act of Apr. 17, 1917 (40 Stat. 19)-----	112,916.29
Total appropriations-----	61,779,674.58
Book valuation of equipment transferred by the Panama Canal-----	\$329,426.68
Donations of coal and other supplies-----	78,559.70
Credit balance of sundry accounts-----	630.89
	408,617.27
Total-----	62,188,291.85
Expenditures to June 30, 1925, as per detailed statement attached-----	61,083,777.51
Balance unexpended June 30, 1925 (cash)-----	1,104,514.34
Preliminary field surveys in Alaska, comparison of routes and preparation of report, before beginning of construction-----	
Additional location surveys-----	425,576.29
Expenses of examination of Controller Bay-----	244,448.28
Purchase of Alaska Northern Railway-----	5,961.00
Construction of line (Seward to Fairbanks):	1,140,658.48
Mile 0 to 12, inclusive (section 1)-----	675,834.31
Mile 13 to 30, inclusive (section 2)-----	418,357.55
Mile 31 to 45, inclusive (section 3)-----	443,322.92
Mile 46 to 70.7, inclusive (section 4)-----	2,691,825.53
Mile 70.7 to 79.3, inclusive (section 5)-----	1,300,900.39
Mile 79.3 to 114.3, inclusive (section 6)-----	3,893,227.60
Mile 114.3 to 227, inclusive (section 7)-----	5,741,195.60
Matanuska branch (section 8)-----	2,537,586.23
Mile 228 to 264.1, inclusive (section 9)-----	2,868,432.02
Mile 264.1 to 290, inclusive (section 10)-----	4,454,087.48

Construction of line (Seward to Fairbanks)—Continued.

Mile 290 to 315, inclusive (section 11).....	\$1, 684, 534. 19
Mile 315 to 334.6, inclusive (section 12).....	1, 537, 527. 09
Mile 334.6 to 347.3, inclusive (section 13).....	1, 208, 814. 81
Mile 347.3 to 358.2, inclusive (section 14).....	2, 533, 866. 84
Mile 358.2 to 411.7, inclusive (section 15).....	4, 626, 794. 12
Tanana River Bridge.....	1, 060, 292. 29
Mile 412.3 to 467.7, inclusive (section 16).....	2, 596, 829. 20
Chatanika branch (section 17).....	375, 530. 00
Expenses of operation in excess of revenues prior to July 1, 1924 (including construction period).....	6, 986, 780. 45
Expenses of operation in excess of revenues July 1, 1924, to June 30, 1925.....	1, 575, 139. 08
Plant at terminals for handling construction work, consisting of yard tracks, office buildings, storehouses, quarters for em- ployees, mess houses, hospital, heating and lighting plant, freight handling machinery, etc.....	2, 149, 281. 47
Wharves and docks.....	611, 969. 65
Machine shops, engine houses, etc. (permanant).....	727, 543. 77
Marine equipment, boats, barges, etc.....	117, 800. 24
Construction equipment.....	1, 021, 742. 19
Shop and plant machinery.....	344, 967. 44
Rolling equipment.....	1, 898, 328. 72
Material and supplies on hand and in transit.....	1, 336, 663. 18
Telegraph and telephone lines.....	679, 854. 45
Anchorage town site.....	145, 937. 20
Nenana town site.....	42, 446. 18
Seward town site.....	13, 381. 41
Matanuska town site.....	9, 072. 32
Wasilla town site.....	1, 486. 11
Coal mines.....	388, 756. 35
Sawmills.....	35, 707. 58
Coal washery, Sutton.....	346, 236. 28
Expenses, Washington, D. C., office to June 30, 1924 (salaries, stationery, etc.).....	129, 561. 13
Expenses, headquarters office, Seward (salaries, stationery, en- gineering equipment, etc.).....	46, 592. 51
Deposits in Treasury as miscellaneous receipts.....	8, 927. 58
Total expenditures to June 30, 1925.....	61, 083, 777. 51

REPORT OF ANCHORAGE BASE HOSPITAL, JULY 1, 1924,
TO JUNE 30, 1925

Maintenance and operation expenses

Surgeon's salary.....	\$4, 736. 10
Hospital pay roll.....	18, 929. 35
Medical supplies.....	4, 828. 86
Mess expense.....	10, 575. 80
Electrical energy.....	1, 548. 18
Fuel.....	1, 631. 21
Laundry.....	1, 982. 48
Water.....	120. 00
Telephone.....	105. 00
Stationery and other supplies.....	2, 189. 56
Team and ambulance service.....	87. 20
Maintenance of buildings, equipment, and miscellaneous expense.....	21. 00
Total maintenance and operation expenses.....	46, 754. 74

The total expense shown above (\$46,754.74), divided by the total number of patient days (6,777), gives \$6.899 as the cost per patient-day.

30 This expense is chargeable to the several classes of patients, as follows:

	Patient days	Amount
Free patients:		
Alaska railway employees.....	2,765½	\$19,080.61
United States soldiers.....	512½	3,534.66
Total.....	3,278	22,615.27
Half-rate patients: Employees' families, employees not free, and O. B. U. S. service.....	895½	6,176.30
Full-rate patients: Private patients.....	2,603½	17,963.17
Grand total.....	6,777	46,754.74

Summary of cases, treatments, etc., July 1, 1924, to June 30, 1925

Dispensary cases treated free.....	556
Number of dispensary treatments given.....	2,224
Number of employees and soldiers confined to hospital free.....	270
O. B. U. S. service, reduced rates.....	289
Private patients treated at full rates.....	448
Patients treated during year, all classes.....	1,007
Examinations for employment made.....	638
Employees dying account of injury.....	0
Employees dying account of illness.....	3
Employees' families dying during the year.....	0
Private patients dying during year.....	17
O. B. U. S. service dying during year.....	2

	Patient days	Per cent
Free patients:		
Alaska Railway employees.....	2,765½	40.81
United States soldiers.....	512½	7.56
Total.....	3,278	48.37
Half-rate patients: Employees' families, employees not free, O. B. U. S. service.....	895½	13.21
Full-rate patients: Private patients.....	2,603½	38.42
Grand total.....	6,777	100.00

Comparison of expenses and revenues, Anchorage base hospital, July 1, 1924, to June 30, 1925

	Expense	Revenue	Loss or gain
Free patients:			
Alaska Railway employees.....	\$19,080.61		
United States soldiers.....	3,534.66		
Total.....	22,615.27		
Half-rate patients: Employees' families, employees not free, and O. B. U. S. service.....	6,176.30	\$7,033.13	\$856.83
Full-rate patients: Private patients.....	17,963.17	13,736.70	\$4,226.47
Grand total.....	46,754.74	20,769.83	\$23,369.64

¹ Gain.

¹ Loss.

Expense is chargeable to construction and operation of railroad.

MISCELLANEOUS DATA COVERING OPERATIONS AND TREATMENTS, ANCHORAGE
BASE HOSPITAL, JULY 1, 1924, TO JUNE 30, 1925

Hospital patients

Month	Employees and States United soldiers		Employees' families, employees not free, other branches United States service		Private patients at full rates		Total number admitted	Total hospital days
	Number patients	Patient days	Number patients	Patient days	Number patients	Patient days		
July.....	14	192	16	84½	45	219	75	495½
August.....	16	217½	21	41½	45	232½	82	491½
September.....	22	237½	18	55	43	309	83	601½
October.....	19	302½	26	50½	40	280	85	633
November.....	19	208½	32	153½	39	233½	90	595½
December.....	23	308	27	90½	36	284	86	682½
January.....	24	271½	25	77	39	262½	88	611
February.....	18	216½	18	76½	39	178	75	471
March.....	20	325	23	78	30	195	73	598
April.....	27	293½	27	15	28	129	82	437½
May.....	30	316½	30	94	37	147	97	557½
June.....	38	389	26	79½	27	134	91	602½
Total.....	270	3,278	289	895½	448	2,603½	1,007	6,777

Surgical operations performed (not including minor surgery done in surgeon's office)

Hernia.....	25	Varicose veins.....	3
Appendicitis.....	46	Harelip.....	1
Tonsils.....	52	Empyema.....	1
Adenoids.....	12	Clubfoot.....	2
Hemorrhoids.....	8	Resection tube and ovary.....	1
Hysterectomy.....	5	Castration.....	1
Prostatectomy.....	2	Bunions.....	2
Circumcision.....	2	Fracture operations.....	6
Curettage.....	18	Abscess, tubercular and otherwise.....	11
Perineorrhaphy.....	4	Suspension uterus.....	6
Amputations:		Tumors.....	4
Leg.....	2	Miscellaneous.....	15
Foot.....	1		
Toes.....	4		
Fingers.....	2		
Arm.....	1		
		Total.....	246

Fractures treated

Skull.....	1	Toes.....	3
Clavicle.....	2	Ribs.....	2
Humerus.....	1	Sternum.....	1
Radius and ulna.....	7	Ileum.....	1
Fingers.....	1	Metatarsal.....	1
Femur.....	2		
Patella.....	2		
Fibia and tibia.....	6		
		Total.....	30

Deaths in hospital

Cause of death:		Classification:	
Pulmonary tuberculosis	3	Employees	3
Tubercular meningitis	1	Employees' families	0
Cancer	3	Other branches United States	
Suicide	1	service	2
Organic heart disease	1	Private patients	17
Uremia	1		
Embolism of coronary artery	1	Total	22
Apoplexy	2		
Septicemia	1	Births in hospital:	
Pyonephritis	1	Employees' families	14
Empyema	1	Soldier's family	1
Gangrene of bowel with peri-		Other branches United States	
tonitis	1	service	2
Influenza	1	Private patients	24
Pneumonia	1		
Puerperal sepsis	1	Total	41
Influenzal pneumonia	2	Cases of twins	1
Total	22		

REPORT OF TRANSPORTATION DEPARTMENT FOR FISCAL YEAR ENDING JUNE 30, 1925

The following is a report of the transportation department for the fiscal year ending June 30, 1925.

TRAIN OPERATION

Regular passenger service was maintained throughout the month of July, a few delays being experienced.

On July 22 a special train was run Seward to Fairbanks and return, reaching Seward on the return trip July 30. This special train handled the Frank Reedy tourist party of 95 people from Texas. Overnight stops were made at Curry in each direction besides several days being spent in Fairbanks and in Seward.

Coaches Nos. 11 and 12, received at Seward July 10, were placed in service July 13. Buffet-observation car "Nenana," which had been remodeled, was placed in service July 26.

On July 13 a special excursion train was run Seward to Roosevelt and return account of Masonic children's excursion.

Regular service was maintained throughout the month of August, few delays being experienced by passenger trains.

August 9 special train was run Seward to Anchorage and return to Seward on August 10 for accommodation of tourists off the steamship *Alaska*.

On August 24 railroad employees at Anchorage furnished special train for the annual picnic Anchorage to Wasilla and return, 254 passengers being handled.

On August 12 Lowell Creek overflowed at Seward, causing damage to main track which made it necessary to use the harbor track until repairs were made on August 16.

On August 19 a rock slide at mile 354½ delayed train No. 1, 1 hour 15 minutes.

Time Table No. 9 was issued effective August 31. Passenger-train service was changed to two round trips per week between Seward and Fairbanks, leaving Seward on Mondays and Thursdays and leaving Fairbanks on Tuesdays and Fridays, trains stopping overnight at Curry.

