of this road all the way to Mill Bay. Not only would this construction materially benefit the homesteaders, but there were valid historical and sentimental reasons for performing the work. The Russians had built this road, perhaps as early as 1798, in order to reach their grist mill on Mill Bay, operated by water flowing from the chain of lakes. The date of construction made it a historical road, "the oldest highway in the Territory of Alaska, and almost as old as the famous El Camino Real of the California Padres."[29]

The subcommittee pointed out that Kodiak Island was most favorably located with regard to the great fishing banks of the North Pacific. This location promised a prosperous future, and Kodiak shortly was destined "to become the center of the largest deep sea fisheries of the Pacific ocean, meaning, most likely, the most important, as far as quantity of production is concerned, fishery in the world." The development of the fisheries naturally would create a higher demand for farm goods, such as meat and dairy products. It therefore was essential to build highways to the ranches so farmers could deliver their goods to town. The subcommittee reminded the Commission that its first road project on Kodiak had been designed to enable Abbert's ranch in the Buskin River Valley to market his meat and milk in town without having to depend upon the uncertain water route. When citizens first broached the subject with the Commission, they received assurances that this road to the Abbert ranch would be built. On the strength of that promise, Abbert had invested thousands of dollars in ranch improvements and several other homesteaders had located in the Buskin River Valley. Finally, the subcommittee was of the firm belief that every member of the Kodiak Good Roads Club, embracing virtually every resident of Kodiak and vicinity, would contribute in either cash or labor to help carry out this project. In fact, residents already had pledged $295.00 in cash and 61 man-days of labor, including horse teams as well.[30]

During the 1926 work season, the Commission spent $13,754.29 in construction of the Kodiak-Abberts road and another $500 in maintenance for a total of $14,254.29.[31] The petitioning had been successful.

The Iliamna Project

There were times when the Commission discovered that it had listed a stretch of wagon road erroneously in its annual report. This was the case with the Iliamna project, route 48, listed as ten miles of wagon road and two miles of trail. Superintendent Sterling inspected the site in 1924 and reported that no wagon road existed, nor had there ever been one. Prior to 1917 the Commission had performed no work in that district with the exception of a reconnaissance trip by John Zug. In 1917 the Commission had sent W. G. Fenton to start work on the so-called road. He spent $5,000 and less than a week after he had left, a heavy rain made the first four miles impassable because the location had been too close to a stream. In 1921 the Commission sent H. W. Vance as foreman to the project. Vance changed the location of the first four miles, crossing a different summit to reach the creek flowing into the Iliamna River. Although Vance had avoided danger of flooding, the stretch getting up to the summit and then down from it was so steep as to be unsuitable for a wagon road, indeed, in some places not even a pack horse could carry a load.[32]

Sterling observed that the trail served traders, settlers, prospectors and trappers in and around Iliamna village who transported part of their supplies over it. Villagers purchased most of their goods from canneries on Bristol Bay. They shipped their supplies up the Kvichak River, thence through Iliamna Lake and four miles up the Iliamna River. It cost $20 to transport each ton over this route, entirely navigable for boats drawing three feet even in low water. Sterling suggested that the route from Bristol Bay would always be used for transporting bulk tonnage, depending on the availability of steamer service. Building a wagon road from Iliamna Bay would not change this transportation pattern, he thought, but since there was no regular, frequent and dependable service to Bristol Bay, and since the canneries could not always supply all needs, the Iliamna Bay outlet was vital to those living within the district. He estimated that there were 45 Caucasians and 150 Natives. Most of the residents trapped, a few pros-

pected, and most seemed content to remain in the area all of their lives. Sterling pointed out that the area was highly mineralized, containing gold, silver, copper, lead, zinc and oil. All that was needed to develop the country, he thought, was to encourage immigration by constructing a transportation route. He suggested that various government bureaus cooperate to make the trail a viable one. The Department of Commerce, for example, should improve the bay by marking the deepest channel with buoys or spars to make it safe for gasboats; while the Post Office Department should inaugurate a bimonthly service between May and October on specified days, insisting that the carrier deliver the mail to a cabin at the end of the trail so that it could be taken on by pack horse. This scheme would insure that residents could get in and out on a regular mail boat.[33]

Ultimately a wagon road should be built, but before this happened the Commission should undertake several projects for helping the district, such as constructing a shelter cabin at the end of the new trail; carry the bay end of the trail to a point where it could be reached by gas boat in high or low tide; build bridges over the entire route; and put the trail on the west and east sides of the summit on wagon road grade.[34]

Following Sterling's recommendations, the Commission expended $5,770.00 in new construction and $725 in maintenance on the Iliamna Bay - Iliamna Lake route for a total of $6,495; and another $5001.76 and $1,540, for a total of $6,541.76 in 1927.[35]

What the foregoing examples show are that the Alaska Road Commission responded flexibly and intelligently to the territory's transportation needs. A highly competent staff stretched modest appropriations to best advantage. What nagged Commission personnel, however, was the fact that each new project completed subsequently required funds for maintenance. There would come a time, they feared, when all available funds would be required for maintaining existing wagon roads, trails, bridges, and tramways, among others. This would foreclose the construction of any new projects.

FOOTNOTES

1. Memorandum by C. H. Skinner, Chief Clerk, September 30, 1932, R. G. 126, Central Classified Files, 9-1-55, N.A.

2. Board of Road Commissioners for Alaska, Report Upon The Construction and Maintenance of Roads, Bridges, and Trails, Alaska in Annual Report of the Chief of Engineers, 1926, Extract (Washington: Government Printing Office, 1926), p. 1953. Hereafter cited as Annual Report of the Alaska Road Commission and Year.

3. Ibid.

4. Ibid., p. 1954.

5. Ibid., p. 1957.

6. Ibid.

7. Ibid.

8. Ibid., pp. 1957-1958.

9. Board of Road Commissioners For Alaska, Annual Report Of The Alaska Road Commission Fiscal Year 1926, Report Upon The Construction and Maintenance of Military and Post Roads, Bridges And Trails; And of Other Roads, Tramways, Ferries, Bridges, Trails, And Related Works In The Territory Of Alaska, Twenty-Second Annual Report, 1926, Part II, Operations (Juneau, Alaska: Alaska Daily Empire Print, 1926), pp. 10-11. Hereafter cited as Part II, Operations and year.

10. Ibid., pp. 12, 15-16.

11. Ibid., pp. 19-20.

12. Ibid., p. 20.

13. Ibid., p. 37.

14. Ibid.

15. Ibid., pp. 37-38.

16. Hajdukovich to Superintendent, ARC, Fairbanks, February 25, 1924, R.G. 30, A.R.C., Box 65480, Federal Records Center, Seattle, Washington.

17. Galen to Steese, April 20, 1924, R.G. 30, ARC, Box 65480, Federal Records Center, Seattle, Washington; Part II, Operations, 1924, pp. 49-50.

18. Steese to Territorial Board of Road Commissioners, April 29, 1924, R.G. 30, ARC, Box 65480, Federal Records Center, Seattle, Washington.

19. Lukens to Gotwals, February 9, 1924, R.G. 30, ARC, Box 65637, Federal Records Center, Seattle, Washington.

20. Ibid.

21. Taylor to Gillette, October 21, 1927, R.G. 30, ARC, Box 65637, Federal Records Center, Seattle, Washington.

22. Ibid.

23. Gillette to President of the Board, July 26, 1928, R.G. 30, Box 65637, Federal Records Center, Seattle, Washington.

24. Gillette to MacDonald, February 16, 1929, Gillette to Foreman, Yukon-Kuskokwim Portage, April 22, 1929, Gillette to Haselem, April 23, 1929, R.G. 30, ARC, Box 65637, Federal Records Center, Seattle, Washington.

25. Sterling to Steese, July 16, 1924, R.G. 30, ARC, Box 65479, Federal Records Center, Seattle, Washington.

26. Ibid.

27. Ibid.

28. Ibid.

29. Subcommittee of the Kodiak Good Roads' Club to Lunsford, February 9, 1925, R.G. 30, ARC, Box 65479, Federal Records Center, Seattle, Washington.

30. Ibid.

31. Part II, Operations, 1926, p. 97.

32. Sterling to Lunsford, September 2, 1924, R.G. 30, ARC, Box 65479, Federal Records Center, Seattle, Washington.

33. Ibid.

34. Ibid.

35. Part II, Operations, 1927, 1928, pp. 95, 85.

EXPENDITURES IN DETAIL FOR FISCAL YEAR 1926

Federal Appropriations, Alaska Fund and Funds Contributed by the Territory of Alaska and Others

Acct. No.	Name of Route	Construction	Maintenance	Totals
79	Seward Warehouse	$	$ 16.00	$ 16.00
80	Minchumina Portage Recon....	500.00	.....	500.00
80A	McGrath-Tokotna (Summer) ...	.....	60.20	60.20
80AA	McGrath-Tokotna (Winter) ...	.....	831.42	831.42
80B	McGrath-Telida	.....	408.90	408.90
80E	Tokotna-Twin Peaks	113.16	.....	113.16
80G	Tokotna-Nixon Fork (Summer).	.....	160.56	160.56
80GG	Tokotna-Nixon Fork (Winter).	.....	108.16	108.16
81	Good Creek-Salmon River.....	1,493.00	300.00	1,793.32
86	Fourth of July Creek	600.00	440.39	1,040.39
88	Ferry-Eva Creek	10,155.79	1,400.00	11,555.79
89A	Seward Peninsula Railroad, 1st Sec.	7,649.25	4,200.00	11,849.25
89A	Seward Peninsula Railroad, 2nd Sec.	.....	13,200.00	13,200.00
90B	Shelter Cabins, 2nd Division	1,754.55	917.53	2,672.08
90C	Shelter Cabins, 3rd Division	2,852.73	417.30	3,270.03
90D	Shelter Cabins, 4th Division	3,340.60	432.70	3,773.30
92A	Bethel-Quinhagak	.....	112.60	112.60
92B	Bethel-Akiak	300.00	222.77	522.77
92L	Crooked Creek-Anlak	.....	277.42	277.42
92M	Aniak-Tuluksak	.....	25.00	25.00
92N	Akiak-Canyon Creek	.....	306.00	306.00
920	Tuluksak-Bear Creek	1,185.12	.....	1,185.12
92P	Holy Cross-Kaltshak	500.00	.....	500.00
93	Chulitna Trail	.....	116.29	116.29
93A	Bull River Trail	1,183.51	200.00	1,383.51
93B	Indian River Footbridge	.....	4.00	4.00
94	Kodiak-Abberts	13,754.29	500.00	14,254.29
95	Kanatak-Becharof Lake	.....	50.75	50.75
96	Chickaloon-King River	.....	413.66	413.66
98	Homer Project	7,382.57	.....	7,382.57
98A	Nuka Bay	4,302.66	.....	4,302.66
100	Juneau Office and General Overhead.....	12,217.29	22,100.00	34,317.29
	Totals	$828,045.38	$483,272.31	$1,311,317.69

Source: Part II, Operations, 1926, pp. 34, 93-96,

EXPENDITURES IN DETAIL FOR FISCAL YEAR 1926

Federal Appropriations, Alaska Fund and Funds Contributed by the Territory of Alaska and Others

Acct. No.	Name of Route	Construction	Maintenance	Totals
47A	Wiseman Aviation Field.....	$ 2,000.00	$	$ 2,000.00
48	Iliamna Bay-Iliamna Lake...	5,770.00	725.00	6,495.00
49	Davidson's Landing-Taylor..	.....	2,616.84	2,616.84
51	Talkeetna-Cache Creek	2,000.00	8,229.12	10,229.12
51A	Cache Creek Trail	1,270.00	706.28	1,976.28
51B	Peters Creek Trail	3,807.93	620.00	4,427.93
51C	Upper Yentna	1,114.91	.....	1,114.91
53	Eagle-Circle	742.00	941.78	1,683.78
53A	Circle-Fort Yukon	.....	1,219.65	1,219.65
53B	Fort Yukon Aviation Field..	1,190.89	.....	1,190.89
54	Chisana-Nizina	770.19	.....	770.19
55	Kenai-Russian River	1,200.00	1,908.87	3,108.87
57	McCarthy-Nizina	9,291.88	6,290.00	15,581.88
57A	Nizina river Bridge	3,000.00	3,876.35	6,876.35
59	Fairbanks Bridge	.....	13.85	13.85
59A	Fairbanks Depot	3,403.09	.....	3,043.09
61	Strelna-Kusklana	.....	1,321.44	1,321.44
62	Dime Creek	.....	2.50	2.50
63	Dunbar-Brooks	2,500.00	1,706.02	4,206.02
63B	Brooks-Amy Creek	.....	277.10	277.10
63C	Brooks Tram	.....	4,190.59	4,190.59
63E	Livengood Aviation Field...	294.00	.....	294.00
64AA	Cripple-Cripple Mountain...	611.05	.....	611.05
65A	Gulkana-Chistochina, 1st Sec.....	13,500.00	2,185.00	15,685.00
65A	Gulkana-Chistochina, 2nd Sec.....	5,600.00	.....	5,600.00
65D	Ketchumstuk-Tanana Crossing	.....	807.00	807.00
65E	Chicken-Ketchumstuk	.....	144.50	144.50
65F	Grundler-Tanana Crossing...	602.26	.....	602.26
65G	Slana-Chisana Reconnaissance	385.04	.....	385.04
67	Nome-Teller	.....	697.90	697.90
68	Flagging Trails	.....	4,043.04	4,043.40
73C	Old Hamilton-Scammon Bay ..	1,100.00	.....	1,100.00
75	Anchorage-Eagle River	4,973.60	5,800.00	10,773.60
75B	Anchorage-Whitney	3,627.47	1,500.00	5,127.47
75D	Anchorage Warehouse	.....	427.98	427.98
75E	McDonald Road	605.13	150.00	755.13
76	Cantwell-Valdez Creek	.....	21.00	21.00

EXPENDITURES IN DETAIL FOR FISCAL YEAR 1926

Federal Appropriations, Alaska Fund and Funds Contributed by the Territory of Alaska and Others

Acct. No.	Name of Route	Construction	Maintenance	Totals
33F	Flat City-Otter Discovery..	$	$ 480.60	$ 480.60
33H	Flat Aviation Field	1,200.00	.....	1,200.00
34B	Iditarod-Shageluk.....	500.00	.....	500.00
35A	Archangel Extension	1,200.00	1,767.42	2,967.42
35AA	Sherry Branch	1,119.32	.....	1,119.32
35AB	Fairangel Extension	104.20	.....	104.20
35D	Willow Creek Extension	.....	2,865.60	2,865.60
35E	Wasilla-Fishhook	.....	4,284.58	4,284.58
35F	Wasilla-Knik	2,610.00	2,055.62	4,665.62
35H	Wasilla-Finger Lake-Palmer.....	.....	220.30	220.30
35J	Wasilla-Matanuska	3,520.00	2,317.62	5,837.62
35K	Matanuska Trunk Road	.....	391.50	391.50
35N	Houston-Willow Creek	.....	249.00	249.00
36	Mineral Creek	6,817.01	3,341.00	10,158.01
36A	Granby Road	.....	349.44	349.44
38A	Ruby-Long	.....	4,183.79	4,183.79
38C	Ophir-Cripple	.....	475.79	475.79
38D	Ophir-Tokotna, 1st Sec. ...	10,240.00	2,340.00	12,580.00
38D	Ophir-Tokotna, 2nd Sec. ...	12,768.16	3,210.00	15,978.16
38E	Long-Poorman (Summer)	11,725.88	2,200.00	13,925.88
38F	Poorman-Ophir	.....	702.59	702.59
38H	Ganes Creek Road	2,158.85	3,000.00	5,158.85
38K	Ruby Aviation Field	600.00	.....	600.00
40	Douglas-Gastineau Channel..	2,102.16	800.00	2,902.16
41B	Kotzebue-Point Barrow	1,900.00	.....	1,900.00
44A	Skagway-Smuggler's Cove ...	.....	558.80	558.80
46	Kobi-Eureka	.....	659.75	659.75
46D	McKinley Park Road, 1st Sec.....	15,230.00	49.16	15,279.16
46D	McKinley Park Road, 2nd Sec.....	18,200.00	.....	18,200.00
46D	McKinley Park Road, 3rd Sec.....	19,060.24	.....	19,060.24
46E	Diamond-Telida	.....	968.89	968.89
46F	Nenana Cemetery	.....	619.20	619.20
46G	Kobi-Bonnifield	.....	60.90	60.90
46H	Lake Minchumina Aviation Field.....	750.00	.....	750.00
47	Coldfoot-Wiseman	.....	657.24	657.24

EXPENDITURES IN DETAIL FOR FISCAL YEAR 1926

Federal Appropriations, Alaska Fund and Funds Contributed by the Territory of Alaska and Others

Acct. No.	Name of Route	Construction	Maintenance	Totals
16	Chatanika-Miller House, 7th Sec.	$ 19,975.00	$	$ 19,975.00
16	Chatanika-Miller House, 8th Sec.	19,703.48	.....	19,703.48
17	Fort Gibbon-Kaltag	.....	514.00	514.00
18	Kaltag-Nome	2,000.00	969.88	2,969.88
18A	Bonana-Kotzebue	.....	234.78	234.78
20DA	Tokotna-Ophir	.....	396.43	396.43
21	Unalakleet-St. Michael	.....	162.28	162.28
22	Hot Springs-Sullivan Creek.	.....	3,075.95	3,075.95
23A	Snowshoe-Beaver	.....	916.81	916.81
23B	Beaver-Caro	5,250.00	9,220.10	14,470.10
23C	Big Creek	1,060.00	907.57	1,967.57
23D	Caro-Flat Creek	.....	529.32	529.32
25D	Mouth of Center Creek	.....	122.15	122.15
25E	Submarine Paystreak	.....	359.39	359.39
25F	Anvil-Glacier	1,489.41	900.00	2,389.41
25G	Snake River Extension	.....	963.53	963.59
25L	Nome Aviation Field	2,500.00	.....	2,500.00
25M	Seward Peninsula Telephone Lines	.....	2,149.10	2,149.10
26	Candle-Candle Creek	.....	1,020.69	1,020.69
27	Deering-Inmachuk	1,500.00	3,995.06	5,495.06
28A	Nome-Taylor	.....	455.68	455.68
29	Fort Gibbon-Bettles	.....	780.75	780.75
29A	Bettles-Coldfoot	.....	130.75	130.75
30	Hot Springs Landing-Eureka.	1,500.00	5,473.77	6,973.77
30A	Hot Springs-Tofty	600.00	658.47	1,258.47
31	Caribou Creek	.....	125.71	125.71
32A	Tokotna-Flat (Summer)	.....	463.33	463.33
32AC	Candle Creek-Tokotna	.....	74.89	74.89
32B	Iditarod-Flat	3,858.20	2,400.00	6,258.20
32C	Ophir-Iditarod (Winter)	.....	225.88	225.88
32D	Flat-Crooked Creek (Winter)	500.00	1,107.60	1,607.60
32E	Tokotna Aviation Field	1,691.19	.....	1,691.19
32F	Tokotna Depot	1,650.26	300.00	1,950.26
33C	Flat City-Flat Creek	.....	623.80	623.80
33D	Head Flat Creek-Willow Creek	.....	730.95	730.95

EXPENDITURES IN DETAIL FOR FISCAL YEAR 1926

Federal Appropriations, Alaska Fund and Funds Contributed by the Territory of Alaska and Others

Acct. No.	Name of Route	Construction	Maintenance	Totals
7V	Fairbanks-Wireless Road	$	$ 15.00	$ 15.00
8	Nome-Council, 1st Sec.	2,000.00	14,050.00	
8	Nome-Council, 2nd Sec.	6,402.43	2,150.00	8,552.43
8H	Casa de Paga	.....	727.52	727.52
11A	Eagle-Liberty	.....	1,835.80	1,835.80
11AA	American Summit-King Solomon	5,429.14	1,000.00	6,429.14
11B	Liberty-Fortymile	.....	171.50	171.50
11C	Steel Creek-Jack Wade	.....	325.25	325.25
11CC	Steel Creek-Jack Wade (Summer)	.....	162.50	162.50
11D	Steel Creek-Walker's Fork ..	.....	308.20	308.20
11E	Eagle-Seventymile	10.00	1,301.80	2,211.80
11F	Jack Wade-Chicken	.....	814.20	814.20
11G	Steel Creek-Canyon Creek ...	.....	92.00	92.00
11H	Liberty Cabin-Dome	.....	77.15	77.15
11I	Dome-Steel Creek	500.00	1,485.49	1,985.49
11L	Franklin-Chicken Creek	.....	156.50	156.50
11M	Jack Wade-Walker's Fork (Summer)	.....	125.00	125.00
11MM	Jack Wade-Mouth of Walker's Fork	.....	114.50	114.50
13A	Nome-Bessie	4,931.90	1,400.00	6,331.90
13B	Bessie-Banner	.....	738.91	738.91
13C	Bessie-Little Creek	500.00	1,041.82	1,541.82
13F	Nome-Osborne	.....	141.42	141.42
13K	Bessie-Buster	3,121.95	1,500.00	4,621.95
14A	Sitka National Monument	300.00	1,272.65	1,572.65
14B	Sitka National Cemetary	150.00	631.82	781.82
15	Circle-Miller House	.....	3,135.91	3,135.91
16	Chatanika-Miller House, 1st Sec.	8,210.00	10,130.00	18,340.00
16	Chatanika-Miller House, 2nd Sec.	16,127.00	3,000.00	19,127.00
16	Chatanika-Miller House, 3rd Sec.	17,800.00	2,009.00	19,809.00
16	Chatanika-Miller House, 4th Sec.	19,725.00	.....	19,725.00
16	Chatanika-Miller House, 5th Sec.	19,910.00	.....	19,910.00
16	Chatanika-Miller House, 6th Sec	19,850.00	.....	19,850.00

EXPENDITURES IN DETAIL FOR FISCAL YEAR 1926

Federal Appropriations, Alaska Fund and Funds Contributed by the Territory of Alaska and Others

