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Road Construction Under the Alaska Commission

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A caterpillar tractor equipped with special snow plow is hauling a train of heavily-loaded sleds over a frozen river bed in Alaska.

THE provisions of the Federal Aid Road Acts are not applicable to the Territories of Alaska and Hawaii. In Alaska, the construction, repair and maintenance of roads, bridges, trails and related works is entrusted by law to the Alaska Road Commission. In addition to the writer, Major John C. Gotwals is Chief Engineer, and Captain A. H. Bond, Secretary-Treasurer of the Commission. Prior to its organization in 1905, there were in the whole of the Territory less than a dozen miles of what might be called wagon road, with a few hundred miles of pioneer trail, mostly constructed by expeditions under the War Department.

In 1919, the Territorial Legislature appropriated \$400,000 for roads, for two years, and in 1921, \$240,000.

During its eighteen years of existence, the Commission has expended about \$8,000,000 upon a system of 6,290 miles of roads and trails, reaching from open-all-the-year south coast ports to all inhabited parts of the Territory.

The total expenditures during the past fiscal year for roads and trails amounted to \$683,247.68, of which \$236,251.91 was for construction, and \$446,995.77 for maintenance. Work was performed upon 5,990 miles of the system. The Alaska

Road Commission has never professed to build hard-surfaced roads, nor would any such construction be justified in view of the great extent of country to be covered with very meager resources. In many isolated localities, the erection of a cableway and cage across a glacial stream, or the setting of stakes across the



The heavy black lines represent the Alaskan railways and highways described in the accompanying article.



Eleven dogs hauling five Armco culverts for installation on the Talkeetna-Cache Creek project. These pipes are part of two carloads recently used on this road. The entire shipment was economically transported by dog teams.

open tundra, is a matter of life and death to the inhabitants.

The most important project of the Commission is the Valdez-Circle Military Road, or Richardson Highway, extending from Valdez, an open-all-the-year south coast port, to Circle, on the Upper Yukon River, a distance of 531 miles, or about the distance from Boston to Richmond, or from Vancouver to Banff. This road is now passable for automobiles throughout except for 79 miles between Chatanika and Miller House, on the portage between the Yukon and Tanana Rivers. Construction upon this section is actively under way. The 371 miles between Valdez and Fairbanks was passable for dog teams in 1909, for a light horse-drawn wagon in 1911, and in 1913, the first automobile made the through overland trip which involves crossing the Coast or Chugach Range through Thompson Pass at an elevation of 2,750 feet, and the main Rock Mountains, or Alaskan Range, through Isabelle Pass, at an elevation of 3,300 feet.

Of even more importance than the wagon roads to the economic life of the Interior, are the winter sled roads and trails over which all mail, except express, and personnel, are handled. Even heavy freight can be handled by bob-sled in the winter time more economically than by

truck in the summer time. Twenty-five cents per pound is a not uncommon charge for handling provisions and miscellaneous supplies over unimproved trails, and a community considers itself lucky when the through rate from the railroad, or river landing, is reduced to less than ten cents. Data collected by the Commission indicate that transportation charges upon freight actually passing over its roads and trails have been reduced over \$2,000,000 annually, due to the improved facilities provided.

The Talkeetna-Cache Creek project affords a striking example of this. For years the Commission had maintained a crude pack trail into this district and the production in 1919 and 1920 was only about \$140,000 in gold. In 1920, the Commission expended \$75,000 on a 42-mile route to the Government Railroad, opening up the entire mileage for sled traffic, and is continuing its improvement to road standard. The following winter 500 tons went into the district by bob-sled at a saving of three cents per pound, or \$30,000, over the old rate. As a result, several hydraulic plants are being installed and a hydroelectric plant is being built to furnish power for a dredge. Last winter the freight amounted to 800 tons, and the saving \$48,000.

The most important new work included in the Ten Year Program, is the provision of road and trail feeders to the Government Railroad. To date, Congress has declined to authorize special relief for the railroad and adheres to its original development policy.

However, using its existing system as a nucleus, the Alaska Road Commission has to date provided 43 feeders to the Government Railroad, covering, in fact, all known areas of possible development. Not all of these routes are completed, but the Ten Year Program contemplates their completion as well as the completion of additional projects that may develop during the next ten years.

Now that the Government Railroad is completed, a very interesting circular tour may be taken, as shown on the accompanying map; namely, in over the Government Railroad and out over the Richardson Highway by automobile.