Sleeping cars were discontinued on that date, also dining-car service, sufficient time being allowed at Anchorage and Healy for meals.

There was no change in the schedule of the Chickaloon mixed train between Anchorage, Jonesville, and Chickaloon. Mixed service on the Chatanika branch was changed from three round trips per week to two round trips per week.

Local freight trains which were scheduled in time table No. 8 were eliminated from time table No. 9, to be run as extras as business warranted.

Regular service was maintained without interruptions during September, only one passenger train delay being experienced, which was due to steamer connection at Seward. Freight service between Seward and Anchorage was handled on twice-weekly schedule.

Passenger trains were 100 per cent on time during the month of October. Regular service was maintained throughout the entire month. Mixed train, Anchorage to Jonesville, was interrupted on October 6 account of rock slide at Mile A-15. Slide was cleared October 12 and normal service resumed. During the blockade train operated between Anchorage and Moose Creek only.

During November regular service was maintained with the exception of November 26, when train No. 1 arrived at Seward 3 hours and 20 minutes late account rocks on track at Mile 52.7. On November 27 train No. 2 was tied up at Anchorage on arrival from Seward account being delayed 7 hours and 20 minutes by rock slide at Mile 78. On arrival of this train at Divide it was necessary for them to return to Woodrow to pick up ditcher and handle same to the slide in order that ditcher could clear slide.

On November 26 Russel Plow was run from Anchorage to Hunter to flange out track, necessary account heavy snows on November 25.

The first snow slides of the season occurred on November 26 at Mile 43 and over the shed at Mile 71.4. Slide at Mile 43 did not reach the track.

Throughout December regular service was maintained excepting that passenger trains December 12 were delayed account snow blockade at Mile 314. Train No. 3 was tied up at Healy and on December 13 ran from Healy to Seward. Train No. 4 was tied up at Curry December 12 and ran through to Fairbanks December 13. On December 15 train No. 2 delayed at Talkeetna 1 hour and 35 minutes account work extra ahead being stalled in the snow in trying to get into clear at Talkeetna. On December 18 train No. 2 was delayed at Seward 1 hour and 50 minutes account connection with steamer *Watson*.

On December 6 a special revenue passenger train was run Seward to Anchorage for Captain Lathrop.

December 1 service was discontinued between Sutton and Chickaloon, trips to be made only as business warrants. Freight service was also reduced to two round trips per week between Anchorage and Fairbanks.

December 9 Russell plow was run Curry to Windy ahead of train No. 4, and delayed train No. 4 three hours, account of hard packed drifts in cuts between Broad Pass and Cantwell.

On December 10 Russell plow on trip Windy to Curry ahead of extra 601 south was stuck in snow at mile 314 account of heavy winds and drifting snow. Train drifted in and it was necessary to send crew from Anchorage to pick up the rotary at Curry to go to mile 314 and clear the line. This work was delayed because of heavy winds, it being necessary to wait until wind went down so rotary could return to Broad Pass.

On December 9 rotary snow crew was established at Curry, and on December 15 rotary snow crew was established at Anchorage.

During December box cars Nos. 802 and 809 were equipped with steam-heat line and train-signal line, and placed in passenger service between Seward and Fairbanks. Car No. 907 was equipped with charcoal heater.

Regular freight and passenger train service was maintained during the month of January, with few delays, wheather conditions considered.

On January 16 train No. 4 was delayed 3 hours 43 minutes between Broad Pass and Windy account of rotary ahead bucking snow. On same date No. 3 arrived Curry 3 hours 40 minutes late account snow conditions encountered in the Windy and Broad Pass district.

On January 20 passenger train No. 3 arrived Curry 17 hours 55 minutes late account cold weather and snow conditions encountered in the Windy and Broad Pass district. On same date No. 4 arrived Fairbanks 16 hours 5 minutes late because of cold weather and snow conditions.

January 8 midweek trains 1, 2, 3, 4 were reduced to two-car trains (baggage car and combination coach); these trains to handle through freight loads when necessary.

January 20 special train consisting of engine and caboose made trip Anchorage to Jonesville and return for purpose of bringing man injured in the Jonesville mine to the Anchorage Hospital.

Mixed train service on Chatanika branch, consisting of two round trips per week, maintained throughout the month. Chickaloon branch service consisting of three round trips per week maintained until January 22, when the service was reduced to two round trips per week; train leaving Anchorage Mondays and Fridays and returning the following days.

Mixed service between Fairbanks and Healy, consisting of two round trips per week, was maintained until January 26, on which date this service was changed to straight freight service.

Regular freight and passenger service was maintained throughout the month of February except as interrupted because of severe snow conditions, which caused several passenger train delays during the month, and on February 11 No. 1 was annulled Anchorage to Seward because of snow conditions.

On February 7 special gas car service was provided for Captain Haverstock, Anchorage to Seward, to enable him to make boat connection at Seward.

Mixed service consisting of one round trip per week maintained throughout the month on Chatanika branch.

Mixed service consisting of two round trips per week maintained on the Chickaloon branch between Anchorage and Sutton throughout the month; this train running through to Chickaloon on February 6 and 27.

Regular freight and passenger train service was maintained throughout the month of March with but few delays.

Effective March 1 midweek trains 1, 2, 3, 4 were made mixed trains, and March 11 all trains 1, 2, 3, 4 were made mixed trains.

Mixed train service on the Chatanika branch, consisting of one round trip per week, was maintained throughout the month.

Mixed-train service consisting of two round trips per week maintained on the Chickaloon branch throughout the month of March.

On March 27 No. 3 arrived Curry 2 hours 25 minutes late, and on same date No. 4 arrived Fairbanks 3 hours 45 minutes late account snow conditions and necessary run rotary ahead.

Regular passenger and freight service was maintained throughout the month of April except as interrupted because of slide conditions at various points on the line.

April 6 heavy snow slides and sluffs reported between Grandview and Spencer. Cleared by rotary; no interruption to traffic.

April 9 heavy snow reported Seward to Moraine. Rotary run ahead of No. 2 from Seward to clear slides; also to clear 2 to 3 feet of snow Divide Hill and Grandview Hill. At 9.40 a. m. a slide 80 feet long and 10 to 20 feet deep reported at south end snow shed 53.1.

April 19 two slides were reported just south of shed, milepost 76.5, one slide 125 feet long by 25 feet deep, other 100 feet long by 15 feet deep. Rotary arrived from tunnel at 7.10 p. m. and slides cleared at 4 a. m. 20th.

April 22 at 12.55 p. m. rock slide reported at milepost 76.4, 60 feet long and 8 to 10 feet deep. Ditcher 102 outfit left Anchorage at 3.25 p. m. No. 1 annulled, Anchorage to Seward. Slide cleared 9 a. m. 24th.

April 25 at 3 p. m. snow slide 40 feet long, 20 feet deep reported south of tunnel at milepost 48.2, breaking in three bents of snowshed. No. 2 returned to Portage from Moraine to procure flat car on which to load timbers. At 5.20 p. m. slide 35 feet long and 10 feet deep reported at mile 49.6. No. 2 picked up Russel plow at Moraine. Extra 601 north left Seward to make transfer of passengers, etc., from No. 1 at mile 48.2. Transfer made and extra 601 returned to Seward, arriving at 12.10 a. m. on 26th. Slide at milepost 49.6 cleared at 7 p. m.

April 26 mixed extra 605 south departed from Anchorage at 7.20 a. m. Account indefinite reports as to when slide at milepost 48.2 would be cleared, extra 601 north ran from Seward and made transfer of passengers from extra 605 south; also handled mail, baggage, and express from delayed No. 1 to assure boat connection. Slide at 48.2 cleared at 1.25 a. m. 27th.

April 27 extra 605 south called at tunnel to start to Grandview but backed in account 7 or 9 inches new snow. Called rotary outfit to go ahead; snowing hard. At 8.27 a. m. slide 300 feet long and 30 feet deep reported at mile post 70. Passenger extra 606 north (No. 2), which had left Seward at 6 a. m., turned back to Seward from Hunter account bad storm.

April 28 at 6.40 a. m. snow slide took out bridge 49.3. Examination showed all but three bents at south end of this bridge taken out. At 8.45 a. m. snow slides reported at both ends new shed at mile 49, 100 feet long, 10 to 15 feet deep. Account interruptions to traffic arrangements made for steamship *Watson* due at Seward 28th, to proceed to Anchorage, carrying passengers, mail, express, and perishable freight from Seward to Anchorage.

April 29 work extra 605-606 with crane and material for bridge 49.3 stalled in snow at mile post 45.5; returned to Seward because of bad storm and heavy snow.

April 30 work extra 605-606 moved from Seward to Grandview, trying to get through to bridge 49.3. Unable to do so account snow.

Mixed train service on the Chatanika branch, consisting of two round trips per week, maintained throughout the month.

On Chickaloon branch normal service consisting of two round trips per week between Anchorage and Sutton-Eska-Jonesville maintained until April 27, when service was reduced to one round trip per week.

Regular passenger and freight service was maintained throughout the month of May except as interrupted because of washouts, slides, and bridge 49.3 being taken out by snowslide April 28.

There were several snowslides in the vicinity of miles 70, 71, 72, and 73 during the month of May; slide also reported May 5 at mile post 21½, 700 feet long and 25 feet deep, cleared May 10 at 10.30 p. m.

Bridge 49.3 reported ready for service at 4.30 p. m. May 10.

On May 14 and 15 there were several small washouts in the vicinity of mile post 241.3, delaying traffic.

On May 14 the agent at Talkeetna reported river broken up and ice thrown on track for a distance of 1,500 feet just north of mile post 236.2. On this date passenger train No. 2 was held up at Talkeetna.

Practically all slides in vicinity of miles 70, 71, 72, and 73 were cleared on May 8 and 9.

On May 13 bridge D-10 crossing the Healy River at Healy was washed out.

May 16 ice again broken and jammed on track at mile 236.7. Track passable at 7 p. m. May 19.

Mixed train service on the Chatanika branch, consisting of two round trips per week, maintained throughout month.

Normal service maintained on Chickaloon branch throughout the month; this consisting of one round trip per week between Anchorage and Sutton-Eska-Jonesville. Trip Anchorage to Chickaloon and return was made on May 9.

Regular passenger and freight service was maintained during the month of June with very few delays.

On June 21 the regular summer schedule went into effect; this service consisting of three passenger trains between Seward and Fairbanks and three passenger trains between Fairbanks and Seward each week, trains leaving both Seward and Fairbanks on Mondays, Wednesdays, and Fridays. Summer schedule also provides for mixed train service each Sunday between Seward and Anchorage and between Anchorage and Seward.

Mixed train service on the Chatanika branch, consisting of two round trips per week, maintained throughout the month.

Regular service on the Chickaloon branch maintained throughout the month, this consisting of one round trip per week between Anchorage and Sutton-Eska-Jonesville.

June 28 small rock slide reported at mile A-34.3, Matanuska branch, and extra 285 south delayed 40 minutes. Slide cleared by crew. There were a few other small mud and rock slides during June, but these were not large enough to interfere with freight or passenger traffic.

ACCIDENTS

The following accidents occurred during the fiscal year ending June 30, 1925:

On September 11 car 828 was derailed several times in Nenana yard account of loose wheel on axle.