Acct. No.	Name of Route	Construction	Maintenance	Totals
4G	Mile 168-Delta River, 2nd Sec.	$ 5,711.00	$ 9,400.00	$ 15,111.00
4H1	Delta River-Rapids, 1st Sec.	7,250.00	9,100.00	16,350.00
4H1	Delta River-Rapids, 2nd Sec.	9,300.00	8,200.00	17,500.00
4H1	Delta River-Rapids, 3rd Sec.	8,020.00	9,020.00	17,121.57
4H2	Rapids-Grundler, 1st Sec.	9,210.00	10,150.00	19,360.00
4H2	Rapids-Grundler, 2nd Sec.	10,307.69	9,050.00	19,357.69
4I	Grundler-Richardson, 1st Sec.	8,500.00	4,200.00	12,700.00
4I	Grundler-Richardson, 2nd Sec.	6,690.00	5,720.00	12,410.00
4J	Richardson-Salchaket, 1st Sec.	10,500.00	6,420.00	15,920.00
4J	Richardson-Salchaket, 2nd Sec.	8,180.00	7,600.00	15,780.00
4J	Richardson-Salchaket, 3rd Sec.	10,402.64	5,190.00	15,592.64
4K	Salchaket-Fairbanks, 1st Sec.	.....	9,210.00	9,210.00
4K	Salchaket-Fairbanks, 2nd Sec.	15,077.92	4,020.00	19,097.92
4KA	Salcha Bridge	12,207.89	2,725.00	14,932.89
5A	Dunbar-Fort Gibbon	.....	1,440.48	1,440.48
6A	Willow Creek-Tonsina, 1st Sec.	7,600.00	3,275.00	10,875.00
6A	Willow Creek-Tonsina, 2nd Sec.	8,035.85	2,475.00	10,510.85
6B	Tonsina-Chitina	5,220.08	7,220.00	12,440.08
6D	Chitina Depot	3,380.78	750.00	4,130.78
7A	Summit-Chatanika	8,354.40	4,500.00	12,854.40
7D	Ester Creek	920.00	2,279.01	3,199.01
7G	Fairbanks-Gilmore, 1st Sec.	13,427.00	3,800.00	17,227.00
7G	Fairbanks-Gilmore, 2nd Sec.	14,503.87	2,700.00	17,203.87
7I	Gilmore-Summit	4,514.38	3,100.00	7,614.38
7J	Fairbanks-Chena Hot Springs.	500.00	1,203.06	1,703.06

EXPENDITURES IN DETAIL FOR FISCAL YEAR 1926

Federal Appropriations, Alaska Fund and Funds Contributed by the Territory of Alaska and Others

Acct. No.	Name of Route	Construction	Maintenance	Totals
3A	Haines-Wells	$ 2,060.00	$ 6,025.14	$ 8,085.14
3B	Pleasant Camp Extension, 1st Sec.	13,050.00	5,120.00	18,170.00
3B	Pleasant Camp Extension, 2nd Sec.	15,500.00	.....	15,500.00
3B	Pleasant Camp Extension, 3rd Sec.	7,511.69	.....	7,511.69
3C	Porcupine Extension	.....	25.00	25.00
3D	Haines-Mud Bay	.....	261.75	261.75
3E	Haines-Chilkoot	.....	64.50	64.50
4BA	Valdez-Ptarmigan Drop, 1st Sec.	9,700.00	9,200.00	18,900.00
4BA	Valdez-Ptarmigan Drop, 2nd Sec.	11,200.00	8,000.00	19,200.00
4BA	Valdez-Ptarmigan Drop, 3rd Sec.	10,625.00	7,300.00	17,925.00
4BA	Valdez-Ptarmigan Drop, 4th Sec.	14,070.00	5,060.00	19,130.00
4BA	Valdez-Ptarmigan Drop, 5th Sec.	15,130.68	3,000.00	18,130.68
4BB	Ptarmigan Drop-Ernestine, 1st Sec.	8,030.00	8,030.00	16,330.00
4BB	Ptarmigan Drop-Ernestine, 2nd Sec.	9,520.00	10,100.00	19,620.00
4BB	Ptarmigan Drop-Ernestine, 3rd Sec.	7,227.69	10,042.00	17,269.69
4C	Ernestine-Willow Creek, 1st Sec.	10,130.00	8,520.00	18,650.00
4C	Ernestine-Willow Creek, 2nd Sec.	12,130.31	6,205.00	18,335.31
4D	Willow Creek-Gulkana, 1st Sec.	12,200.00	6,300.00	18,500.00
4D	Willow Creek-Gulkana, 2nd Sec.	14,204.39	4,900.00	19,104.39
4D	Willow Creek-Gulkana, 3rd Sec.	13,100.00	4,000.00	17,100.00
4E	Gulkana-Sourdough	500.00	7,816.20	8,316.20
4F	Sourdough-Mile 168	8,754.59	5,400.00	14,154.59
4G	Mile 168-Delta River, 1st Sec.	6,000.00	9,800.00	15,800.00

TRAFFIC CENSUS FOR FISCAL YEAR 1926

District	No. Route	Station	Period 1925	No. of Persons	Autos	Wagons	Sleds	Pack Horses	Tonnage
Flat City-Flat Creek	33C	Flat	Jan.-Dec.	600	100	40	100	20	175
Flat Creek-Willow Creek	33D	Willow Creek	Jan.-Dec.	300	90	30	50	15	125
Flat City-Otter Discovery ..	33F	Flat	Jan.-Dec.	600	40	100	40	70	325
Ophir-Tokotna	38D	Ganes Creek	June-Sept.	267	89	36	----	54	70
Poorman-Ophir	38F	Ophir	May-Oct.	30	----	----	----	6	----
Ganes Creek Road	38H	Ganes Creek	June-Sept.	473	154	182	----	25	241
Cripple-Cripple Mt.....	64A	Cripple	Jan.-Dec.	80	----	----	40	----	3
McGrath-Tokotna	80AA	McGrath	Nov.-Dec.	528	----	----	373	----	20
McGrath-Candle Creek	80C	McGrath	May-Nov.	60	----	----	----	----	----
Tokotna-Twin Peaks	80E	Tokotna	May-Oct.	25	----	----	----	8	1/2
Medfra-Nixon Mine	80F	Medfra	June-Oct.	80	----	20	----	----	8
Tokotna-Nixon Fork	80G	Tokotna	May-Oct.	30	----	----	----	----	----
NOME									
Nome-Council	8	Safety	June-Oct.	260	75	49	----	----	29
Nome-Teller	67	Sinrock	Jan.-Dec.	380	----	----	155	----	17

Source: Part II, Operations, 1926, pp. 34-35

TRAFFIC CENSUS FOR FISCAL YEAR 1926

District	No. Route	Station	Period 1925	No. of Persons	Autos	Wagons	Sleds	Pack Horses	Tonnage
NENANA									
Rampart-Eureka	9	Rampart	June	49	----	1	----	----	1
Kobi-Diamond	46	Kobi	Jan.-Apr.	75	----	----	65	----	12
Nenana-McGrath	----	Knight's R. H...	Jan.-Dec.	390	----	----	275	----	30
Ruby-Poorman	38A&E	Long	Jan.-Dec.	610	58	48	239	----	155
Ferry-Eva Creek	88	Ferry	May-Dec.	265	----	46	25	----	21
SOUTHWESTERN									
Archangel Extension	35A	Fishhook	Jan.	57	----	----	36	----	30
Wasilla-Fishhook	35E	Wasilla	Jan.-Dec.	3646	937	46	215	----	1112
Wasilla-Knik	35F	Wasilla	Jan.-Dec.	2591	258	156	98	78	140
Wasilla-Palmer and Wasilla-Matanuska	35H 35J	Wasilla	Jan.-Dec.	4249	394	359	181	53	259
McKinley Park Road	46D	McKinley	Jan.-Apr.	207	----	----	175	----	411
Iliamna Bay-Iliamna	48	Iliamna	Mar.-Oct.	242	----	----	71	120	13
Talkeetna-Cache Creek	51	Moose Creek	Jan.-May	409	----	----	193	----	201
Kenai-Russian River	55	Cooper's Landing	Jan.-Dec.	674	----	----	113	----	23
Anchorage-Eagle River	75	6 Mile R.H.	Jan.-Nov.	7509	3213	2	43	----	100
Anchorage-Lake Separd	75A	Spenard	Jan.-June	931	245	----	37	----	518
Cantwell-Valdez Creek	76	Cantwell	Jan.	40	----	----	19	----	2
Kanatak-Becharof Lake	94	Kanatak	Jan.-Apr.	338	27	9	88	60	72
KUSKOKWIM									
Tokotna-Flat	32A	Tokotna	May-Nov.	96	----	----	----	36	3
Flat-Moose Creek	32AB	Flat	May-Nov.	44	----	----	----	24	2
Candle Creek-Tokotna	32AC	Tokotna	May-Oct.	64	----	----	----	----	----
Iditarod-Flat	32B	Flat	Jan.-Dec.	700	120	200	300	30	799

TRAFFIC CENSUS FOR FISCAL YEAR 1926

District	No. Route	Station	Period 1925	No. of Persons	Autos	Wagons	Sleds	Pack Horses	Tonnage
HAINES									
Haines-Pleasant Camp	3A&B	Wells	May-Dec.	7691	2191	23	148	----	297
EAGLE									
Eagle-Liberty	11A	Eagle	June-Dec.	1190	----	78	436	381	281
Eagle-Seventymile	11E	Eagle	Oct.-Dec.	225	----	----	105	25	87
Jack Wade-Chicken	11F	Jack Wade	June-Nov.	232	----	----	----	237	10
Steel Creek-Walker's Fork .	11D&G	Steel Creek	June-Sept.	155	----	----	----	158	7
Franklin-Chicken	11L	Franklin	June-Dec.	517	----	----	29	215	73
Eagle-Circle	53	Eagle	Nov.-Dec.	56	----	----	28	----	6
Chicken-Tanana Crossing ...	65D&E	Chicken	June-Sept.	261	----	----	----	86	5
CHITINA									
Chitina-Valdez-Fairbanks ..	----	Chitina	Jan.-Dec.	2097	982	72	479	6	1274
FAIRBANKS									
Fairbanks-Chitina-Valdez ..	----	Richardson	May-Nov.	3111	1171	67	----	----	430
Fairbanks-Chitina-Valdez ..	----	Grundler Ferry .	May-Oct.	2149	854	4	----	----	246
Gilmore-Fairbanks Creek ...	7C	Meehan	May-June	375	97	32	26	----	157
Gilmore-Fairbanks Creek ...	7C	Meehan	Oct.-Dec.	108	4	----	43	----	72
Fairbanks-Chena Hot Springs	7J	Colorado R. H...	Jan.-Dec.	310	----	----	155	----	131
Chatanika-Circle	15&16	Miller House ...	Jan.-Nov.	1123	----	136	315	5	139
Chatanika-Circle	15&16	12 Mile R.H	Jan.-Apr.	174	----	----	198	----	40
Beaver-Caro	23B	Beaver	May-Dec.	75	----	2	27	10	27
Circle-Ft. Yukon	53A	Ft. Yukon	Jan.-Apr.	150	----	----	68	----	14
Grundler-Tanana Crossing ..	65F	Grundler	Jan.-Apr.	108	----	----	66	----	14

CHAPTER EIGHT

HIGH HOPES AND DISAPPOINTMENTS

Alaskans always demanded more transportation facilities than the Alaska Road Commission could construct because of the fiscal constraints Congress imposed. It did not matter in what isolated sections of the Territory its residents worked and played. Invariably, they always demanded that their mails be delivered and they be afforded access to supply sources, such as rivers and ports. Alaskans also were incurable boosters who bragged about the natural resources, scenic attractions, and climatic advantages of their particular region.

Citizens of Nome Think Highly of Their Region

The citizens of Nome, on the sparsely settled, treeless and windswept Seward Peninsula, thought much of their region. At the end of 1927, the Northwestern Alaska Chamber of Commerce issued an appeal to the federal government to extend the Nome-Shelton Tramway to Candle and to construct adequate harbor facilities at Nome. The appeal, handsomely printed by the Nome Nugget, the town's newspaper, featured a map of the Seward Peninsula on the cover. Noted on it were the region's resources, such as numerous reindeer herds, gold, coal, and tin fields, and a hot springs location. Lines radiating out from Nome harbor into the ocean marked water transportation routes: to Barrow and the Arctic Ocean, to St. Michael and the Yukon River, to Seattle and San Francisco, to Japan and China, and to Anadyr, Siberia.[1]

Want Federal Aid

The chamber explained that the citizens of Nome needed federal aid in order to "open up a highly mineralized region to the northward rich almost beyond imagination of man...giving access to a region in comparison with which all other mining fields in Alaska pale." Nome was the

logical and only supply base, for its port had at least two more months of open navigation than any other port on the Seward Peninsula, allowing ships to arrive and depart from the middle of May until the beginning of November. With the suggested improvements, Nome would serve the mining districts on the Kougarok, Inmachuk, Kugruk, and Keewalik Rivers.[2]

Rehabilitation Work Applauded

The Chamber applauded the rehabilitation work on the Nome-Shelton tramway, a distance of 86 miles, which the Commission had undertaken during the last three years. As a result of the work freight rates had fallen from 10¢ to 1¢ a pound. Extending the tramway to Taylor, about 40 miles from Shelton, would effect a similar savings. Beyond Taylor, unfortunately, mining activities had almost ceased because of excessive freight costs. If the federal government financed the proposed extension, the Chamber argued, "a vast field of quartz, as well as placer values, would be opened up to the nation's wealth and advantage." In addition, "great wealth would also be tapped in the fur industry and the reindeer industry."[3]

Nome Harbor

Nome needed a decent harbor, because its geographical position made it the "metropolis of the north and the only distributing point for the coast of Alaska from the Kuskokwim to Herschel Island on the American side of the Arctic Ocean, a distance of over 2,000 miles, and the logical port from which to supply settlements on the Siberian coast, the Chamber pointed out. Indeed, "all roads lead to Nome," and with a little government help Nome would become a great seaport and harbor, serving the needs of "the vast treasure house of the Northern section almost at our door. . . ."[4]

Minerals were only a part of the region's wealth, because the Chamber expected that the Bering Sea shortly was to become "the nation's greatest fish reserve." It abounded in halibut, cod, shrimp, crabs, and many

varieties of salmon, as well as herring. These riches of the sea strengthened the argument that Nome needed a large modern harbor and transportation facilities in order to dock and shelter the fishing fleet. Indeed, the Chamber expected that within a few years, Nome would "be the Ketchikan of Northwestern Alaska."[5]

Reindeer Industry

The Chamber also believed that there was a great future for the reindeer industry. A government biologist, Dr. E. W. Nelson, a few years earlier had estimated that Alaska could support between four to five million reindeer. About a million and a quarter could be slaughtered each year. A reindeer carcass, dressed for the market, averaged about 150 pounds. Taking this weight and the value of the meat, Nelson had estimated that a fully developed industry should yield approximately $43 million per annum. The Chamber conservatively estimated one million carcasses per year, and at 150 pounds each, that would necessitate shipping out 150 million pounds of meat. It was not only the meat which was valuable, of course, since markets also had developed for reindeer by-products. Hides yielded leather, bone could be ground and shipped, horns utilized in manufacturing, and the hoofs made excellent glue stock. Waste fat found use in soap making, and the entrails and blood could be manufactured into fertilizer or dog and fox feed.[6]

Vast Coal Deposits

Last, but not least, were the coal deposits in the Kugruk River valley which would give a great impetus to prospecting. At present, the Seward Peninsula imported coal from British Columbia which cost from $28.50 to $35.00 per ton. The Kugruk coal could easily be landed in Nome for $12.00 to $15.00 per ton, a substantial savings. In view of all of the foregoing prospects, the Chamber asked Congress to appropriate $750,000 for extending the Nome-Shelton tramway to Candle and building an adequate harbor at Nome, and providing docking facilities for ships of eight feet

draft or more "in order that the region described herein may be developed and redound to the Nation's wealth and strength."[7]

Congressional Parsimony

Congress, in its blindness, did not appropriate the requested funds. Instead the Commission continued to spend funds for construction and maintenance for a wide variety of projects. In fiscal year 1929, for example, it allotted a total of $113,406 for projects in the second judicial division, a far cry from the $750,000 requested by the Northwestern Alaska Chamber of Commerce for only two construction proposals.[8]

Road From Haines to Chilkoot

At times, the Commission could not help at all with funds. This was the case with a three-mile road from Haines to Chilkoot. In the summer of 1926, Joseph W. Stansfield, a homesteader and proprietor of Chilkoot Fur Farms who raised mink, blue foxes and chinchillas, asked Colonel Steese if the Commission could start work on a road to connect Chilkoot with Haines, a distance of about three miles. Regrettably, the Commission had to inform Stansfield that there was no possibility of starting the project in 1926, and in fact, there appeared to be "no possibility that it will be started within the next several years." Territorial officials, who would have put up the money for the road, had told the Commission that there was much desirable homestead land adjoining the existing good roads in the vicinity of Haines, and "that they cannot afford to build expensive roads such as this to any locality far from the existing roads where one may take out a homestead."[9]

Fur Farmer Stansfield Disappointed

Stansfield was taken aback by the attitude of the Territorial Board and the Commission. He insisted on presenting his side of the question. He agreed that Haines and vicinity had good roads and that there was

excellent homestead land nearby, yet this did not mean that there was an abundance of suitable sites for homesteads near Haines. On the Haines-Pleasant camp road, claimants had taken up the land for seven miles, and there was no good land beyond that for several miles. There was no available land along the Mud Bay road. Stansfield argued that it was very much of an uphill struggle to establish a homestead in Alaska. Since the local market was so small, homesteaders with products to sell needed to be as near as possible to a steamship dock in order to be successful. Stansfield complained that too many homesteaders had given up the struggle. Building a short road would give a group of homesteaders a fair chance to succeed. He even offered to have the group of settlers participate financially, in a modest fashion, in the project. This, he had heard, had been done in other parts of the Territory. Still, the Commission could promise no road work, but Stansfield's neighbors started to add their voices to the growing demand for a road. In the fall of 1926, Ruby E. Allen, the fur farmer's neighbor, told the Alaska Road Commission that "I have staked me a homestead and built a cabin north of Haines on Chilcoot Inlet, I would greatly appreciate it if you would do all in your power to see that we have a road along the beach in the near future." Steese assured Allen, as he had Stansfield, that the Territorial Board and the Commission would consider the request when next year's program came under discussion, but he could offer "no encouragement whatever as to the inauguration of this project." Steese had examined the stretch of proposed road and concluded that the costs were "all out of proportion to the possible benefits."[10]

Homesteaders Press Claims For Road

In the spring of 1927, Stansfield and Allen had interested numerous other citizens of the Haines region in their plight. Some eighty residents signed a petition directed to the Commission and the Territorial Board asking that the road from Haines to Chilkoot be built as soon as possible. The petitioners pointed out that the requested road would provide "an outlet for a very fertile farming district," a typically Alaskan exaggera-

tion. Steese once again promised that the Commission and the Territorial Board would consider the proposal but could not be more specific. Stansfield was grateful that the Commission had at least acknowledged the petition. He pointed out that despite the lack of access, improvements and development on various homesteads had been progressing for the last four years, "and a good deal of building will be done there this summer, road or no road." But it was difficult. His neighbor, for example, had been waiting for ten days with a crew of four men to transport supplies and materials to his site but the weather had been too bad to make the trip.[11]

What did Stansfield expect during the breakup seasons when travel throughout the territory was difficult, Steese asked. Even the road out of Juneau, he reminded Stansfield, was "still blocked by deep snow and neither the Bureau of Public Roads nor ourselves have ever pretended to maintain traffic at this season of the year." But Steese apparently was more optimistic, because he told Stansfield that an engineer officer would come to Haines in early May to inspect the entire situation "and line up a program for next year."[12]

Major Lunsford E. Oliver, the engineer officer, visited Haines and estimated that the short road would cost between $10,000 to $12,000, far more than the Commission or the Territorial Board were willing to spend because it would benefit relatively few people. Such an amount of money could be spent more effectively elsewhere serving a much larger constituency. Stansfield was disappointed, and he and his neighbors now asked for the construction of a packhorse trail along the beach from Haines to Chilkoot. Those benefited, he promised, would contribute fifty dollars in labor or cash to get the project underway. But despite repeated pleas by the homesteaders, neither the Commission nor the Territorial Board appropriated any funds.[13]

Gillette Makes Preliminary Survey

In the late fall of 1928, Engineer Officer D. H. Gillette walked over the proposed route. A road of sorts existed, he explained, and the

homesteaders apparently had done much work on it lately. But it had a slope of thirty-three percent of the north side, and for about a mile extensive clearing and boulder blasting would be necessary to put it into shape. He estimated the cost of the road at about $11,500; it would serve three homesteading families raising vegetables and furs. These three shipped out about twenty tons of goods a year, and brought in the same amount, at an average cost of approximately $12 per ton. This rate could easily be reduced to $2 per ton with the road in place. Gillette thought that an additional fifteen to twenty homesteaders could locate between the hill and the cannery, and related that the construction of the road "would actually lead to more families coming in as they all seem to be doing very well, with their furs especially." In conclusion, he pointed out that the residents of Haines supported the proposal wholeheartedly, undoubtedly because all would indirectly benefit from increased business in the vicinity. In the 1929 season, the Territorial Board finally appropriated funds for the road from Haines to Chilkoot, and the Commission built it. The tenacity of the residents finally had paid off.[14]

Situation In 1927

In The Alaska Year Book of 1927, the editors summed up the Alaskan transportation situation. "In a pioneer country," they stated, "there is nothing so important at the start as roads and trails. They are the arteries that carry the very life blood of supplies to the far flung outposts, and make living possible until the Constitution catches up with the Flag." Much had already been accomplished in Alaska, such as the construction of the Richardson Highway and the Alaska Railroad. Considering the difficult terrain, the total construction cost of the Richardson Highway, including maintenance for more than twenty years, came to slightly under $12,000 per mile, a truly remarkable figure. Now the Alaska Road Commission planned to extend this road from Fairbanks to Circle, which, when finished, would link the coast to the Yukon River with a scenic highway about 540 miles in length.[15]

