

UNITED STATES DEPARTMENT OF THE INTERIOR

**ANNUAL REPORT OF
THE GOVERNOR
OF ALASKA**

*TO THE SECRETARY OF THE INTERIOR
FOR FISCAL YEAR ENDED JUNE 30, 1933*

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Presented to Anchorage Office
Territorial Dept. of Mines, March 5, 1933

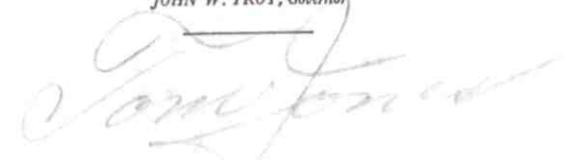
By
Wyman Anderson, Mt. View, Alaska

UNITED STATES DEPARTMENT OF THE INTERIOR

HAROLD L. ICKES, Secretary

TERRITORY OF ALASKA

JOHN W. TROY, Governor



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UNITED STATES

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By
Wyman Anderson, Mt. View, Alaska

ANNUAL REPORT OF THE GOVERNOR OF ALASKA

INTRODUCTION

This annual report of the Governor of Alaska is based upon the record of the year that terminated June 30 last. I did not become governor until after the middle of April, therefore less than 2½ months covered herein has to do with the present administration.

The facts and figures and, in a large measure, the language of the report comes from others.

My few months' experience as Governor of Alaska has confirmed a life-long conviction that, wherever possible, Alaska should govern herself. Her laws should be made by her own legislature and executed by her own officials. There should be a system of counties or other means of local government.

The Federal governmental functions in Alaska, as much as possible, should be under the direction of Alaskans and people on the field should have wide discretion and authority to act on their own judgments. None is so interested in Alaska as those who live here. And there are plenty of capable men and women in the Territory to fill all of the responsible positions.

Complaint is not infrequently heard from the States about the large cost of Alaska to the Federal Government. It is sometimes said that more money is appropriated annually for Alaska than was ever appropriated for any of the other Territories. But the treatment of the other Territories was far different than has been that of Alaska. All of the land and other natural resources of the other Territories were available for the use of the people who came to them, used the resources, and brought about the development of commonwealths. During the period of Alaska's greatest growth the Federal appropriations for the Territory were inconsiderable. But in that time residents of the Territory could take over and utilize the natural resources just as could the pioneers in former frontiers when civilization was quickly and triumphantly advancing from the Atlantic to the Pacific. But the application of the so-called conservation policies to Alaska changed things. Timber lands, coal lands, oil lands, water power, and other natural resources were withdrawn from private appropriation to remain the property of the Federal Government.

It was some time after the withdrawal before the various bureaus and departments in Washington worked out plans for the utilization of resources through leases and so forth. In the meantime, many thousands of people who probably would have been employed in private enterprises had been left as they were left the Territory. This evacuation was accelerated, of course, by the World War and the resulting enormous wages and profits in the States.

I believe, however, that so-called conservation has been accepted by the American people as a settled national policy. I believe, further,

TERRITORY OF ALASKA,
OFFICE OF THE GOVERNOR,
Juneau, September 29, 1933.

HON. HAROLD L. ICKES,
Secretary of the Interior, Washington, D.C.

SIR: I have the honor to transmit herewith the annual report of the Governor of Alaska for the fiscal year ended June 30, 1933, with some recommendations.

Respectfully,

JOHN W. TROY, Governor.

that while the transition from development through private enterprise to utilization under governmental regulations was costly, development is now proceeding and will continue to proceed under the changed conditions.

However, the change has made the Federal Government the permanent owner of a large proportion of the wealth and resources of the Territory that would be paying taxes into local treasuries if it had not been for the interruption of private ownership of resources. That makes it the plain duty of the Federal Government to take the place of potential taxpayers and contribute largely for the development of resources owned by itself. Nothing less will be fair play for those pioneers who have come into the Territory and invested their money and time and brought about the considerable development that we have had. It is the obvious duty of the Federal Government to build roads that will afford transportation that would have been supplied by private capital if the private enterprises could have acquired the natural resources.

It is not improbable that development under conservation policies might in the end be more satisfactory to the people, though that has yet to be proved. The Federal bureaus are clearly striving for progress and to be useful to the people.

LABOR CONDITIONS

The unemployment situation in the Territory during the fiscal year was one of the major problems confronting Federal and Territorial officials, as well as local communities. Local public welfare programs were inaugurated in several districts during the winter of 1932-33 to relieve this condition. Unsatisfactory market conditions for fishery products and for base metals caused widespread unemployment among persons usually engaged in these industries. However, toward the latter part of the fiscal year an upward trend of prices for products from these industries gave promise of enabling them again to operate on a profitable basis with a normal supply of labor employed. By the National Reforestation Act passed by Congress March 31, 1933, funds were allotted for emergency conservation work in the States and Alaska. Allotments to employ 325 men in Alaska were made and the matter of organizing and supervising this work was delegated to the Forest Service, which has displayed the characteristic efficiency of this organization in its work.

During 1932 there were approximately 3,754 men employed in the mining industry, which is an increase of about 216 over the number employed during 1931. This is due to increased activity in gold mining and the reopening of the marble quarry at Token during the year. There was further curtailment of operations at copper mines, where there were only 143 men employed in 1932 compared with 208 in 1931. Of the men employed in the mining industry during 1932, approximately 2,180 were engaged in connection with placer mining, 78 in coal mining, and 1,496 in lode mining.

The working season in the fisheries industry, generally speaking, lasts from 4 to 8 months, depending upon the locality and the nature of the fishery. It is confined generally to the coastal regions of the first and third judicial divisions. From 35 to 50 percent of the labor employed in this industry in the first division, which embraces all of

southeast Alaska, is secured locally from the resident population. About 10 percent of those so employed are Indians. The balance of the employees are imported from the States for the fishing season only.

WAGES

Fishery.—In the fishing industry the reduced scale of wages adopted in 1931 was again in effect during the season of 1932. Wages paid general cannery labor secured locally in the first division range from \$1.70 to \$3 per day for women and from \$3 to \$4.25 per day for men. In the third division wages for women range from \$1.70 to \$3.40 per day and for men from \$2.15 to \$4.25 per day. All other labor is paid on a monthly or seasonal basis.

Mining.—Labor in the mining industry of Alaska is employed under widely varying conditions, controlled both by location of the operation and nature of the work. It is difficult to make general statements regarding wage scales.

In placer mining wages for general labor range from 50 to 80 cents per hour and board. The hours of labor per shift range from 8 to 10, and the cost of board per man per day ranges from \$1.50 in the Cook Inlet region to \$4 in remote districts such as Shushana and Koyukuk. Wages for skilled workmen range from \$5 per day and board for oilers in the Yentna district to \$13 per day and board for dredge masters.

The wage scale for coal miners is quite uniform. Underground coal miners and timbermen receive \$8.60 per day; underground laborers, trammers, and rope riders, \$7.80 per day; and outside labor, \$5.50 per day. Fire bosses are paid \$250 per month and foremen from \$250 to \$300 per month. Deductions from the above wages are made for board at rates of from \$1.50 to \$2 per day.

TERRITORIAL FINANCES

The fiscal system of the Territory is controlled by laws enacted by the Territorial Legislature, and is separate from revenues received by the Federal Government from business and trade licenses which are covered into and disbursed from the "Alaska fund" in the Federal Treasury. Territorial revenue acts have been amended from time to time. The general act in effect at this time (ch. 31, Session Laws of Alaska, 1921, and amendments thereto), together with certain other special revenue acts, imposes license taxes for various occupations and industries.

There is no system of property taxation in Alaska except for municipal purposes, but the Territory is in receipt of other revenues in addition to license taxes. Railroads pay a tax of 1 percent on gross receipts, 25 percent of the receipts of the national forests in the Territory accrue to it, and a poll tax for school purposes of \$5 per annum on all men between the ages of 21 and 50 years, is in effect. Estates of deceased persons without heirs escheat to the Territory. The legislature of 1919 passed inheritance and profits tax laws, but only small results have thus far been realized under these.

The condition of the Territorial treasury for the year ended December 31, 1932, was as follows:

Balance of cash on hand Jan. 1, 1932.....	\$298, 920. 92
Total receipts from all sources.....	994, 529. 60
Total disbursements under appropriations made by the Territorial Legislature.....	1, 022, 017. 06
Balance of cash on hand Dec. 31, 1932.....	271, 433. 46

ALASKA FUND

The Federal Government collects revenue for the benefit of the Territory from business and trade licenses issued outside of incorporated towns, through tax collections by the clerks of the district courts, deposited to the credit of the Treasurer of the United States, and by him credited to the Alaska fund, under the act of Congress approved January 27, 1905. Sixty-five percent of the money paid into this fund is used for the construction and repair of roads and trails outside of incorporated towns and expended under the direction of the Alaska Road Commission; 25 percent is used for the maintenance of schools outside of incorporated towns, expenditures being made upon requisitions by the Governor of Alaska upon the Treasurer of the United States through the Secretary of the Interior; and 10 percent for the relief of indigents, disbursed by Federal judges under the act of Congress approved March 3, 1913.

TERRITORIAL BANKS

Eleven Territorial and four national banks were doing business in the Territory at the close of the year covered by this report. The Territorial banks are located at Ketchikan, Wrangell, Petersburg, Juneau, Skagway, Cordova, Valdez, Seward, Anchorage, Flat, and Nome. National banks are located at Ketchikan, Juneau, Anchorage, and Fairbanks.

The Territorial Banking Board, composed of the Governor, the auditor, and the treasurer of the Territory, maintains supervision over Territorial banking institutions. All such banks were examined during the year and reports of condition in published statements were made under call, as required by law.

Combined deposits in the several Territorial banks at close of business June 30, 1933, totaled \$5,957,327.75, as compared with total of \$6,289,641.19 on June 30, 1932. Combined capital of all Territorial banks totals \$615,000. On June 30, 1933, under call from the comptroller, the national banks of the Territory showed combined capital in total of \$275,000, surplus and net undivided profits of \$253,075.08, deposits, \$3,911,007.72. Aggregate banking figures for the Territory on June 30, 1933, were approximately as follows: Capital, \$890,000; surplus and net undivided profits, \$840,500; deposits, \$9,668,000. Approximate totals for the year previous were: Capital, \$890,000; surplus and net undivided profits, \$787,500; deposits, \$10,331,700.

COMMERCE OF ALASKA

Following is a summary of the commerce of Alaska, both incoming and outgoing, with the United States, for the fiscal year ending June 30, 1933; also statistics as to vessels documented in Alaska and the number of vessels entering and clearing from Alaska ports during the period indicated.

Compared with the fiscal year 1932 there has been a decrease in all commerce between Alaska and the United States with the exception of a net increase of 179 vessels documented in Alaska, together with a slight increase in tonnage; and also an increase of approximately 12 percent in gold production, which probably can be accounted for by the greater demand and increased market value.