September 12 work extra 221 derailed two cars going in on Whitney siding. September 22 train No. 20 derailed one car and engine backing in on siding.

On September 27 engine of train No. 15 was derailed on Moose Creek spur account of broken rail.

On October 12 car 817 in extra 605 north derailed a short distance south of Rainbow. Car was pulled for 40 rail lengths and struck the switch at Rainbow necessitating sending a crane from Anchorage to rerail the car.

On November 7 arch bars on car 567 loaded with gravel broke, letting car down on rails. Car was skidded to Houston, the nearest siding.

On November 12 cars 574 and 578 were derailed at mile post 11 on the Chickaloon branch, caused by a rock rolling down the hill.

On November 26 steamship *Watson* while at Seward Dock during a heavy gale broke all the fender pilings on the dock. Wind came up suddenly and it was difficult for the *Watson* to get away from the dock before breaking a great many fender pilings.

On December 18 the Healy River Coal Corporation's crew with engine No. 20 let three cars get away from them at coal spur at Healy, cars running to the end of spur where they were derailed.

On January 17, No. 1's engine (606), in charge of hostler going to roundhouse, derailed at south depot track switch at Seward; rerailed by snow crew January 18. No damage to engine. Four rails and one pair switch points damaged and had to be replaced. Cause of derailment undetermined.

During February and March there were no accidents or derailments of a serious nature; and no delays to traffic caused by accidents or derailments during these two months.

On April 8 front wheels forward truck rotary No. 2, plow extra 270-266, derailed while turning on wye, caused by narrow gauge on rotary tank truck; delayed 15 minutes to rerail; no damage.

At 3.45 p. m. April 9 No. 2 hit small rock slide at mile post 66.3, derailling engine 614 and cars 2408 and 2127 loaded with machinery for Houston and Fairbanks; also car 2411 loaded with company poles for Anchorage; front trucks baggage car 61 also derailed. Broken arch bar on car 2411 only damage to cars; eight rails bent and 120 feet of ties marked. Passengers, mail, and express brought to Anchorage by extra 618 north, arriving Anchorage 12.50 a. m. April 10. At time of derailment engineer was using flangers account 2 feet snow on ground, and was unable to see obstruction. Cars rerailed by rotary 270-266 and returned to Portage.

On April 23 Section Foreman Joe Johnson, Girdwood, while working on rock slide was severely injured account boulder falling upon him and crushing one side of body. Yard crew from Anchorage, with caboose and Doctor Haverstock, left Anchorage 8.25 a. m. for scene of accident for purpose of bringing injured party to Anchorage Hospital.

April 24 rear trucks engine 620, train No. 4, jumped track account frost heave at mile post 323½. No. 3 proceeded to derailment and Conductor Curran, extra 264 north, set out train at Cantwell and proceeded to derailment. Extra 264 north made transfer with No. 3 and brought No. 3's train to Curry with No. 4's equipment. No. 3 returned to Fairbanks as No. 4 with same equipment. No. 4 arrived Fairbanks 4 hours 35 minutes late; No. 3 arrived Curry 2 hours 40 minutes late.

April 28 at 4.30 p. m. No. 3 reported engine tank, two outfits, and one car bridge material derailed at mile post 331½ account shimmed on curve and track spread; delayed 2 hours 45 minutes rerailling.

May 1 crane 3 handling bridge steel at Seward turned over at 10.40 a. m.; picked up 4.15 p. m. No injuries.

May 3 leading pair wheels car 913 in extra 265 north jumped track at mile 85.6; ran eight rail lengths at 20 miles per hour. Caused by rough track.

May 23 at 5.45 p. m. when No. 1 passing through shed mile 48.2 loose timbers bent sunshade engine 606 and step on baggage car 62. Train stopped at end of shed; piece of 4 by 12 found wedged under tank of engine.

On June 10 Brakeman McKenzie riding on car of ties in Seward yard jumped from car while it was backing onto train, injuring left ankle. First aid administered by Doctor Boughman. Brakeman McKenzie brought to Anchorage Hospital by extra 601 north.

June 21 Fireman Neville was overcome with gas in tunnel at mile 48.2 and fell from engine. Not injured and all right upon arrival of train at Hunter.

PASSENGER-TRAIN SERVICE

Following is the passenger-train performance during the fiscal year ending June 30, 1925:

1924		Percentage on time	1925		Percentage on time
July	-----	85	January	-----	67
August	-----	85	February	-----	56
September	-----	97	March	-----	80
October	-----	100	April	-----	76
November	-----	85	May	-----	75
December	-----	79	June	-----	96

MAIL SERVICE

During the fiscal year the following failures in train service occurred, resulting in delays to mails:

Date	Train No.	Mileage	Points between which failure occurred and its cause
Feb. 2	17-20 19-18	(1)	No failures under schedule in effect. Contract calls for two round trips per week between all stations; effective Feb. 1, 1925, service between Fairbanks and Chatanika reduced to one round trip per week, and in accordance with contract failure would be four round trips between Happy and Chatanika, a distance of 32 miles each direction, making a total of 256 miles.
9			
16			
23			
Mar. 2	20 19	(2)	No failures under schedule in effect. Contract calls for two round trips per week between all stations; effective Feb. 1, 1925, service between Fairbanks and Chatanika reduced to one round trip per week, and in accordance with contract, failure would be five round trips between Happy and Chatanika, a distance of 32 miles each direction, making a total of 320 miles.
9			
23			
30			
Apr. 27	2	74.3	Hunter to Anchorage account snowslides.
27	12-14	21.8	Matanuska to Jonesville account reduction in service.
28	13/11	21.8	Jonesville to Matanuska account reduction in service.
29	1	74.3	Anchorage to Hunter account snowslides.
30	2	114.3	Seward to Anchorage account snowslides.
May 2	4	114.3	Anchorage to Seward account snowslide taking out bridge 49.3.
4	2	114.3	Seward to Anchorage account snowslide taking out bridge 49.3.
4	12/14	21.8	Matanuska to Jonesville account reduction in service.
4	13/11	21.8	Jonesville to Matanuska account reduction in service.
6	1	114.3	Anchorage to Seward account snowslide taking out bridge 49.3.
7	2	114.3	Seward to Anchorage account snowslide taking out bridge 49.3.
9	1	114.3	Anchorage to Seward account snowslide taking out bridge 49.3.
11	12/14	21.8	Matanuska to Jonesville account reduction in service.
11	13/11	21.8	Jonesville to Matanuska account reduction in service.
16	1	123.7	mile 238 to Anchorage account ice jam, mile 238, washing out track.
18	12/14	21.8	Matanuska to Jonesville account reduction in service.
18	13/11	21.8	Jonesville to Matanuska account reduction in service.
25	12/14	123.7	Matanuska to Jonesville account reduction in service.
25	13/11	123.7	Jonesville to Matanuska account reduction in service.
June 1	12/14	21.8	Matanuska to Jonesville account reduction in service.
1	17/20	39.2	Fairbanks to Chatanika account reduction in service.
1	19/18	39.2	Chatanika to Fairbanks account reduction in service.
2	13-11	21.8	Jonesville to Matanuska account reduction in service.
6	13-11	21.8	Do.
8	12/14	21.8	Matanuska to Jonesville account reduction in service.
8	17/20	39.2	Fairbanks to Chatanika account reduction in service.
8	19/18	39.2	Chatanika to Fairbanks account reduction in service.
15	12/14	21.8	Matanuska to Jonesville account reduction in service.
16	13/11	21.8	Jonesville to Matanuska account reduction in service.
22	12/14	21.8	Matanuska to Jonesville account reduction in service.
23	13/11	21.8	Jonesville to Matanuska account reduction in service.
27	13/11	21.8	Do.
29	12/14	21.8	Matanuska to Jonesville account reduction in service.

¹ 64 miles each round trip; total, 256 miles.

² 64 miles each round trip; total, 320 miles.

TELEPHONE AND TELEGRAPH DEPARTMENT

During the fiscal year ending June 30, 1925, telephone and telegraph service furnished various departments of the railroad, other departments of the Government, and to commercial customers.

The telegraph circuit between Seward and Fairbanks assigned to the Signal Corps has been used by them more or less during the year, and service has been also furnished them over wires used jointly for railroad purposes between Seward and the Alaska Railroad radio station at Anchorage, which is operated by the Signal Corps.

Local telephone switching is furnished as follows:

The Seward Light & Power Co., Seward.

The city of Anchorage, Anchorage (leased from Alaska Railroad).

Alaska Railroad agent, Talkeetna.

Alaska Railroad Hotel, Curry.

Alaska Railroad agent, Broad Pass.

Alaska Railroad agent, Healy.

The city of Nenana, Nenana (leased from Alaska Railroad).

The Fairbanks Telephone Co., Fairbanks.

Service is furnished to 210 long-distance telephones, owned and maintained by the railroad, and to 19 telegraph offices. There are in use on our poles in the

Fairbanks district by the Fairbanks Telephone Co., 1,076 contracts, for which a rental charge is made.

Service furnished was satisfactory with exception of a three-day interruption in October, due to adverse weather conditions and to poor condition of our lines between Curry and Broad Pass. The line between these points is being rebuilt, 15 miles being completed during the year.

In addition to our regular maintenance force, one crew was in the field for three months and two crews for four months, employed as follows:

Major repairs were made to the line between miles 68 and Anchorage, miles 129 and 168, Matanuska and 31-A on the Chickaloon branch, and at other points where necessary. Fifteen miles of new line was built between miles 253.4 and 268.4 and the old line salvaged.

DOCKS AT SEWARD AND ANCHORAGE

Anchorage dock was not opened for operation at beginning of the 1925 season of navigation. Business handled over this dock up to the close of the 1924 season, however, was as follows:

To June 30, 1925, 1,306 tons of coal were handled over the Anchorage dock; this coal being loaded into tugs owned by the Libby, McNeil & Libby Co. and the Northwestern Fisheries Co.

Seward dock was operated throughout the year. Following is a summary of the business handled during the season:

	Vessels	Tons handled		Vessels	Tons handled
1924			1925		
July.....	20	3,403.13	January.....	11	2,086.62
August.....	18	2,074.55	February.....	9	1,486.36
September.....	16	3,430.94	March.....	13	3,220.33
October.....	12	1,318.67	April.....	12	4,576.92
November.....	12	2,867.80	May.....	14	4,102.10
December.....	12	2,830.73	June.....	11	3,892.51

TANANA AND YUKON RIVER BOAT SERVICE

Following is outline of river boat service from July 1, 1924, to close of navigation:

The steamer *Davis*, which left Nenana August 20 on the return trip from Holy Cross, was unable to get in at the mouth of the Tanana River account low water. After that date and until the season closed the steamer *Jacobs* was used out of Nenana and on the Tanana River, while the *Davis* was used on the lower Yukon River, transfer being effected wherever the boats met. However, on last trip of the *Davis* water had scoured out of the channel at the mouth of the Tanana River sufficiently to permit the boat to enter and reach Nenana.

Last sailing out of Nenana was the *Jacobs* on September 24. This trip was made to Ruby only. Sailing the previous Wednesday was last trip to Holy Cross.

Both of the boats returned to Nenana for winter quarters, reaching there October 3, when they were put on the ways and crews disbanded for the season.