More Roads Needed

But despite these accomplishments, the north needed still more roads into new mining districts and there were "sections that only need transportation to make them productive." For example, the Kuskokwim, Lower Yukon, and Nome districts in southeastern Alaska needed more roads. Millions of tons of pay ore in the Hyder district could be developed as soon as connection to tidewater was complete. The promising mineral regions of the Copper and Nabesna country were only accessible by pack trains. In fact, lack of transportation arteries made it impossible to get supplies and mining machinery into most of the territory except at prohibitive costs. Therefore, promising mineral properties were idle and prospectors only performed the annual assessment work to hold the ground, and in the meantime waited for the federal government to build transportation routes.[16]

Shortage of Funds

Unfortunately, Congress had never appropriated the full amount the Commission had requested. That body knew of "the crying needs ... [for] roads and trails in the North..." but when presenting their budget to Congress, "some bunchgrass congressman who wants a new post-office building at Pumpkin Center" had always been able to reduce the Alaskan request at least by one half. Therefore, Congress could do nothing more important during its next session than to appropriate funds generously for the construction of new roads in Alaska, the editors concluded. For the 1928 season, Congress appropriated $860,192.90 to the War Department for its Alaska work, down from the $889,443.65 it had allowed in 1927. The Alaska fund had yielded another $134,593.11, while other contributions had amounted to $258,883.17 for a total of $1,253,668.18 which amounted to a slight increase of $36,501.29 over the previous year's total.[17]

Lottsfeldt's Trip

While Congress and the territorial legislature wrestled with money questions, the employees of the commission were out in the field performing their duties. For example, C. F. Lottsfeldt, the superintendent of the Kuskokwim district, left Takotna on November 30, 1927 accompanied by Lars Indergard as dog musher and a team consisting of fifteen dogs. The purpose of the trip was to inspect the Bethel district and make recommendations for winter trail work. The two men traveled for 37 days, covering a distance of 931 miles, and averaging about 25 miles per day. The account of their travel and Lottsfeld's recommendations follow:[18]

> Arrived at Ophir evening 30th and the next day proceeded toward Flat arriving there on December 3rd. Laid over one day at Flat and then left for Holy Cross inspecting the new work along this route. Stopped evening 5th at Frank Fox's Reindeer Camp, arrived at Holy Cross following day.
>
> Laid over the 7th and the following day left for Paimute, arriving there that evening. Account extremely soft weather laid over Dec. 9th. Dec. 10th we proceeded toward the Kuskokwim River arriving at Kaltshak [sic] that evening. The next proceeded to Tuluksak arriving there the 12th. Stopped evening 11th at Bob Hermans cabin. On December 13th in company with Tony Sumi left to make an inspection of the new shelter cabin at the Foothills, we returned to Tuluksak evening 14th.
>
> On December 15th left Tuluksak and arrived Bethel on the 17th. Laid over at Bethel for repairs to sled the 18th, 19th and 20th. Left Bethel December 21st arrived at Quinhagak December 23rd, stopped the 21st at the new shelter cabin at Black Fish Lake and the 22nd at the Eek schoolhouse.
>
> Left Quinhagak December 24th proceeding toward Goodnews Bay, arriving there afternoon December 26th. Stopped one night Jack Smith's Bay shelter cabin and the other at Indian River shelter cabin. Laid over the 27th at Goodnews Bay. December 28th we proceeded toward Togiak arriving there January 1st. On the 29th and 30th we were held storm bound at the shelter igloo on the South Fork of the Goodnews River. On December 31st we "siwashed it" about four miles from Togiak.

January 1st, 1928 we proceeded down the bay to Johnny Owens place. On the second we left for Kulukuk arriving there that evening. The next day we left Dillingham arriving there on the 5th. Due to poor trail markings and soft weather we were forced to "siwash it" the first night out about ten miles from Kulukuk, and the second evening stopped at the native village at Tuklong.

Laid over at Dillingham the 6th, making arrangements for the summer trail work between Dillingham and Snag Point. The 7th left for Koggiung arriving there on the 9th. Stayed one night with natives six miles from Portage Creek, and the second night at the King Salmon Saltery. This saltery is four miles off the trail but does not greatly lengthen the distance to the Squaw Creek Cannery.

Left Koggiung January 10th in a blinding blizzard and were lucky to reach Libbyville Cannery that evening just at dark. This section is not marked. The next day we proceeded toward Naknek stopping that night at the Portland Packers Cannery. Jan. 12th left for Egegik arriving there before noon on the 14th. Stopped first night at the Halfway Shelter Cabin and the second at at Frank Atlonen's six miles from Egegik. This section is well tripoded but due to a very severe blizzard at times it was impossible to see twenty five feet ahead.

Left Egegik January 15th and arrived Kanatak January 17th at 2 P.M. Stopped the first night at West End Becharoff Lake shelter cabin and the second night at the East End Becharoff Lake shelter Cabin.

Route 92 P Holy Cross-Kaltshak [sic] 56 Miles Trail

The section of this trail between Holy Cross and Paimute, that is the part traveled along the river should be staked with willows every winter. The river between these points has several channels, some of which are several miles longer than others. Strangers often take the longer channel due to lack of markings.

The section of the trail between Paimute and Kaltshak can be greatly shortened by cutting through some heavy timber near Paimute. Would also culminate travel on several sloughs which overflow badly. A tundra fire burnt down many of the old tripods which should be replaced next fall.

Allotment Required $785.00

Route 92 Tuluksak-Bear Creek 32 Miles Trail.

Inspection was made over this route and only necessary maintenance need to be performed next year.

Roue 92 Aniak-Tuluksak 60 Miles Trail.

The crossings on the river route between these two places should be marked with willows right after the freezeup every winter. A short land portage cut out between Ohogamute and Kaltshak would shorten this trail two miles.

Allotment Required $375.00

Route 92 L Crooked Creek-Aniak 74 Miles Trail.

All the crossings on this river route should be marked with willows every winter after freezeup.

Allotment Required $75.00

Route 92 B Bethel-Tuluksak 44 Miles Trail.

This section should also be marked with willows on the river every fall as it is very easy for travelers to get off the beaten trail. Because of the river cutting in the banks between Akiak and Bethel need to be cut down every year.

Allotment Required $125.00

Route 92 A Bethel-Quinhagak 90 Miles Trail.

This trail is now in good condition, well marked and tripoded the entire distance. Beacons have been placed on the edge of all the larger lakes. Only maintenance work need be performed next season.

Route 92 F Quinhagak-Goodnews Bay 60 Miles Trail.

This trail is in first class condition with only maintenance needed next season.

Route 92 G Goodnews Bay-Togiak 53 Miles Trail.

This trail is far below standard and without a guide is nearly impossible to follow. The first four miles out of Goodnews Bay there are no tripods, and the remainder of the distance they can only be found here and there. Tripods were constructed from small willows and tied at the top with rope. These tripods will not stand up against the weather in this section where at times they have very violent winds. If the commission desires to have this as a standard part of the route between Bethel and Kanatak the entire work will have to be done over in a year or two I don't believe any of the present markings will remain. This work will be rather expensive as poles for good tripods cannot be obtained closer than Akiak.

Allotment Required $3,000.00

Route 92 H Togiak-Nushagak 125 Miles Trail.

The section of the trail between Togiak and Johnny Owens, a distance of nine miles is not tripoded. This work should be done in the next year or two. The section between Johnny Owens and Kulukuk is only fairly well marked and needs considerable improvement in the way of tripoding. Between Kulukuk and Tuklong the trail is poorly marked. The first four miles out of Kulukuk has never been tripoded, because of this we went up the wrong draw which put us off the trail about ten miles. Several places where the trail crosses creeks the brush needs to be cut out. The Tuklong shelter cabin is two miles off the trail and there are neither markings to or from the cabin. Tripods should be placed to and from the cabin otherwise it will never be used.

The trail between Tuklong and Nushagak is well marked and needs no further improvement. I think it advisable that this entire section between Togiak and Nushagak be brought up to standard as quickly as possible due to considerable travel between the government hospital at Dillingham and the schools along the Bering Sea.

Allotment Required $1,500.00

Route 92 I Lewis Point-Naknek 86 Miles Trail.

The trail between Lewis Point and Portage Creek needs some improvements, especially a large beacon showing where the trail goes into Portage Creek leaving the Nushagak River. Trail between Portage Creek and Koggiung is well marked. There are no markings between Koggiung and Naknek account the heavy travel between the various canneries in this section.

Allotm

Route 92 J Naknek-Egegik 50 Miles Trail.

The trail between the Diamond M. Cannery and Egegik is marked with old telephone poles, many of them are beginning to fall down. Mr. Frank Altonen original contractor of this work offered to do this maintenance work for nominal sum.

Guthries Inspection Trip

Captain Ralph R. Guthrie undertook a much shorter inspection trip in February, 1928. Employing the same musher with a team of seventeen dogs, he left Lawing on February 5 bound for Kenai which they reached in three days. After a one day rest the party returned to Lawing. The weather was variable, temperatures fluctuating from +40°F to 0°F. The two men experienced snow drifts three feet deep, and on the return journey encountered a snow storm which dumped eighteen inches on the trail. They followed a well-broken trail, except during the snow storm on Kenai Lake, and met eleven dog teams during their travels. Guthrie estimated that this amounted to a fairly heavy traffic of about forty dogsleds during the winter months. Guthrie's report of his journey and his work recommendation follow:[19]

> The route of the inspection started at Lawing, Mile 25, U. S. Railroad, and led over the ice, down Kenai Lake, to the lower end. Thence up the Kenai River a short distance, off the river and up the mountain side to an elevation of approximately seventy-five feet, and rather precipitous, for a mile and a half to Cooper's Landing. About this section of the lake it may be said that travel in the winter is very precarious, there being a considerable number of air holes off Black Point, opposite the mouth of Quartz Creek. During the past twenty years many teams have broken through. The mile-and-a-half section between the mouth of Kenai River and Cooper's Landing is maintained apparently by the fire patrols, and is the worse place on the trail. A little grading, the rehabilitation of one small bridge, and the hewing down of a few trees here would do very well and could be accomplished at a cost of one hundred dollars. On the lower end of Kenai Lake to a point seven and one half miles beyond Cooper's Landing there is an average of one cabin per mile, and all are suitable for shelter. The prevailing grade is about thirty per cent.
>
> The first shelter cabin encountered is located fifteen miles from Cooper's Landing. It was in good condition, corrugated iron roof, one door, two windows, sheet iron stove, five joints of pipe, pole bed, and dog cabin. The latter was about twelve by twelve feet inside measurement, the dimensions of the shelter cabin itself being fourteen by sixteen feet. After leaving this cabin no further shelter was encountered until the cabin known as the "Midway Cabin," of approximately the same dimensions as the first, but without dog shelter, was reached. This was twenty-nine miles for Cooper's Landing. This cabin was very comfortable, indeed, with a sheet iron stove, a pole bed, and the comforts which could be expected under

the circumstances. It is here suggested that these cabins (all of them) could be improved by battening up or filling in the interval between the iron roof and the pole roof, six inches beneath. Into this open space the snow drifts and melts from the heat of the stove, causing leakage in the vicinity of the bed. The approximate cost for three cabins on the Kenai-Lawing trail in the opinion of the undersigned could be covered by one hundred and fifty dollars, or fifty dollars per cabin. Between Cooper's Landing and Midway Cabin only two fallen trees were encountered, and they were lying across the road as it led across the second small lake after leaving Cooper's Landing. They were about fifty yards apart, and could be removed by one man in about a minute. A few objectionable "nigger-heads" were found on the trail between a point eight miles from Coopers Landing and Midway Cabin, and again six miles beyond Moose River and the village of Kenai. The third relief cabin, located Mile 19 from Kenai, was in the same condition as the others; very habitable, but it was found that natives had been using it as a trapper's cabin, and it is strongly suspected of being infested with vermin.

Using a twelve-foot sled and seventeen dogs with a broken trail it was found that from forty to sixty miles could have been easily accomplished in a day, any place on the road. At approximately twelve miles from Kenai village there is a plateau with a very steep incline, varying from thirty-five to fifty per cent grade, and winding in and out between trees, very dangerous to teams. From this point toward Kenai the Road Commission trail is practically abandoned and an old Siwash trail, leading over frozen swamps, is used. It is recommended that the Road Commission accept the judgement of traffic in this regard, and that the Siwash trail be adopted and improved. Three miles of trail in the vicinity of Mile 19 from Kenai has also been abandoned by traffic in preference of a shorter cut, apparently to good advantage. It was found that the trail is opened each winter by the natives, and that in spite of any advantage which might exist in the new government trail, they prefer the one that they laid out themselves. In the judgement of the undersigned, the only way to get those sections of the trail used would be to send a trail breaking crew over the trail early in the season. The advisability of this is questioned.

In general, the trail from Lawing to Kenai is not in bad condition for either heavy or light hauling. It is believed that Duncan Little, of Cooper's Landing, with one assistant could go over the entire trail in two months next summer and put it in excellent shape. No one could hope to remove all of the nigger-heads, but the more prominent ones could be smoothed away. All the equipment needed would be a couple of axes, cross cut saw, spades, hammers, nails, and a couple of pack horses. Bridges and shelter cabin roofs could be repaired, and the material found on the ground. Mr. Little has the reputation of being extremely conscientious and industrious, and has both experience and common sense. It is recommended that he be put in charge of the work and authorized to employ one man as an assistant, and that the period of his employment not exceed two months.

Answering the questions in your memorandum of May 20, 1927, for all superintendents, the following information is given:

Length of road from Lawing to Kenai, approximately 120 miles.
Shelter cabins, Mile 19 from Kenai and Mile 37 from Kenai. A privately owned prospector's cabin used as a shelter cabin at Mile 46 from Kenai.
General ruling grade, 20 per cent.
Maximum grade encountered, 50 per cent, 150 feet long. Maximum grade not objectionable if trees are cut which now endangers sleds from turning over. Cost of improvement $20.00.
Two-horse teams cannot be used.
One small bridge to be renewed at Cooper's Landing.
Grading not necessary, but strong shovel work required at approaches to two small lakes between Cooper's Landing and Midway shelter cabin, approximate cost $20.00
No new bridges required.
Road now used does not drift nor glacier badly. Trail is located so that approximately thirty-nine miles is over frozen lakes and streams. This not objectionable.
Nigger-heads and stumps are to be removed in a few instances.
Condition of shelter cabins excellent, except for roofs noted. Stoves have all been installed by private interests, and are at present adequate, but should be replaced next summer by new stoves suitable for both heating and cooking.
Character of traffic on route, foot, and dog sleds, about forty sleds per month.
This route can not be used in the summer time without long and difficult detours on account of so much of it being over ice. It is purely a winter trail, and if it is to be converted into a summer trail, as well, a road must be cut from Lawing along the north bank of Kenai Lake to Cooper's Landing, and from a point seven and one half miles beyond Cooper's Landing the road must be widened and improved, detouring all lakes and streams, the entire distance to Kenai. As seven lakes and three streams are used, this is liable to be expensive.

In case a wagon road were contemplated, it would necessitate a wagon road along the north bank of Kenai Lake to Coopper's Landing, or the use of the railroad outlet at present supplied by the Quartz Creek route to Moose Pass and thus junction with the railroad, cost about ten thousand dollars ($10,000.00) per mile. From the lake the road could then follow the north bank of Kenai River along the present trail branching off onto a trapper's trail twelve miles from Cooper's Landing to Skilak Lake, cost about five thousand dollars ($5,000.00) per mile. Thence along the north bank of Skilak lake to the Lower Kenai River to the mouth of Moose River which must be spanned by new fifty-foot suspension type bridge, cost of road ten thousand dollars

($10,000.00) per mile, cost of bridge five thousand dollars ($5,000.00) to ten thousand dollars ($10,000.00). From bridge the road could take direct route to Kenai village over tundra, cost about five thousand dollars ($5,000.00) per mile.

RECOMMENDATIONS

It is recommended that two good trail construction men be employed for two months next summer to go over the entire trail from upper Kenai Lake to Kenai village to make common sense repairs to the winter trail and to shelter cabins, using material to be found in the forest with a moderate amount of equipment and material furnished, and no further expense undertaken. Also that plans be formulated to construct a winter trail around upper Kenai Lake from Lawing, for the purpose of avoiding the obvious dangers to lives and mail, involved in crossing over treacherous stretches of thin ice abounding in air holes at different periods during the winter.

The Anchorage-Matanuska Road

There can be no doubt that the Commission had assembled a knowledgeable headquarters and field staff over the years. Futhermore, the Commission and the Territorial Board cooperated smoothly on many projects, the former serving as the construction contractor and the latter supplying the funds. At times, however, there arose disagreements. One of these concerned the proposed construction of an Anchorage-Matanuska road. The 1927 territorial legislature, at the urgings of the legislative delegation from the third judicial division, had included $25,000 for the undertaking. Perhaps the delegation had halfheartedly urged the appropriation at the behest of the Anchorage Chamber of Commerce, because the money measure stated "that in performance of said work...said Board shall not expend more than the sum of $200,000.00..."The legislators knew that both the Territorial Highway Engineer and the Commission had estimated the cost of the project at $318,000 without surfacing. The legislature knew that the Territorial Board could not proceed on a project which it could not finish - but voting the $25,000 certainly endeared the politicians to the Anchorage electorate.[20]

Elliott Rejects Anchorage-Matanuska Road

Major Malcolm Elliott, the Commission president, was appalled about the very idea of building this road. While residents in most parts of Alaska desperately needed the most rudimentary transportation network, Anchorage citizens demanded such a vast expenditure on a route already provided with a railroad. He carefully explained to the Territorial Board that the Commission would not approve the expenditure of federal funds on this project. The road was not needed, and the use of federal funds for the Anchorage-Matanuska road would inevitably deprive other communities of badly needed transportation facilities and of the full assistance from federal monies to which they were entitled. Furthermore, the Commission had an understanding with the Secretary of the Interior that it would not parallel existing railroad lines. The $318,000 estimate was low, because it contemplated the joint use with the railroad of bridges over certain streams with no assurance that this heavy use would not require early rebuilding. There was no allowance for the maintenance of the completed sections during the construction phase. Including these factors, Elliott believed that the total cost of the project would amount to approximately $500,000, a sum all out of proportion to the benefits expected. In short, the proposal was economically unsound and therefore not worthy of federal assistance.[21]

Elliott Warns That Congress Would Consider Road Waste of Funds

Worse yet, Elliott warned that Congress would most likely take a very dim view of the Anchorage-Matanuska road. Legislators very quickly would conclude that a territory which could afford the luxury of a highway paralleling a railroad clearly had advanced beyond the pioneer stage and no longer needed "appropriations for roads amounting to sums much larger than the per capita contributions for Federal aid in the States." He assured the Territorial Board of his "disinclination to interfere in any way with local control of how territorial money shall be spent," but in this case asked that the project at least be delayed. He concluded that

if this did not happen it probably would result in decreasing federal contributions for Alaska's road building program. And that, he asserted, would be injurious to Alaska's best interests.[22]

Teritorial Board Seeks Legal Advice

The Territorial Board thereupon sought the advice of Alaska's Attorney General, John Rustgard. He advised that because the estimated cost of construction exceeded the amount authorized by the legislature, the Board had no authority to proceed. The Anchorage Chamber of Commerce was bitterly disappointed at Rustgard's decision. Senator Arthur Frame, the sponsor of the measure authorizing the funds to begin the project was present at the Chamber meeting. He explained that the politicians had meant well, and blamed those in charge of road building operations in the territory of not wanting to connect the Anchorage and Matanuska road systems. Therefore, they "resorted to the adverse opinion of the attorney general as an excuse."[23]

Territorial Board Holds Special Meeting

On March 29, 1928, the Territorial Board held a special meeting at which it accepted Rustgard's opinion and decided not to proceed with the work. The question then remained could the Board use the designated $25,000 for general roadwork in the third judicial division? Attorney General Rustgard put the members of the Territorial Board at ease when he ruled that the construction of the Anchorage-Matanuska road was not compulsory but rather discretionary. Therefore, the attorney general ruled, the $25,000 could be expended for general road work in the third division.[24]

Chamber Memorializes Territorial Legislature

That was not the end of the matter, for by early March 1929 the legislative committee of the Anchorage Chamber of Commerce had prepared a memorial for the territorial house and senate. The Chamber complained

that because the Alaska Road Commission, "a federal agency," had been unwilling to cooperate in the construction of the project the territorial $25,000 had not been used. It reiterated the necessity for building the road because it would open "one of the most fertile and promising agricultural regions in the Territory of Alaska" and asked that the legislature appropriate $50,000 for the following biennium "for the purpose of building so much of said road as the sum permits to be constructed."[25] The Anchorage-Matanuska road eventually was built-but that was in the future.