Over 66 percent of the shipments from Alaska this year were fisheries products as compared with 70 percent for the preceding fiscal year. The radical drop in copper ore shipments was due to the fact that the Kennecott mine was operating with greatly reduced forces. This, together with the low price of copper, accounts for the value of the copper ore being but one fourth of the preceding fiscal year.

TOURIST TRAVEL

Tourist travel to Alaska, as elsewhere, has reflected the general economic condition and suffered a decline during the past few years. During the fiscal year ended June 30, 1933, a total of 28 vessels serving Alaska carried 18,488 passengers, which was approximately 15 percent less than those transported the previous year.

The Alaska Steamship Co. operated 14 vessels, freight and passenger, during the year, rendering service to Alaska as far north as Bering Sea.

The Northland Transportation Co. operated two vessels the entire year, serving points in southeastern Alaska.

The Pacific Steamship Co. maintained six vessels in regular service to all points in southeastern and southwestern Alaska to April 1933, when this company withdrew from Alaskan service.

The Canadian National Railways operated three passenger vessels to southeastern Alaska during the summer season.

The Canadian Pacific Railway maintained a reduced service through the year to southeastern Alaska, operating 3 passenger vessels during the summer season and 1 during the remainder of the year.

THE ALASKA RAILROAD

The summer passenger train schedule was in effect on the Alaska Railroad at the beginning of the fiscal year. This schedule provided for two round trips per week between Seward and Fairbanks and in addition one round trip per week between Fairbanks and McKinley Park. On September 24, 1932, passenger train service was reduced to one round trip per week between Seward and Fairbanks and owing to change in service of steamers arriving at Seward, from November 11, 1932, until December 23, 1932, service was further restricted to one round trip every 10 days. On December 23, 1932, weekly service was resumed and on June 9, 1933, the summer passenger train schedule for the 1933 season was inaugurated.

Mixed train service was provided on the Chickaloon branch to serve the coal mines on the Moose Creek and Jonesville branch with a frequency of one round trip each week from Anchorage with additional service when necessary. Owing to limited activities at Chickaloon only 11 trips were made to that station.

Scheduled freight service consisting of one round trip per week between Seward and Fairbanks was maintained throughout the year except during the period from November 1 to December 22, when service consisted of one round trip every 10 days with one extra round trip each 10 days between Healy and Fairbanks. Freight service out of Seward was regulated so that the north-bound trip made connection with the steamers arriving at that point.

During the period July 1, 1932, to the close of navigation on October 3, 1932, the river boats *General J. W. Jacobs* and *Alice* were operated on a weekly schedule between Nenana and Holy Cross, and every second week service was extended to Marshall.

The steamer *Nenana*, built at Nenana for the Alaska Railroad, by the Berg Ship Building Co., of Seattle, under contract, was accepted by the railroad on May 30, 1933, and was dispatched on its first trip for Marshall. The steamer *Nenana* will replace the steamers *Alice* and *Jacobs* on the river and service will consist of a round trip every 2 weeks between Nenana and Marshall.

During the year reductions were made in the local freight rates on building material, lumber, cement, mining machinery, explosives, petroleum, and petroleum products.

The pay roll for 1933 amounted to \$1,165,464.07, a decrease of \$265,962.73 under the previous year. The average number of employees during the year was 650 compared with 679 during the previous year.

Railroad operating conditions were favorable, though during the winter months frost heaves and glaciers caused, no doubt, by the small snowfall, gave an unusual amount of trouble and in August 1932 heavy rainfall all along the line did considerable damage to roadbed and bridges and disrupted traffic. The cost of removing snow, ice, and sand was \$65,567.77 as compared with \$118,135.90 for the previous year.

The number of rail-line revenue passengers carried decreased from 22,568 in 1932 to 13,117 in 1933. The rail-line revenue passenger-miles for the same period were 2,005,169 and 1,683,818.

There was a total of 97,479 tons of rail line freight hauled during the year, of which amount 72,007 tons consisted of coal. The tonnage last year was 87,053 tons, of which 60,783 tons were coal.

Rail-line passenger revenue amounted to \$121,119.90, a decrease of \$70,753.28, or 36.88 percent, from the previous year.

Rail-line freight revenue amounted to \$890,248.95, a decrease of \$15,874.90, or 1.75 percent.

Miscellaneous rail-line operating revenue amounted to \$132,140.69, a decrease under the previous year of \$20,181.45, or 13.25 percent.

Water-line passenger revenue amounted to \$7,823.35, a decrease of \$4,151.65, or 34.67 percent.

Water-line freight revenue amounted to \$36,826.30, a decrease of \$6,987.49, or 16 percent.

The total rail- and water-line revenues, including nonoperating income, was \$1,215,828.13, a decrease of \$121,622.50 from the previous year, or 9.1 percent.

The cost of maintenance and operation of rail lines, including replacements, was \$1,403,447.72, a decrease of \$248,114.41, or 15.02 percent under the previous year.

The operating ratio of the railroad for the fiscal year 1933 was 122.73, as compared with 132.09 for 1932.

The maintenance and operation cost of water lines was \$66,954.94, a decrease of \$16,897.13, or 20.15 percent.

The operating ratio of the water line was 99.25 as compared with 103.09 for the fiscal year 1932.

The total deficit for rail and river boat operations was \$259,436.36, a decrease of \$144,326.98, or 35.75 percent.

The net deficit, including expenses of operation of rail and water lines, expenses of miscellaneous operations and uncollectible railway revenues, less revenues of operation and nonoperating income, was \$257,083.73, a decrease of \$144,040.19 under the previous year, or 35.90 percent. From this deficit should be deducted \$102,952.39 expended during the year from the \$250,000 provided in the appropriation act of 1932 for the investigation of mineral and other resources of Alaska.

The program of settlement of agricultural land adjacent to the Alaska Railroad was continued through the year but owing to general economic conditions difficulty was experienced in locating people with capital sufficient to finance the undertaking. During the year 25 prospects were shown around the Matanuska Valley, 10 of whom located homesteads totaling 1,360 acres, 2 purchased 80 acres each, and 5 rented tracts and remained in the valley for the season to study conditions.

GEOLOGICAL SURVEY

MINING IN ALASKA IN 1932

The total value of the mineral production of Alaska from 1880, the earliest year for which records are available, to the end of 1932 was more than \$653,000,000.

Of this total a little more than 62 percent was furnished by the gold lodes and placers and a little more than 33 percent by copper lodes. The following table shows the distribution of the total output of minerals from Alaska, by substances:

Total value of mineral production of Alaska, by substances, 1880-1932

Gold	\$409,033,000
Copper	214,680,000
Silver	12,063,000
Coal	8,443,000
Tin	1,094,000
Lead	1,944,000
Marble and other products (including platinum metals)	5,972,000
Total	653,229,000

Mines in Alaska produced \$11,638,000 worth of minerals in 1932, as compared with \$12,278,000, in 1931.

It is evident that there was a great increase in the gold output but a decrease in the value of all other mineral commodities. To persons familiar with the general business situations throughout the world in 1932 the statement, that the value of Alaska mineral output in that year showed a falling off of about 5 percent, is a cause of encouragement as showing the extremely sound condition of the mining industry in the Territory.

GOLD LODES

Alaska lode mines in 1932 yielded \$4,687,000 in gold, or somewhat more than in 1931, when the production was \$4,665,000. The gold derived from lodes was approximately 46 percent of the entire gold production of the Territory for 1932. The proportion of lode gold to placer gold was somewhat less in 1932 than in 1931, when the proportion was 49 to 51.

Gold produced from gold-lode mines in Alaska in 1932, by districts

Districts	Fine ounces	Value
Southeastern Alaska.....	169,506	\$3,504,000
Willow Creek.....	34,298	709,000
Fairbanks district.....	8,707	180,000
Other districts.....	14,222	294,000
Total.....	226,733	4,687,000

GOLD PLACERS

Placer gold produced in 1932 has a total value of \$5,522,000. The following table shows, by regions, the output of placer gold in 1932 and in 1931:

Value of placer gold produced in Alaska in 1932 and 1931

Region	1932	1931	Increase or decrease, 1932
Southeastern Alaska.....	\$3,000	\$3,000	—
Copper River region.....	68,000	88,000	—20,000
Cook Inlet and Susitna region.....	114,000	105,000	+9,000
Yukon Basin.....	3,648,000	3,269,000	+379,000
Kuskokwim region.....	153,000	158,000	—5,000
Seward Peninsula.....	1,533,000	1,215,000	+318,000
Northwestern Alaska.....	3,000	4,000	—1,000
Total.....	5,522,000	4,842,000	+680,000

The increase in the production of placer gold indicates that there has been increased effort on the part of individual miners working in partnership groups of small proportions and we may confidently expect a further increase during the coming year.

COPPER

The value of the copper output in 1932 was \$550,500. Practically all of this came from two mines near Kennecott in the Copper River region that are operated practically as a unit, though owned by different companies. The ore from both of these mines consists mainly of high-grade copper sulphides and carbonates. The total copper ore mined during the year from all of the copper properties amounted to 56,900 tons and the copper produced from it is estimated to be 8,738,500 pounds. This was a decrease of nearly 14,000,000 pounds from the amount recovered in 1931. The price of copper in 1932 was only about three fourths of that paid for copper in 1931 and this situation further reduced the value of the output of 1932. All of the Alaska copper ore is shipped to the States to be smelted.

SILVER

None of the ores that are mined in Alaska are valuable solely for the silver they contain, and by far the greatest part of the silver that is produced occurs as a relatively minor constituent in ore whose principal constituent is copper or gold. The great decrease in the output of copper ores in 1932 resulted in a correspondingly great

falling off in the amount of silver yielded from that source and as a result the greatest amount of silver recovered that year came as a byproduct from treatment of the lode gold ores.

The total silver produced in 1932 from all sources in Alaska amounted to 234,050 ounces, having a value of \$66,000. Compared with 1931 this is a decrease in quantity of about 117,950 ounces or \$36,000.

LEAD

The lead produced from Alaska ores in 1932 amounted to 2,521,300 pounds. At the average price of lead for the year of 3 cents a pound, the total value of the output was \$75,600. By far the largest part of the lead produced was recovered at the Alaska-Juneau mine in Southeastern Alaska.

PLATINUM

In 1932 all the platinum metals produced in Alaska came from placers. The largest amount of placer platinum that was sold during the year came from several streams in the Goodnews Bay district, near the mouth of the Kuskokwim, and a small amount from deposits on Dime Creek in the eastern part of Seward Peninsula. The total production of platinum metals is estimated to be 720 crude ounces or 540 fine ounces, which at the average price prevailing for platinum for the year, at \$36.45 an ounce, was worth \$19,700.