From September 11 to September 26 the launch *Sunflower* and launch *Midnight Sun* made four trips from Nenana to various points on the Tanana River as far as Tanana for the purpose of handling Tanana River freight and to clean up freight for Tanana River points so that the river steamers could be utilized in handling capacity cargoes to lower river points.

Launch *Alice* was chartered for a special trip with the mail and freight to Holy Cross and return account the *Midnight Sun* being broken down. This boat left Nenana September 29 and on the return from Holy Cross encountered ice at Ruby which would not permit it to proceed farther. It was therefore necessary to store the boat at Ruby. Owing to the terms of the contract, if we failed to return the boat to Nenana by the close of navigation it was necessary that we purchase the boat at a price of \$2,000. This was done account of our failure to return the boat due to ice conditions.

The launch *Sunflower* left Nenana October 1 for Holy Cross and return, and reached Hot Springs on October 4, where engine trouble was encountered, and it

was necessary to tie this launch up at Hot Springs. Crews of this launch and the launch *Alice* returned to Nenana over the trail.

During the season, 18 sailings of the river boats were made out of Nenana, 17 being to Holy Cross and 1 to Ruby, besides the sailing of the steamer *Nenana* under charter out of Nenana May 31.

The ice moved in the Tanana River at Nenana May 7, 1925, at 6.32 p. m. The steamer *Jacobs* was launched Monday afternoon May 18; the steamer *Davis* was launched the evening of May 19. On account of low water experienced at the mouth of the Tanana River, the *Jacobs* operates out of Nenana and the *Davis* out of Holy Cross, meeting in the vicinity of Kokrines, where cargo and passengers are exchanged, the *Davis* returning to Holy Cross and the *Jacobs* to Nenana. Weekly service is maintained; the *Jacobs* leaving Nenana at 2 p. m. each Wednesday, and the *Davis* leaving Holy Cross at 9 a. m. each Tuesday.

The *Jacobs* on its first trip went to Ruby and return only, while the *Davis* went through to Holy Cross. Exceptionally high water was manifested on the Yukon River below Ruby, damaging wood piles and flooding numerous stores at Anvik and Holy Cross. At Holy Cross the high water and ice carried the barges *Oil City* and *Seattle 3* of the A. Y. & N. and our barge *Innoko* back on the river bank about 75 feet from the edge. Very little damage was done to the *Innoko*, only it made it necessary to construct ways so as to place in water. The *Oil City* is left high and dry, while the *Seattle 3* has several holes in the side.

The steamer *Jacobs* has been converted into a coal burner and on its first trip averaged 0.374 ton per hour running time; the steamer *Davis* will continue to burn wood as fuel.

On June 10 a crew was dispatched from Nenana to Holy Cross for purpose of launching the barge *Innoko*. This barge was launched and ready for service on June 21.

Following is amount of business handled from July 1, 1924, to June 30, 1925: Tons of freight handled, 3,125; passengers handled, 833.

J. T. CUNNINGHAM,
Superintendent of Transportation.

REPORT OF MAINTENANCE AND CONSTRUCTION DEPARTMENT FOR THE FISCAL YEAR ENDING JUNE 30, 1925

BRIDGE AND BUILDING DEPARTMENT

Bridge construction.—The construction of a 308-foot steel viaduct across Eagle River (bridge No. 127.5) was completed September 13, 1924. The construction of this bridge began January 14, 1924, work was discontinued in February, 1924, and resumed in June, 1924. This steel viaduct replaces old wooden bridge which was erected in 1916.

Erection of a suspension footbridge across the Susitna River at Curry was begun in June, 1924, and completed in July, 1924. This bridge is 537 feet long, 4 feet wide, and is swung between two towers, each 31 feet high. It was built primarily for the benefit of tourists. A magnificent view of Mount McKinley can be had from the top of a hill approximately 2,600 feet high, across the river from Curry.

In September, 1924, work was begun on steel structure across the Nenana River at Ferry (bridge No. 370.7), consisting of two 200-foot steel-truss spans and one 80-foot through plate girder span, resting on four concrete abutments and piers. A shoofly, or temporary pile trestle, 1,147 feet long was put in to accommodate traffic during construction. Some delays to construction were experienced in December and January due to extreme cold weather; at mile 370 the temperature, on December 13, 1924, dropped to 63° below zero. The first train crossed new bridge April 21, 1925. Construction was completed May 2, 1925.

In January, 1925, construction work began on steel bridge across the Nenana River on the Healy coal spur. This bridge consists of five 80-foot through steel-girder spans and was completed June 30, 1925. Work was delayed somewhat in June due to high water which washed out 11 pile bents of old structure, and undermined remaining bents in main channel.

In November all bridges between miles 3 and 6 were raised from 3½ to 6 feet, to conform to revised grade line.

A flume and wing dam were constructed at bridge 21.4 to insure free passage of gravel during flood periods.

Snowshed construction.—Construction began August 7, 1924, rebuilding 115 feet of south end of snowshed No. 714, near Kern, which was demolished by a snowslide in February. New extensions of 100 feet on south end, and 52 feet on north end, of this shed were also built. Work on this shed was completed in October.

Construction began in October on a 48-foot extension to north end of snowshed No. 531 and was completed in December.

Construction roadway and station buildings.—Track scales at Nenana were installed, adjusted, and made ready for service in July.

At Fairbanks a platform and sidewalk were built around the depot, a new floor laid in the engine house, a new drop pit constructed for narrow-gauge locomotives, and a well dug and pipe lines laid to supply water for terminal facilities.

A coal bunker and an addition to the depot at Broad Pass were built in July and painted in August.

At Chickaloon nine cottages and the staff house, erected by the Navy Coal Commission, were dismantled and taken to Curry.

At Curry the staff house brought from Chickaloon was erected for use as a dormitory for trainmen. Three of the cottages were also erected for the use of employees. A shelter house, built in the Anchorage carpenter shop and shipped to Curry in a knocked-down condition, was erected on the top of the hill across the Susitna River from Curry for the use of tourists and others who climb the hill to obtain a view of Mount McKinley at that point.

Work of dismantling the engine house at Nanana was begun in August, preparatory to moving it to Healy, the new division point. Erection of this engine house at Healy was completed in January. An oil and sand house and coal bunkers were also erected at Healy.

At Anchorage a cooling tower for the power plant was built in October, addition to stores department warehouse No. 2 was completed in November. The old heating plant was dismantled and a coal-testing laboratory was erected on the site. A wheel shop was built in the yards for use of the mechanical department. Coal bunkers were constructed to facilitate loading coal in trucks and wagons, and an ash conveyor was built at the hospital. Forms were built and eight 60-foot and sixteen 40-foot concrete piles were made to be used in future construction of bridge 432.1.

Maintenance of bridges, buildings, and other structures.—During the year all bridges were inspected by a bridge foreman assisted by an instrument man, whose duties were to examine all bridges and report on their condition.

Three bridge gangs were engaged in making necessary general repairs to all bridges and roadway buildings along the line. The most important of these repair jobs was on bridge 49.3, across Bartlett Glacier Stream, which was partially demolished by a snowslide 6.40 a. m., April 28. Two 45-foot truss spans and seven 15-foot bents were taken out, a total of 195 feet. Repairs to bridge were completed May 27.

During the month of August a locomotive crane was engaged in clearing drift from Knik and Matanuska River bridges, miles 147 and 148. High water in those streams at that time of year is caused by the breaking or overflowing of a glacial lake at the head of Knik River and is an annual occurrence, which brings down large quantities of drift, a large percentage of which is cottonwood trees, 60 feet or more in length and 2 feet in diameter.

The damage done to the Seward Dock by steamship *Admiral Watson* during storm of November 26 was repaired in December, 58 fender piles, 1 creosoted dock pile, and 3 floating fender piles being replaced.

General repairs were made to the following snowsheds: Nos. 496, 714, 759, 760, 763, and 765.

Roadway maintenance.—A lake one-half mile from the railroad, at Colorado, which overflowed the track each spring at mile 295.1, was drained in October.

The overhang at tunnel portals, miles 52 and 53, was shot down, reducing danger from falling rocks. Rock cuts were widened where necessary, by section crews, from mile 25 to mile 45 to provide proper clearance for snowplows and rotaries.

Track maintenance and construction.—The section gangs in winter were reduced to 1 or 2 laborers and a foreman on each section, except on division terminals where the crews consisted of from 4 to 8 men. During the winter months all section crews were engaged chiefly in caring for switches, shimming track, and

general track maintenance. In the spring and summer as the frost left the track the various crews were gradually increased and were engaged in renewing ties, surfacing, ditching, and general track repairs.

Extra gang No. 1, consisting of a foreman, timekeeper, and 25 men, was engaged in grading, laying track, and surfacing miles 308 to 381 during July, August, and September. In October it was transferred to Seward, where it was engaged in raising track and bridge approaches to the new grade line, mile 3 to mile 6, and surfacing Seward yards. This gang was absorbed by steam shovel gang No. 1, November 10, 1924, and reorganized May 15, 1925, for the purpose of surfacing and renewing ties between miles 150.7 and 159.8. On May 14 the gang was sent to Chase to assist in clearing overflow ice from track and repair washout at that point.

Extra gang No. 2, consisting of a foreman and 12 men, was engaged during the months of July, August, and September in surfacing track, renewing ties, and general track maintenance between miles 119 and 157. This gang was disbanded September 4, 1924, and reorganized June 13, 1925, and sent to Moose Creek coal spur to clear the right of way for a $2\frac{1}{2}$ -mile extension to narrow-gauge spur. Clearing was 90 per cent completed June 30, 1925.

Extra gang No. 3, consisting of a foreman and four men, was engaged in culvert construction, miles 295.9, 308 to 323, and 378.6. This gang was disbanded October 7.

Extra gang No. 4, consisting of a foreman and from 6 to 14 laborers, is a permanent gang maintained at tunnel, mile 52, to handle ice and snow in the three tunnels on mile 53, to care for three snowsheds, to clear ice and snow from the approaches of all bridges having inside guard rails, to look after the gravity water supply of tunnel water station, to coal all engines at tunnel by hand, to accompany the rotary snowplows when engaged in clearing snow slides, and general track maintenance in the loop district, mile 48 to mile 53 $\frac{1}{2}$.

Extra gang No. 5, consisting of a foreman and six laborers, was engaged in culvert construction between miles 139 and 241. This gang was disbanded November 11.

Extra gang No. 6, consisting of a foreman, 4 teams, 4 teamsters, and 4 laborers, was engaged in stripping top soil from gravel pit site, mile 232 $\frac{1}{2}$. This gang was disbanded October 9.

Ditching gang No. 1, operating ditcher No. 101, loaded approximately 2,600 cubic yards of gravel at the pit at mile 56, for concrete piers for various bridges across the Nenana River, at mile 370.7, and the Healy coal spur, and ditched at various points between Seward and Anchorage until December 27, on which date it was disbanded for the season. This gang was reorganized April 15 and ditched between mile 72 and mile 86, loaded ties for the stores department, and assisted in cleaning and repairing track at washout at Chase.

Ditching gang No. 2, operating ditcher No. 102, loaded approximately 3,500 cubic yards of gravel at pit at mile 305.5 and about 1,500 cubic yards at mile 362, for ballast in the vicinity of the pits, ditched between mile 233 and Fairbanks, and Matanuska branch, and was disbanded for the season November 16. This gang was reorganized May 14 and sent to Chase to assist in cleaning and repairing track at washout at that point. Ditching operations were resumed from mile 233 to mile 259.