President Elliott Reviews Accomplishments

In 1928, President Elliott proudly reviewed the territory's transportation system for the Alaska Year Book. The territory's road system, he told his readers, consisted of one main axis connecting Prince William Sound with the Yukon River, and a considerable number of small road nets which connect the various commercial, mining, and agricultural centers with supply bases located on the coast, railroads, the main highway, and the navigable rivers. The Commissions proudest accomplishments were the Richardson and Steese Highways, extending from Valdez to Circle to the Yukon River. At its northern terminal in Fairbanks, the Richardson Highway joined the northern terminal of the Alaska Railroad main line which connected the city with Seward. Together, the highway and railroad formed a belt line traversing much of interior Alaska.[26]

The Copper River and Northwestern Railway ran from Cordova on Prince William Sound to the Kennecott copper mines. Chitina, a station on the railroad, also was the southern terminal of the Edgerton Cutoff, a branch of the Richardson Highway. The Steese Highway extended north from Fairbanks to Circle City on the Yukon River. Elliott pointed out that Circle City was on the route which, beginning at Skagway, followed the White Pass and Yukon Railroad to Whitehorse and then by river transportation went down the Yukon River through the Klondike goldfields and Dawson into central Alaska. These railroad, highway and water routes formed the framework of a transportation system covering a wide area rich in natural resources.[27]

Cooperation With Forest Service

The Commission and the Forest Service were developing small road systems which either tied in with the main rail, highway and river systems or were located along the coast, connecting with good harbors. In southeastern Alaska, small highway systems centered at Ketchikan, Hyder, Wrangell, Petersburg, Sitka, Juneau, Haines and Skagway. Each of these towns and settlements possessed sheltered, deep-water harbors. Along the remaining coastline, roads connected almost all ports with the immediate hinterland. Small road networks of this kind existed at Cordova, Valdez, Seward, Kodiak, Iliamna, Kanatak, Nome and Deering. Settlements along the Yukon and Tanana Rivers, like Eagle, Beaver, Rampart, Brooks, Tanana Hot Springs and Ruby had short road systems. In the upper Kuskokwim Country travelers obtain access to the river over short road systems connecting with McGrath and Takotna. Similarly, a short road connected the mining areas around Flat and Otter with the Iditarod River, and Wiseman, the head of small-boat navigation of the upper tributaries of the Koyukuk River north of the Arctic Circle possessed roads leading to the nearby mines.[28]

Transportation Network

Automobile, wagon and sled roads radiated from mining, agricultural, and trapping operations to the Alaska Railroad. Prospectors, miners, and homesteaders on the Kenai Peninsula, the Matanuska Valley, in the vicinity of Talkeetna and in the important Kantishna region used Commission built roads an trails which enabled them to transport supplies to their workings and ship their products to outside markets. A highway under construction from the railroad into Mt. McKinley National Park eventually was to lead to the base of the mountain, opening the park to public use. Homesteaders in both the Matanuska and Tanana Valleys did considerable farming. The Commission had built local roads connecting these operations to the railroad; and the country adjacent to the Richardson Highwway and the Copper River and Northwestern Railway was connected with short roads

to the mineral operations in the vicinity of Kennecott, Kotsina, and the Chistochina country.[29]

Length of System In 1928

As of 1928, the entire road system consisted of 1,623 miles of automobile, tram, and wagon roads, 1,375 miles of winter sled roads, 7,044 miles of rails, and 712 miles of flagged winter trails. The Alaska Road Commission had built this imposing transportation system within the short span of twenty-four years at a cost of about $13 million. About $4 million of this total, or about 30 percent, had been derived from Alaskan sources, while the federal treasury had contributed the balance.[30]

When the Commission had started its labors in 1905, there had been no roads worthy of the name. Inhabitants freighted supplies over unimproved trails or used pack horses and dogsleds. Life was primitive by necessity in any community not close to water transportation. All this had changed, for the transportation system had enabled the residents to import all the conveniences of modern life, yet large areas of Alaska, capable of economic development, still were a wilderness. Much work needed to be done yet, Elliott concluded.[31]

Edmunds Makes Inspection Trip

Members of the Commission worked hard. M. C. Edmunds, the superintendent for the Anchorage district, took a ten day hiking trip inspecting various routes between Cache Creek and the Yentna River in the fall of 1928. The full report follows to give readers a feeling for the country covered:[32]

> The following report covers an inspection trip during which the various routes mentioned below were covered, route 51, 51-D, 51-E and 20-H.
>
> The main object of the trip was to cover routes 51-D and 51-E, between Cache Creek and the Yentna river; no one attached to the force at present, had been over the trails, and the only information available

was obtained from people in the district, and it appears that the more persons talked the less reliable information was obtained.

As it is not likely that the trip will be taken again for sometime, as there is no necessity until more development takes place, I am writing a report of the trip, for future reference.

The trip was taken on foot, carrying ten days provisions, making a pack of about 60 lbs to start off, and 25 lbs when I finished up at the railroad.

I had intended to take a dog along, carrying some of the load on it, but the dog was too soft, and I had to leave him the second day out.

Itinerary.

October 1st. Left Anchorage 1.45 p.m. by A.R.R. arriving Talkeetna 6 p.m.

2nd Left Talkeetna 7 a.m. stopped at A.R.C. cabin at Moose Cr. 12 miles out. arrived 1.30. p.m.

3rd Left Moose Cr. 7 a.m. arrived Peters Cr. noon mile 23 1/2, after lunch went to Lee's cabin on Black Creek, mile 29, arriving 2 p.m. (this cabin used by public for shelter.)

4th Left Black Cr. cabin 7 a.m. went to the A.R.C. road camp near Windy, a tributary of Cache Creek, arriving there 11:20 a.m. stayed here the night. traveled 10 miles. Waited over here for one day, in order to wait for two trappers who were going to Sunflower Creek.

5th Went, with trappers Wagner and Strom, to Falls Creek, stopping the night in a cabin belonging to Nagley, the merchant at Talkeetna, evidently used by the public; distance traveled 2 miles.

6th Left the cabin on Falls Creek, which is located about one half mile above the mouth at 8 a.m.; went down Cache Cr. to the mouth of Short Cr. then over trail to the Treasure Creek shelter cabin, arriving there at 6:30 p.m., distance travelled 18 miles.

7th Left the A.R.C. cabin on Treasure Creek 7:30 a.m., went to Wagners cabin on Sunflower, about three miles below the cable Crossing, arriving there at 1:30 p.m. distance traveled 10 miles.

8th Left Wagner's cabin 8 a.m. went to Pat Collins camp on Notobac creek, (the men who named this creek evidently must have been out of tobacco when they struck here) a tributary of Twin Creek. Stopped at Hugger's camp on Mills Creek enroute; distance between camps one and a half miles, distance traveled ten miles, the last two miles being on the South East slope of Fairview mountain. Was accompanied by Wagner this far. Arrived at Collins camp 5 p.m.

Oct. 9th Left Collin's camp 7:30 a.m., after one mile reached the regular Yentna-Mills Creek trail, following same until

I reached the camp of McLean and Patterson, on the Clearwater, one mile above the mouth, where it enters into the Yentna River. Arrived here 3 p.m. distance traveled 15 miles.

10th Left McLain and Patterson's cabin 7:30 a.m., went down trail to the Yentna river, inspected cabin, then proceeded down the river to the cabin of a trapper named Briggs, who had a light boat which I intended to get to go down the river. Found upon arriving that the boat was twenty miles further down stream, at the mouth of Donkey Creek slough, so walked down there.
Had thought that I could get a trapper to take me down to the Station as they all have Johnson outboard motors, but ice was running in the Yentna, and the boats were all beached for the winter, and it was doubtful whether they would work in the ice. Arrived 5:p.m. distance traveled 27 miles.

11th Examined boat, which had not been in water for two seasons, calked two seams with gunnysack and old shirt, which were open for a good half inch, put a patch over a small hole in the bow, and started off at 10 a.m., arriving at the abandoned town of McDougall at 5:p.m. wet snow all day, distance traveled 18 miles.

12th Left McDougal 6:45 a.m. arriving at Susitna Station 2:p.m. had to break shore ice in order to beach boat, weather wet with snow and rain. Distance travelled 36 miles.

13th Left Susitna Station 7:a.m. over the winter trail for Nancy, on the Alaska Railroad, arrived at the shelter cabin at mile 10.5 at 2:p.m. distance traveled 11.5 miles.

14th Left shelter cabin 6 a.m. arriving at Nancy 1:p.m. caught freight train into Anchorage, arriving 8:p.m.

Route 51. Talkeetna-Cache Creek.

This route is being maintained each year, and will be covered in the annual report, so there is no necessity of mentioning it at this time.

Route 51-D. Yentna-Mills Creek, (23 miles trail.)

This is a pack trail leading from the Yentna river, on the left limit of Clearwater Creek, to the confluence of Twin and Mills Creek which head against Fairview mountain, in the Fairview District.

Leaving the river the trail crosses a flat country for a distance of three miles, covered with small green spruce and an occasional swamp, to high ground running in the same direction as the Yentna river, which runs in a Southeasterly direction.
The ridge is cut through by the water of Clearwater Creek, which runs in a Southerly direction.

After leaving the flats, high ground is followed for a distance of four miles, through spruce and birch timber, along the left limit of the creek, sometimes close to the creek, other times away out of sight, to a small creek running West; after crossing the creek, which is bridged, the trail continues along the high bench near the stream, with a fair growth of spruce, which comes to an end about mile 12, after which a heavy growth of willow and alder is encountered, to mile 15.

At mile 8, a small cabin is passed on the left of the trail, or West, which could be used in an emergency, but it is very small being about 6 feet by 8 feet, with a flat roof.

At mile 15 the trail leaves the Clearwater Creek watershed, running down the right limit of Twin Creek, on a high bare bench to its junction with Mills Creek, which is the end of the trail.

Very little work was done on the trail after passing the 15 mile post, the chief item being tripods that were erected to mark the trail.

The point where the trail starts down Twin Creek is about one mile from Skookum Pass, which is the route followed by the miners and trappers in going from the Clearwater Creek watershed to the Cache Creek district.

With the exception of some swampy ground across the Yentna flats, which could not be avoided, the trail is located in good ground, and is well defined.

It appears, however, as though it would have been better to have continued the trail through Skookum Pass to the mouth of Cottonwood Creek, instead of going down the right limit of Twin Creek, as this would have kept the trail on dry ground, passing close to the location of the men mining there, and been considerably shorter for a main route.

Considerable timber had fallen across the trail in places, but where it passed through willows and alder the cutting was very plain.

The shelter cabin on the Yentna was in good condition, except for the roof, which should be replaced with an iron roof, and a floor put in.

Arrangements were made to have the trail cleared up, and for the repairing of the shelter cabin next season.

This route is now in good condition, and, with the clearing of windfalls occasionally should be ample for the requirements of the district for years to come, unless further development is shown. At the time the trail was put in there were some good publicity men interested in the district, and it appeared as though the district might develop into a mining camp.

Our friend Mr. Ben Grier, had a lot of property at the mouth of Twin and Mills Creek a few years ago, but, being unable to interest any capital in the venture, it has been abandoned, and has since been re-staked by another pencil miner, who has done no prospecting of any amount to determine whether it is commercial ground or not.

C. J. Lincke, an old newspaper man, has been in the vicinity for some years, off and on, and has staked a lot of ground in the district; He also does no prospecting, and has the means of keeping people off the ground who might dig up something. The only evidence of work done on his property that I saw was a small hole about three feet wide by six feet long, three feet deep, that any ordinary laborer would dig in two hours.

While it is possible that something may show up in the vicinity that may pay to work by modern methods that would not be profitable to work by olden methods, several of the tributaries of Mills and Twin Creek were prospected and mined years ago.

A man named Pat Collins is the only one left of the early miners, he traps a little in the wintertime.

A man named Hugger has been in the district three seasons, he is mining on Mills; these are the only two men attempting to mine, and I venture to say they do not average more than $1,000.00 a year output between the two of them.

In returning down the Yentna River to Susitna Station, I found very little activity except for trappers and furfarmers, who are located on an average every six miles or so along the river bank.

The white men seemed to be ambitious and energetic, building trails, cabins and doing other work in readiness for the trapping season.

As far as I could ascertain, there appeared to be no activity in prospecting or mining, probably the high prices paid for fur during recent years made trapping more profitable.

There appears to be no need for any road, trail, or shelter cabin work; the main artery of travel is water, and the trappers living along the river are glad to welcome occasional travelers, who bring recent news, and are available for carrying mail.

The Yentna River, from Youngtown to the mouth, is very easy to navigate in a small boat, there being no rapids or other places where there is any hazard. The sweepers along the bank, and the snags in the channel, are easily seen and avoided.

The only place encountered was on the Susitna River, after leaving the mouth of the Yentna, where whirlpools were active; these however, are plainly seen and there is ample room to steer clear.

The velocity of the current near the mouth of the Clearwater is about four miles per hour, while it is only around two miles near the mouth.

The trappers and an estimate of their earnings during the last season adjacent to the river, is as follows:

Name	No. men	River	Estimated Earnings
Gasnon and one	2	Kichatna	$5,500.00
Mike Stripka	1	East Fork	3,000.00
McLain and Patterson	2	Yentna	5,000.00
Corigan	1	"	2,200.00
Briggs	1	"	3,000.00
Jones and wife	1	"	1,500.00
Sholbarger,wife, 3 children	1	Skwentna	5,000.00
Reamer, McElroy and one	3	"	5,000.00
Ross, wife, 1 child	1	"	2,000.00
Link	1	Yentna	5,000.00
Nelson	1	"	500.00
Oman	1	"	800.00
Zorn (does no trapping, a little prospecting)			
Meller	1		1,500.00
Unknown	1		1,500.00
Madison Bros.	2		2,500.00

About six of these people go to Talkeetna, over the trail, with their furs during the winter, the remainder come down the river either taking the Nancy-Susitna trail over the snow, or going by boat to Anchorage and the railroad.

Route 51-E. Cache Creek - Mills Creek 35 miles trail.

This is a summer trail, used as a means of communication between the people of the upper Yentna river, including the Fairview mining district, with the Cache Creek mining district, and by means of the system of roads leading from there, with Talkeetna and the Alaska railroad.

It is suitable for foot and pack trail travel.

In the winter time there is no need of any trail; swamps, lakes and rivers, which constitute the country South of the summer trail, freeze over, and one can go in any direction, and the several cabins belonging to trappers provide places where one may obtain shelter.

The winter travel connects with the Cache Creek trail by means of the Mile 32 Spruce Creek trail, route no. 51-D.

The summer travel leaves Cache Creek by means of two routes, horse travel goes up Dollar Creek to the junction with Little Dollar, and foot travel follows Short Creek for a distance of one mile, then drops over the bench to the mouth of Little Dollar Creek, from this point one trail is followed.

The trail follows up Little Dollar Creek for one quarter of a mile, then climbs on the left limit of the creek, following the creek which drains a flat plateau, until it forks, near the head. The creek is crossed at this point, near the top of a steep slope leading down to a large flat drained by the Kahiltna River. The rim is then followed for one mile until an old camp is reached, known as the Barrenburg or Shell camp, about eight miles from Cache Creek.

From this camp an old trail is followed, known as the "Hughes" trail, over which attempts were made to haul supplies to the Cache Creek diggings from the Yentna, in the early days, before the road was built from McDougal.

The trail was also used by Dr. Cook, during the time he was scouting around when attempting to climb Mt. McKinley.

The trail for the first eight miles is fairly good, except some willows need cutting, and it is inclined to be wet for a couple of miles until the rim, on the left limit of the Kahiltna watershed, is reached.

From the Shell camp the trail drops down to the level of the Kahiltna flats, descending 1200 feet in the course of a mile through a well timbered slope covered with spruce, willows and alders, then continuing for two miles through the timber, skirting lakes and beaver dams to the edge of the timber, the horse trail coming out about one mile below the cable crossing on Granite Creek, about twelve miles from Cache Creek.

Granite Creek drains the left or East side of the Kahiltna Glacier, and the cable tramway spanning this stream is located about two hundred yards above the end of the glacier, where the stream is in one channel, which is not subject to change.

The tram was in good condition, and no difficulty was found in making the crossing.

The left side of Granite Creek, at the cable crossing, is in timber, while the right side runs alongside the glacier, the cable being anchored to rocks and the landing being on rocks, forming part of the glacier.

The trail on the West side of the crossing follows the glacier for two hundred yards until dropping down on the flat, but no difficulty is found in getting over this stretch.

There is no timber between Granite Creek and the Glacier stream which drains the West side of the Kahiltna Glacier, except for some scattered willows, a distance of four miles, the trail keeping about two hundred yards South of the end of the glacier.

The water of the Kahiltna River, draining the glacier, was in three channels, about 75 feet wide, the depth at the deepest place where a ford was made being 18 inches.

A cable tram is to be put across this stream this season, materials were being freighted there during the time I passed through.

The stream draining the West side of the glacier was forty feet wide and 12 inches deep, and easily crossed, at mile 16.

West of the stream the trail goes through a dense growth of willows and alders, but the trail is well defined, and once on it, it is easily followed.

Continuing along the trail a distance of three miles, Treasure Creek is reached, at mile 119, where the Alaska Road Commission shelter cabin is located, on a small bench about twenty feet above the level of the creek.

Spruce timber has been gradually getting thicker, until there is good timber where the cabin is located.

The cabin is located about 250 yards off the trail, to the North, and 300 yards from water, but is well supplied with dry wood, and is in a dry location.

Signs are placed on the main trail, so that it is readily seen by travelers.

Owing to the difficulty of getting material on the site, the roof was made out of poles, with moss and dirt, which did not prove very satisfactory this last season, during the continual rain.

During the night I spent there, the roof leaked all night, and it kept the three of us busy keeping the fire going, in order to try and keep warm.

Arrangements were made for putting galvanized iron roof and a floor in the cabin, the work to be done in the spring when conditions were favorable for hauling the material.

Leaving Treasure Creek cabin the trail traversed level ground for one mile through timber, then climbed for one half mile on a ten percent grade, which increased to about twenty per cent towards the top, to a level plateau, with an elevation of 1500 feet, formed of grassy meadows, (some wet and swampy) small lakes, and high mounds covered

with green spruce, which made a picture very pleasing to the eye, but not so attractive when considered from the viewpoint of the trail situation.

Keeping in a Westerly direction, with the trail now getting very indistinct through the meadows, we reach Lake Creek, at mile 24.

Lake Creek is crossed by means of a cable tram, which was in good working order. A fjord is located just above the cable, where horses can cross the stream, while below the water from different channels collects, and runs through swampy ground.

There is no timber of any size on Lake Creek.

From Lake Creek the trail continues in a South Westerly direction, following timber and high ground where possible, to Sunflower Creek, at mile 28, where another cable crossing is located.

The crossing is located at the head of a canyon, in an ideal location, about one mile below the place forded by horses.

Spruce and cottonwood is plentiful along the banks of Sunflower Creek.

There is a trappers cabin about three miles below the cable crossing on Sunflower Creek, also one on the right limit of Chelantna Lake about two miles above the tram, which are available for shelter for travelers.

Leaving the Sunflower cable, and keeping in the same general direction for a distance of two miles, Camp Creek is reached at mile 30.

Camp Creek is forded just above the mouth of Cottonwood Creek, it was about 75 feet wide and 15 inches deep at the time I crossed.

There was very little water in Cottonwood Creek, it was about six feet wide and 12 inches deep.

There was a good growth of Cottonwood timber along the course of both streams, and some spruce up to 10 inches diameter.

A camp belonging to C.J. Lincke is located on the right limit of Conttonwood Creek, about 1/4 mile above the mouth, which is available for shelter for mushers traveling through.

A bear or wolverine had visited the place, and made a mess of things generally; one of the articles chewed up being a Corona typewriter which they must have considered to be out of place in the wilds.

After leaving Cottonwood Creek the trail crosses a grassy meadow to the left limit of Little Skookum Creek, about one mile distant, and then follows through dense willows and alders the left limit of the

creek until near the head, when the creek is crossed, and the trail follows along high ground, on the Southeast side of Fairview mountain, to Skookum Pass, at mile 34.

Skookum Pass is the divide between Mills Creek and Twin Creek, near the summit of Fairview mountain. It is a good location for a trail as the ground is firm; there are several patches of willow growths along the mountain side, but generally these can be avoided.

From the pass the tripods of the Yentna-Mills Creek trail can be seen along the skyline of the Clearwater slope, which is fifteen miles from the Yentna river.

There is one miner, Matt Hugger, mining on Mills Creek, about one mile from the head, working by the open cut method, with sluice boxes running through the cut into which dirt is shoveled by hand; he was the only man doing any work on Mills Creek.

Another man is working on Notobac Creek, a tributary of Twin Creek on the right limit, using the same method of mining. He had everything in good order, and appeared to be working to advantage; he was the only man working on Twin Creek. His name is Pat Collins.

There is gold scattered all around the South slope of Fairview mountain, which is formed of gravel, work has been done on the different creeks since 1906, and several men have taken out small amounts varying from $3,000.00 to $5,000.00, but no big money has been made.

Water is very scarce, which is a detriment to small miners, but would not effect the working of the ground by a large company, who could bring water for many miles, but a large company is not liable to start operations unless much more prospecting and development is done.

In addition to the two miners mentioned, whom I do not believe take out $1,000.00 a year between the two of them, there are other people interested in the district who call themselves prospectors, who have a lot of ground staked, but do no development work to ascertain whether the ground can be worked or not.

These speculators are a detriment to the district, as they tie up a lot of ground that other people who want to dig might file on, and develop something.

At present time there are possibly ten trappers, the two miners mentioned, and a few others using this trail.

Until more development work is done, or something else shows up, the present trail, with the four cable crossings, and the shelter cabins on Treasure Creek and Spruce Creek, which ensures safe travel during the summer and winter, is sufficient, with a little additional cutting and staking.

Despite a perpetual shortage of funds, the Commission undertook much exploratory work. Should monies become available, roads and trails could be constructed quickly because informal surveys had already been accomplished.

Footnotes

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2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid.

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8. Operations, Part II, 1929, p. 143.

9. Stansfield to Steese, July 3, 1926, Oliver to Stansfield, July 14, 1926, R.G. 30, ARC, box 65637, Federal Records Center, Seattle, Washington.

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15. The Alaska Year Book, 1927 (Seattle: The Alaska Weekly, 1927), p. 13.

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20. Rustgard to Parks, March 28, 1928, R.G. 30, A.R.C., box 65481, Federal Records Center, Seattle, Washington.

21. Malcolm Elliott, "Statement of the Alaska Road Commission's Attitude on Anchorage-Matanuska Road, "March 26, 1928, Elliott to Territorial Alaska, March 26, 1928, R.G. 30, A.R.C., box 65481, Federal Records Center, Seattle, Washington.

22. Malcolm Elliott, Statement of the Alaska Road Commission's Attitude on Anchorage-Matanuska road, March 26, 1928, R.G. 30, A.R.C., box 65481, Federal Records Center, Seattle, Washington.