TIN

Stream tin, or cassiterite, has been found in concentrates in sluice boxes of placer operations at many places in Alaska and tin minerals have also been found in veins in the mineralized country rock of the York or Port Clarence districts of western Seward Peninsula.

In the past tin worth more than a million dollars has been produced from Alaska deposits, but so far as reported, no tin minerals were sold from Alaska in 1932.

COAL

The amount of coal produced in 1932 showed some decrease over the production of 1931, though it has been exceeded in only 5 years since coal mining began in the Territory. The total quantity of coal produced by Alaska mines in 1932 was 102,700 tons, valued at \$513,500.

PETROLEUM

The only petroleum produced in Alaska comes from wells of the Chilkat Oil Co., in the Katalla field in central southern Alaska. At that place the company obtains oil from a number of shallow wells, few of which are more than 1,000 feet deep. A small refinery is operated by the company, and the products, gasoline and distillate, find a ready market near at hand, especially in Cordova. Considerable quantities of petroleum products are imported into Alaska from the States.

MISCELLANEOUS MINERAL PRODUCTS

Many other minerals, including such metals as antimony, arsenic, bismuth, chromium, iron, manganese, mercury, molybdenum, nickel, tungsten, zinc, and such nonmetallic minerals as asbestos, barite, clay, garnet, graphite, gypsum, jade, limestone, marble, mica, stone,

and sulphur have from time to time been exploited in Alaska. The Geological Survey does not have records that any considerable amounts of any of these mineral products except limestone and marble were produced or sold in 1932.

ADMINISTRATIVE ARRANGEMENTS

The work of the Geological Survey in Alaska consists of two distinct functions: The investigation of the mineral resources of the Territory and the activities connected with the administration of certain laws relating to the leasing and prospecting of mineral deposits on the public domain. Administrative control of both types of work is vested in the Chief Alaskan Geologist at Washington, D.C. For the conduct of certain phases of both types of work district offices are maintained by the Geological Survey at Juneau and Anchorage, the local administration of which is delegated to a supervising mining engineer with headquarters at Juneau.

INVESTIGATIVE WORK

The investigations of the mineral resources of the Territory include the study of individual mineral deposits, the preparation of reports and maps covering prospective mineral-bearing areas, and an annual canvass of the mineral production of the Territory. In connection with the work both geologic and topographic surveys are carried on.

PROJECTS FOR THE SEASON OF 1933

The severe curtailment of funds for the fiscal year 1932-33 and the even more drastic curtailments for 1933-34, together with the necessity of suspending new work until various pending matters of policy and procedure were settled, prevented the sending of as many field parties to Alaska for the season of 1933 or the starting of those projects that were to be undertaken as early in the season as usual. As a result, only three field projects were started before the end of the fiscal year and the personnel of two of these had not reached the field by June 30.

COOPERATIVE WORK WITH THE ALASKA RAILROAD

The Alaska Railroad, constructed, owned, and operated by the Government as a means of developing Alaska, derives much of its business from the transportation of freight and persons engaged in mining enterprises. With a view to increasing the business the railroad for many years has encouraged mineral developments and lately, under specific grants from Congress, has, through cooperation with the Geological Survey, redoubled these efforts.

LEASING WORK

Part of the activities of the Alaskan branch of the Geological Survey are related to the proper conduct of mining work on the public mineral lands that have been or may be leased to private individuals or corporations under certain laws. Funds for this work throughout the United States are provided in a general item contained in the Interior Department Appropriation Act. For the fiscal year 1933 the allotment for Alaska leasing work was \$7,000.

TRANSPORTATION ASSISTANCE TO PROSPECTORS

The restrictions placed on the use of funds for assistance to prospectors in May 1932 were continued to the end of the biennium ending March 31, 1933, and no applications for assistance were accepted during that period. At its 1933 session the legislature failed to appropriate additional funds for this purpose and there is no allotment for assistance to prospectors during the present biennium.

Among these are discoveries in the Bremner River area of placer gold by two men who report that they were able to make wages by crude hand methods, with indications that the property will justify development on a larger scale. On Monahan Creek, in the Bremner River area, encouraging placer-gold prospects were also reported. On Kodiak Island, at the mouth of Red River, several hundred dollars in fine placer gold was recovered by hand methods and encouraging placer-gold prospects found on Montana Creek. At the mouth of Spring Creek, in the Wild River area of the Kobuk district, prospects of fine placer gold and quartz float carrying free gold were reported, and on Wild River in the same district several hundred dollars in placer gold was recovered and a piece of quartz float weighing about 14 pounds was picked up that was said to contain between 30 and 40 dollars in gold. On Last Chance Creek, a tributary of the Big Delta River, placer-gold prospects were found that seemed to warrant the installation of a drag-line scraper and plans to that end were being made. In an unexplored area on the Okpiluk River, about 60 miles inland from Barter Island on the Arctic slope, encouraging placer gold prospects were discovered.

In the Bremner River district a discovery of ore containing gold, lead, and molybdenum was reported to have been located. On Alder Gulch, in the Chisana district, discovery of three quartz veins of workable size was reported, assays from which indicate a satisfactory gold content.

On Kuiu Island, in southeastern Alaska, discoveries of the rare and valuable mineral witherite (barium carbonate) were made, but the two prospectors who made the discovery were financially unable to undertake the development work necessary to determine the extent of the deposit. On Dahl Creek, in the upper Kobuk River district, what appears to be an extensive deposit of very high-grade chrysotile asbestos was discovered that may prove to be the beginning of a new and important industry for Alaska.

In addition to the above, a number of discoveries of mineralized deposits of sufficient merit to induce prospectors to return to them for further examination in the future, have been reported by prospectors who have received assistance from the Territory.

BUREAU OF MINES

The activities of the Bureau of Mines in Alaska during the fiscal year ended June 30, 1933, were again confined to the mine-safety service, assaying and mineral analysis for prospectors and others, and the sampling and analysis of coal.

MINE-SAFETY SERVICE

The purpose of the mine-safety service is to safeguard the lives and health of those engaged in mining and related activities. This work in Alaska is conducted by a principal safety instructor assigned from the Bureau of Mines staff.

A total of 901 persons received first-aid training during the year and two persons were recommended for first-aid instructors' certificates. One hundred percent first-aid certificates were recommended for the Dome and Gilmore camps of the Fairbanks Exploration Co. New York Alaska Gold Dredging Co., at Nyac, and the Healy River Coal Corporation at Suntrana.

ASSAYING AND MINERAL ANALYSIS

Assaying and mineral analysis work was continued at the Alaska Agricultural College and School of Mines, near Fairbanks, by an analytical chemist and mineralogist detailed to that work by the Bureau of Mines. This work is carried on under a cooperative agreement whereby the college furnishes quarters and supplies and the Bureau furnishes fixed equipment and details and pays the salary of the chemist who conducts the work.

This service provided prospectors and others in Alaska with an opportunity to secure official assays of ore samples at actual cost and of having made identification tests of mineral specimens free of charge.

COAL SAMPLING AND ANALYSIS

The analysis of samples of coal in Alaska is carried on by the Bureau of Mines in a well-equipped laboratory at Anchorage furnished by the Alaska Railroad. The analyst who conducts the work is detailed and his salary paid by the Bureau of Mines.

All coal purchased by the Alaska Railroad under contract from private operators is inspected, sampled, and analyzed by the analyst; and, if necessary, appropriate penalties are applied on the basis of the results obtained. The facilities of the coal-analysis service are also available to other Departments and Bureaus of the Government and to the public.

ALASKA FISHERIES

Although fewer establishments and persons were employed in the industry, the output of fishery products in Alaska in 1932 was larger than in the preceding year, due primarily to an increased production of herring and to the resumption of operations by one of the whaling stations. There was also a gain in the output of clams and crabs. While the quantity of salmon products was somewhat less than that for 1931, it was above the general average. Prices, however, continued to decline, and the total value of fishery products was the lowest since 1921.

A patrol of the fishing ground was maintained to secure compliance with the laws and regulations for the protection of the fisheries.

Biological investigations were continued, dealing chiefly with the red salmon runs at Chignik and Karluk and the pink salmon in southeast Alaska. Weirs for counting the escapement of spawning salmon were maintained in 27 typical salmon streams, of which 5

were in southeast, 17 in central, and 5 in western Alaska. The study of the Alaska herring was likewise continued.

SALMON HATCHERIES

The fish-cultural stations were operated by the Government and one under private management in the fiscal year 1933. During that period the privately owned hatchery released 22,173,950 red salmon fry for which, at the rate of 40 cents for each 1,000 fry, the operating company was entitled to a rebate of \$8,869 in Federal license taxes on its catch and pack of salmon in Alaska.

In 1932 the total number of young red or sockeye salmon liberated was 58,304,212, of which 19,920,712 were released by the Government hatchery at Afognak and 18,980,500 by that on McDonald Lake. The latter hatchery also produced and liberated 317,000 pink salmon fry from eggs taken in 1931.

Egg collections in 1932 consisted of 19,151,800 red salmon eggs and 2,524,500 pink salmon eggs at the Afognak hatchery, 25,500,000 red salmon eggs and 558,000 pink salmon eggs at the McDonald Lake hatchery, and 25,895,000 red salmon eggs at the privately owned hatchery. In the fall there were shipped to Seattle in the eyed stage 2,228,000 pink salmon eggs from the Afognak hatchery and 379,904 pink salmon eggs from the McDonald Lake hatchery for the State of Washington, and 3,010,650 red salmon eggs from the latter hatchery for the State of Oregon.

A shipment of 50,000 eastern brook trout eggs was received for incubation at the McDonald Lake hatchery in March, 1932, from which 36,000 No. 2 fingerlings were produced and distributed in various lakes of Southeast Alaska.

STATISTICS OF THE FISHERIES

The number of persons employed in the commercial fisheries of Alaska in 1932 was 20,122. Of these 10,641 were whites, 5,016 natives, 1,998 Filipinos, 899 Mexicans, 810 Japanese, 685 Chinese, 52 Negroes, and 21 miscellaneous (Kanakas, Puerto Ricans, and Koreans). The total number in 1931 was 22,577, or 2,455 more than in 1932. The total value of Alaska fishery products in 1932, exclusive of aquatic furs; was \$25,028,920, a decrease of \$8,565,832 from 1931.

SALMON INDUSTRY

An increase of 2 percent over the preceding year in the catch of salmon, notwithstanding a considerable reduction of fishing effort, is evidence of the general abundance of the fish in 1932.

Salmon canning.—The output of canned salmon in 1932 represented about 94 percent of the total quantity and 96 percent of the total value of all products of the salmon industry. The number of cases packed was 5,254,483, valued at \$21,715,801, as compared with 5,403,739 cases, valued at \$29,096,292 in 1931.