Steam shovel gang No. 1 moved to rock pit at mile 84, July 2; the following quantity of rock excavated and disposition of same:

	Cubic yards
Filling bridge No. 835, mile 83 $\frac{1}{2}$	2, 336
Riprap and bridge protection, bridge No. 1146.....	296
Riprap, Matanuska branch.....	280
Riprap, mile 54 to mile 97.....	19, 738
Bridge protection, bridge No. 493.....	42
Riprap, mile 40 $\frac{1}{2}$	76
Bridge protection, bridge No. 1031.....	144
Riprap, mile 225.....	152
Total quantity rock excavated, mile 84.....	23, 064

August 15 the shovel moved to the gravel pit, mile 134½, and began excavating gravel for ballast and bank widening. The following shows quantity of gravel excavated at this pit and disposition of same:

	Cubic yards
Ballast, mile 125 to mile 163.....	32, 527
Grade filling, mile 125 to mile 163.....	4, 696
Grade filling, Matanuska branch.....	936
Grade filling, Jonesville yards.....	176
Filling bridge No. 1275, Eagle River Bridge.....	4, 212
Total quantity gravel excavated, mile 134½.....	42, 547

September 23 the shovel cut out at mile 134½ and moved to the Lowell Creek gravel pit, Seward, and began operations September 27, excavating gravel for ballast, grade filling, and bank widening. The following shows quantity of gravel excavated in Lowell Creek and disposition of same:

	Cubic yards
Grade filling and bank widening, mile 1 to mile 6.....	78, 674
Ballasting, Seward yards.....	2, 016
Repairs to grade, caused by high tide, mile 1.....	1, 800
Total quantity gravel excavated, Lowell Creek.....	82, 490

Steam shovel gang No. 1 was disbanded December 24, 1924, for the season. This gang was reorganized June 16 and cut in at gravel pit on Healy coal spur. The following shows disposition of gravel from this pit:

	Cubic yards
Filling approach bridge D-10.....	4, 520
Filling approach bridge D-12.....	295
Filling approach bridge D-13.....	295
Total.....	5, 110

The shovel moved to gravel pit, mile 371.3, June 26, and excavated 160 cubic yards, which was dumped at approach of bridge 370.7. Encountering frozen ground the shovel was moved on June 27 to gravel pit, mile 366.8, where 1,080 cubic yards were excavated and dumped at approach of bridge 370.7.

Steam shovel gang No. 2 was organized September 12 and the shovel cut in at gravel pit, mile 360.5, excavating gravel, which was distributed as follows:

	Cubic yards
Filling grade, Healy yard.....	4, 926
Filling grade, McKinley Park station site.....	960
Bank widening, mile 349 to mile 357.....	1, 580
Ballast, mile 362 to mile 380.....	5, 198
Total gravel excavated, mile 360.5.....	12, 664

October 1 steam shovel gang No. 2 moved from the gravel pit, mile 360.5, to gravel pit, mile 305.5. The following shows quantity of gravel excavated at mile 305.5 and disposition of same:

	Cubic yards
Bank widening, mile 310 to mile 316.....	1, 676
Filling grade, Healy yard.....	184
Total gravel excavated, mile 305.5.....	1, 860

October 6 the shovel cut out and moved to mile 15, Matanuska branch, to work on rock slide there. Casting over began October 8 for a shoofly around the slide, and continued until October 13, when it was completed. Loading rock from the slide into cars was then begun. The following shows quantity loaded and its disposition:

	Cubic yards
Riprap, Matanuska branch.....	1, 128
Repairs to fill, mile 94.....	200
Total rock loaded, mile 15, Matanuska branch.....	1, 328

October 20 the shovel came to Anchorage for repairs. October 22 it was moved to gravel pit, mile 56, to load gravel for concrete construction. The following shows quantity of gravel excavated at mile 56 and disposition of same:

	Cubic yards
Anchorage power-house construction.....	24
Bridge No. 3707, Nenana River crossing.....	168
Bridge No. D-10, Healy coal spur.....	1, 863
Total gravel excavated, mile 56.....	2, 055

The small output was caused by the long haul, it being 302 miles from the gravel pit to Healy.

November 8 the shovel was moved back to the rock slide at mile 15, Matanuska branch, for additional excavation. The following shows quantity and disposition of rock excavated there:

	Cubic yards
Riprap, mile 8 to mile 25, Matanuska branch.....	9, 192
Riprap, mile 225, bank protection, Susitna River.....	504
Total rock excavated, mile 15, Matanuska branch.....	9, 696

November 29 the shovel was returned to the gravel pit at mile 56 and again excavated gravel for concrete construction. The following shows quantity and disposition of output:

	Cubic yards
Bridge No. 32, mile $3\frac{1}{4}$	168
Bridge No. 33, mile $3\frac{1}{4}$	168
Bridge No. 37, mile $3\frac{3}{4}$	168
Bridge No. 530, mile 53.....	504
Anchorage yards, for concrete-pile construction.....	408
Bridge No. 2272, Talkeetna River.....	1, 468
Bridge No. 2111, Montana Creek.....	816
Bridge No. 2923, Mile $292\frac{1}{4}$	828
Total gravel excavated, mile 56.....	4, 528

December 20 the shovel was moved from the gravel pit, mile 56, to the rock pit, mile 81. The following shows quantity of rock excavated and its disposition: Riprap, mile 92 to mile 99, 2,844 cubic yards.

Steam shovel gang No. 2 was disbanded December 31, 1924, for the season, at rock pit, mile 81.

Summary of output of steam shovel gang No. 2, September 12 to December 31, 1924.

	Cubic yards
Gravel; ballast, bank widening, and fills.....	14, 524
Gravel; concrete construction.....	6, 583
Rock.....	13, 868

Total output, steam shovel gang No. 2, 1924..... 34, 975

Washouts.—Heavy rainfall in the month of July caused a rise in the streams between Seward and mile 55, resulting in washouts at mile 41. Two trains of rock to repair damage were brought from the pit at mile 84.

During the month of November high tides and heavy wind caused washouts on main line and on harbor track at Seward. Repairs were made by steam shovel gang No. 1.

During the month of April, due to mild weather, the grade softened in many places and at mile 458.4 washed out for one rail length.

On May 12 a small washout occurred at mile 348.2; repairs were made without delay to traffic.

On May 14 an ice jam formed in the Susitna River which caused the water to overflow the track for a distance of 2,000 feet, mile 237 and mile 238. When the water receded, large pieces of floe ice were left on the track. May 15 another jam formed in the river, causing a similar overflow on miles 237 and 238 for a distance of a mile and a half. The track was shifted from the roadbed, the grade washed out in several places, and the roadbed covered with floe ice from 5 to 10 feet thick. At the same time the high water caused 4 washouts on mile 242 and 2 on the siding at Lane. On mile 225 there were 4 washouts within a distance of one-fourth of a mile, all caused by ice jams and high water in the Susitna

River. Ditcher No. 101 was brought from Portage, ditcher No. 102 at Healy was placed in commission and brought to Curry, and extra gang No. 1 brought from Matanuska to Chase. With the aid of these organizations, and the assistance of the section crews, the track was repaired and made ready for service, May 19.

Rock, earth, and mud slides.—With a single exception, no earth, rock, or mud slides worthy of extended mention occurred. Small mud slides came down at various points along the line but were easily handled. In July several small rock and mud slides came down in Nenana Canyon, which were taken care of by ditcher No. 102.

The largest rock slide in the history of the railroad came down at mile 15, Matanuska branch, October 6, covering the track to a depth of 30 feet for a distance of 350 feet. Steam shovel gang No. 2 was put to work on it, and by casting over, excavated a grade for a shoofly around it. Track was then laid and traffic resumed October 13.

Snowslides.—The following snowslides occurred during the fiscal year:

Date	Location	Length	Average depth
Nov. 26	Snowshed No. 714	100	12
Feb. 11	Mile 76.5	300	20
Do.	Mile 78.5	500	8
Feb. 14	Mile 76.5	(¹)	-----
Do.	Mile 78.75	100	12
Feb. 23	Mile 71.4	300	10
Mar. 15	Mile 53.3	80	12
Apr. 6	Mile 49.7	60	10
Do.	Mile 52.2	60	5
Apr. 8	Mile 53.3	80	10
Do.	Mile 49.7	50	10
Apr. 9	Mile 47.0	50	8
Do.	Mile 53.0	60	20
Do.	Mile 53.0	100	20
Apr. 18	Mile 49.7	50	10
Apr. 19	Mile 76.4	150	27
Do.	do	120	27
Apr. 21	Mile 52.2	60	5
Apr. 26	Mile 48.1	80	22
Apr. 26	Mile 70.0	250	25
Apr. 27	Mile 49.6	1,000	15
Apr. 28	Mile 49.8	1,000	15
Do.	Mile 49.3	200	30
Do.	Mile 49.5	600	15
May 5	Mile 21.2	600	15
Do.	Mile 70.0	400	40
Do.	Mile 71.8	250	30
May 6	Mile 75.7	30	8
May 14	Mile 53.1	100	20
Do.	Mile 53.3	100	20
May 29	Mile 53.1	300	25
May 21	Mile 258 $\frac{1}{4}$	60	2

¹ Snowshed over both ends

² Wrecked Branch 49.3.

Following are tie replacements for the fiscal year ending June 30, 1925:

Seward to Anchorage	23, 212
Anchorage to Curry and Matanuska branch	51, 546
Curry to Healy	998
Healy to Nenana (including Healy coal spur)	24, 346
Nenana to Fairbanks	3, 736
Chatanika branch (narrow gauge)	4, 632
Total	108, 471

Following is the force report for this department for the fiscal year:

	1924						1925					
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
CONSTRUCTION												
B. and B. No. 2.....	21	41	42	52	52	24	16				13	20
B. and B. No. 5.....	32	27	26	39	42	48	48	52	47	36	36	34
B. and B. No. 6.....					10	10	14	43	56	40	24	
B. and B. No. 7.....												29
B. and B. No. 8.....			10	29	10	11	8					
B. and B. No. 9.....	11	15	11									
B. and B. No. 10.....				4	4							
Extra gang No. 1.....				28								
Extra gang No. 5.....		7	7	8								
Extra gang No. 2.....												14
Steam shovel No. 1.....			39	59	79	25						17
Steam shovel No. 2.....				18	20	21						
Residency No. 1.....											3	
Total.....	64	90	135	237	217	139	86	95	103	76	76	114
MAINTENANCE												
B. and B. No. 1.....	6	6	8	6	8	9	6	6	6	9	6	7
B. and B. No. 3.....	11	13	12	35	25	21	7	8	7	7	13	23
B. and B. No. 4.....	2	2	2	2	2	2						
B. and B. No. 6.....	7	6	6	6								7
B. and B. No. 7.....	6	6	6	6	7	6	6	6	6	13	11	
B. and B. No. 8.....		7										
B. and B. No. 9.....				8	7							
Extra gang No. 1.....	26	26	28						1		26	20
Extra gang No. 2.....	13	23										
Extra gang No. 4.....	21	20	20	19	16	18	18	18	15	15	14	13
Extra gang No. 6.....		9	9									
Steam shovel No. 1.....	19	32										
Steam shovel No. 2.....			21							7	13	8
Ditcher No. 1.....	8	8	8	8	8	8						7
Ditcher No. 2.....				7							7	
Sections:												
Seward—Anchorage.....	108	79	75	59	57	54	54	55	50	49	60	125
Anchorage—Curry.....	83	89	104	75	71	68	74	59	55	50	51	58
Curry—Fairbanks.....	251	246	233	77	80	89	96	101	95	99	122	153
Total.....	561	572	532	308	281	275	261	253	235	249	330	430
Grand total.....	625	662	667	545	498	414	347	348	338	325	406	544

Personal.—Mr. C. D. Pollock, bridge engineer, left the service November 5, 1924, and was succeeded by Mr. C. H. Holmes.