23. Rustgard to Parks, March 28, 1928, R.G. 30, A.R.C., box 65481, Federal Records Center, Seattle, Washington, Anchorage Daily Times, April 13, 1928.

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27. Ibid.

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CHAPTER NINE

THE LAST FEW YEARS UNDER THE WAR DEPARTMENT, 1929-1932

It had become customary for Commission personnel to use the early spring to inspect various routes and make recommendations for improvements. Donald MacDonald, a Commission engineer, reported on the condition of the winter trail from Chatanika to Fort Yukon in February, 1929. There were two sections of the trail, one leading from Chatanika to Circle, and from the latter point to Fort Yukon.

The Chatanika Winter Trail

The Chatanika winter trail originated at the little mining community by the same name, situated on the Steese Highway. It followed the highway to Mile 45, about 17 miles from Chatanika, crossed the river by the same name to the winter trail on the left limit of the river and went along the old winter trail to Sourdough Creek at Mile 66.6, some 38.6 miles from Chatanika. The winter trail then again followed the Steese Highway to an Alaska Road Commission tent cache at Mile 82.6. Since the Steese Highway drifted over with snow, at this location, the winter trail avoided this difficulty and dropped into McManus Creek, followed it to its head, and climbed up the McManus 12 mile Divide. From here it followed the highway for a short distance along the divide, and then dropped down to the head of the North Fork and to the old Twelve Mile Roadhouse. It joined the highway again at Mile 88, followed it to Mile 102, and then left it again to avoid the deep snow drifts on Eagle summit. It followed Eagle Creek to its head and then crossed the Eagle Summit about 1.5 miles east of the highway. The trail descended to Miller and Mammoth Creeks and intercepted the Steese Highway again at Mile 89.5. From here it followed the highway to Mile 162.5 at Circle on the Yukon River.[1]

While there were some rough spots along the winter trail, MacDonald considered it unwise to spend any funds on improvements because of the slight winter traffic. With the completion of the Steese Highway to

Circle, all residents with access to the road made every effort to ship supplies in the late fall before the highway closed for the winter. In addition, Fairbanks citizens had asked that the mail for the district be carried by plane during the winter months, thereby eliminating expensive delivery by dog sled. He proposed, however, that a relief cabin and stable be built at the junction of the highway and winter trail at Mile 82.6. Travelers used the highway over Twelve Mile Summit up to December 15 in most winters. If more snow fences were put in, MacDonald reasoned, the highway over the summit could probably be used throughout the winter in an ordinary year. There was a relief cabin opposite Mile 85 at the foot of Twelve Mile Summit, but it was located about 300 feet from the trail and not easily seen. MacDonald pointed out that the proposed relief cabin and stable could be a real life savers, because violent winds and blizzards often closed Twelve Mile Summit and shelter then became absolutely necessary.[2]

Eagle Summit Hazardous

Eagle Summit, MacDonald continued, was notorious throughout the interior for the hazards it presented to winter travelers. Blizzard and wind conditions here were worse than on Twelve Mile Summit. A five feet wide trail cut into the side hill on the north side of the summit for a distance of about 2,000 feet made this stretch very dangerous. The slightest winds blocked the trail, and it frequently had happened that in a blinding blizzard travelers had slipped into a deep gulch on the west side of the trail. MacDonald proposed that the Commission widen the trail to eighteen feet, and also install a telephone in a suitable shelter at the summit. The Rasmussen telephone line already passed the summit at this point, so the improvement would be inexpensive, involving only the purchase of a telephone and the construction of a shelter for the instrument. This would allow travelers to summon aid when necessary.[3]

A Few Miles of Telephone Lines

Telephone lines extended from Fairbanks to Mile 70 of the Steese Highway. The Fairbanks Exploration Company owned the line from Chatanika to Mile 70. Another telephone line ran from Circle to Mile 106, owned by a Mrs. Rasmussen of Circle. Thus there existed a 36 mile gap, and residents along the road had repeatedly requested that this distance be bridged. In fact, they had volunteered the labor cost of construction and winter maintenance if the Commission paid for the phones, lines and tripods. MacDonald estimated that these materials would cost about $2,000. He recommended that the expenditure be made because not only would it serve the public but the Alaska Road Commission as well.[4]

Trail From Circle To Fort Yukon

The second part of the trail extended from Circle to Fort Yukon. It had been built in 1924 to avoid the dangerous ice conditions of the Yukon River trail which followed the bends and turns of the river channels. It was unnecessarily long and difficult to follow. The 1924 trail consisted of a series of long tangents ranging from two to fourteen miles. It took advantage of all existing shelter, and had reduced the distance from 85 to 67 miles. From Circle the trail headed in a straight line through some light timber and wide open spaces to the first shelter cabin, some 20.5 miles from Circle. The open windy stretches, and grass clumps and swampy conditions made this the most difficult part of the trail. The second shelter cabin was 33 miles from Circle, and the third some 47.5 miles on a slough of the river. At Mile 45.5 the trail left the land and followed sloughs to the main channel of the Yukon and then into Fort Yukon. The last part of the trail, past the third cabin, changed yearly with the river. MacDonald had inspected the trail because residents for Fort Yukon had petitioned the Commission to have the trail widened and raised to double ender standards. MacDonald estimated that the requested improvements would cost $4,700, unwarranted by the weekly mail carrier, a few passengers and the transportation of furs.[5]

MacDonald recommended, however, that the Commission build a shelter cabin ten miles out of Circle in the open flats where strong winds and snow drifts rendered travel difficult and slow. In fact, the mail carrier and several other travelers "have had to Siwash at or near this point and several times men have arrived in Circle in dangerously exhausted condition."[6]

Inspecting the Richardson Highway

Personnel of the Commission also inspected the Richardson Highway, the most highly developed transportation link in the territorial system which the Commission had constructed. By 1929, it had developed into a 371 mile long gravel-surface wagon and automobile road, connecting Valdez and Fairbanks. There were two main branches, the Chistochina, then under construction which was designed to give access to the highly mineralized Shushanna area located north of the Wrangell mountains. The Chistochina road branched off at mile 128 at Gulkana. The Edgerton Cutoff branched off at mile 92.4 at Willow Creek and connected the Richardson Highway with Chitina, and little tow located 39 miles away at Mile 131 of the Copper river and Northwestern Railway. The latter originated at the seaport of Cordova and ran to the Kennecott copper mines situated to the south of the Wrangell mountains.[7]

Development of the Richardson Highway

The Richardson Highway, the Commission pointed out, was still in a development status. The Commission had completed the route as a winter sled road in 1907, and by 1913 upgraded it to a wagon road. After World War I the Commission had worked diligently to improve the road to automobile standards. As a result, in certain newly improved sections, thawing, ground settlement and drying were still incomplete. Those sections, as a result, had an unfinished appearance. Still, much had been accomplished since 1920. Almost all the steep grades had been eliminated, most of the narrow places widened, bridges and culverts rebuilt, soft spots drained

and graveled, and dangerous stretches had either been removed, fenced, or properly marked with standard United States highway warning signs[8].

Funds Expended On The Richardson Highway

In twenty-five years of operating in Alaska, the Commission had expended $6,158,000 on the Richardson Highway. Of this sum, $2,842,000 had been spent on construction and $3,316,000 for maintenance and improvements for an average total per mile cost of about $15,900. In 25 years the Commission had $14,400,000 available for its Alaskan work. It spent 43 percent of that amount on the Richardson Highway. In short, the Commission now attempted to place the entire highway on a purely maintenance basis, and in 1929 only 20 percent of the route required more than annual maintenance.[9]

The Kuskokwim District

The Richardson Highway had opened the areas adjacent to it for settlement and development. The Kuskokwim district, where Commission headquarters were located at Takotna, comprised the most inaccessible parts of Alaska, including the Kuskokwim River valley, extending eastward along the coast to Bristol Bay and west as far as the Yukon River. It thus included the valleys of the Iditarod and Innoko Rivers. The chief mining operations were centered about Iditarod, Takotna, and Ophir. Although the Commission had constructed shelter cabins, aviation fields, and the Yukon-Kuskokwim portage, the remoteness of the district and high costs had prevented the building of any through wagon or automobile routes. Freight destined for Takotna and vicinity reached Bethel by ship from Seattle. Reloaded on river boats, it was shipped from there to the communities along the Kuskokwim River. Goods for Iditarod and environs went by ship from Seattle to Seward, and then via the Alaska Railroad to Nenana. Reloaded on railroad-owned river boats, supplies then were shipped to Holy Cross. There they were unloaded once again into smaller craft and sent up the Innoko and Iditarod Rivers. There were two important

winter trails, one via McGrath, Telida, Diamond, Knights to Kobi or Nenana, and another one extending from McGrath to Aniak, Bethel, Goodnews Bay, Togiak, Dillingham, and Naknek to Kanatak.[10]

Superintendent C. F. Lottsfeldt

C. F. Lottsfeldt occupied the position of superintendent for this far-flung district. It was his responsibility to determine the need for roads connecting mining operations with supply centers. Miners had proposed the construction of a ten mile wagon road between Cripple and the Cripple Mountain District. Lottsfeldt traversed the route and reported two dragline and two hydraulic operations at work, making the location one of the most active mining areas in the district, employing twenty-three men. Summer transportation to the mines was impossible because of the 3.5 miles of swampy tundra encountered when leaving the town of Cripple. Even pack horses, he observed, had a difficult time reaching the camps because of the swamp. Lottsfeldt recommended the construction of the road, estimating that it would cost $5,000 per mile, or $50,000 for the whole project. Since both the Takotna-Ophir and Iditarod-Flat roads were on a maintenance basis, practically the entire funds for his district could be allocated for this new project. He suggested that $30,000 be made available the first year, and the other $20,000 for the second year.[11] The Commission, however, found that the mining activities did not warrant the expenditure of $50,000.

The Eagle District

In the meantime, J. G. Christianson, a military member of the Commission, examined the transportation system and resources of the Eagle area. He observed that Eagle was a dying town. Only a substantial goldstrike could revive the town, but the prospects for such a discovery were slight. Eagle had a population of 50 whites, the 40 mile District had 125, and the 70 mile District only 20 residents. The average age of the men and women in the district was approximately 60 years. Christianson

reported that "the chief industry seems to be the holding of claims of low-grade placer ground and hoping that some day someone may come who will buy their claims, and many are still waiting after 30 years of such hoping."[12]

Imports and Exports

The district imported about 200 tons of supplies annually and exported furs and gold. Eagle received 55 tons, the 40 mile District 125 tons, and the 70 mile District 20 tons. John B. Powers, a teamster, handled about 90 percent of the freight. He had 15 horses and mules, and about 40 buildings scattered over the district. Powers had the mail contract which called for three monthly trips. Christianson predicted that if Powers should go out of business it would deal the death blow to the district because there was nobody with enough capital to replace him. Powers, in fact, was the "only real user" of the road and trail system which the Alaska Road Commission had built and maintained. Some supplies, he reported, moved into the district avoiding Eagle altogether. Dropped off in Canada at the confluence of the 40 Mile River with the Yukon River, miners picked up the goods and sledded them up the 40 Mile River. In fact, the mine at Walker's Fork, the largest in the district employing 25 men, received its supplies directly from Dawson.[13]

Mines In The Eagle District

Christianson also listed the mining locations. As preciously noted, the biggest operation in the 40 Mile District was at Walker's Fork which used both dragline scraper and hydraulics. There also were smaller operations at Chicken Creek, Jack Wade, Dome and Moose Creeks, and Discovery Fork. At several other placers he observed mining operations run singly or by two men. In the 70 Mile District, small placer mines operated at Crooked, Broken Neck, Bryant, Fox, and Alder Creeks. Christianson pointed out that, although considerable quantities of low grade placer ground existed, to really profitably utilize them required modern ma-

chinery. This, in turn, necessitated capital which was in short supply. In conclusion, he stated that the Commission intended to spend $2000 in the 70 Mile and $4500 in the 40 Mile Districts for the 1929 season. Considering the low freight volume moving over the roads and trails each year, the Eagle District received a generous allotment of road funds for the season.[14]

Never Enough Funds

Unfortunately, Congress never appropriated the funding level which the Alaska Road Commission desired. As already mentioned, the Commission, in cooperation with the governor of Alaska, the Territorial Board of Road Commissioners and other interested federal and territorial officials had submitted to Congress a long-range program of operations in 1920. It had proposed three types of work in order of their priority: first, the construction of approximately 700 miles of arterial or feeder highways principally following old routes, at an estimated cost of $7 million; second, the building of development road where most needed, at a cost of about $1 million; third, the maintenance of the existing road and trail system at a ten-year cost of approximately $2 million. This brought the total cost for the ten year period to $10 million.[15]

For the first five years of the program, however, Congress had appropriated less than half the estimates. Of this sum, three-fourths had been required for maintenance and repairs. In 1924, the Commission revised its 1920 ten year program. For the next five years, it requested $4,350,000 for the maintenance and improvement of 9,736 miles of existing routes, and $1,735,000 for the completion of projects already underway. It requested another $1,780,000 for the completion of projects already approved but not yet undertaken, and another $1,135,000 for constructing transportation components likely to arise with economic development during the next five years. In short, the Commission requested a total of nine million dollars for the five year period, but Congrees appropriated only $4,325,000 for a short-fall of $4,675,000.[16]

New Ten Year Program

Finally, the Commission submitted a new ten year program which was to become effective in fiscal year 1932. For maintenance and improvements it asked for $9,047,000, and another $7,500,000 for new construction for a total outlay of $16,547,000. Of this amount, the Commission asked Congress to appropriate $15,547,000, and the territorial legislature to contribute $1,000,000.[17]

The War Department advised the Alaska Road Commission next that it needed to prepare yet another expenditure projection and submit it to the Federal Employment Stabilization Board in accordance with the Employment Stabilization Act of 1931. A six year program, from 1933 through 1938, it asked for $740,000 for maintenance and improvements and $290,000 for new construction in 1933 for a total of $1,030,000. For the next five years, from 1934 through 1938, it asked for $650,000 for maintenance and improvements and $480,000 for new construction for each year for a total annual federal budget of $1,230,000, or for a six year total of $7,180,000.[18]

1932 Annual Report

In 1932, before the transfer of the Alaska Road Commission from the War Department to the Department of the Interior, Commission members proudly issued their annual report celebrating 28 years of service to the Territory. It had built and maintained 1,701.5 miles of wagon and tram roads, most suitable for automobile travel; 1,495.5 miles of winter sled road, 7,322 miles of trail and 712 miles of flagged trail. This had been accomplished at a total cost of $18,015,848.47, of which $9,393,369.68 went for new construction and $8,622,478.49 for maintenance and improvements. The Commission had expended a total of $18,312,825.40 of which $12,694,859.28 Congress had appropriated. Some $5,617,966.12, or over 30 percent of the total had come from territorial sources.[19]

New Equipment

Over the years, the Commission had acquired many pieces of mechanical equipment, and was now able to handle engineering construction anywhere in the territory. The equipment included the following:

3 graders, motor
1 shovel, three-eights-cubic year, gasoline
3 scrapers, automatic, tractor drawn
1 hoist, for attachment to "30" tractor
2 auto trucks, Dodge
145 auto trucks, Ford
27 auto trucks, G.M.C.
1 auto truck, Pierce Arrow
1 auto truck, White
9 boilers, steam
1 boiler, pile driver
2 cars, gasoline section
11 cars, roller bearing push
4 compressors, air, portable
2 crushers, stone
1 drum, hoisting
21 drags, road
2 ditches, road
1 engine, donkey
6 engines, hoisting
37 graders, road, tractor drawn
12 graders, road, horse drawn
10 graders, motor
11 hoist, Allison, for attachment to Fordson tractor
1 hoist, double drum for attachment to "30" tractor
11 jack hammers
7 levels, surveying
1 loader, belt, conveyor, portable
2 locomotives, gasoline
2 machines, mowing, horse drawn
6 machines, mowing, tractor drawn
12 maintainers, tractor drawn
5 pile drivers, complete
50 plows and 3 plows, reversible back-filler attachment for "30" tractor
1 plow, snow, lateral rotary type
8 rollers, road
7 saws, power driven
1 sawmill, portable
1 scarifier
51 scrapers, slip
5 scrapers, wheel, 1 scraper, self-loading, tractor drawn

11 scrapers, Fresno
28 scrapers, automatic, tractor drawn
11 shovels, three-eighths-cubic-yard, gasoline
47 sleds, bole
30 tractors, caterpillar "30"
4 tractors, caterpillar "60"
2 tractors, monarch "35", 1 tractor, Holt
1 tractor, Case, 3 tractors, Fordson
28 trailers, highway, 2 trailers, crawler type
9 transits, surveying
63 wagons, 5 welding outfits, 13 windres, band.

Added Responsibilities

Over the years, the War Department added to the responsibilities of the Commission. For example, effective April 1, 1921, the office of the Chief of Engineers created the Alaska Engineer District. The Chief of Engineers appointed the president of the Commission district engineer, and placed the two other Commission members under the orders of the district engineer. The Commission's secretary and disbursing officer also became disbursing officer of the district. As a part of North Pacific division, the district engineer rendered an annual report of the operations of the Alaska district to the Chief of Engineers.[21]

Congress and the War Department also directed the president of the Commission to direct the construction or repair of any aid to navigation, authorized by Congress in the sixteenth lighthouse district which included Alaska. By an informal agreement, the president of the Commission agreed to act for the National Park Service, Department of the Interior, on certain matters relating to the improvement of the Sitka National Monument and the development of Mount McKinley National Park. This agreement became effective on April 1, 1922. In addition, the territorial government requested the president of the Commission to supervise a variety of territorial public works such as the construction of roads, aviation fields, shelter cabins, telephone lines, flood protection and terminals. The duties and responsibilities kept piling up. The Quartermaster General

of the Army requested the Commission to disburse funds and generally supervise the administration of the Sitka National cemetery, created by executive order of June 12, 1924, and at the request of the commanding general of the Ninth Corps Area, the Alaska Road Commission had built a water supply system for Chilkoot Barracks, the only Army post in Alaska. The Commission, on behalf of the Federal Power Commission, supervised and inspected hydroelectric developments in the territory; and finally, in conformance with an act Congress had approved on May 15, 1930, the president of the Alaska Road Commission was appointed a member of the Commission for studying the possible construction of the Pacific-Yukon Highway to connect the northwestern part of the United States with British Columbia, Yukon Territory, and Alaska.[22]

Smooth Cooperation Among Bureaus

In short, over the twenty-eight year history of the Alaska Road Commission there had developed, without legislation, but through executive orders and interdepartmental and interbureau agreement, a harmonious working arrangement utilizing the facilities of all the organizations involved interchangeably. The Commission, however, kept a careful account of all funds so that each appropriation was eventually expended according to Congressional intent, and no appropriation was either increased nor diminished by such interchange of working funds or facilities. The Commission prepared separate accounts and reports to the departments under whose direction they performed the work. This coordination had made possible the economical construction of many public works without the expenditure of a large overhead. Had each organization acted independently, there would have been the expenditure of substantial overhead funds.[23]

Activities In 1932

In 1932, the Alaska Road Commission conducted the following activities under its consolidated engineering direction: The construction,

repair, and maintenance of federal roads, tramways, ferries, bridges, trails, and related works, in excess of 11,000 miles, and extending from year-around open ports on Alaska's south coast to all inhabited parts of the territory; territorial roads, bridges, ferries, aviation fields, telephone lines, and trails throughout Alaska, covered by cooperative agreements; shelter cabins; the seventy-four miles long Nome-Shelton tramway. Either engines or dogs pulled the tramway cars. There also was the Valdez Dyke, the Yukon-Kuskokwim portage, and the government float in Juneau. [24]

Improvements Accomplished

The Alaska Road Commission also had made improvements at the following location: Nome Harbor, Port Alexander, and Harbor of Refuge and Seward Harbor; it had conducted preliminary surveys or examinations of Sitka Harbor, Dry Pass, Nome Harbor; Egegik River, Kake Harbor, Stikine River, Petersburg Harbor, Keku Strates; Kodiak, Wrangell, and Craig, Harbors; it had built flood control devices on the Salmon River; and issued permits for fish traps and other structures in the navigable waters along Alaska's 26,000 mile long coast; it had improved the Sitka National Monument and maintained various aids to navigation. Also, larger available funds allowed purchase consolidation for supplies resulting in lower prices, and combined operations avoided conflicts in plans and work compilations. Very importantly, having funds available on a year-round basis avoided the difficulties resulting from fiscal year appropriations beginning or terminating about the middle of each working season. All of this made the operations much more flexible and responsive to local needs.[25]

Aviation

Alaskans had enthusiastically embraced aviation, largely because of the territory's huge size and difficult geography, and scarcity of other transportation needs. To keep pace with aviation developments, therefore,

the territorial legislature, since 1925, had authorized the expenditure of a portion of the territorial road funds for the construction of aviation fields. The Alaska Road Commission built these airfields under the existing cooperative agreement with the territory. By 1932, some seventy of these airfields had been constructed at a total cost of $173,243.47. Some figures illuminated the importance of Alaskan aviation during the last fiscal year:

Planes in service.....31
Plane miles.....742,854
Passengers carried.....6,637
Passenger miles.....942,176
Mail and express carried.....496,680 lbs.