FUR-SEAL SERVICE

Sealing operations at the Pribilof Islands in 1932 resulted in the take of 49,336 skins, of which 39,490 were from St. Paul Island and 9,846 from St. George Island. This is 188 less than the number

taken in the previous year. On St. Paul Island 32,029 skins were blubbered before being salted.

Killings were confined as far as possible to 3-year-old male seals. A suitable number of this age class were reserved for breeding stock, 1,200 on St. Paul Island and 1,809 on St. George Island being marked for this purpose. The reserve included also many additional 3-year-olds that were not taken up in the drives.

The annual computation of the fur-seal herd was made as of August 10, 1932, after the completion of commercial killing operations. There were 1,219,961 animals of all ages and classes, an increase of 92,879 over the computed number in the preceding year.

GAME AND FUR CONDITIONS AND ADMINISTRATION

The Alaska Game Commission, composed of five members, one from each of the four judicial divisions of the Territory, and the chief representative of the Biological Survey resident in Alaska who acts as its executive officer, fiscal agent, and secretary, began its operations with the passage of the Alaska game law (act of Jan. 13, 1925, 43 Stat. 739, as amended by the act of Feb. 14, 1931, 46 Stat. 1111).

The Commission is closely associated with the United States Bureau of Biological Survey and is under the general jurisdiction of the Secretary of Agriculture, although each organization has specific duties assigned to it. The Biological Survey conducts scientific studies and investigations of the wild life of the Territory in its relation to agriculture, grazing, game, and fur industry. It also administers certain bird reservations. The Commission's fundamental activities are regulatory and pertain to the enforcement of the provisions of the Alaska game law.

The annual meeting of the Alaska Game Commission was held at Juneau from November 21 to December 8, 1932. Modifications and adjustments were made in the regulations for open seasons on fur animals, to afford residents the maximum benefits consistent with proper maintenance of breeding stocks.

During the year 34 cases of game and fur law violations were filed in court, which resulted in fines totaling \$1,510 and jail sentences of 665 days. Numerous furs, traps, guns, trophies, and game meats were forfeited by court orders, the proceeds of which when sold were deposited with the general receipts of the Commission.

The revenues from licenses, fines, and forfeitures received by the executive officer during the fiscal year totaled \$22,738.33 which, as provided by the Alaska Game Law, have been divided equally between the Federal and Territorial Treasuries. The Territorial receipts were deposited in the school fund.

The value of land fur-bearing animals shipped from the Territory during the calendar year 1932 was \$1,144,841.17. Prevailing low prices and decreased demand for furs are responsible for a decline.

Continued unfavorable market conditions were reflected in the number of fur farm licenses issued. A total of 310 were issued during the fiscal year 1933, which is 116 less than for the previous year. The number of permits issued to capture live fur bearers from the wild for propagation purposes also declined: 14 permits were issued authorizing the capture of 18 beaver, 25 muskrat, 27 red fox, 17 white fox, and 23 marten.

There was a marked decline in the number of nonresident hunters visiting the Territory for the purpose of taking big game animals. During the year 52 nonresident general hunting and trapping licenses and 13 nonresident small game licenses were issued. Additional licensing officers were appointed in order that the public might more conveniently secure the various forms of licenses required under the Alaska game law.

FOREST SERVICE

The two national forests in Alaska, administered by the Forest Service of the Department of Agriculture, embrace the best timber regions of coastal Alaska. The Chugach Forest, in the Prince William Sound region, is estimated to have 6,260,000,000 feet, board measure, of commercial timber and the Tongass, which covers most of southeastern Alaska, has approximately 78,500,000,000 feet, board measure.

Although it is possible to harvest 1,000,000,000 board feet yearly in perpetuity from the Alaska national forests, the actual cut over a considerable period has averaged between 40,000,000 and 50,000,000 board feet. Owing to the present depression in industry, the cut during the calendar year 1931 was only 24,000,000 board feet and in 1932 but 18,000,000 board feet. Gross receipts from the national forests for the fiscal year 1933 were but \$34,938 as against \$42,021 for the previous year.

ROADS AND TRAILS

The Bureau of Public Roads constructs and maintains the national forest roads with funds appropriated under the forest road section of the Federal Highway Act and in cooperation with the Territory. A system of roads and trails has been planned and approved which will serve to connect the larger towns with smaller settlements, mining districts, and agricultural communities. That these roads have proven of value is shown by the increase in property improvements along the highways, the total value of which was \$4,781,264 on December 31, 1932.

On June 30, 1933, 270 men had been enrolled in Emergency Conservation Corps projects on the National Forests. They are grouped into crews of 10 to 15 men and are largely engaged in the construction of trails for the protection and utilization of the forests and for mining development.

LANDS

At the close of the calendar year 1932 there were 1,059 special-use permits in force, covering a total of 124,295.43 acres. Fur farms, summer homes, and industrial sites are some of the uses to which these areas are put. Highway construction during the past 2 years has increased the demand for homesites and 550 applications were on record for the two national forests at the close of the fiscal year, June 30, 1933.

WATER POWER

Attractive power sites for mining or industrial enterprise have been systematically examined by the Forest Service personnel. Forty-six constructed power projects operating under Federal license or permit are located on the national forests. The Forest Service acts as agent for the Federal Power Commission in the administration of the water power resources of the Territory.

PUBLIC LANDS

Alaska is divided into three land districts, which include the four judicial divisions of the Territory. A local land office is maintained at Anchorage to care for the land entries of the first and third judicial divisions, and the Nome office and the Fairbanks office handle the second and fourth divisions, respectively. The third and fourth judicial divisions contain the greater part of the suitable homestead lands, and requests for information should be directed to the local offices at Anchorage and Fairbanks, respectively.

PUBLIC SURVEY OFFICE

The returns of all surveys executed for patent proceedings in Alaska, including surveys of mining claims, homesteads, homestead entries in national forests, trade and manufacturing sites, soldiers' additional homesteads, Indian and trustee townsites, and township surveys under the rectangular system, are filed in the public survey office, where they are examined and transcripts of the field notes made and the plats constructed.

Several classes of Government reservations are surveyed by field engineers of the public surveying service, and the returns of these surveys follow the same course.

The United States supervisor of surveys, Denver, Colo., approves all townsite and township surveys after they have been worked up in the public survey office. All other surveys are approved by the cadastral engineer in charge of the public survey office.

After the approval of surveys, the field notes and plats are submitted to the Commissioner of the General Land Office for final consideration and acceptance, excepting mineral surveys. Immediately after the approval of a mineral survey by the cadastral engineer in charge, the plats are blueprinted and blueprint plats and transcripts of the field notes are mailed to the claimants for use in patent proceedings.

Homesteads, homestead entries in national forests, Government reservations, townsites, and townships under the rectangular system are surveyed by field engineers of the public surveying service, who may also execute surveys of trade and manufacturing sites and soldiers' additional homesteads, when deposits are made by applicants to cover the cost of field and office work, under the act of April 13, 1926.

Mineral surveys are made by the United States mineral surveyors on orders issued by the cadastral engineer in charge; and trade and manufacturing sites and soldiers' additional homesteads are executed by United States deputy surveyors, as a general rule, under special instructions prepared by the cadastral engineer in charge. Both the mineral and deputy surveyors perform their work under private contract with the applicants for the respective surveys.

In connection with the work of the Public Survey Office, which has been sharply curtailed in Alaska: It seems that this is one of the most important duties of the Government in a frontier country. There can be no doubt that settlement of the agricultural areas will proceed more rapidly when the system of surveys has been completed to a point where local information is readily available to parties interested. The extension of a comprehensive program of survey for the public domain in Alaska should be urged.

MOUNT MCKINLEY NATIONAL PARK

Mount McKinley National Park, situated in south-central Alaska, was established in 1917, principally to protect the immense herds of mountain sheep and caribou which live in this part of the Alaska Range. It has an area of 3,030.46 square miles or 1,939,493 acres, and is the second largest member of the national park system. It is a vast wilderness, with ice-capped peaks, grinding glaciers, and sphagnum-covered foothills sweeping down to forests of spruce in the valleys.

Mighty Mount McKinley, highest peak on the North American continent, is the park's principal scenic feature. This majestic mountain rears its snow-covered head high into the clouds, reaching an altitude of 20,300 feet above sea level, and rises 17,000 feet above timber line. No other mountain in the world rises so far above its own base.

The abundant animal life in the area, which is a constant source of pleasure and interest to visitors, came through the past winter in fine shape. Here roam large herds of caribou and mountain sheep, moose, Alaska brown bear, timber wolf, and wolverine.

During the past year or two there has been a noticeable increase in the number of coyotes and in the number of park animals, noticeably sheep, destroyed by them. Efforts are being made by park authorities to prevent, as far as may be feasible, the further spread of this non-native animal.

NATIONAL MONUMENTS

There are three national monuments in Alaska administered by the National Park Service. These are the Sitka National Monument, established in 1910; Katmai National Monument, established in 1918; and Glacier Bay National Monument, established in 1925.

The Sitka National Monument, situated in southeast Alaska, contains 57 acres and is a reservation of great beauty and historical interest.

Katmai National Monument lies near the base of the Alaska Peninsula on the shore bordering Shelikof Straits. This area of 2,697,590 acres includes Mount Katmai, which in 1912 gave vent to a violent eruption.

Glacier Bay National Monument was created upon the petition of the Ecological Society of America and the indorsement of the National Geographic Society. It is situated in southeast Alaska and contains approximately 1,164,800 acres of glaciers and ice-covered peaks of the first rank, among which are Mount Fairweather, Lituya, La Perouse, and several others.

TERRITORIAL ROAD COMMISSION

Road building activities in the Territory are administered under three heads: The Bureau of Public Roads under the Department of Agriculture; the Alaska Road Commission under the Department of the Interior; the Territorial Road Board consisting of the governor, the Territorial treasurer, and the highway engineer. In each of the four judicial divisions there is a divisional road board consisting of two elective members whose duty it is to make recommendations for road work in their respective districts.

The construction and maintenance of roads, trails, bridges, aviation fields, and shelter cabins in the Territory is carried on under the Territorial Road Board and is supported by appropriations made by the legislature. Road funds are also derived from 25 percent of the receipts from the sale of timber in the national forests, though during the 1933 fiscal year no funds were received by the Territory from this source.

The Bureau of Public Roads confines its road building to the national forests of which Alaska has about 33,000 square miles.

The Alaska Road Commission carries on its road work in that part of the Territory outside of the national forests and is likewise supported by congressional appropriations. These appropriations are supplemented by what is known as the Alaska fund, being the taxes collected outside the incorporated towns by the Federal Government, a portion of these being allotted to roads.

AVIATION

Commercial aviation in Alaska was first inaugurated by Col. C. Ben Eilson in 1923 with a special experimental air mail contract for carrying United States mail from Fairbanks to McGrath, a distance of about 300 miles. At that time the mail was being transported by dog sled and was about 17 days in transit, whereas the first air mail trip was accomplished in 2 hours and 45 minutes.