Mr. J. R. Sapp was appointed accountant for the department April 6, 1925.

Mr. J. E. Holmes was appointed acting roadmaster May 20, 1925, relieving Mr. J. K. Moore, who was granted 60 days' leave of absence.

Weather.—During the months of July, August, and September there was considerable rain over the entire line, light frost several times on the Fairbanks end in August, and on the 29th of August on the southern end. During the month of September it snowed several times in the Broad Pass district. The month of November was very mild, causing numerous slides. December and January were extremely cold, the thermometer ranging from 20° below to 66° below zero on the north end of the line, which hampered bridge construction considerably. February was mild with a good deal of snow over the entire line. On March 26, the temperature fell to 50° below zero on the north end, causing a number of track bolts to shear. April, May, and June were normal, a gradual thaw combined with rains causing many slides on the southern end of the line.

H. HORN,
Assistant General Manager.

REPORT OF SUPERINTENDENT, MOTIVE POWER AND EQUIPMENT,
MECHANICAL DEPARTMENT, FISCAL YEAR 1924-25

ANCHORAGE, July 1, 1925.

MR. NOEL W. SMITH,
General Manager Alaska Railroad,
Anchorage, Alaska:

I am giving below a summary of mechanical department progress operations, etc., in all shops during the fiscal year ending June 30, 1925.

Average number of men employed at Anchorage, 190; Fairbanks, 15; Nenana, 3; Nenana marine ways, 10; Curry, 9; Seward, 7; Healy, 3; total, 237, on the following work (including 3 pumpmen at various points on line):

Locomotives.—General shop and roundhouse work such as running repairs, overhauling, coaling, hostling, washing and inspection of boilers, hydrostatic tests, and all work necessary to maintain equipment in proper shape. Running repairs were made on 1,409 engines. Two engines received class 2 repairs, 4 engines received class 3 repairs, 6 engines received class 4 repairs, 25 engines received class 5 repairs, 37 engines received class 6 repairs.

We particularly invite attention to two engines receiving class 2 repairs—one 600 and one 200. The 600 received in addition to the regular class 2 repairs, a renewal of half the first course in boiler shell; a complete new throat sheet; all rigid stay bolts in breakable zone were replaced with flexible stay bolts. This is the first application of flexible stay bolts to any of our locomotives and expect to make a considerable saving in the number of bolts necessary to remove on periodical inspections.

The physical condition of our locomotives has improved steadily during the fiscal year. This is reflected in the reduced number of failures and hours of delay. At the time of writing this report two of our engines are in shop receiving repairs, the balance in good or serviceable condition.

In addition to locomotives the following work equipment received general overhauls and repairs comparable to the various classes used on locomotives from the standpoint of labor and material involved: 2 cranes, 1 track driver, 2 steam shovels, 1 caterpillar tractor, 2 ditchers, 2 rotaries, 1 pile-driver hoist, and 2 Russell plows. Other miscellaneous shop work, such as repairs to machinery, making stock material, overhauling gas cars and trucks, overhauling stationary boilers and engines, rewiring general office building, installing plumbing and fixtures in new Bureau of Mines building, constructing gravel spreader, toll boxes for telegraph and telephone department, welding sheet piling, rigging up boiler and flat car for use at slide, assembling pile driver for Alaska Road Commission, reinforcing rods for bridges, installing fire-protection lines in snowsheds, overhauled gas car 104, and constructed Pelton wheel, etc.

Car department.—Seventeen thousand three hundred and twenty-eight freight, 304 cabooses, 873 coaches, 171 baggage cars inspected; 1,288 cars cleaned, oiled, and tested; 519 coaches received light repairs, 17 heavy repairs; 2,020 freight cars received light repairs, 47 heavy repairs; 60 Oliver dump cars received extensive repairs. Air tested and adjusted on 598 cars. Coach No. 4, parlor observation car "Kenai," and coach "Nenana" were rebuilt; a supply car was constructed. Fifty-six dining-room chairs completed and work started on 10 rockers, 33 cabinets, and 10 writing desks for use at Curry Hotel. Other miscellaneous work, such as millwork for bridges, painting overhauled locomotives and cars, making stock material, etc.

Floating equipment.—At the beginning of the fiscal year steamers *Davis* and *General Jacobs* with barges were in revenue service on the Tanana and Yukon Rivers plying between Nenana and Holy Cross. At this time the annual inspection of floating equipment was made and the following report turned in by Government inspectors: "In the engineer's department of the steamer *Jeff C. Davis* the boiler and engines were found to be in good and efficient working condition. The engine room and the machinery well taken care of, showing a marked and commendable improvement over conditions as found at the last annual inspection August 7, 1923. In the engineer's department of the steamer *General Jacobs* the engine room was found to be maintained in a clean and well-kept condition and the engines in a well-cared for and efficient working condition."

Making on an average of four round trips a month the season ended October 3 and boats were put on marine ways for the winter. Extensive repairs, as well as additions and betterments, were made to this equipment, the work carrying on all winter. The gas boat *Eklutna* was given a general overhauling and a new gas engine installed. The *Matanuska* received repairs consisting of complete remodel-

ing of above deck, installation of a new gear and chain transmission, and a complete general overhauling of the engine. Considerable trouble has been experienced in the past with the old transmission. While the new one is a home-made affair, made in the shops here in Anchorage, it is sturdy and we are confident will prove very reliable, and through this we expect to make a considerable saving in the fuel consumption of the engine.

The expense of the work on the *Jacobs* and *Davis* this year was slightly higher than the year 1924—considerably lower than the year 1923. This equipment is getting to the stage that to maintain in a safe and operative condition, and to properly pass inspection, undoubtedly a slight increase in the cost of repairs and launching will be noted every year until they are retired. The steamer *Jacobs* was converted into a coal burner. After one trip—a round trip to Ruby—it was proven beyond doubt that coal could be successfully used as fuel in these boilers, consumption on the first trip being 42 tons, the complete trip requiring 182½ hours. While this consumption is a trifle high when considered on a mileage basis, a better performance was made after making minor changes and adjustments and after the engineers became more familiar with the handling of coal. On the last trip of the fiscal year in June—a round trip 25 miles below Ruby—the coal consumption was reduced to 35½ tons in a running time of 106½ hours.

At Anchorage marine ways the launching of the steam tug *Annie W* was completed and turned over to the United States Coast and Geodetic Survey. The launching was made May 9 at 6.15 p. m. Inasmuch as this boat had not been used for the past three years, the ways were not only covered with ice but with 2 and 3 feet of mud, and it was quite a job to handle with our equipment.

Private jobs contracted.—Various mechanical department employees were used on private jobs contracted with citizens and merchants. These consisted of 187 jobs and 2,006 man-hours during the fiscal year.

Water service.—Approximately 76 per cent of this department's time during the fiscal year was spent on repairs and upkeep of 36 Government dwellings, office buildings, hotels, cafeteria, etc.

Power plant.—In order to cut down coal consumption numerous changes were made in Anchorage power plant. A 300 kilowatt generator, a condenser with 900 square feet of cooling surface was installed, also a 12 by 20 by 30 foot cooling tower and necessary vacuum pumps. These changes have resulted in reducing the coal consumption considerably. Comparing the month of June, 1925, with the same month last year, the coal consumption was 184 tons less with a 28,300 kilowatt hour increase over June, 1924, a reduction of approximately 0.02 per kilowatt hour. A full report showing cost per kilowatt hour, coal consumption per month, and other data, will be shown in the next annual report. A steam jet ash conveyor, built in our shops, was also installed. This has proven successful and has reduced the cost of ash handling. Net consumption of coal was 14,160.91 tons. Total alternating current energy produced, 1,336,700 kilowatt hours. Total direct current energy produced, 22,160 kilowatt hours. Alternating current proportion of energy metered, 98.87 per cent; direct current, 1.63 per cent.

Time lost due to engine failures and delays.—Terminal delays, 5 hours 40 minutes; road delays, 40 hours 42 minutes; engine failures, 3 hours 45 minutes. During the winter months the time lost was unusually high, due to the extreme cold weather, the coldest experienced in the history of the Alaska Railroad from Seward to Fairbanks. As an illustration, on January 23 it was 66° below zero at Nenana; engine No. 264, extra north, was delayed 1 hour 25 minutes account drivers frozen to rail. Other delays were caused by air freezing up and brakes sticking account of being frozen. Considering difficulties encountered during the winter account of the extreme cold weather it is remarkable that time lost was not considerably greater than as indicated above. Due credit for this showing is given the engineers.

Sick and annual leave—Saturday half holiday.—Sick and annual leave and Saturday half holiday for the mechanical department for the fiscal year amounted to \$7,785.61.

Warehouse No. 2.—Acting under instructions from special assistant to the Secretary of the Interior, and effective October 1, 1924, the material yard, warehouse No. 2, and corral were placed under the supervision of the superintendent of motive power and equipment. All employees in these departments (64 men), including laborers and crane employees, formerly carried on stores department pay roll, were transferred to the mechanical department roll.

In taking over these departments the additional duties of the mechanical department will be the requisitioning, handling, and issuing of all material and supplies used in the mechanical, track, bridges and building, and telegraph and telephone

departments; the operation of yard cranes serving all departments; the preparation and writing of contracts and bonds in connection with mechanical and marine property; the ordering, handling, and disbursing of all coal used by all departments of the railroad, such as transportation department, pump stations, section houses, power plants, and coal sold to employees. The accounting for and distribution of labor and material in connection with these departments has been combined with the mechanical department's monthly report.

R. H. HALE,
Superintendent Motive Power and Equipment.

STATEMENT OF WORK PERFORMED BY THE PURCHASING DEPARTMENT OF THE ALASKA RAILROAD, INCLUDING PURCHASES, INSPECTION, AND TRANSPORTATION OF MATERIALS, AND EMPLOYMENT OF LABOR FOR THE FISCAL YEAR 1925

JULY 15, 1925,

Purchases

Number of circulars calling for bids.....	259
Purchase orders drawn, D-24607, D-26385.....	1, 779
Total amount.....	\$736, 819. 57

The principal items of purchase for the fiscal year 1925 were:

Track material.....	\$31, 581. 56	Electrical supplies (tele-	
Bridge steel.....	248, 839. 60	graph and telephone)....	\$27, 346. 32
Sheet-steel piling.....	3, 778. 55	Telephone poles.....	6, 577. 30
Cement.....	29, 025. 00	Commissaries.....	212, 772. 78
Rolling stock, etc.....	31, 922. 86	Furniture, furnishings,	
Shop machinery, tools, etc.	39, 589. 51	clothing.....	16, 131. 16
Lumber.....	13, 064. 93	Kitchenware.....	1, 202. 25
Building materials, hard-		Printing, stationery, etc..	9, 650. 48
ware, etc.....	9, 512. 76	Hospital supplies.....	4, 187. 90
Paints, oils, gas.....	20, 624. 01	Fire apparatus, hydrants..	2, 014. 92
Canvas, flags, etc.....	3, 047. 19	Explosives.....	8, 117. 50
Plumbing, heating, light-		Forage.....	6, 644. 00
ing.....	13, 157. 34		

In addition to orders placed with 240 local manufacturers, dealers, and agencies, business was awarded to 236 firms in 68 other cities in 20 States and the District of Columbia.