A summary of the work the Commission had accomplished by 1932 follows:

Consolidated cost summary

No.	Subproject	Cost, 1932	Total cost to June 30, 1932	Cost maintenance and improvement 1932	Total cost maintenance and improvement to June 30,1932	Cost construction, 1932	Total cost construction to June 30,1932
1	Prince of Wales Island[1]		$63,850.26		$21,038.40		$42,811.86
2A	Auk Bay extension[1]		60,404.43		12,300.30		48,104.13
2B	Mendenhall Glacier extension[1]		15,150.21		7,644.57		7,505.64
2C	Eagle River extension[1]		18,362.32		3,360.00		15,002.32
2D	Juneau-Duck Creek[1]		109,658.27		31,250.55		78,407.72
2E	Gastineau Channel Bar	$240.00	30,007.83	$240.00	1,386.00		28,621.83
2F	Gold Creek Bridge, Juneau		2,156.75				2,156.75
2G	Alaska Juneau Mine Trail		831.66				831.66
2H	Juneau Wharf	275.01	30,967.53	275.01	751.01	751.22	30,216.31
2J	Juneau Float	45.38	5,179.80	45.38	45.38		5,134.42
3A	Haines-Wells	6,044.27	243,206.34	6,044.27	119,576.35		123,629.99
3B	Pleasant Camp extension	5,685.68	170,710.20	5,685.68	28,516.00		142,194.20
3C	Porcupine extension		47,534.63		9,279.73		38,354.90
3D	Haines-Mud Bay	115.75	32,064.29	115.75	13,256.83		18,807.46
3E	Haines-Chilkoot	116.14	20,224.86	116.14	1,988.30		18,236.56
3F	Haines-Jones Point	34.75	2,353.20	34.75	799.75		1,553.45
3G	Chilkoot Barracks water supply	28,344.60	28,344.60			28,344.60	28,344.60
3H	Chilkoot Barracks Road	1,252.50	1,252.50	1,252.50	1,252.50		
4A	Donnelly-Washburn[2]		33,460.05		14,594.66		18,865.40
4AA	Richardson-Democrat Creek		2,320.59				2,320.59
4AB	Donnelly Aviation Field	14.11	137.42	14.11	14.11		123.31
4BA	Valdez-Ptarmigan drop	44,030.24	1,067,894.63	44,030.24	597,338.08		470,556.55
4BA	Dyke	27,123.68	119,100.36	27,123.58	63,034.38		56,065.98
4BB	Ptarmigan Drop-Ernestine	9,424.92	451,562.55	9,424.92	280,334.99		171,227.56
4C	Ernestine-Willow Creek	4,491.07	363,086.10	4,491.07	185,586.25		177,499.85
4D	Willow Creek-Gulkana	17,270.64	606,055.01	17,270.64	359,660.43		246,394.58
4E	Gulkana-Sourdough	17,436.24	384,036.25	17,436.24	239,862.55		144,173.70
4F	Sourdough-Mile 168	20,712.18	324,881.94	20,712.18	188,623.65		136,258.29
4G	Mile 168-Delta River	19,963.90	538,024.51	19,963.90	379,408.62		158,615.89
4H1	Delta River-Rapids	40,465.49	723,227.62	40,465.49	463,262.02		259,965.60
4H2	Rapids-Grundler	35,089.23	403,186.04	35,089.23	282,799.92		120,386.12
4I	Grundler-Richardson	949.01	345,806.87	949.01	224,512.87		121,294.00
4J	Richardson-Salchaket	2,919.89	448,286.96	2,919.89	232,768.95		215,518.01
4JA	Lake Harding Road	15.73	5,068.96	15.73	1,968.21		3,100.75

Cost consolidated summary - Continued

Consolidated cost summary - Continued

4K	Salchaket-Fairbanks	$12,040.75	$548,781.48	$12,040.75	$293,818.61	---	$254,962.87
4KA	Salcha Bridge	4,555.65	81,206.87	4,555.65	30,836.20	---	50,370.67
5	Ester-Dunbar[2]		19,405.18	---	6,781.00	---	12,624.18
5A	Dunbar-Tanana	749.31	89,182.74	749.31	38,913.05	---	50,269.69
5B	Nenana-Campbells		2,025.61	---	106.60	---	1,919.01
5C	Fish Lake-American Creek		$7,501.43	---	$1,734.90	---	$5,766.53
5D	American Creek Aviaton Field		940.00				940.00
5E	Tanana Aviation Field	189.76	4,274.92	189.76	374.96	---	3,899.96
5F	Illinois Creek-MoranCreek		1,178.89				1,178.89
6A	Willow Creek-Tonsina	3,783.70	229,458.59	3,783.70	119,797.81	---	109,660.78
6B	Tonsina-Chitna	13,794.13	353,827.21	13,794.13	208,464.52	---	145,362.69
6D	Chitina Depot	147.89	14,600.78	147.89	2,662.12	---	11,938.66
6E	Chitina native school		599.66	---	104.60	---	495.06
6F	Lower Tonsina Aviation Field		1,587.15				1,587.15
6G	Copper Center Aviation Field-	9.09	276.92	9.09	76.33	---	200.59
6H	Chitina Aviation Field		110.85				110.85
7A	Summit-Chatanika	4,318.49	80,508.40	4,318.49	39,745.69	---	40,762.71
7AA	Cleary Creek	186.81	8,375.56	186.81	4,057.75	---	4,317.81
7B	Fox-Olnes	1,009.87	50,809.91	1,009.87	22,718.26	---	28,091.65
7BA	Dome-Spaulding Mine		3,220.31	---	380.94	---	2,839.37
7BB	Fox-Steel Creek		855.75				855.75
7C	Summit-Fairbanks Creek	2,103.27	53,254.89	2,103.27	28,352.28	---	24,902.61
7CA	Summit-Fish Creek	199.76	16,561.15	199.76	3,780.33	---	12,780.82
7D	Ester Creek	3,131.49	85,005.60	3,131.49	46,348.67	---	38,056.93
7DA	College Spur	28.25	1,391.52	28.25	861.52	---	530.00
7DB	Ester-Dome	8.50	4,683.31	8.50	490.58	---	4,192.73
7DC	St. Patricks-Happy	231.71	7,116.57	231.71	1,047.10	---	6,069.47
7DD	Ester-Beegler	10.28	1,010.28	10.28	10.28	---	1,000.00
7E	Vault Creek[1]		4,875.20	---	172.37	---	4,702.83
7F	Vault Creek-Treasure Creek[1]		1,379.09	---	29.09	---	1,350.00
7G	Fairbanks-Gilmore	17,267.67	183,377.92	17,267.67	112,975.17	---	70,402.75
7GA	Lazelle Road	171.42	6,024.96	171.42	1,911.45	---	4,113.51
7H	Little Eldorado Creek	9,778.20	21,826.89	9,778.20	13,248.58	---	8,578.31
7I	Gilmore-Summit	7,867.30	54,187.23	7,867.30	35,023.91	---	19,163.32
7IA	Gilmore Creek[2]		1,562.00				1,562.00
7J	Fairbanks-Chena Hot Springs	814.42	17,618.57	814.42	9,585.98	---	8,032.59
7JA	Chena River Branch	181.72	1,653.37	181.72	1,039.36	---	614.01
7JB	Palmer Creek Aivation Field	14.11	839.11	14.11	264.11	---	575.00
7JC	Colorado Creek-South Fork		600.00				600.00
7K	Olnes-Livengood	37,926.59	52,917.46	---	2,170.39	$37,926.59	50,747.07
7N	Farmers-Birch Hill	776.71	25,414.36	776.71	11,012.39	---	14,401.97

7NA	Isabelle Creek		$2,484.38		$809.38	$1,675.00
7NB	Ballaine-Rickert		1,926.76		126.76	1,800.00
7R	Goldstream-O'Connor Creek	$399.00	553.64	$399.00	399.00	154.64
7S	Graehl Bridges	469.47	4,894.79	469.47	1,844.43	3,050.36
7T	Farmers-Chena Slough	1,496.27	17,097.31	1,496.27	5,898.54	11,198.77
7V	Fairbanks, wireless		495.46		495.46	
7X	Chena Hot Springs Aviation Field		1,739.58		50.00	1,689.58
7Y	Fairbanks Aviation Field	14.11	19,969.33	14.11	498.11	19,471.20
7Z	Fairbanks Aviation Field Road		766.66			766.66
8	Nome-Council	10,593.80	422,411.60	10,593.80	243,028.64	179,382.96
8D	Council-Ophir Creek	1,195.68	7,804.82	1,195.68	7,804.82	
8H	Casa de Paga	175.50	32,357.27	175.50	14,917.62	17,439.65
8J	Shovel Creek		66.55		8.05	58.50
8K	Council Aviation Field	845.03	2,244.27	845.03	845.03	1,399.24
8L	Port safety aids	120.00	616.50	120.00	616.50	
9	Rampart-Eureka	1,091.92	52,312.66	1,091.92	23,198.30	29,114.36
10	Seward-Kenai Lake[1]		80,783.93		34,523.10	46,260.83
10A	Seward-Radio[1]		6,594.04		124.00	5,470.04
10B	Seward-Nash[1]		21,996.00		8,753.70	13,242.30
10C	Lowell Creek flood control	701.71	124,663.54	701.71	11,424.92	113,238.62
10D	Seward Aviation Field	286.77	10,343.61		245.75	$286.77 10,097.86
11A	Eagle-Liberty	7,237.00	119,083.46	3,507.09	65,660.91	3,730.00 53,422.55
11B	American Summit-Forty Mile	345.50	26,945.31	345.50	6,694.12	20,251.19
11C	Steel Creek, mouth of Walkers Fork	638.90	8,499.06	638.90	3,866.56	4,632.50
11D	Steel Creek-Walkers Fork	249.50	6,446.20	249.50	2,336.20	4,110.00
11E	Eagle-Seventy Mile	746.89	20,385.89	746.89	15,421.30	4,964.59
11F	Liberty-Chicken	1,815.55	17,439.74	1,815.55	13,425.47	4,014.27
11G	Steel Creek-Canyon Creek		914.00		914.00	
11J	Forty Mile-Chicken		44.75		44.75	
11K	Forty Mile-Steel Creek		80.00		80.00	
11L	Franklin-Chicken	117.00	1,843.75	117.00	1,843.75	
11M	Jack Wade-Walkers Fork-Boundary	165.87	290.87	165.87	290.87	
11N	Lilywig Creek		909.50			909.50
11P	Chicken Aviation Field	49.00	2,749.14	49.00	49.00	2,700.14
11Q	Eagle Aviation Field	443.48	2,762.98	443.48	742.23	2,020.75
12A	Mile 34-Lynx Creek[2]		22,192.66		8,239.03	13,953.63
13A	Nome-Bessie	918.43	86,629.09	918.43	48,087.14	38,541.95
13B	Bessie-Snake River	5,127.84	82,475.02	5,127.84	52,941.90	20,533.12
13BA	Snake River-Monument Creek	371.38	1,788.05	371.38	371.38	1,417.27
13C	Bessie-Sunset Creek	16,674.63	36,414.10	1,242.00	15,141.82	15,432.63 21,272.28
13D	Bessie-Dry Creek[1]		3,280.20		1,706.73	1,582.47
13E	Dry Creek-Newton[2]		623.74		223.86	399.88
13F	Nome-Osborne	187.21	56,827.92	187.21	41,434.13	15,393.79

Consolidated cost summary - Continued

13G	Grass Gulch[2]		$1,125.73		$338.94	$786.79
13H	Center Creek[2]		1,538.80		1,455.15	83.6
13J	Wonder-Flat Creek[2]		2,803.72		2,633.22	170.50
13K	Bessie-Buster	$563.89	53,836.81	$583.89	36,332.83	17,503.98
13L	Nome buoys		585.00		585.00	
13M	Nome Depot	307.22	4,832.42	307.22	4,832.42	
14	Sitka-Indian River[1]		9,610.88		3,336.16	6,274.72
14	Sitka-Indian River	129.15	6,771.76	129.15	3,208.76	3,563.00
14A	Sitka National Monument	1,291.69	12,196.08	1,291.69	10,646.08	1,550.00
14B	Sitka National Cemetery	1,072.33	9,233.02	1,072.33	5,733.02	3,500.00
14C	Sitka-Pioneer Cemetery Road	45.00	4,399.16	45.00	1,058.14	3,341.02
14D	National Cemetery Road	200.41	1,993.30	200.41	1,195.83	697.47
15	Circle-Miller House	25,591.20	583,981.73	13,330.20	151,293.70	$12,261.00 432,688.03
15A	Central House-Circle Hot Springs	884.52	32,181.54	884.52	9,680.84	22,500.70
15B	Central House-Deadwood	8,160.92	12,051.88			8,160.92 12,051.88
15C	Circle Hot Springs Aviation Field	64.11	1,702.21	64.11	385.71	1,316.50
15D	Leech cut-off		224.75			224.75
15E	Miller House spur	206.05	2,206.22	206.05	335.69	1,870.53
16	Chatanika-Miller House	98,687.12	752,743.38	41,160.00	217,134.87	57,527.12 535,608.51
16A	U.S. Creek Branch	706.81	12,362.79	706.81	1,990.66	10,372.13
16B	Eagle Creek spur		306.03		224.86	81.17
16C	Chatanika-Miller House (winter)	71.78	23,262.11	71.78	8,647.37	14,614.74
16D	Sourdough Creek Branch	206.29	2,970.41	206.29	206.29	2,764.12
17	Tanana-Kaltag	386.40	34,235.33	386.40	10,497.53	23,737.80
17A	Lewis Landing-Dishkaket[2]		483.37			483.37
17B	Nulato-Dishkaket[2]		735.88		250.00	485.88
17C	Nulato Aviation Field	14.13	5,026.02	14.13	14.13	5,011.89
17D	Tanana-Kaltag telephone line		6,683.59		6,683.59	
18	Kaltag-Nome	1,758.09	70,535.17	1,758.09	42,397.78	28,137.39
18A	Bonanza-Kotzebue	717.94	9,741.30	717.94	8,511.30	1,230.00
18B	Golovin-Council	13.09	386.94	13.09	386.94	
18D	Unalakleet Aviation Field	571.90	1,641.17	171.90	199.50	400.00 1,441.67
18E	Solomon Aiviaton Field	267.55	719.83	267.55	624.83	95.00
18F	Golovin Aviation Field	167.80	1,751.97	167.80	172.90	1,579.07
18G	Moses Aviation Field		254.20		29.20	225.00
18H	Kaltag-Unalakleet telephone line		2,454.00		2,454.00	
18J	Spruce Creek		287.50			287.50
19	Kern Creek-Knik[2]		13,891.95		3,615.73	10,276.22
19A	Kenai Lake-Kern Creek[2]		6,833.20			6,833.20
19B	Mile 27, mile 29, A. N. R. R.[2]		741.66			741.66

19C	Kenai Lake, mile 27 A. N. R. R.[2]		$1,595.81			$1,595.81
19D	Kern Creek-Indian Creek[2]		3,758.26			3,758.26
19E	Girdwood-Crow Creek[1]		3,434.15		$2,542.50	891.65
20A	Knik-Susitna[2]		8,437.44		629.59	7,807.85
20B	Susitna-Rainy Pass		32,876.98		6,598.69	26,278.29
20C	Rainy Pass-Big River		16,436.46		1,927.39	14,509.07
20D	Dishkaket-Kaltag[2]		4,290.00		38.60	4,251.40
20DA	Takotna-Ophir (winter)	$8.98	4,896.47	$8.98	1,096.47	3,800.00
20DB	Ophir-Dishkaket		4,335.00		760.00	3,575.00
20E	Susitna-McDougal[2]		8,640.21			8,640.21
20F	McDougal-Cache Creek[2]		7,350.00		347.10	7,002.90
20G	Lakeview-McDougal[2]		3,675.00			3,675.00
20H	Nancy-Susitna	1.00	2,773.36	1.00	2,773.36	
20J	Susitna-Tyonek	51.40	4,122.45	51.40	1,478.52	2,643.93
20K	Susitna Aviation Field		931.10			931.10
21	Unalakleet-St. Michael		8,896.33		6,293.70	2,602.63
21A	St. Michael Aviation Field		110.00			110.00
22	Hot Springs-Sullivan Creek	354.00	60,168.37	354.00	32,344.53	27,823.84
23A	Snowshoe-Beaver		14,163.03		3,227.58	10,935.45
23B	Beaver-Caro	375.45	65,198.90	375.45	34,958.00	30,240.81
23C	Big Creek		9,614.77		3,294.77	6,320.00
23D	Caro-Flat Creek	1,233.94	16,517.56	1,233.94	12,494.30	4,023.26
23E	Caro-Coldfoot		13,167.46		5,607.59	7,559.87
23F	Chandalar Aviation Field		8,335.74		120.00	8,215.74
24	Mile 29, A.N.R.R.-Sunrise[1]		57,850.94		27,123.00	30,727.85
24A	Lynx Creek-Six Mile[1]		10,882.40		3,800.00	7,082.85
24B	Sunrise-Hope[1]		1,085.00		200.00	885.00
25A	Cripple River[2]		8,801.79		3,743.82	5,057.07
25B	Penny River[2]		1,967.08		691.05	1,276.03
25C	Nome wireless	202.02	3,638.64	202.02	1,873.73	1,764.91
25D	Mouth of Center Creek	286.66	26,229.45	286.66	18,728.38	7,501.07
25DA	Little Creek Branch	281.50	4,078.20	281.50	281.50	3,796.70
25E	Submarine Paystreak	437.90	35,556.33	437.90	11,186.00	24,370.33
25H	Otter Creek[2]		1,802.52		652.98	1,149.54
25K	Nome City Dock		2,966.65			2,966.65
25L	Nome Aviation Field		8,982.43	2,062.27	5,459.73	3,522.70
25M	Telephone lines, Seward Peninsula		13,149.20		11,449.20	1,700.00
25N	Nome city Streets		1,319.57		1,319.57	
25P	Nome Harbor lights	173.81	815.29	173.81	815.29	
25R	Radio telephones	6,477.34	6,477.34			$6,477.34 6,477.34
26	Candle-Candle Creek	2,642.88	83,480.75	2,642.88	48,486.68	34,994.07
26A	Kugruk River approach[2]		488.00		488.00	

Consolidated cost summary - Continued

26B	Bear Creek Trail		$613.09		$273.09	$340.00
26C	Candle-Kiwalik		1,027.91			1,027.91
26D	Kiwalik Aviation Field	$432.40	873.50	$432.40	573.50	300.00
26E	Candle Aviation Field		1,355.00			1,355.00
26F	Telephone line reconnaissance		148.00		148.00	
26G	Candle radio roda		575.00			575.00
27	Deering-Inmachuk	4,654.79	99,914.28	4,654.79	69,022.38	30,891.90
27A	Deering Aviation Field	10.40	1,159.65	10.40	137.65	1,022.00
28	Shelton-Candle	100.84	12,368.89	100.84	4,161.87	8,207.02
28A	Nome-Serpentine Hot Springs	2,546.36	15,994.93	2,546.36	10,755.93	5,239.00
29	Tanana-Bettles	81.52	12,252.29	81.52	5,240.18	7,012.11
29A	Bettles-Coldfoot	2,334.84	18,734.89	2,334.84	13,604.89	5,130.00
29C	Mile 70-Hughes		2,167.02		458.45	1,708.57
29D	Wild River Trail		1,425.76		1,425.76	
29E	Bettles River Aviation Field		500.00			500.00
30	Hot Springs Landing-Eureka	5,826.11	76,263.16	5,826.11	55,837.35	20,425.81
30A	Hot Springs-Tofty		6,683.47		2,374.21	4,309.26
30B	Manley Hot Springs Aviation Field	24.98	1,189.98	24.98	49.98	1,140.00
31	Caribou Creek		13,634.62		5,053.70	8,580.92
32A	Takotna-Flat (summer)		9,247.94		3,810.65	5,437.29
32AA	Takotna-Flat (via Moore Creek)	62.80	123.83	62.80	123.83	
32AB	Flat-Moore Creek		15.00		15.00	
32AC	Candle Creek-Takotna		1,216.09		1,216.09	
32B	Iditarod-Flat	3,660.50	120,589.49	3,550.50	64,703.22	55,886.27
32BA	Iditarod River improvement		100.00			100.00
32C	Ophir-Iditarod	53.91	7,747.26	53.91	2,747.26	5,000.00
32D	Flat-Crooked Creek	391.78	5,932.57	391.78	4,452.57	1,480.00
32DD	Flat-Georgetown		150.00		150.00	
32E	Takotna Aviation Field	1,479.25	3,859.87		437.43	$1,479.25 3,422.44
32F	Takotna Depot	3,235.01	13,064.12	3,235.01	5,454.85	7,609.27
33A	Otter Creek Towpath[2]		448.23			448.23
33B	Summit-Otter Creek		5,047.66		5,047.66	
33C	Flat City-Flat Creek	741.53	4,754.68	741.53	4,754.68	
33D	Head Flat Creek-Willow Creek	1,507.13	7,241.88	1,507.13	5,998.88	1,243.00
33E	Willow Creek-Chicken Creek	3,022.35	9,108.19	3,022.35	7,608.19	1,500.00
33F	Flat City-Otter Discovery	3,503.62	20,665.29	1,500.00	8,850.59	2,003.62 11,814.70
33G	Candle Landing-Candle Creek		6,572.00		975.00	5,597.00
33H	Flat Aviation Field	223.42	3,123.42	223.42	223.42	2,900.00
34	Iditarod-Dishkaket[2]		4,830.98		100.00	4,730.98
34A	Flat-Holy Cross-Anvik	118.48	1,920.14	118.48	1,920.14	
34B	Iditarod-Shageluk-Anvik	89.91	1,123.78	89.91	623.78	500.00
35A	Archangel extension	296.08	31,113.28	296.08	13,915.36	17,197.92
35AA	Sherry Branch		1,768.49		649.17	1,119.32