These flights, made at a time of the year when the weather conditions were the least favorable, demonstrated the possibilities of the airplane as peculiarly adapted to the difficult transportation conditions of Interior Alaska.

The substantial increase in all branches of aviation for the fiscal year of 1933 over the previous years is indicative of the important part that is to be played by aviation in the development of the Territory. This increase and known plans of the airways companies operating in Alaska point unerringly to rapid growth in the future. All that is now required to insure a very prominent place for air navigation are air mail contracts.

ALASKA ROAD COMMISSION

Following is the twenty-sixth annual report of the operations of the Alaska Road Commission for the fiscal year ending June 30, 1933. Formerly this report was printed and published separately and is embodied herein as an economy measure.

Activities were necessarily confined quite largely to maintenance of the existing system. In several localities, serious damage to road and bridge structures from floods required extraordinary repairs.

It is recommended that a definite plan for completion of projects now underway and for the construction of much needed minor projects in various localities be adopted. Appropriations, if possible, should be secured at a uniform rate to provide for full use of equipment and forces during the short construction season.

The organization has functioned satisfactorily, and close cooperation has been maintained with Territorial and Federal agencies.

Alaska products are preferably used in the road work when the price and quality compare favorably with the cost of the same items landed at warehouses in Alaska.

ORGANIZATION

Labor, both common and skilled, is secured entirely from local residents. Due to decreased appropriations and the general business depression the supply of labor has been plentiful the past year. In fact, some of the oldest employees were hired for only short periods and others were entirely without work. It is encouraging to note the exceptional loyalty to the organization which is manifested generally even by the lowest paid laborers. This may be attributed in part to the fact that, though the work is only seasonal, many of these men have worked for the Commission continuously for 5 to 10 seasons and in part to the fact that as a whole Alaska labor is probably superior to that found elsewhere.

The general scheme of operations is practically the same as under the War Department previous to the transfer of the organization to the Department of the Interior on July 1, 1932. There has also, except of course for the military personnel, been little change in the personnel of the organization.

OPERATIONS DURING THE FISCAL YEAR

The work in the past fiscal year was confined largely to maintenance and improvement of the chief existing routes. The Richardson Highway was open from Valdez to Fairbanks from June 17 to October 23 except for a 7-day period in August, when cloudbursts and continual rains took out a bridge at mile 226 and otherwise seriously damaged the road in that vicinity. Similar experiences on the Alaska Railroad closed that route to the interior during the period August 6 to 20. Fortunately, the two routes were not closed simultaneously.

PROPOSED OPERATIONS

In addition to \$469,300 from appropriated funds, it is estimated there will be available from the "Alaska fund" and Territorial appropriations \$210,000, for the fiscal year ending June 30, 1934.

These funds will be required for normal maintenance of the existing system and for a limited improvement of certain sections. Surfacing will be provided where possible with available funds and a limited mileage of tractor road will be improved to an extent permitting the use of truck traffic in dry weather only.

TWENTY-NINE YEARS' SERVICE

With the period covered by this report the Alaska Road Commission concludes its twenty-ninth year of service. The work accomplished consists of the construction and maintenance of 1,735 $\frac{3}{4}$ miles of wagon and tram road, most of which is suitable for automobiles, 1,617 miles of winter sled road, 7,284 $\frac{1}{4}$ miles of trail and 712 miles of flagged trail. The total costs to the end of the fiscal year are \$18,708,683.89, of which \$9,543,641.05 was for new work and \$9,165,042.84 was for maintenance and improvement. The total expenditures to date are \$19,007,861.56 of which \$13,220,886.69 were derived from Federal appropriation acts. The balance, \$5,786,974.87, or over 30 percent of the total expenditures, was obtained from Alaskan sources.

Annual maintenance costs, including minor improvements, are roughly considered as \$300 per mile for wagon roads, \$25 for sled roads

\$10 for trails and \$3 for flagged trails. For the working season of 1932 bare maintenance, exclusive of necessary improvements, was \$137.08 per mile for roads, \$8.07 for sled roads and \$2.83 for trails. Roads were kept open for traffic, except in unusual circumstances but in certain instances maintenance was insufficient due to lack of funds.

BUREAU OF PUBLIC ROADS

Funds designated for expenditure by the Bureau of Public Roads have been available for use in the Territory since 1917. Construction and maintenance operations from 1917 to 1920 were handled by joint representatives of the Alaska Road Commission and Bureau of Public Roads. On July 1, 1920, a branch office of District 1 of the bureau was established and an assistant district engineer placed in charge. Since that date all roads within the national forests have been constructed and maintained by the Bureau of Public Roads.

All Federal funds now being expended on the roads within the national forests are provided by the Federal Highway Act, approved November 9, 1921, and subsequent amendments thereto. Federal appropriations have made available for expenditure by the Bureau of Public Roads, \$6,295,184 for roads in and adjacent to the national forests in Alaska. In addition to the Federal funds so provided, \$325,108.12 have been made available by the Territorial board of road commissioners, making a total to June 30, 1933, of \$6,620,292.12. A total of 242.107 miles of highways have been constructed and are now under maintenance by the Bureau with funds provided under the Federal Highway Act and in cooperation with funds made available by the Territorial board of road commissioners. An additional 8.255 miles are at present under construction and will be completed within the present year, making a total of 250,362 miles of forest highways. A total expenditure of \$296,264.35 has been made during the past fiscal year.

PACIFIC-YUKON HIGHWAY

The Pacific-Yukon Highway is the name given to a road project which when completed will connect the northwest part of the United States with British Columbia, Yukon Territory, and Alaska. The proponents of the highway project desire a serviceable automobile road throughout western Canadian Provinces to Alaska, which can now be reached only by ship or by airplane. It is urged in behalf of the project that it would open up vast areas in British Columbia, Yukon territory, and Alaska which are now so inaccessible that development is impracticable.

In 1929 the Alaska Legislature adopted a memorial to the United States Congress indorsing the project and petitioning that steps be taken toward arranging for conferences on the subject between representatives of the United States and Canada. The same body also passed acts in 1929 and 1931 providing for the advertisement of the advantages of the project, and appropriating funds to be used for that purpose.

In 1930 the Congress of the United States authorized the appointment of a Commission to cooperate with the representatives of the Dominion of Canada in a study regarding the feasibility of the con-

struction of such a highway, appropriating \$10,000 for the purpose. Pursuant to this act, the President of the United States appointed as commissioners: Mr. Herbert H. Rice, Detroit, Mich., chairman; Mr. Ernest Walker Sawyer, assistant to the Secretary of the Interior; Maj. Malcolm Elliott, Corps of Engineers, United States Army, president Alaska Road Commission.

The commissioners studied the project in cooperation with representatives of the Canadian Provinces involved and since submission of their report to the President of the United States have been relieved of further duty in this connection.

The conclusions and recommendations of the commissioners briefly were that the highway is a feasible project and can be built at a reasonable cost which should not exceed \$2,000,000 for the Alaska section and \$12,000,000 for the Canadian section.

RIVERS AND HARBORS

The Juneau engineer district, established by the Chief of Engineers, United States Army, on April 1, 1921, was consolidated with the Seattle district on July 14, 1932.

Six localities in Alaska are under improvement: Ketchikan Harbor, Wrangell Harbor, Wrangell Narrows, Port Alexander, Seward Harbor, and Nome Harbor. The district is also charged with the maintenance of the flood-control works at Lowell Creek, Seward.

Items for the improvement of Dry Pass, Sitka Harbor, Petersburg Harbor, Kodiak Harbor, Stikine River, Egegik River, and for the further improvement of Wrangell Narrows, Wrangell Harbor, and Nome Harbor, have been recommended to Congress. A survey report has been submitted for the improvement of Gastineau Channel, and reexaminations have been authorized for Cordova Harbor and Ketchikan Harbor.

AIDS TO NAVIGATION

Aids to navigation are established and maintained by the Lighthouse Service of the Department of Commerce. The work in Alaska is conducted from the headquarters of the sixteenth lighthouse district at Ketchikan under the direction of the district superintendent. A supply and buoy depot is maintained at Ketchikan. Two oil-burning steam lighthouse tenders both built especially for the work in Alaska, are operated throughout the year in connection with constructing and maintaining aids. These are the *Cedar*, a steel vessel of 1,245 tons displacement, and the *Fern*, a smaller wooden vessel having a displacement of 245 tons.

In order to take care of the increased needs of the district, replacement of the *Fern* by a larger vessel has been authorized and contract was awarded during the year for construction of a new steel, twin-screw, oil-burning lighthouse tender for this purpose.

During the year, facilities at the Ketchikan lighthouse depot were improved by the construction of a steel buoy shed 50 feet square to provide sheltered space for overhauling buoys, and the installation of a hand-power traveling crane for handling large buoys and transferring them to and from the shed.

UNITED STATES COAST AND GEODETIC SURVEY

HYDROGRAPHY AND TOPOGRAPHY

Three ships continued surveying operations in Alaskan waters during the fiscal year 1933. Two of these were engaged during the season of 1932 in making original surveys along the southeast coasts of Kodiak and Afognak Islands. The ship *Surveyor* extended surveys from Sitkalidak Island northeastward to and including Chiniak Bay. These surveys include a complete survey of Ugak Bay. Offshore surveys were made between the Trinity Islands and Chiniak Bay, including a development of Albatross Bank, on which an 8-fathom shoal was found.

The *Discoverer* extended surveys of the previous season southwestward from Perenosa Bay into Marmot Bay. Detailed examinations were made of Izhut and Tonki Bays and Marmot Strait. Surveys were extended approximately 60 miles offshore. The *Discoverer* resumed operations in this locality at the beginning of the 1933 season and it is expected that all field work required for complete charting of the southeast coasts of Kodiak and Afognak Islands will be completed this season.

The Pacific Coast Tide Tables, published annually by the Coast and Geodetic Survey, include the predicted times and heights of the tide for every day of the year at Ketchikan, Sitka, Juneau, Seldovia, Anchorage, Kodiak, Apokak, and St. Michael. Tidal differences and ratios for approximately 300 other places in Alaska are given in these tide tables also, enabling the navigator to determine the time and height of high and low water for practically all of the tidal waters of Alaska.

MAGNETIC AND SEISMOLOGICAL WORK

The Sitka Magnetic Observatory was continued in operation throughout the year. New magnetic and seismological instruments have been installed, bringing the instrumental equipment up to date.

Magnetic observations were also made at various places along the coast, by vessels of the Coast and Geodetic Survey engaged in hydrographic and topographic surveys. Special attention was given to water areas in which the ship's compass needle is deflected from the normal through the presence of magnetic material in the bottom of the channel and on adjacent shores.