Statement of sales of miscellaneous materials returned from Alaska

Number of sale orders.....	6
Total amount.....	\$3, 675. 56

INSPECTION

From July 1, 1924, until April 10, 1925, inspection was conducted under existing agreements with firms of Northwest Testing Laboratories (representing Pittsburgh Testing Laboratory), Seattle, Robt. W. Hunt & Co., Chicago; and Hildreth & Co., New York, costing.....

\$3, 683. 19

This includes the inspection and checking drawings of steel bridges, amounting to \$2,643.46, making the net cost of inspection of miscellaneous materials under the contracts \$1,039.73.

From April 11 to June 30, inspections in the East were handled by the most conveniently located inspection firms at a cost of.....

77. 62

Local inspections for the fiscal year were made by employees of this office at a cost of.....

1, 169. 01

Total cost of inspection.....

4, 929. 82

Lumber purchased under conditions of the orders placed was inspected by the Pacific Coast Lumber Inspection Bureau (Inc.), without charge to the Alaska Railroad, checked at point of loading by an employee of the railroad.

TRANSPORTATION

Transportation of supplies.—Following is statement of tonnage and freight cost of supplies moving by water from Seattle to Seward, Alaska, July 1, 1924, to June 30, 1925:

	Tons	Feet, board measure	Total
Seattle to Seward.....	8,741,107	1,347,194	10,088.30
Cost.....	\$100,985.04	\$13,471.94	\$114,456.98

In addition to the foregoing, certain expenses were incurred in connection with the shipment of freight over Seattle terminals, as follows:

Wharfage and handling at Pier 2 and G. T. D.....	\$1,438.12
Wharfage and handling at port commission docks.....	3,551.51
Storage.....	17.86
Total.....	5,007.49

Shipments by rail, en route to and from Seattle on Government bill of lading

Number of bills of lading.....	227
Freight cost.....	\$48,158.90
Drayage charges.....	157.97
Total.....	48,316.87

Transportation of passengers.—During the fiscal year 1925 there were carried by the steamship companies between Seattle, Seward, and Anchorage, on Government transportation requests, at the expense of the Alaska Railroad, 63 passengers at a cost to the railroad of \$2,548.50.

Under contract with the Alaska Steamship Co. and the Pacific Steamship Co., which expired January 31, 1925, the railroad's employees and dependent members of their families were granted a three-quarter rate for transportation to and from Seattle and Seward or Anchorage, at a saving to them of \$4,744.65.

Transportation by rail, including sleeping-car fares, on Government transportation requests, vouchered through the Seattle office, amounted to \$2,712.80.

EMPLOYMENT

Thirteen skilled and clerical employees were procured by the Seattle office and sent to Alaska during the fiscal year 1924-25.

DISBURSEMENTS

Disbursements by the Seattle disbursing office for the period July 1, 1924, to June 30, 1925, amounted to \$890,820.60; cash discounts of \$1,419.01.

OFFICE FORCE AND EXPENSE OF PURCHASING DEPARTMENT

For the fiscal year 1924-25 the expenses of the Seattle office were as follows:

Pay roll.....	\$23,622.58
Rent.....	1,490.00
Telegraph and telephone.....	617.99
Miscellaneous.....	131.80
Advertising.....	286.91
Travel.....	280.85
Total.....	26,430.13

SUMMARY

Purchases: Number circulars issued, 259; purchase orders placed, 1,779; total amount-----		\$736,819.57	
Sales: Number sale orders placed, 6; amount-----		3,675.56	
Inspection:			
Inspection and check, steel bridges-----	\$2,643.46		
Inspection, miscellaneous supplies-----	2,286.36		
			4,929.82
Transportation of supplies:			
By water-----	\$114,456.98		
Terminal charges-----	5,007.49		
		119,464.47	
By rail-----	48,158.90		
Drayage-----	157.97		
		48,316.87	
			167,781.34
Transportation of passengers:			
By steamer-----	2,548.50		
By rail-----	2,712.80		
			5,261.30
Expense of Seattle office, including branch offices at Portland and San Francisco-----			26,430.13
Total-----			944,897.72

C. E. DOLE,
General Purchasing Agent.

REPORT OF STORE DEPARTMENT, FISCAL YEAR ENDING JUNE 30, 1925

ANCHORAGE, ALASKA, July 8, 1925.

Mr. NOEL W. SMITH,
General Manager, The Alaska Railroad,
Anchorage, Alaska.

SIR: Herewith report of store department activities for the fiscal year ending June 30, 1925, submitted, as requested, along the lines of similar reports for previous years:

COAL

The total amount of coal of all classes delivered by various contractors amounted to 58,698.116 tons, which is approximately 12,000 tons more than the deliveries for the previous fiscal year.

The total amount of coal consumed was 60,020.214, which is approximately 4,000 tons less than for the year ending June 30, 1924.

Detailed statement hereto attached.

WOOD

From the 1924 operation of river steamers 579 cords of wood were reported on hand. Contracts were let for a total of 1,555 cords additional at an average cost of \$7.31 per cord. Due to extremely high water much of the wood cut for delivery under these contracts was washed away and only 316.25 cords were inspected and accepted at the opening of navigation this year. Some of this may be salvaged later.

PILING

Twenty thousand and five linear feet of piling of various lengths were contracted for and delivered during the year, at an average cost of \$0.17 per linear foot.

TIES

Contracts were completed, and operations actually begun by the contractors thereunder, calling for delivery of 200,300 crossties at an average price of \$1.07 each. Of this number 77,626 were delivered and accepted to June 30, 1925.

It is estimated that before expiration of the various contracts, approximately September 1, 1925, an additional 36,000 ties will be delivered, bringing the quantity up to 113,626 delivered under the 1924-25 contracts.

Respectfully submitted.

ROBT. HUNTLEY, *General Storekeeper.*

Coal receipts for the fiscal year ending June 30, 1925

Month	Evan Jones	Healy	Premier	Baxter	Rawson	Heckey	Roth	Total
1924								
July.....	5,167	64.8	269					5,500.8
August.....	6,026.7	50.25	80.25					6,157.2
September.....	2,090.8	729.5775	657.9					3,478.2775
October.....	5,045.71	1,873.4775	570.0835					7,489.2710
November.....	5,064.7775	832.4175	848.725					6,745.92
December.....	5,957.8725	728.2650	987.149	102.575	314.8245			8,090.6860
1925								
January.....	5,514.9225	1,033.9080	82.45	227.0525	397.9525			7,256.6855
February.....	2,666.1540	1,141.850	40.50	391.175	216.369	318.4		4,774.0080
March.....	2,468.465	779.0075		588.838	79.425	83.5	37.4	4,036.6355
April.....	1,268.1185	1,133.5225	189.8	673.3615				3,264.8025
May.....	18	462.86	384.2					865.06
June.....	13	399.8	625.88					1,038.68
Total.....	41,301.52	9,229.7355	4,735.9875	1,983.0020	1,008.5710	401.9	37.4	58,698.1160
On hand June 30, 1924.....								
Received July, 1924, to June 30, 1925.....								9,336.10
								58,698.116
On hand June 30, 1925.....								68,034.216
								8,014.002
Consumed, fiscal year ending June 30, 1925.....								60,020.214

ROBERT HUNTLEY, *General Storekeeper.*

MINING TRIBUTARY TO THE ALASKA RAILROAD

COAL MINING

Production of coal from the Matanuska and Nenana fields for the fiscal year ending June 30, 1925, amounted to a total of 92,270 tons, which is an increase of approximately 5,000 tons over that of the preceding fiscal year. Of the total tonnage, 70 per cent was produced in the Matanuska field, and 30 per cent in the Nenana field. Of the coal produced in the Matanuska field, approximately 200 tons was semibituminous coking coal, mined at Coal Creek in the Chickaloon section. The balance, which is high-grade subbituminous coal, came from the Eska-Jonesville and Moose Creek sections. The former section produced 49,274 tons, all of which came from the Evan Jones mine at Jonesville, and the latter produced 15,049 tons, which came from the Premier, Baxter-Bedell, and Rawson properties. With the exception of about 500 tons mined during the winter at the Roth property on upper Healy River, all coal mined in the Nenana field was produced at the Suntrana mine of the Healy River Coal Corporation at Healy.

Prospecting for and development of coal seams in the Matanuska field proceeded during the year with the result that the proven available tonnage of commercial coal is very materially increased over the preceding year. The most significant new developments of the year were the cutting of the coal seams of the north limb of the Eska syncline by the crosscut tunnel driven from the bottom level of the Evan Jones mine; and the demonstration of probably important additional reserves of mineable coal on each of the units of the Moose Creek section, particularly the Howard-Jesson permit area. The tonnage exposed on the Howard-Jesson ground is sufficient to warrant the construction of an extension of the Moose Creek spur to the property, and preliminary work in preparation for the building of this spur has been commenced. Renewed interest was manifested in the deposits of anthracite coal at Anthracite Ridge, east of Chickaloon, to which section several trips were made by interested parties. It was found that prospecting work sufficient to demonstrate the probable tonnage of anthracite coal in the deposits that would be available for mining at a reasonable cost is probably justified, and steps are being taken to secure capital for that purpose.

Important underground developments at the Suntrana mine in the Healy River section of the Nenana field consisted in extensive work on the sixth seam of the coal series, that has served to prove the commercial value of that bed and the existence of a very large additional tonnage of cheaply mineable coal. Additional knowledge of the large seams of coal known to exist in the easterly portion of the Healy River section was gained by prospecting and development work conducted during the winter months on the Roth permit area, which lies several miles up Healy River from the Suntrana mine. Under favorable conditions this area could probably produce an enormous tonnage of coal of satisfactory grade, some of which is cannel coal.

PLACER MINING

Tributary to the Alaska Railroad are about 20 placer mining districts, within which active operations were conducted in 1924, and in connection with which operations approximately 1,500 men were employed. In a general way these tributary placer regions may be grouped as follows: Fairbanks; upper Yukon, including the Chandalar, Circle, Eagle-Seventy-Mile and Forty-Mile districts; central Yukon, including the Tolovana, Hot Springs, and Rampart districts; lower Yukon, including the Ruby, Marshall, Iditarod-Innoko and Koyukuk districts; the Yentna region; and the Kenai Peninsula region. In addition to the above main regions, placer mining operations were conducted on a small scale in the Kantishna, Bonfield, and Valdez Creek districts.