Consolidated cost summary - Continued

35AB	Fairangel extension		$104.20				$104.20
35B	Palmer-Fishhook	$93.40	38,892.28	$93.40	$14,204.36		24,687.92
35C	Palmer-Matanuska River	31.17	34,702.33	31.17	11,046.17		23,656.16
35D	Willow Creek extension	3,190.34	108,868.29	3,190.34	70,734.15		38,134.14
35DA	Gold Chord Branch	179.21	11,617.49	179.21	1,026.25		10,591.24
35DB	Lucky Shot-St. Peters	28,544.59	54,341.28			$28,544.59	54,341.28
35E	Wasilla-Fishhook	3,619.90	127,167.24	3,619.90	93,754.61		33,412.63
35F	Wasilla-Knik	243.98	52,346.51	243.98	25,911.04		26,435.47
35G	Palmer-Springer	97.82	3,173.76	97.82	1,600.44		1,573.32
35H	Wasilla-Finger Lake-Palmer	2,110.85	36,280.38	2,110.85	17,223.15		19,057.23
35I	Moose-Palmer	133.95	2,520.62	133.95	627.53		1,893.09
35J	Wasilla-Matanuska	616.82	26,383.58	616.82	17,107.35		9,276.23
35K	Matanuska Trunk Road	7,419.23	47,366.38	7,419.23	32,314.92		15,051.46
35L	Palmer-Matanuska	345.98	15,579.65	345.98	7,174.95		8,494.70
35N	Houston-Willow Creek		1,212.32		272.00		940.32
35O	Fishhook-Goldmint	2,407.79	24,982.28	2,407.79	7,445.45		17,536.83
35P	Moose Creek-Baxter[2]		2,218.62				2,218.62
35Q	Edlund Road	63.73	3,153.02	63.73	601.33		2,551.69
35R	Bogard Road	84.89	13,514.11	84.89	1,285.53		12,228.58
35RA	Engstron Road		1,020.00				1,020.00
35S	Moose Creek Trail		2,118.44		77.43		2,041.01
35T	Werner connection		486.94				486.94
35U	Moose Creek Aviation Field		481.75		20.25		461.50
35V	Fishhook Aviation Field		917.49		68.75		848.74
35W	Wasilla Aviation Field		459.50				459.50
35X	Wasilla Aviation Field Road	22.45	1,191.11	22.45	55.17		1,135.94
36	Mineral Creek	257.64	60,633.37	257.64	25,318.36		35,315.01
36A	Granby Road		3,431.35		349.44		3,081.91
36B	South Second Street, Cordova		3,373.15				3,373.15
36C	Eyak Lake Road[1]		7,735.85				7,735.85
36CA	Cordova Aviation Field		941.90		15.75		926.15
36D	Valdez-Quartz Creek[2]		524.75				524.75
36E	Valdez-Glacier[2]		616.91				616.91
36F	Shoups Bay[2]		3,457.25				3,457.25
37	Topkok-Candle		1,026.56		210.00		816.56
37A	Bluff-White Mountain		3,273.23				3,273.23
37B	Bluff Aviation Field		80.00				80.00
38A	Ruby-Long	10,413.65	237,807.24	10,413.65	105,786.89		132,020.35
38B	Poorman-Cripple	307.20	3,757.04	307.20	2,254.08		1,502.96
38C	Ophir-Cripple	44.15	4,001.58	44.15	2,102.58		1,899.00
38D	Ophir-Takotna	7,204.47	264,146.31	7,204.47	89,638.81		174,507.50
38DA	Little Creek Road		13,185.52		2,537.48		10,648.04
38E	Long-Poorman	7,588.85	158,145.17	7,588.61	40,952.61		117,192.56

Consolidated cost summary - Continued

38EE	Long-Poorman		$5,378.00		$110.00	$5,268.00
38EEE	Tamarack-Poorman		22,322.69			22,322.69
38F	Poorman-Ophir		3,030.44		3,030.44	
38G	Takotna Aviation Field Road	$559.56	8,934.24		1,000.00	$559.56 7,934.24
38H	Ganes Creek Road	3,515.50	14,930.71	$3,515.50	11,526.86	3,403.85
38K	Ruby Aviation Field	23.76	2,098.51	23.76	898.51	1,200.00
38L	Ruby Aviation Field Road		500.00			500.00
38M	Ophir Aviation Field		1,825.12			1,825.12
39	Juneau-Sheep Creek[1]		45,929.40		20,539.27	25,390.13
40	Douglas-Gastineau Channel[1]		18,616.56		6,596.68	12,019.88
41	Kiana-Klery Creek	146.87	3,905.94	146.87	891.18	3,014.76
41A	Kotzebue-Shungnak	245.13	3,993.31	245.13	3,993.31	
41AA	Kiana-Selawik-Shungnak	791.40	791.40		791.40	791.40
41B	Kotzebue-Point Barrow	147.57	6,065.59	147.57	1,665.57	4,400.02
41C	Kiwalik-Noorvik	454.25	454.25	454.25	454.25	
41D	Kotzebue Aviation Field	110.40	1,955.45	110.40	537.90	1,417.55
41E	Kobuk Aviation Field	300.00	2,299.00		300.00	2,299.00
42	St. Michael-Kotlik		2,385.51		2,385.51	
43	Petersburg-Scow Bay[1]		23,466.23		9,968.56	13,497.67
44	Skagway Valley[1]		11,124.83		2,320.88	8,803.95
44A	Skagway Trails	1,899.53	17,833.41	1,899.53	6,674.70	11,158.71
44B	Skagway Aviation Field	263.34	7,048.87	263.34	263.34	6,785.53
45	Silver Bow Basin[1]		23,466.21		17,527.59	5,938.62
46	Kobi-Eureka	94.74	16,437.54	94.74	3,865.91	12,571.63
46A	Roosevelt-Kantishna		61,686.53		19,723.84	41,962.69
46B	Lignite-Kantishna		13,130.00		1,163.09	11,966.91
46C	Nenana-Knights Roadhouse	157.30	3,651.03	157.30	2,058.45	1,592.58
46D	McKinley Park Road	96,237.79	721,437.38	25,194.94	87,907.28	71,042.85 633,530.10
46E	Diamond-Telida	69.70	10,276.40	69.70	3,464.84	6,811.56
46F	Nenana Cemetery Road	47.70	7,606.51	47.70	3,787.88	3,818.63
46G	Kobi-Bonnifield		5,767.51		69.90	5,706.61
46H	Lake Minchumina Aviation Field	14.11	914.11	14.11	164.11	750.00
46J	Kantishna Aviation Field		775.00		100.00	875.00
46K	Telida Aviation Field		850.00		250.00	600.00
46M	Nenana Aviation Field	65.48	1,108.04	65.48	388.04	720.00
47	Coldfoot-Wiseman	83.48	16,255.34	83.48	7,312.73	8,942.61
47A	Wiseman Aviation Field	623.33	6,434.02	623.33	2,320.77	4,113.25
47B	Nolan Branch	3,808.67	25,729.83	2,608.67	7,095.00	1,200.00 18,634.74
47C	Wisemann-Hammond	856.42	7,897.70	845.42	3,930.03	3,907.07
48	Iliamna Bay-Iliamna Lake	14,738.49	71,749.37	3,000.00	7,506.46	11,738.49 64,242.91
49	Davidson Landing-Taylor	1,518.16	19,930.25	1,518.16	12,217.08	7,713.17
50	Stilkine River[1]		2,256.75			2,256.75
51	Talkeetna-Cache Creek	10,329.54	277,143.00	10,329.54	111,803.74	165,339.35

Consolidated cost summary - Continued

51A	Cache-Creek Trail		$4,533.11		$2,283.11	$2,270.00
51B	Peters-Creek Trail	$2,281.07	14,632.70		2,144.81	$2,281.07 12,487.89
51C	Yentna-Mills Creek		5,174.80		44.36	5,130.44
51E	Mills Creek-Cache Creek	107.22	2,253.83	$107.22	946.38	1,307.45
51F	Cache Creek Aviation Field		170.90			170.90
52	Ketchikan-Wards Cove[1]		26,120.42		5,000.00	21,120.42
52A	Ketchikan-Charcoal Point[1]		15,500.48		3,000.00	12,500.48
53	Eagle-Circle		5,816.59		4,161.87	1,681.72
53A	Circle-Fort Yukon	77.00	7,929.98	77.00	3,763.41	4,166.57
53B	Fort Yukon Aviation Field	14.11	3,096.00	14.11	557.11	2,540.00
54	Chisana-Nizina	337.16	10,303.37	337.16	2,976.47	7,327.30
54A	Chisana Aviation Field		1,744.63		250.00	1,494.63
54B	Nabesna Aviation Field		2,001.48		524.90	1,476.56
55	Kenai-Russian River	1.00	14,186.56	1.00	7,627.32	6,559.26
55A	Kenai Aviation Field		901.51			901.51
56	Tasnuma[2]		1,658.14			1,658.14
56B	Katalia-Chilkat[2]		7,752.56			7,752.56
57	McCarthy-Dan Creek	13,642.91	230,544.32	7,642.00	79,102.00	6,000.00 151,352.23
57A	Nizina River Bridge	774.63	108,749.63	774.63	42,807.80	125,941.80
57B	Nizina Chitina River	1,438.01	7,726.62		888.04	1,438.01 6,838.58
57C	McCarthy-Kennecott River	75.00	516.27	75.00	516.27	
57D	Chititu Branch	221.29	7,865.42	221.29	1,636.94	6,228.48
57E	McCarthy-Green Butte		2,178.42		2,178.42	
57F	McCarthy Aviation Field		2,923.11		344.23	2,580.88
57G	Copper Creek Trail		301.98			301.98
57H	Chitina River Aviation Field		735.00			735.00
58	Hyder-Salmon River[1]		63.50			63.50
59	Fairbanks Bridge	227.14	73,947.03	227.14	12,247.73	61,690.30
59A	Fairbanks Depot	5,380.51	29,463.84	1,180.51	6,453.84	4,200.00 23,010.00
60A	Valdez Aviation Field		2,558.24		206.50	2,351.65
60B	Upper Tonsina Aviation Field		1,747.47		47.50	1,699.97
61	Strelna-Kuskulana		17,106.28		4,589.73	12,536.55
61A	Kotsina Trail		16,095.29		1,523.74	14,571.55
61B	Nuggett Creek Extension		1,630.00		1,630.00	
61C	Elliot-Kotsina		6,858.42			6,858.42
61E	Farnan Trail		941.96		15.80	926.16
61F	Bremner Trail	1,695.49	5,215.47		46.73	1,695.49 5,168.74
61G	Bremner Aviation Field	500.00	500.00			500.00 500.00
62	Dime Creek	1,172.34	78,869.24	1,172.34	35,166.28	43,702.96
62A	Haycock-Bear Creek		517.82		301.82	216.00
62B	Haycock Aviation Field	2,010.40	2,115.40			2,010.40 2,115.40

62C	Koyuk Aviation Field----------	$285.90	$312.98	$285.90	$285.90	----------	$27.08
63	Dunbar Brooks----------	115.64	31,525.72	115.64	12,296.13	----------	19,220.59
63B	Brooks-Livengood Creek--------	191.50	33,223.88	191.50	13,159.02	----------	20,064.86
63BA	Army Creek Branch----------		2,368.45	----------	300.00	----------	2,068.45
63C	Brooks Tram[2]----------		63,455.30	----------	45,144.09	----------	18,311.30
63D	Brooks Aviation Field Road----------		713.00	----------	----------	----------	713.00
63E	Livengood Aviation Field------	164.12	2,778.87	164.12	624.87	----------	2,154.00
64	Cripple Lewis Landing[2]----------		100.00	----------	100.00	----------	----------
64A	Cripple-Cripple Mountain----------		553.65	----------	261.65	----------	292.00
64AA	Cripple-Cripple Mountain (winter)	8.08	860.03	8.98	248.98	----------	611.05
65A	Gulkana-Chistochina----------	46,191.00	350,435.66	22,101.00	82,572.16	$24,000.00	267,863.50
65B	Chistochina-Slate Creek-------	2,946.18	7,132.91	----------	109.50	2,946.18	7,023.41
65C	Chistochina-Slam----------	77,007.55	126,274.51	5,006.00	5,008.20	72,001.85	121,176.31
65D	Kechumstuk-Tanana Crossing----------		1,669.82	----------	1,669.82	----------	----------
65E	Chicken-Ketchumstuk----------		1,663.50	----------	1,663.50	----------	----------
65F	Grundler-Tanana Crossing------	176.90	12,174.17	176.90	2,801.46	----------	9,372.71
65G	Slana-Chisma----------	4,384.91	16,717.80	----------	950.12	4,384.91	15,737.77
65H	Tanana Crossing Aviation Field----------		550.00	----------	----------	----------	550.00
65K	Chistochina Aviation Field----------		2,067.97	----------	----------	----------	2,067.97
66	Matanuska-Chickaloon[2]----------		1,268.30	----------	----------	----------	1,268.30
67	Nome-Teller----------	960.89	11,497.69	960.89	11,197.69	----------	300.00
67A	Teller-Cape Prince of Wales---	27.90	2,970.98	27.90	2,970.98	----------	----------
67B	Teller-Bluestone----------	1,694.13	11,950.27	1,694.13	6,273.82	----------	5,676.45
67C	Teller-Pilgrim Hot Springs----	21.55	3,138.05	21.55	1,338.05	----------	1,800.00
67D	Teller-American River----------		906.34	----------	56.67	----------	849.67
67E	Teller Aviation Field---------	110.40	1,071.20	110.40	318.40	----------	762.80
67F	Tin City-Goodwin----------	202.50	2,659.42	292.50	561.60	----------	2,097.82
67G	Lost River Aviation Field----------		121.40	----------	----------	----------	121.40
67H	Wales Aviation Field----------		121.40	----------	----------	----------	121.40
67J	Woolley-Gold Run----------	4.25	29.25	4.25	29.25	----------	----------
68	Flagging Trails----------	1,895.94	98,835.12	1,895.94	98,835.12	----------	----------
70	Misc. Surveys & Reconnaissances	6,159.72	21,503.84	----------	1,008.76	6,159.72	20,465.08
72	Wrangell Oil Dock[1]----------		4,964.97	----------	----------	----------	4,964.97
72A	Wrangell Cemetery Rd[1]----------		8,630.22	----------	2,350.00	----------	6,280.22
73	Marshall Road----------	1,102.48	23,569.93	241.48	8,000.88	921.00	15,470.05
73A	Kotlik-Marshall----------	82.15	3,614.65	82.15	2,704.65	----------	850.00
73B	Stayabok----------		1,660.00	----------	----------	----------	1,660.00
73C	Old Hamilton-Scammon Bay------	62.00	2,440.18	62.00	586.73	----------	1,853.45
73D	Marshall Aviation Field-------	100.00	2,100.00	100.00	100.00	----------	2,000.00
75	Anchorage Loop----------	7,756.55	121,541.34	7,756.55	64,537.55	----------	57,003.79
75A	Anchorage-Lake Spenard--------	1,968.20	21,942.81	1,908.20	11,932.58	----------	10,010.23

Consolidated cost summary - Continued

75C	Chester Creek boat landing----	$122.90	$1,341.18	$122.90	$558.76	----------	$782.42
75D	Anchorage Depot----------	161.27	7,383.93	161.27	3,417.58	----------	3,966.35
75E	McDonald Road----------	165.18	2,820.03	165.18	1,714.90	----------	1,105.13
75G	East First St., Anchorage[2]----------		1,023.46	----------	----------	----------	1,023.46
75H	Lake Spenard Aviation Field----------		277.45	----------	----------	----------	277.45
75I	Oilwell Road----------	902.99	7,297.77	902.99	2,707.78	----------	4,589.99
75J	Anchorage Aviation Field------	154.20	4,768.20	154.20	154.20	----------	4,614.00
75L	Anchorage Loop-Eklutna-------	192.29	2,717.75	192.29	192.29	----------	2,525.46
75M	Anchorage Radio Road----------		448.09	----------	----------	----------	448.00
76	Cantwell-Valdez Creek----------		10,793.95	----------	2,953.75	----------	7,840.20
76A	Valdez Creek Aviation Field----------		1,337.10	----------	----------	----------	1,337.10
78	Valdez Depot----------		5,266.56	----------	5,266.56	----------	----------
79	Seward Depot----------	57.50	4,171.55	57.50	4,171.55	----------	----------
80A	McGrath-Takotna----------		368.05	----------	368.05	----------	----------
80AA	McGrath-Takotna(winter)-------	137.80	5,075.15	137.50	2,803.15	----------	2,182.00
80B	McGrath-Telida----------	253.74	12,376.50	253.74	5,108.38	----------	7,178.21
80C	McGrath-Candle Creek----------		305.20	----------	305.20	----------	----------
80D	Nixon Fork-Nixon Mine---------	36.78	2,384.78	36.78	36.78	----------	2,348.00
80E	Takotna-Twin Peaks----------		213.16	----------	100.00	----------	113.16
80F	Medfra-Nixon Mine----------	93.60	3,553.20	93.60	1,753.20	----------	1,800.00
80G	Takotna-Nixon Fork----------		610.56	----------	610.56	----------	----------
80GG	Takotna-Nixon Fork (winter)----------		183.16	----------	183.16	----------	----------
80H	McGrath Aviation Field--------	63.50	14,400.93	63.50	63.50	----------	14,346.43
80J	Medfra Aviation Field----------		345.00	----------	60.00	----------	285.00
81	Good Creek-Salmon River-------	255.10	13,084.03	255.10	3,993.89	----------	9,900.14
81A	Rink River----------		1,550.00	----------	----------	----------	1,550.00
82	Taku River[1]----------		20,208.95	----------	----------	----------	20,208.95
84	Fairbanks-Council Survey----------		41,528.75	----------	----------	----------	41,528.75
86	Fourth of July Creek----------	556.60	4,751.26	566.60	3,590.03	---------	1,161.23
87	Woodchopper Creek----------		872.00	----------	810.00	---------	62.00
88	Perry-Eva Creek----------	7,008.65	24,175.33	7,008.65	9,815.64	---------	18,350.89
89	Kougarok Reconnaissance----------		4,312.11	----------	----------	----------	4,312.11
89A	Seward Peninsula Railroad-----	12,200.94	197,540.06	12,200.94	133,000.14	---------	64,539.92
89B	Pilgrim Aviation Field--------	10.40	1,126.40	10.40	410.40	---------	716.00
89C	Iron Creek-American Creek-----	292.50	2,478.67	292.50	723.75	---------	1,754.92
90A	Shelter Cabins, First Division----------		340.35	----------	----------	----------	340.35
90B	Shelter Cabins, Second Div.---	1,424.03	39,197.96	1,000.70	7,286.66	$383.33	31,911.30
90C	Shelter Cabins, Third Div.----	21.55	24,720.02	21.55	2,328.90	---------	22,391.12
90D	Shelter Cabins, Fourth Div.---	1,254.30	42,419.33	504.30	5,495.15	750.00	36,954.18
91	Yakutat]----------		50.55	----------	----------	----------	50.55
92A	Bethel-Quinhagak----------	268.00	2,979.21	268.00	1,181.71	---------	1,797.50

Consolidated cost summary - Continued

92B	Bethel-Tulusak	$966.89	$3,755.13	$966.80	$2,276.65	---	$1,478.48
92C	Akiak-Russian Mission	150.75	1,734.75	150.75	150.75	---	1,584.40
92D	Bennett's Cut-Off	---	396.00	---	---	---	396.00
92E	Yukon-Kuskokwim Portage	89.83	27,541.66	89.83	1,025.68	---	26,515.98
92F	Quinhagnak-Goodnews Bay	80.86	2,863.27	80.86	445.50	---	2,417.77
92G	Goodnews Bay-Togink	---	2,428.57	---	225.24	---	2,203.33
92H	Togiak-Nushagak	---	8,492.98	---	4,300.82	---	4,192.16
92I	Lewis Point-Naknek	382.56	4,171.66	382.56	1,539.32	---	2,632.34
92J	Naknek-Egegik	166.34	2,082.84	166.34	877.84	---	2,105.00
92K	Egegik-Kanatak	---	1,168.50	---	818.50	---	350.00
92L	Crooked Creek-Aniak	196.56	1,940.74	196.56	1,129.74	---	820.00
92M	Anink-Tuinksak	205.04	3,927.35	205.04	1,412.39	---	2,514.96
92N	Akiak-Canyon Creek	---	306.00	---	306.00	---	---
92O	Tuluksak-Foothills	27.80	1,471.94	27.80	286.82	---	1,185.12
92P	Holy Cross-Kaltshak	242.67	1,362.77	242.67	862.77	---	500.00
92Q	Upper Landing-Bear Creek	2,691.04	8,210.02	2,691.04	4,119.04	---	4,100.00
92R	Dillingham-Snag Point	14,511.27	16,417.58	---	---	$14,511.27	16,417.58
93	Chulitna Trail	72.00	8,809.44	72.00	1,943.00	---	6,956.44
93A	Bull River Trail	---	4,515.60	---	983.28	---	3,582.82
93B	Indian River	---	6,579.63	---	13.40	---	6,566.23
93C	Curry Aviation Field	3.84	4,221.05	3.84	844.45	---	3,376.60
93D	Chulitna Tram	3.34	523.71	3.34	3.34	---	520.37
93E	Hidden River Tram	135.92	135.92	---	---	135.92	135.92
94	Kodiak-Abberts	2,171.85	62,619.07	2,171.85	15,810.56	---	46,808.51
95	Kanatak-Becharof Lake	---	30,276.74	---	6,394.43	---	23,882.31
95B	Larsen Bay-Kariuk River	---	962.05	---	---	---	962.05
96	Chickaloon-King River	37.00	1,870.68	37.00	1,070.68	---	800.00
96A	Chickaloon Cable	20.22	404.44	20.22	132.15	---	272.29
96B	Chickaloon-Nelchina	366.66	8,283.83	366.66	783.46	---	7,500.37
97	Suntrana Footbridge	---	413.80	---	---	---	413.80
97A	Healy Aviation Field	---	491.79	---	---	---	491.79
98	Homer Spit	250.45	37,474.75	250.45	4,605.00	---	32,869.75
98A	Nuka Bay	---	5,757.75	---	2,106.77	---	3,650.98
98B	Ninilchik Aviation Field	---	384.18	---	---	---	384.18
98C	Kasilof Aviation Field	---	674.52	---	---	---	674.52
98D	Kasilof Road	1,012.10	18,158.45	1,012.10	1,012.10	---	17,146.35

Consolidated cost summary - Continued

100	Office & General Overhead-----	$30,453.65	$580,323.20	$19,242.31	$307,483.97	$11,241.34	$272,839.29
101	Territorial General Overhead----------		71,521.31	---------	31,584.89	---------	39,936.42
	Total Costs----------	1,122,750.79	18,948,120.03	678,803.87	8,669,576.71	443,946.92	10,278,552.32
110	Book Value of Plant-------	39,500.25	90,347.56	----------			
111	Supplies & materials on hand	44,219.76	206,620.27	----------			
	Total Expenditures---	1,030,030.78	19,245,105.86	----------			

[1]Transferred to Department of Agriculture.
[2]Abandoned
[3]Includes $932,280.46 of supervised funds.
[4]Includes $1,312.40 General Accounting Office settlements. Does not include $3,858.13 reimbursements and receipts from sales.