ALASKA AIRWAYS WEATHER SERVICE

Airways weather reports were continued from 46 of the 48 stations in operation during 1932. One of the stations previously reported was closed because of lack of communication facilities, while the other was found to be of little value and the funds were diverted to a more important station.

Reports are transmitted twice or three times each day, which give the ceiling, visibility, and general flying conditions. Pilot balloon observations, to secure the wind direction and velocity aloft, were continued at Nome, Fairbanks, and Juneau. The U.S. Signal Corps has arranged special schedules for rapid transmission of airways reports to points most interested.

THE UNITED STATES SIGNAL CORPS

The United States Signal Corps continues to maintain its position as one of the most important and efficient Government functions in the Territory. The amount of traffic handled over the system has increased from \$26,977.69, during the first year of operation, to \$702,598.48, in the fiscal year 1932. This year, however, there was a decrease of \$64,266.27, and the receipts totaled \$638,332.21.

The system serves the newspapers throughout the Territory with press reports, giving Alaska the important news dispatches simultaneously with the States. The money-transfer service, which was extended to serve all stations three years ago, is still being maintained. Communication between all stations on the system is by radio.

NAVAL COMMUNICATIONS

The Navy Department maintains two radio traffic stations in the Pribilof and Aleutian Islands area; namely, St. Paul and Dutch Harbor. These stations serve the Navy and Coast Guard requirements in that area, broadcast hydrographic information and local weather conditions to merchant shipping in the Bering Sea and the North Pacific Ocean, and guard the distress frequency. The main channel of communication between the United States and that area is the circuit between the stations at St. Paul and Puget Sound, Wash.

MAIL SERVICE

The transportation of mails in Alaska is under the supervision of the superintendent of the thirteenth division, Railway Mail Service, at Seattle, Wash. This office exercises supervision over the entire Alaska service and has immediate charge of all service in Southeast Alaska and all direct steamboat service from Seattle. The chief clerk, Railway Mail Service, at Seward, has immediate charge of the service provided along the south coast, north and west of Yakutat, the service provided over the Copper River & Northwestern Railway and the Alaska Railroad, the upper and lower Yukon River, Tanana River, Kuskokwim River, and the Seward Peninsula.

UNITED STATES COAST GUARD

The patrol of the waters of the North Pacific Ocean, Bering Sea, and southeast Alaska, which was in progress at the close of the fiscal year 1933, was being conducted by the Coast Guard cutters *Tallapoosa*, *Northland*, *Shoshone*, *Itasca*, *Haida*, and the 125-foot patrol boats *Alert* and *Montgomery*. This patrol which is carried on annually by the Coast Guard, has for its primary purpose the enforcement of the convention of July 7, 1911, between the United States, Great Britain, Russia, and Japan, and the laws and regulations for the protection of the fur seal and sea otter; and of the game, the fisheries and fur-bearing animals of Alaska.

TERRITORIAL SCHOOLS

The Territorial public schools, which provide for the education of white and mixed-blood children, are of two classes, namely, schools within incorporated cities and incorporated school districts, and

schools outside incorporated cities and incorporated school districts. The latter, or rural, class of schools, is further divided into schools in regularly organized school districts and "special schools" which are maintained in communities where the school population is insufficient to warrant the establishment of school districts.

The Territorial schools are largely supported by appropriations from the Territorial treasury, augmented by 25 percent of the "Alaska fund", which is made up of a variety of Federal taxes collected in the Territory.

The Territorial schools, including elementary schools, high schools, and citizenship night schools, are under the supervision of a Territorial Board of Education with the Commissioner of Education as executive officer of the board.

SCHOOLS IN INCORPORATED CITIES AND DISTRICTS

Schools are maintained in 16 incorporated cities and 1 incorporated school district. The per-capita cost in these schools, based on average daily attendance, during the school year 1932-33 was \$121.85.

SCHOOLS OUTSIDE INCORPORATED CITIES AND DISTRICTS

Schools were maintained in 66 rural school districts, and in addition, 9 special schools were maintained during the year. The cost per pupil in average daily attendance in the rural schools was \$140.38. The cost per pupil in average daily attendance in the special schools for the year was \$223.06.

CITIZENSHIP NIGHT SCHOOLS

Citizenship night schools, for the purpose of preparing adult foreigners for citizenship, were maintained in but three communities. A total of 102 students were enrolled. Of this number, 26 were aliens, 50 were declarants or holders of first papers, 16 were petitioners for second papers, and 10 were citizens of the United States.

ALASKA AGRICULTURAL COLLEGE AND SCHOOL OF MINES

At the eleventh annual commencement of the Alaska Agricultural College and School of Mines, at College, near Fairbanks, Alaska, held on May 15, 9 students were awarded diplomas, as follows: 1 in business administration, 4 in civil engineering, 1 in general science, 1 in geology and mining, 1 in metallurgy, and 1 in mining engineering.

Three certificates for completion of a 2-year nonspecialized course for teachers were also awarded.

COOPERATIVE EXTENSION WORK

Cooperative extension work in agriculture and home economics has been carried on by the Alaska Agricultural College and School of Mines under the provisions of the Smith-Lever Act since July 1, 1930, having started at that time with two part-time employees. At present the organization consists of the director, who is also the president of the college, and three full-time employees: 1 in agriculture, 1 in home economics, and since October 1, 1932, a veterinarian for fur production.

Work in agriculture and home economics is centered at the college at College, Alaska. Fur-production work was centered first at Matanuska and at present at Juneau, which is nearer the center of the fur-farming area. This service in agriculture has reached the farmers of the Matanuska and Tanana Valleys, the people living at Homer, Kodiak, and along the Tanana and Yukon Rivers, and dairy-men and gardeners along the coast. Potato growers' meetings have been held. 4-H garden and poultry clubs have been organized.

In home economics the service has been carried to the home-makers in all the coast towns from Ketchikan to Seldovia and Kodiak and along the railroad. 4-H home economics clubs have been organized in most of these places.

Fur-production work has been carried on on the islands and on the mainland all along the coast and wherever there are fur-farming activities in the interior. Interest in this work has grown rapidly, as shown by the letters requesting information.

The Federal appropriation of \$12,000 under the provisions of the Smith-Lever Act for this work has been increased by an annual amount of \$3,000 from the Territory of Alaska to be used as either offset or supplementary funds.

By virtue of the provisional act of Congress approved February 23, 1929, together with the act of February 20, 1931, the benefits of the Hatch Act were extended to Alaska. This act provides an annual grant of \$15,000 to be expended in carrying on experimental work in agriculture. Work was begun July 1, 1931, in accordance with this act, on 14 projects, as follows: Administration, publications, buildings, peat experiments, native redtop, blueberry, native red currants, red raspberries, Irish potatoes, wheat breeding experiments, pea breeding experiments, determination of forage values by digestion trials and meat tests, native vetches, and forage plants. Since then two projects, consisting of seed production and seed increase, have been added.

COOPERATIVE WORK WITH BIOLOGICAL SURVEY

During the year the cooperative work with the Bureau of Biological Survey in the investigation of reindeer and muskoxen was continued. In addition, the crossing of domestic with mountain sheep was initiated. Lambs from such cross have thus far shown more the characteristics of the mountain sheep. The series of digestion tests with muskoxen were concluded during the year and the analysis of materials is now being done at the Beltsville Experiment Station near Washington, D.C. Similar tests with reindeer will be continued. The crossing of reindeer and caribou, being conducted at the College station as well as on Nunivak Island, is making progress. It is shown that the cross fawn at birth is between 3 and 4 pounds heavier than the average reindeer fawn. On Nunivak Island mature animals resulting from the cross weigh 50 to 100 pounds heavier than the average reindeer. Through selective breeding it is believed this increase may be further developed.

INTERNATIONAL POLAR YEAR PROGRAM

In the summer of 1932 the delayed preparation for the United States' part in the international Polar year program was completed and the actual work of construction of buildings and installation of

instruments was begun at College. Mr. Franklin P. Ulrich of the Sitka Magnetic Observatory was in charge of the construction of all buildings and the installation of the magnetic instruments and Mr. W. J. Rooney of the Carnegie Institution of Washington, D.C., supervised the installation of the earth current and atmospheric electricity equipment. Bad weather prevailed slowing up all work but the entire observatory was in operation by the 1st of October.

The work being done at College is outlined below:

Continuous records are made of the H, D, and Z components of the earth's magnetic field. A continuous rapid magnetic recorder gives a measure of fluctuations too rapid for the more insensitive instruments to record. Absolute magnetic measurements are made biweekly for purposes of calibration.

An earth-current recorder records continuously earth currents set up in the earth along east-west and north-south lines.

An induction apparatus known as a "Mitchell loop" records the electrical current induced by the fluctuation of the earth's magnetic field in a horizontal loop of wire nearly 4 miles in length.

An ion-counter, a potential gradient instrument, and a conductivity apparatus record the electrical character of the atmosphere at an elevation near the surface of the earth. Records obtained with these instruments are of especial interest because of the comparison between lower and higher latitude measurements.

UPPER ATMOSPHERE STUDY

In Fairbanks is located apparatus for the study of the upper atmosphere. Continuous records are made of the change in height of the Kennelly-Heaviside layer by means of a radio reflection apparatus.

A radio reception program is being carried on in connection with the Kennelly-Heaviside layer work.

Spectrographic equipment is used in determining the ozone content of the atmosphere at high altitudes and also for the study of other types of radiation passing through the atmosphere. A 10-inch reflecting telescope is also used in the spectrographic studies.

WEATHER BUREAU STUDIES

The Weather Bureau here has also followed a plan outlined by the Polar Year Commission of making pressure, temperature, and humidity records at middle altitudes by means of airplane-carried instruments and of upper altitudes by means of special sounding balloons.

The aurora research conducted at College under a grant made by the Rockefeller Foundation was continued through the past year.

SCHOOLS AND MEDICAL RELIEF FOR NATIVES OF ALASKA

SCHOOLS

The total number of Indians and Eskimos in Alaska according to the 1930 census is 29,983. They are scattered at intervals along the 25,000 miles of coast and on the great rivers in Alaska, in villages varying from 30 to 40 to 500 or 600 persons. Except in southeastern Alaska, these villages are widely separated and have little communication with each other. The village and not the tribe is the unit. The natives of Alaska are divided into the following ethnic groups:

Eskimos and Aleuts numbering 19,028; Athabascans, 4,935; Thlingets, 4,462; Haidas, 588; Tsimshians, 845; and others, 125.

The native population of Alaska is distributed geographically as follows: First division, 5,990; second division, 8,686; third division, 7,298; fourth division, 8,009; total, 29,983.

Serving the above population, the Bureau of Indian Affairs maintained in Alaska during the school year 1932-33 99 day schools, 3 vocational boarding schools, 1 orphanage and school for the blind. The day schools had a total enrollment of 4,229 pupils.