While definite figures are not yet at hand as to the production of gold from the various placer regions, it is known that the value of the output in 1924 exceeded that of 1923 by about \$250,000. Operations on the upper Yukon were hampered by an unusually dry season and consequent shortage of water, but other districts experienced favorable water conditions and many of them showed an increased output over the preceding year.

Important developments in the placer-mining situation in the Fairbanks region became known during the year that give promise of greatly increased activity in that region over a period of many years to come. It has long been known that throughout the Fairbanks region there are large reserves of low-grade gravels that can not be profitably mined by methods heretofore employed. The mining of these gravels on a large scale, by means of dredging, following improved thawing methods of comparatively recent developments and greatly improved transportation facilities and fuel supply afforded by the Alaska Railroad, seems now assured. By the close of the fiscal year approximately 300 men were employed by the Fairbanks Exploration Co. in preliminary development work and construction. During the past winter an extensive program of drilling was carried on by this and other companies by which was determined the gold content of large areas in the several sections of the Fairbanks region. The results were apparently satisfactory. Aside from the work of exploration and development there were 55 productive summer placer operations in the Fairbanks region, employing approximately 300 men, and 18 winter drift mines, employing about 100 men. The value of the gold output of the region was greater than in 1923. The summer operations included three dredges, one of which was operated for the first time in 1924.

Most of the operations in the upper Yukon region are conducted by small groups of miners or single individuals who are scattered over wide areas. In 1924 there were about 230 placer miners employed in the region. The season was unusually dry and therefore unfavorable for successful placer operations, and the value of the gold produced was less than for the preceding year. The Berry dredge was operated as usual on Mammoth Creek in the Circle district.

The Hot Springs and Tolovana districts of the central Yukon region had unusually good supplies of water in 1924, and as a consequence made an increased production of gold over 1923. The Rampart district was very quiet, and only about 20 men were employed during the season of 1924.

About 30 placer operations were conducted in the Iditarod district, that gave employment to 135 men. Two dredges, employing 39 men, were operated on Otter Creek. A good supply of water was available in most sections of the district. A shortage of labor was experienced after the middle of July. The gold output of the district for 1924 was about \$175,000. The gold produced in the Innoko district was somewhat less than in 1923. Two dredges, one hydraulic plant, and eight ground-sluicing plants were operated in the district during the year. Very little activity is reported from the Ruby district, and likewise from

the Marshall district on the lower Yukon. While the production of gold from the Koyukuk district was comparatively small, very encouraging results were obtained from the extensive prospecting that was carried on.

Placer-mining operations in the Yentna region gave employment to about 100 men in 1924, and included 1 dredge, 14 hydraulic plants, and 6 ground-sluicing plants. The season was favorable in so far as water conditions are concerned, and the normal output of gold was maintained.

In the Hope, Sunrise, and Girdwood districts of the Kenai Peninsula region five hydraulic plants and a number of ground-sluicing outfits were active during the year. The total gold output of the region for 1924 is estimated to be about \$32,000.

Activities in the Kantishna, Bonnifield, and Valdez Creek districts were on a small scale, and the production of gold from them was not of importance.

LODE MINING

The extent and importance of mineral resources in the form of lode deposits in regions tributary to the Alaska Railroad are very imperfectly known. Lode mining has been very slow in developing and at the present time is confined wholly to free-milling gold ores, which, being treated at the localities where mined, provide no important tonnage to the railroad. Prospecting for lodes in the interior of Alaska has been subordinated to the more alluring search for placer gold. The scarcity of bedrock outcrops in large sections of the interior regions has also prevented the discovery of lode deposits that may exist. Owing to lack of trails and difficulty of access, areas in the Alaska Range, the Talkeetna Mountains, and the Chugach Range that are known to contain ores of metals other than gold have been but imperfectly examined, and little is known of their potential importance to the railroad as sources of tonnage.

The yield of gold from the numerous small but relatively high-grade lodes of the Fairbanks district was slightly less in 1924 than in 1923. The reduced cost of operation brought about by the completion of the Alaska Railroad to Fairbanks will probably result, however, in the reopening of many small quartz properties that have been idle for years and a more intensive search for new veins.

The Willow Creek district in the Talkeetna Mountains is the most important lode gold area yet discovered tributary to the railroad. The production of gold from this district in 1924 amounted to about \$200,000 and development work done during the year indicates a materially increased production for the year 1925. A very encouraging feature of the past year's development work in the Willow Creek district is the success attending the search for ore at much lower levels than have heretofore been opened in the district.

As a result of improved transportation provided by roads being constructed by the Bureau of Public Roads, a notable increase in prospecting for gold lodes on Kenai Peninsula was evident during the year.

Work was continued at the Liberty Bell property near Ferry, in the Bonnifield district, where a gold lode has been under development for the past three years, with a crew of about 15 men engaged.

Additional development work was also done on a promising ruby silver lode prospect on Portage Creek near Chulitna station.

ANALYSES OF VARIOUS COAL MINES TRIBUTARY TO THE ALASKA RAILROAD

MATANUSKA FIELD

Evan Jones Coal Co.—The mine of the Evan Jones Coal Co. is situated at Jonesville, 1 mile west of Eska. The analysis given is of the average of samples taken of the coal delivered to the Alaska Railroad during the month of February, 1925. The coal was mined from the south limb of the Eska syncline and was washed at the coal washery at the mine. The plant is served by a standard-gauge spur of the Alaska Railroad.

	As received	Air dried	Dry coal
Moisture.....	7.22	2.85	-----
Volatile matter.....	38.28	40.08	41.26
Fixed carbon.....	45.42	47.07	48.19
Ash.....	13.52	14.16	14.57
British thermal units.....	11,373	11,909	12,258
Sulphur.....	.32	.33	.35

Ross Heckey property.—The coal mined at the Ross Heckey property is a semi-bituminous coking coal, suitable for use as blacksmith coal. The coal is secured from the westerly extension of the seams developed by the Navy Alaska Coal Commission at Coal Creek, 2 miles from the junction of the Chickaloon and Matanuska Rivers, and is mined during the winter and sledded to the railroad across the ice. This coal is used by the Alaska Railroad in making coke for foundry use, and is found to be equal to eastern coking coals for this purpose.

	As received	Air dried	Dry coal
Moisture.....	2.39	0.40	-----
Volatile matter.....	21.68	22.12	22.21
Fixed carbon.....	67.85	69.23	69.51
Ash.....	8.08	8.25	8.28
British thermal units.....	13,973	14,258	14,315
Sulphur.....	.61	.62	.63

Premier Coal Mining Co.—The Premier Coal Mining Co. operates under the lease of Bruno Agostino on unit No. 1 in the Moose Creek section. The coal is hoisted through a slope from the main gangway level, which is at a depth of approximately 250 feet below the surface. The mine is adjacent to the tracks of the Moose Creek narrow-gauge spur of the Alaska Railroad. The analysis is of samples of the coal delivered to the Alaska Railroad in April, 1925.

	As received	Air dried	Dry coal
Moisture.....	5.46	2.54	-----
Volatile matter.....	37.69	38.86	39.87
Fixed carbon.....	44.53	45.90	47.10
Ash.....	12.32	12.70	13.03
British thermal units.....	11,772	12,136	12,452
Sulphur.....	.20	.21	.22

Phillips Coal Co.—The Phillips Coal Co. operates under the permit of the Rawson Coal Co., whose property is situated on the line of the proposed extension of the Moose Creek spur and about 2½ miles above the present terminus of the spur. The analysis is of samples of a car of coal delivered to the Alaska Railroad in April, 1925.

	As received	Air dried	Dry coal
Moisture.....	5.60	1.85	-----
Volatile matter.....	37.82	39.32	40.06
Fixed carbon.....	44.55	46.32	47.19
Ash.....	12.03	12.51	12.75
British thermal units.....	11,756	12,220	12,453
Sulphur.....	.19	.20	.21

Alaska Bituminous Coal Co.—The Alaska Bituminous Coal Co. operates the property that has formerly been known as the Baxter, or Baxter-Bedell mine, which is situated at the present terminus of the Moose Creek narrow-gauge spur of the Alaska Railroad. The analysis given is of a face sample taken from a seam recently developed on the property, and is, therefore, not representative of the average of the coal that has been delivered from the property.

	As received	Air dried	Dry coal
Moisture.....	5.47	2.55	-----
Volatile matter.....	39.14	40.35	41.40
Fixed carbon.....	46.74	48.18	49.45
Ash.....	8.65	8.92	9.15
British thermal units.....	12,383	12,766	13,100
Sulphur.....	.50	.52	.53

The following is the analysis of the average of samples of 7,500 tons of run-of-mine coal delivered to the Alaska Railroad in 1923:

	As received	Air dried	Dry coal
Moisture.....	4.74	-----	-----
Volatile matter.....	36.38	38.19	46.32
Fixed carbon.....	42.16	44.26	53.68
Ash.....	16.72	17.55	-----
British thermal units.....	11,231	11,790	14,300
Sulphur.....	.31	.33	.39

Alaska Matanuska Coal Co.—The Alaska Matanuska Coal Co., otherwise known as the Jesson-Howard interests, hold under permit an area extending for about 4 miles along Moose Creek. The lower end of the property lies adjacent to the Agostino lease premises and the property of the Alaska Bituminous Coal Co. The principal development work has been done at a point about a half mile above the workings of the Rawson Coal Co., and about 3 miles above the mine of the Alaska Bituminous Coal Co. The extension of the narrow-gauge spur of the Alaska Railroad will reach the upper end of the property. Commercial production has not yet been attempted but surface and underground development work has demonstrated the existence of a large tonnage of coal on the ground. The analysis given is that of a face sample taken from No. 3 bed where it was penetrated by the main crosscut adit.

	As received	Air dried	Dry coal
Moisture.....	5.74	3.32	-----
Volatile matter.....	39.76	41.20	42.18
Fixed carbon.....	45.42	47.07	48.19
Ash.....	9.08	9.41	9.63
British thermal units.....	11,951	12,384	12,679
Sulphur.....	.27	.28	.29

NENANA FIELD

Healy River Coal Corporation (Suntrana mine).—The Suntrana mine of the Healy River Coal Corporation is served by a standard-gauge spur of the Alaska Railroad extending approximately 4 miles up Healy River from the town of Healy. The coal mined, while possessing the lignitic characteristic of slaking on exposure to air, has been pronounced a subbituminous coal. The analysis is that of a composite of the samples taken of the coal delivered to the Alaska Railroad during the month of February, 1925.

	As received	Air dried	Dry coal
Moisture.....	21.16	14.31	-----
Volatile matter.....	39.72	43.22	50.38
Fixed carbon.....	31.29	34.05	39.69
Ash.....	7.83	8.52	9.93
British thermal units.....	8,883	9,666	11,267
Sulphur.....	.19	.21	.24

Roth property.—The R. F. Roth property, which is held under permit, is situated about 8 miles above Suntrana on Healy River. Coal is mined only during the winter months, when it may be sledged down Healy River on the ice to the railroad spur at Suntrana. The analysis is that of a composite of samples taken of 16 cars of coal shipped during March, April, and May, 1925.

	As received	Air dried	Dry coal
Moisture.....	16.80	8.07	-----
Volatile matter.....	42.34	46.78	50.89
Fixed carbon.....	37.52	41.46	45.10
Ash.....	3.34	3.69	4.01
British thermal units.....	10,621	11,736	12,767
Sulphur.....	.10	.11	.12