The vocational boarding schools offer to prepared students a specialized type of vocational education and guidance for which the day schools are not equipped. White Mountain caters to Eskimo boys and girls from the villages on the northwestern coast as far north as Point Barrow. The Alaskan Railroad makes Eklutna readily accessible for pupils from Central Alaska and the Yukon. Wrangell Institute exists for the specialized training of pupils of southeast Alaska. In addition to the usual academic subjects, instruction is offered in carpentry, gardening, farming, furniture making, domestic science, boat building, navigation, sled construction, the operation and repair of gas engines, making of snowshoes, skin tanning and sewing, fur farming, wood and ivory carving, blanket making, basket weaving, typewriting, stenography, bookkeeping, and business methods.

The natives of Alaska enter into the economic pursuits prevalent in the communities in which they live. They have proven their ability as fishermen, cannery workers and operators, lumbermen, storekeepers, carpenters, fur trappers and dealers, miners and prospectors, boatbuilders, railroad workers, craftsmen, teachers, clergymen, and lawyers. Two hundred and eight teachers are employed to staff the native schools under operation at the present time.

It was found necessary to close the Tanana Orphanage at the close of the fiscal year. The children of the institution were placed in homes of interested relatives or friends or transferred to the Eklutna Industrial School pending satisfactory placement. The School for the Blind was also transferred to Eklutna where it will continue as a part of that institution.

Inasmuch as the native schools of Alaska are concerned with every phase of village life, continuous research is necessary to make the schools serve the people in a manner commensurate with their needs. Consequently the Alaska Division of the Bureau of Indian Affairs, through its Juneau office and the district superintendents, is undertaking investigations calculated to make available educational facilities in those native villages not now served by the school system, and to more thoroughly integrate the existing educational units with the life of the native groups.

MEDICAL SERVICE

In spite of the fact that the funds available for medical work among the natives of Alaska were decreased, the amount of work accomplished has been increased. This has been done by bringing medical services to the natives in several localities where it formerly had not been available at all and in other localities where it was necessary for the natives to go many miles to see a physician or nurse. Expenses have been cut down at the stations where the cost seemed unduly high.

Fire destroyed the old hospital at Kanakanak just before the close of last year. It was necessary to move patients into a temporary hospital made from remodeling an abandoned school building. This building is far from satisfactory, but in spite of this, many patients have been treated in the hospital and several major operations have been done. The building now being used will only accommodate 10 patients, while the former one accommodated 20.

The Kotzebue Hospital has continued the traveling nurses' program that has been in effect for some years. The Mountain Village Hospital has had a nurse render aid in the form of active medical treatment and health instruction from Marshall to Hooper Bay. In this manner, fully a thousand natives have received some help who would otherwise have had none. The physicians at Kanakanak and at Akiak have made long trips to villages in the vicinity of their hospitals and in each instance have extended the work of the hospital into the communities. Much of the work done by the traveling representatives of the hospital tends to increase the confidence of the natives in the modern medical aid that the hospitals have to offer. Emphasis is placed by formal talks, house-to-house visitation, group meetings, etc., on the importance of hygienic living with special attention being given to the prevention of tuberculosis.

The nurse at Nome has been placed on a travel basis, and her work has extended from Teller to Golovin instead of only at Nome. On all of the trips made by the traveling nurses or physicians, much stress has been laid on preventive medicine, and during the year over 1,000 natives have been immunized to diphtheria and smallpox who had not been previously protected. Plans are now being made for the extension of this type of work.

No severe epidemics were reported during the year, and only the prevalence of whooping cough in southeast Alaska required special attention. Shortly after the cases began to occur, all village nurses were instructed in the immunization for this disease. Excellent results were obtained and many deaths prevented by the early use of this simple measure. In several villages where the serum was used early, no cases occurred; while in others where little serum was used, many cases and a few deaths were reported.

Tuberculosis was again responsible for the greatest number of deaths. An attempt is being made to get sufficient funds for the erection of several hospitals for the care of this type of patient. The work of a properly-trained, Public Health nurse is of greatest importance in combating this disease, and efforts are being made to secure appropriations for several additional nurses of this type.

FEDERAL AID NEEDED FOR INDIANS

There should be greater activity by the Office of Indian Affairs in aiding destitute, aged, and afflicted Indians, and Congress should make larger appropriations for this purpose. It is possible that in some sections of the Territory the Territorial government would be a more satisfactory vehicle in educating and otherwise caring for the Indians than the Federal Government and it might be a better arrangement to have the Federal Government contribute to the Territorial schools and welfare organizations for work among the Indians. The burden on the taxpayers for the care of the white population is all the taxpayers are able to bear.

REINDEER SERVICE

Reindeer were introduced into Alaska in 1891, and the total importations numbered 1,280 head. The first herd was established at Teller Mission. Reindeer may now be found from Point Barrow to Kodiak Island, as well as along the Alaskan Peninsula, and it has been estimated that there are more than 500,000 animals in Alaska today. Of them the Government owns approximately 10,000, widely scattered over the various reindeer districts, and these herds can be drawn upon to furnish stock for any village in need.

The reindeer service personnel consists of teachers of the Bureau of Indian Affairs, who act as local reindeer superintendents in the various villages, some 50 in number; 5 unit managers, in charge of designated units, who devote their entire time to reindeer work; and the general reindeer supervisor whose office is in Nome. One full-time and one part-time clerk are employed in this office. The Governor of Alaska directs the administration of the service, in his capacity of ex officio Commissioner of the Department of the Interior for Alaska. In addition, a council was organized, representing the Government, native, and white owners, to act in an advisory capacity, which met in 1931. A second meeting was held in Nome in August 1932, but as an economy measure no meeting was scheduled for 1933. A conference of unit managers was held in Nome in June 1933 and the results justify the recommendation that such a meeting be held annually.

Two additional unit managers are needed in order to extend the benefits of the service to the two unsupervised areas, the northern district extending to Point Barrow, and the southwestern district, to include the Alaskan Peninsula and Kodiak Island. This would complete the organization of the reindeer service.

To speak of reindeer herds creates an erroneous impression. The conditions that exist today are almost identical to those that existed in the West in the days prior to the coming of fences. No continuous herding is practiced. The reindeer are free to roam as they choose, and in recent times seem to travel to an unprecedented extent. Mountains or rivers do not constitute natural boundaries. The obvious result is that the herds have disintegrated, to the point where animals may be seen on the range in any size groups of one or more. Mixing of animals from the several ranges has freely occurred, so that in any roundup there is a large admixture of strays.

The anticipation is that this drifting and mixing will continue to a greater extent in the future, and there is no feasible way in which the animals belonging to different herders can be kept separate. This is exactly the condition that existed on the western ranges in the eighties and nineties. General separation as a policy was not possible nor practical until the range became fenced, and the same holds true in the reindeer areas.

The jurisdiction of the reindeer service presumably arose from the fact that the native-owned reindeer were considered restricted property. Certain restrictions as to alienation and transfer upon death were provided for by the rules and regulations issued in 1907-8. Due to the nature of the reindeer, and the enlarged numbers, increases were prorated upon a percentage basis. At any marking the herd will be composed of restricted and of nonrestricted animals. After a marking on a percentage basis the identity of restricted offspring is

completely obliterated, so that, at the present time, the Government appears to be in a position whereby it is unable to establish its restrictions in any case. This renders the rules and regulations obsolete except insofar as individuals voluntarily conform. Obviously a new set of regulations is required to meet this unforeseen development.

The immediate requirements of the reindeer service should be referred to. The need of two additional unit managers has previously been suggested. Proper living quarters and office space and equipment for the unit managers at their official headquarters should be provided, as the facilities now available are completely inadequate. The personnel of the unit managers cannot be improved upon, and their salaries should be increased to such an extent as will compensate them for the excessive living and fuel costs which are characteristic of this part of Alaska.

I believe that the general reindeer superintendent should be given all of the authority that is necessary to carry his recommendations out on the field. He is in charge of the actual work. He devotes his entire time to that position. And he should be backed to the limit. It looks to me as though the control of the reindeer should be practically all vested in one man, and the proper official to have that authority is the man who is in charge on the ground. The present reindeer superintendent is a man of ability, courage, and the highest integrity. He is interested in his work. He is honest and energetic and knows what it is all about. He should be paid a salary commensurate with his duties and should have, as stated, authority to enforce his rules and regulations.

MISSION SCHOOLS

With the advent of the public-school system, which was inaugurated by the Federal Government in 1885, supplemented in 1900 by schools maintained by incorporated towns, in 1905 by schools outside of incorporated towns supported by 25 percent of moneys collected by the Federal Government from licenses, and in 1917 by the creation of the Territorial school system, the mission schools have gradually withdrawn from the field of education. However, several sectarian schools are still maintained and render most necessary service, especially in some of the more isolated regions.

During the past year schools of this class were conducted by the Presbyterian, Episcopal, and Catholic Churches. These schools have a total attendance of about 900 pupils.

HEALTH CONDITIONS

General health conditions throughout the Territory for the fiscal year ending June 30, 1933, were very good; in fact, much better than has been recorded for several years.

The number of cases of all diseases reported for the year totaled 1,089, less than half of last year's total. The total number of deaths recorded was 60.

There was a small epidemic of diphtheria at Nome and Barrow but no deaths were reported. Whooping cough was prevalent in southeast Alaska.

More than 200,000 units of vaccine and antitoxin serums were distributed throughout the Territory during the past year, with an adequate supply kept in storage at Nome, Fairbanks, Anchorage, and Juneau.

PUBLIC HEALTH SERVICE

Activities of the Public Health Service in Alaska are confined entirely to furnishing medical relief to beneficiaries of the United States Public Health Service. The majority of these beneficiaries are merchant seamen. This relief is furnished by acting assistant surgeons appointed for this purpose at Ketchikan, Wrangell, Sitka, Juneau, Cordova, and Seward. In addition there are two fourth-class stations at which seamen can obtain medical relief through the customs officer, Petersburg and Nome.

LIVESTOCK INSPECTION

On October 1, 1932, the Territorial veterinarian was transferred to the staff of the Alaska Agricultural College and School of Mines, as a cooperative extension worker.

The Territorial livestock inspection service to dairymen continued under his supervision and the tuberculin test was applied to dairy cattle as in previous years. An exceedingly small percentage of reacting cattle were found this past year. Tubercular cattle were promptly destroyed and disinfection of the premises under the supervision of the veterinarian followed. Dairymen of the Territory, with the aid of the tuberculin test, have eliminated diseased cattle and are now producing milk from healthy animals in clean surroundings. Their cooperation in this work has been wholeheartedly given.

Assistance is provided the fur farmers when difficulties arise in the production of fur, and a large portion of the Territory is covered by the veterinarian during the course of a year's time.

ALASKA INSANE

The legally adjudged insane from the Territory of Alaska have been cared for at Morningside Hospital under contract with the Department of the Interior for a period of 29½ years. During this period there have been admitted to Morningside Hospital a total of 1,487 patients. The patients under care June 30, 1932, were 242 males, and 45 females.

AMERICAN RED CROSS

The American Red Cross carried on its usual efficient activities through the several chapters in Alaska and as in former years has never failed to meet any emergency that has presented itself.

While this Territory has suffered few disasters requiring major services of the Red Cross, our people are ever ready to assist in calls that may come from any quarter of the globe and have without hesitation given of the funds at their command and look with pride upon the fact that every quota of membership and money assigned by the national headquarters has been oversubscribed.

The vigorous condition of most Alaskan children is strong indication of the importance and value of the public health programs which are being carried out by the Red Cross through the employment of

part-time nurses to conduct physical examinations and prescribe correction when needed, of all children in the public schools at stated periods.

RELIEF MEASURES

The 1933 Territorial legislature appropriated the sum of \$484,060 for expenditure as provided in various measures for the care of dependent children, the pioneers of Alaska, the relief of the aged and indigent, and for the rescue and relief of lost persons.

DEPENDENT CHILDREN

A board of children's guardians in each judicial division—composed of the judge of the district court, the United States marshal, and one woman citizen appointed by the governor, all of whom serve without compensation and hold office for a period of 3 years—has power to conclude arrangements with persons or institutions for the care of dependent children at such rates as may be agreed upon, not to exceed \$25 per month for each child, and to appoint agents. This board is charged with the legal guardianship of all white children under 16 years of age committed to it by the juvenile court.

PIONEERS' HOME AND ALLOWANCES

The Pioneers' Home, located at Sitka, is entirely supported by the Territory. The management of the home is in a board of trustees, of which the Governor is the chairman. Any worthy resident incapable of self-support who is qualified by 5 years' residence in Alaska, and who has no relative liable under the law for his or her support, may apply to the board of trustees for admission to the home. A completely equipped modern hospital is maintained in connection with the home, and in every respect the residents are well cared for.

The present home being inadequate to care for the number of applicants for admission, the 1933 Territorial legislature made provision for outside care of all applicants eligible for admission, pending the construction of new and larger buildings. The overflow is now being cared for at Goddard Hot Springs.

Since 1927 certain sums have been set aside by the Territorial legislature from time to time for the purpose of building a new home for the aged pioneers of Alaska. This money has for the most part been invested in United States Government bonds. The present quarters with capacity for 102 guests are crowded. The building is an old wooden structure that constitutes a dangerous fire hazard.

Actual steps toward building have unfortunately been delayed through hearings on site selection that were required to be held throughout the Territory, but it is hoped that actual construction will begin not later than April 1934.

RELIEF OF DESTITUTION

Entire superintendence of the poor is vested in the Governor, with authority to appoint an advisory board in each judicial division, composed of such officers charged with the administration and enforcement of the laws of the Territory as he may designate. Temporary and limited relief from the Territory is available for destitute persons

who are unable to earn a livelihood in consequence of bodily infirmity and who have no relatives of sufficient ability to assist them, and who are not entitled to the benefits of the pioneers' allowance or home.

ALASKA HISTORICAL LIBRARY AND MUSEUM

As in former years, the Alaska Historical Library and Museum continued its policy of disseminating information on the history, life, and habits of the Alaska native people to various institutions, schools, and individuals. A large number of letters of inquiry were received and answered. This work was made possible by many rare and important volumes of early history and explorations contained in the library.

In these volumes, dating back over 100 years, with rare wood cuts and prints, maps, and cartography, are accounts of early explorations, round-the-world journeys, which give detailed histories of the life and habits, modes of living, customs and beliefs of the Alaskan aborigines.

The museum, with its valuable collection of aboriginal art and craft, the hunting and fishing implements, the household appurtenances of the Eskimos, Thlingits, and Aleuts, their clothing and footwear and, in fact, all material used in their social and economic life, attract the attention and admiration of all visitors to the museum from all parts of the United States and Europe.

TERRITORIAL AUDITOR

It is the duty of the auditor to examine all claims presented against the Territory of Alaska, and if he allows the same, to draw warrants on the treasurer in payment.

The auditor is registrar of vital statistics and keeps a record of all births, deaths, and marriages as they are reported by the United States Commissioners throughout the Territory.

Articles of incorporation, annual reports, financial statements, appointments and consents of resident agents, and other documents required of corporations to be publicly filed and recorded, including insurance companies, in order that they may exist as corporations under the laws of Alaska or do business in Alaska as required of corporations existing under other laws, are filed with the auditor. The auditor also collects annual corporation fees and taxes and receives for filing declarations of candidacy for Territorial offices, records applications, and issues brands for blue foxes and reindeer.

CORPORATIONS

Three or more persons may unite to form a stock corporation under the general corporation laws of the Territory of Alaska for any lawful business purpose whose chief business shall be in the Territory of Alaska, except for the purpose of banking, insurance, brokerage or loan, trust and guaranty associations. Domestication of banks and of trust companies and of social, fraternal, educational, and similar corporations is authorized by special laws pertaining thereto.

Foreign corporations (there being a special law applying to insurance companies) may qualify to do business in the Territory by filing in the offices of the Territorial auditor and of the clerk of the court in each of

the judicial divisions of the Territory wherein business is contemplated being done (1) certified copy of articles of incorporation, (2) financial statement, and (3) appointment and consent of resident agent for the service of process, the agent to be a resident of the division for which he is appointed.

All corporations must pay to the Territorial auditor at the time of incorporation, if domestic, or at the time of qualifying to function in Alaska, if foreign, a tax of \$15, and the same amount each calendar year thereafter, on or before January 1 of the year concerned. If not then paid a penalty of \$2.50 attaches, and in case of tax delinquency for 2 consecutive years, dissolution or cancelation of authorized status automatically results.

INCORPORATED TOWNS

There are 17 incorporated towns in Alaska. The total assessed property valuation for the fiscal year 1933 was \$25,556,141, a decrease of \$1,599,216 from 1932. The rates of taxation range from 10 to 20 mills.

GOVERNOR'S OFFICE

From time to time during the past several years, additional duties and responsibilities have been delegated to the governor and his office by both the Federal and Territorial Governments, but with no increase in office assistants, until at present the mechanical work required of the office is so great that the governor and his secretaries do not have adequate time to function properly. Each legislature has assigned to the governor the administration of many new acts. He has direct supervision of all territorial relief measures and unemployment problems, which have increased so materially in recent years. In addition, this office has become the local organization in which is centralized Federal unemployment relief work and public works' projects.

The office is constantly being called upon for information and statistical records relating to the Territory, and should be in position to answer all such inquiries promptly.

There is urgent need of at least one more competent secretary at a good salary and at least one more stenographer.

RECOMMENDATIONS

1. Mining is the basic industry of Alaska. Upon its continued and vigorous prosecution will depend the development of the Territory. With the development of mining will follow the expansion of population and a consequent increase in all phases of human activity. The title to nearly all the mineral lands in Alaska is in the Federal Government. The Federal Government should assist in the prospecting and development of this land, and to that end I urge sufficient appropriations for the United States Geological Survey to do this work, and a business-like plan to encourage prospecting for minerals. (S.J. Memorial No. 6, passed by Territorial Legislature, 1933, asks for Federal aid to prospectors.)

The area and resources of Alaska would provide, if developed, relief to the population of congested centers throughout the country. People brought to Alaska to prospect for gold and to find employment

in public works would furnish population that would make markets for those who utilize the agriculture, timber lands, and other resources of the Territory.

2. I earnestly urge that the fisheries resources of the Bering Sea and Arctic Ocean be investigated and surveyed in accordance with the program suggested by a memorial (S.J. Memorial No. 2) to Congress passed by the last legislature.

3. The Federal Government ought to grant to fur farmers title to not less than 160 acres of the lands they now occupy through leases or otherwise, and upon which their improvements are located (S.J. Memorial No. 3, Territorial Legislature, 1933).

4. There should be greater activity by the Office of Indian Affairs in aiding destitute, aged, and afflicted Indians, and Congress should make larger appropriations for this purpose. (S.J. Memorials Nos. 9 and 10 request Federal funds for medical aid to Indians.)

5. I believe that the bills introduced in the last Congress by Alaska Delegate, Anthony J. Dimond, transferring the control of the fisheries and game of Alaska to the Territory ought to become laws.

6. There should be greater activity on the part of the Federal Government toward the extermination of predatory animals and other enemies of the fish, game animals, and birds of the Territory (H.J. Memorials Nos. 7 and 10, Territorial Legislature, 1933).

7. I urge liberal appropriations for the improvement of national parks and monuments and the encouragement of tourist travel in Alaska.

8. Efficient management of the Alaska Railroad is fast eliminating the deficit in connection with its operation. The railroad, as well as highways, air fields, etc., should be treated liberally and its utilization to the fullest extent encouraged.

9. The frequent use of airplanes for the transmission of mail indicates the present need for air-mail service between important points on the coast, to the interior, and thence to Bering Sea points.

10. I urge the extension of a comprehensive program of survey for the public domain in Alaska as a means of increasing population.

11. The construction of an international highway connecting the highways of the United States, through British Columbia and Yukon Territory, with the highways of Alaska would contribute immeasurably to the growth of Alaska and it ought to be built at the earliest possible time.

12. I believe the general reindeer supervisor should be given all of the authority that is necessary to carry out his recommendations on the field.

13. The governor's office should have at least one more competent secretary at a good salary and one more stenographer.

14. Congress should speedily pass Delegate Dimond's bill for the repeal of the "Alaska Bone Dry Law." Public opinion in Alaska is practically unanimously in favor of repeal. Twice the Territorial Legislature has attempted to repeal the Alaska Bone Dry Law, but local court decision held that the Territorial Legislature had no authority to legislate on the subject. To make the situation clear and definite, there should be congressional action (Alaska Bone Dry Repeal, Ch. 2, S.L. of Alaska, 1933).

15. Small boats' harbors should be built at Juneau, Petersburg, Cordova, and in all important fishing points where they are needed,

similar to the ports built by the Federal Government at Ketchikan, Seward, and Wrangell.

16. An adequate bridge connecting Juneau and Douglas would unite two important municipalities, which might very well be consolidated into one. Its construction would aid municipal administrative government, reduce public expense, and provide needed employment. I urge that it be built.

17. I recommend the continued maintenance of bases for coast-guard ships at Juneau and Ketchikan and the establishment of two similar bases in the third division.

18. The establishment of a naval submarine and air base in Alaska is urged. The importance of Alaska's position on the shortest route to the Orient would give it command over the sea and make impossible the hostile movement of fleets of warships or transports against the American Pacific coast.

19. And this above all: I urge the granting of a full Territorial government to Alaska.

JOHN W. TROY, *Governor.*