[26]At the conclusion of twenty-eight years of service, the Alaska Road Commission could look back on a solid record of achievement.

Footnotes

1. Donald MacDonald, "Report on Winter Trail Conditions Chatanika to Fort Yukon, February 28, 1929, R. G. 30, ARC, box 65480, Federal Records Center, Seattle, Washington.

2. Ibid.

3. Ibid.

4. Ibid.

5. Ibid.

6. Ibid.

7. "Condition of the Richardson Highway, Alaska, May 10, 1929," RG30, ARC, box 65481, Federal Records Center, Seattle, Washington.

8. Ibid.

9. Ibid.

10. Annual Report of the Alaska Road Commission, 1932, p. 37.

11. Lottsfeldt to Gillette, May 29, 1929, R.G.30, ARC, box 65479, Federal Records Center, Seattle, Washington.

12. Christianson to Engineer Officer, ARC, June 10, 1929, R.G. 30, A.R.C., box 65480, Federal Records Center, Seattle, Washington.

13. Ibid.

14. Christianson to Engineer Officer, June 10, 1929, R.G. 30, A.R.C., box 65480, Federal Records Center, Seattle, Washington.

15. Report Upon The Construction and Maintenance of Roads, Bridges and Trails, Alaska, Extract From the Annual Report of the Chief of Engineers, 1931 (Washington, D.C.: Government Printing Office, 1932), pp. 2274-2275.

16. Ibid., p. 2275.

17. Ibid.

18. Annual Report of the Alaska Road Commission, 1932, p. 20.

19. Ibid.

20. Ibid., pp. 3-4.

21. Ibid., p. 11.

22. Ibid., pp. 11-12.

23. Ibid, p. 12.

24. Ibid.

25. Ibid., pp. 12, 11.

26. Ibid., pp. 45-55

CHAPTER TEN

THE ALASKA ROAD COMMISSION AND ALASKAN AVIATION

Major James G. Steese, the president of the Commission, submitted his annual report in October 1927. He obviously took pride in the achievements of his organization. From 1905 to 1927, the Commission had constructed 1,487.5 miles of wagon road, 100 miles of tramroad, 1,221.5 miles of sled road, 6,925.5 miles of permanent trail, and 712 miles of temporary flagged trail, for a total of 10,446.5 miles. Considering Alaska's huge size of 586,600 square miles, the total mileage was not impressive, but when taking into account the territory's rugged terrain, extremes in temperatures, and the relatively modest Congressional appropriations over the years, the ten-thousand odd miles of roads and trails did look imposing.[1]

Steese noted the continued cooperation between Territorial officials and the Commission, based on section 17 of the Territorial road law of April 21, 1919. Under this section, Commission personnel had also performed territorial functions. For example, Anton Eide, the assistant superintendent of the Commission for southwestern Alaska had acted as chairman and secretary of the Territorial Divisional Road Commission for the third division, while Hawley Sterling, the superintendent for the Fairbanks district, had filled the same position for the Territorial Divisional Road Commission for the fourth division. In fact, the territory had not maintained its own road organization since March 31, 1921.[2]

During fiscal year 1927, Eide and Sterling, under the supervision of the Commission had expended $13,052.15 and $13,844.42, respectively. In addition, the Commission had been responsible for the expenditure of the following Territorial monies:

	Allotted	Expended
Cooperative Projects	$127,550.00	$127,550.00
Shelter cabins	25,000.00	8,624.34
Aviation fields	23,926.38	10,366.74

Telephone lines	7,468.40	1,382.50
Nome Harbor	2,500.00	2,500.00
Valdez Dike	10,000.00	10,000.00

When bills needed to be paid, the Commission charged the territory for work performed, while local banks disbursed divisional funds, but the Commission audited all vouchers under the same restrictions applying to federal vouchers before being certified to the territorial treasurer for payment.[3]

The Commission also had continued its cooperative effort with the territory on the rehabilitation and operation of the Nome to Shelton tramroad, situated on the Seward Peninsula and approximately 87 miles long, and the Tolvana tramroad, located about 50 miles northwest of Fairbanks and extending from the town of Brooks about 13 miles south to the head of navigation on the Tolovana River. The Commission had spent $22,073.16 on the rehabilitation of the former, and $6,932.08 on the latter. In addition, the Commission had assumed the repair and maintenance of 400 miles of telephone lines for the territory, and the construction and maintenance of 24 aviation fields.[4]

"The aviation," as Alaskans called it, had become very important in the Territory by 1927. The first plane to fly in Alaska took off from Fairbanks on July 4, 1914. Fairbanksans always celebrated the Fourth of July with foot, horse, and bicycle races, tugs of war, and baseball games - and this time they added an aerial circus. Arthur Williams, the owner of the Arcade Restaurant, and two other merchants hired aviator James Martin from the states, and paid his and his wife's transportation as well as the shipment of his small tractor biplane. It was an expensive undertaking and cost the three men several thousand dollars. They made a good choice, in picking Martin, for he was one of the earliest aviation pioneers in the United States and had invented the first successful tractor biplane in 1911 with which he set a world speed record of seventy miles per hour. An Army consulting engineer during World War I, he became a good friend of General Billy Mitchell, the Army advocate of air power, and subsequently invented numerous

other aeronautical products and manufactured those together with planes and automobiles at a factory in Garden City, Long Island, and New York.[5] That was in the future, however.

The promoters planned to hold the aerial circus at the ball park. They planned to charge five dollars a head for admission, expecting a large crowd. But when Martin went up in his plane, the ball park was almost empty, but spectators all over town covered rooftops and woodpiles, watching the show for free. After one false try, Martin's biplane lifted into the air, and flew some 400 feet above the baseball diamond for nine minutes before it settled down. He flew four times, but the promoters lost a bundle of money.[6]

In 1920 General Mitchell sponsored the flight of the Army Air Service's Black Wolf Squadron from New York to Nome. This flight showed Alaskans what airplanes could do. It took the squadron, under the command of Captain St. Clair Streett, almost six weeks to reach Alaska. Finally, they landed at the ball park in Fairbanks joyously greeted by a large crowd of residents. "Wrong Font" Thompson, the editor of the Fairbanks Daily News-Miner, wrote that "adventurers of an earlier day take their hats off to the advance guard of the new generation who are blazing a pioneer trail by means of locomotion which seems almost super human and uncanny in its marvelous accomplishment."[7]

Several individual pilots followed the Army fliers, but Carl Ben Eielson probably was the most important figure for the development of Alaskan aviation. He arrived in Fairbanks in 1922 to teach school. A graduate of North Dakota State University, he taught mathematics and general science and coached basketball at the red frame high school on Eighth Street. But what Eielson wanted to do was to fly, not teach. He had learned flying in the Army Air Service during World War I. And soon Eielson persuaded Fairbanksans to buy a plane for him, a Jenny with an OX-5 engine. Dick Wood, a pioneer banker, gave most of the money. The plane arrived in Fairbanks on July 1, 1923, and three days later he climbed into the wicker seat of the open cockpit plane and made the first commercial flight in interior Alaska. Wood, his princi-

pal financial backer, climbed in behind him, well fortified with "Alaska Mule", a vicious local moonshine liquor. The two flew to Nenana, fifty miles from Fairbanks on the Alaska Railroad. That summer Eielson made several more cross-country trips, hauling passengers and light freight to nearby towns.[8]

Late in November of 1923, the United States Post Office gave Eielson a contract for ten twice-monthly mail trips from Fairbanks to the town of McGrath, more than three hundred miles distant. The Department also shipped him a Liberty-powered DeHavilland for the flights and agreed to pay him two dollars a mile - less than half the cost of transporting mail by dogsled. "The Aviation" had arrived in the north, and it was destined to revolutionize transportation, helping to tie together a vast subarctic subcontinent.[9]

With aviation established in the north, it became necessary to build aviation fields. As early as 1925, G. R. Jackson investigated landing fields in Nome on behalf of Alaska's first bush pilot, Noel Wien, a Minnesota farm boy who had arrived in Fairbanks in 1924. Soon Wien compiled a list of aviation firsts which was almost endless. And since he was Alaska's first bush pilot, almost every flight he made was an inaugural. He was the first to fly the 350 miles from Anchorage through the Alaska Range alongside Mount McKinley's 20,300-foot height to Fairbanks in the Interior. He was the first to fly over and land beyond the Arctic Circle; to fly commercially between Fairbanks and Nome; and to pilot the first passenger flight from Seattle to Fairbanks. The list is indeed a very long one.[10]

For the first flight to Nome, Jimmy Rodebaugh, one of the owners of the Fairbanks Airplane Company, bought a very large Fokker F.III which arrived in the town on two train flatcars early in the summer of 1925. Noel Wien and his brother Ralph assembled the aircraft with a curious crowd watching their every move. The assembly was uncomplicated, because the Fokker fitted together easily, but it took some time because of the size of the parts. Rodebaugh and the other officers of the company were anxious to get the Fokker flying because it promised to double the revenue taken in from any of the company's three biplanes.

The Fokker carried five instead of two passengers at an average of one dollar per mile, and 500 pounds of freight averaging 40¢ a pound on short flights and 75¢ on flights longer than sixty miles. In addition, there still was room for any mail the owners could contract from the post office in the future.[11]

The Fairbanks Daily News-Miner was enthusiastic about the plane, stating that "Pullman equipment has nothing on the interior of this airship." The reporter was impressed by the "red upholstered chairs and settee, easily opened windows, vases for flowers and drapes and leather fittings" which all combined to make the airplane look comfortable and beautiful. The dull green exterior finishing gave the airship an aristocratic look and gave "one the feeling that all the equipment is safe and substantial." In this aircraft Wien planned to make a round trip to Nome on the Bering Sea, some 570 miles from Fairbanks. It was a most ambitious undertaking because the traditional method of traveling to Nome in the summer took about three weeks. The trip by boat down the Tanana and Yukon Rivers and across Norton Sound, is a distance of about 1,100 miles. In the winter it was traveled by dog team, 735 miles and four weeks to reach the town. The air distance to Nome was 570 miles which the Fokker could cover in less than seven hours. Wien's flight to Nome, the first long-distance effort accomplished in the territory, advanced northland transportation from the stone to air age.[12]

Norman C. Stines, a Bostonian and mining engineer for the Fairbanks Exploration Company, chartered the Fokker for $1,500 to fly him and two women members of his party, Midge Downer and Mrs. Mayo, to Nome. But before Wien could fly to Nome he needed a place to land and take off again. G. R. Jackson, together with an employee of the Alaska Road Commission who understood aviation field requirements, scouted Nome and vicinity for a suitable location. They discovered two: the highpoint on Bessie Road between where Osborne Road branched off and Bourbon Creek was located, which offered a strip about 500 feet long and 25 feet wide. It could easily be smoothed out and all side obstructions removed without expense. The second was the parade grounds of the Army's old Fort

Davis, covered with driftwood and with a telephone line running through its center. Jackson estimated that clearing a 1,000 feet strip along the south side between the sea and the telephone line would cost fifty dollars. This sandy field had a length of 1,800 feet from the bridge to the first building at the fort and offered no overhead obstructions. It was 200 feet wide with a five percent slant dipping toward the sea; and across the Nome River from this field there was a 500 feet long meadow, about 75 feet wide, covered with goose grass which required no work and extended the strip. The Fokker needed a 900-foot run after touchdown. It had no brakes and its skid was a shovel type, three inches wide and six inches long. A sharp skid would not have dug in deep enough, because the craft was so light on the empennage that Wien could pick it up and walk the tail around without help. So Noel chose the Fort Davis field, provided it did not consist of loose sand, and that it be cleared of all driftwood, making it 1,400 by 500 feet without obstructions at either end.[13]

To comply with Wien's specifications, Jackson hired Billy Rowe for $1,100 to clear, level, roll and generally put the field into the same condition army aviators enjoyed when they landed in Nome in 1920. It would be 1,400 feet long, he assured Noel, but only 300 feet wide because that was the distance from the sea to the Nome River. The telephone line was to be removed, and although there was some loose sand, the field's center was fairly firm. The Fairbanks Airplane Company guaranteed the $1,100 payment to Rowe, and informed Jackson that the Territorial legislature had appropriated $5,000 for the Nome field and asked the Alaska Road Commission to accomplish the work.[14]

On June 7, 1925, hundreds of Fairbanks citizens watched as thirteen people lined up to have their photograph taken standing in front of the Fokker. There was Jimmy Rodebaugh, dressed in coveralls, Norman C. Stines, in breeches and matching jacket, boots, white shirt, and tie, and his two companions, Midge Downer and Mrs. Mayo. Others posing in their Sunday best were Mayor Frank de la Vergne of Fairbanks, airplane company stockholders, Mr. and Mrs. Wood, and Mr. and Mrs. Frank Gordon, store owners, and Frank Struthers. Ralph Wien in coveralls stood be-

side his pilot brother in boots, breeches, leather jacket, and cloth cap. A uniformed conductor of the Alaska Railroad pretended to dispatch the historic flight. Then the Stines party climbed aboard, and the photographer shot one more picture with Mayor de la Vergne handing Noel a letter addressed to the Mayor of Nome. Noel started the engine, and after a long takeoff run between lines of autos and trucks, the Fokker was airborne at 10:45 p.m. on June 7, 1925, carrying 1,350 pounds which placed it over the aircraft's posted gross weight of 4,800 pounds. Noel climbed to 4,000 feet and cruised west at ninety miles an hour, passing Nenana on the left, Manley on the right, and picking up the Yukon at Tanana Village. From there on Noel did not know the country below him. He planned to follow the Yukon to where it just turned sharply south after receiving the Koyukuk River, 300 miles west of Fairbanks. There he would leave the Yukon and continue westward over the mountains between Nulato and Norton Bay and follow the coast to Nome. Wien carried Coast and Geodetic Survey charts of the Yukon and the Bering Coast, and he believed old-timers who had told him that the Yukon had many sand bars suitable for emergency landings along its entire length. That faith proved to have been misplaced.[15]

Wien was to land on a sand bar at the little mining settlement of Ruby, but when he got there at 12:45 in the morning there was no sand bar. In fact, since the river ran high after breakup, Wien had seen no sand bars at all on the trip. So he continued on, but about forty miles from Ruby Wien ran into heavy weather covering the whole Nulato range from north to south. Since he did not know how much rain the engine could take, and did not know the country ahead, he turned back. Wien had seen a cleared place on top of a hill above Ruby and there landed the plane. It ran uphill a couple of hundred feet and got to the top. It was a baseball field, and just over the highest point the plane rolled down, hit a soft spot and nosed over and slowly somersaulted onto its back. Noel and Ralph Wien helped the passengers out of the cabin. Fortunately, nobody had been hurt, and the damage to the plane was slight. The propeller was shattered, and approximately a foot of the balanced rudder was crushed down. Wien

had landed in four hundred feet a plane which needed a nine-hundred-foot landing run, and instead of smashing it and killing all five people aboard, had left it needing only a new propeller, some tube straightening, and a piece of petticoat to make it flyable again.[16]

Many of Ruby's population of 125 souls gathered at two in the morning and took the unexpected visitors down the bluff to the roadhouse where they slept a few hours. After these few hours of rest, Stines decided to forego any further flying, and hired a small boat to try to catch up with the regular Yukon steamer going to Saint Michael on Norton Sound, and from there take another scheduled boat along Norton Sound to Nome. As soon as the Army Signal Corps radio station opened later in the morning, Wien contacted Fairbanks Airplane Company and reported the accident and damage. Dick Wood promised to rush a spare propeller via gasoline launch to Ruby, hoping that he could cover the 220 miles to Ruby in two days. While Stines and his party departed downriver, Wien and Ralph set to work repairing the Fokker. The entire village helped right the plane, and village women supplied cloth for patching the fabric. Wood arrived with the propeller on the second day, having covered the distance to Ruby in a record thirty hours. Soon they were airborn again, and after a flawless flight of three hours and forty minutes out of Ruby the Fokker swooped down over Nome, and landed on the newly prepared strip on June 9, pronouncing it to be "satisfactory for use during this season flights....." Another $500 had to be spent to make the field safe, but the Commission planned to construct a new one about one mile north of Nome - which was to be the permanent air-field.[17]

The Territorial legislature had indeed appropriated $5,000 for "aeroplane landing fields in the Second Division of Alaska," directing the Territorial Board of Road Commissioners to select appropriate sites for such construction. The latter, as already stated, turned the responsibility over to the Commission under the terms of the 1919 cooperative agreement. At the suggestion of Noel Wien, the Commission then built a permanent airfield at the Bessie Road site. It consisted of two runways, an east-west and north-south one, the first 1,300 by 200 feet

and the second 1,400 by 200 feet. The construction task was easy and inexpensive because the area was underlain with gravel and covered only with bunches of moss which had to be removed, the runways dragged, and then smoothed and rolled.[18]

Alaskans quickly realized that the airplane was the ideal mode of transportation for the huge and rugged territory. Trips that would have taken weeks could now be covered in hours, and soon requests for construction of aviation fields poured in. William H. Hesse, the superintendent of the Chandalar Gold Company, made one of these in the summer of 1925. R. J. Sommers, the territorial highway engineer, told Hesse that $600 was available for such work. Sommers also established procedures for such construction projects. The Territory and the Alaska Road Commission had adopted a standard size for aviation fields, 1,400 by 600 feet, extending in the general direction of the prevailing winds in order to permit planes to take off and land against the wind. Fields were to be smooth and firm, and this required a location with good drainage. It had to be absolutely free from soft spots, Sommers explained, because the planes in use weighed between three to five thousand pounds, and "when the plane comes to rest the entire weight is supported on the two-wheel landing gear and a plane in landing hitting a soft spot on the field is almost sure to result in a wreck." Hesse was to spend no more than $600 for the work, and Sommers expected that the citizens of the area served would provide any additional funds needed.[19]

In the summer of 1925, the Territorial Board of Road Commissioners authorized funds for airfield construction in a number of locations. The Alaska Road Commission was to construct fields at Takotna ($1,500) and Flat ($1,000). The Board asked that citizens form local aviation committees in various communities which were to select the sites, receive Territorial funds, and raise local contributions. The estimated cost of the Fort Yukon field amounted to $900, and of this amount the community had agreed to contribute $600 in cash or work. The local aviation committee in Wiseman laid out the field, contributed $1,000 and the Board paid $2,000. Brooks was to receive $300 and Lake

Minchumina $700, while no final arrangements had yet been made for Ruby, Circle and Chena Hot Springs.[20]

On January 30, 1928, the Fairbanks district of the Alaska Road Commission reported that fifteen airfields had been constructed for a total cost of $13,963.03. The territory had funneled $11,018.03 into the work, cash contributions had amounted to $1,500 and donated labor had been worth $1,445.00. Work on aviation fields progressed rapidly hereafter. At the end of 1934, Hawley Sterling, the acting chief engineer of the Alaska Road Commission, submitted a summary of existing and proposed airfields to Captain Murray Hall, the inspector of the Aeronautical Division of the Department of Commerce. By that time the Commission also had established class "A" fields, having two runways, each 300 by 3,000 feet, and emergency landing fields with an estimated size of 200 by 1,500 feet with only one runway. Sterling estimated that it would cost $905,000 to improve existing fields, upgrade others and build additional emergency fields. This cost estimate, he warned, included only construction costs of the field but nothing for radio, lights, accommodations, depots or hangers. The Alaskan aviation community, the Commission, and the Territorial Board of Road Commissioners all hoped that the Department of Commerce would allocate the estimated funds for airport improvement and construction in the north.[21]

EXISTING AND PROPOSED AVIATION FIELDS IN ALASKA (ALPHABETICAL LIST)
AS OF 1934

Name	Route No.	Item No.	Miles From		Est. Cost to Complete	Remarks
Akiak	3	3	Ketchikan	1535	3500	
American Creek	1	1	Ketchikan	1000	1000	
Anchorage	2	2	"	1020	25000	
Aniak	3	3	"	1465	3500	
Bear Creek	3-C	1	Bethel	75	2000	
Bethel	3	4	Ketchikan	1555	50000	
Bettles River	1-D	1	Fairbanks	230	2000	

Big Delta	1	3	Ketchikan	890	2000	
Birches	1	3	"	1155	4000	
Boundary	1 & 2	4	"	715	35000	
Bramner	4-A	1	Cordova	110	5000	
Bluff	1 & 2	1	Ketchikan	1475	2500	
Cache Creek	5-A	1	Seward	200	3000	
Candle	1-C	1	Koyuk	75	5000	
Cantwell	5	1	Seward	255	5000	
Chandalar	1-DA	1	Fairbanks	260	4000	
Chena Hot Springs	1-B	1	"	50	3000	
Chicken	1-A	1	Ketchikan	860	3000	
Chisana	4-A	1	Cordova	215	3000	
Chistochina	2	1	Ketchikan	320	2000	
Circle Hot Springs	1-C	1	Fairbanks	100	2000	
Copper Center	4	2	Cordova	150	20000	
Cordova	4	1	Fairbanks	350	25000	
Council	1-I	1	Nome	60	2500	
Cripple	2-D	1	Anchorage	300	3000	
Crooked Creek	3	3	Ketchikan	1395	3500	
Curry	5	1	Seward	185	2000	
Deering	1-J	1	Nome	135	2000	
Damenti	2	3	Ketchikan	1395	5000	
Dillingham	2-C	4	Anchorage	360	40000	
Donnelly	4	3	Cordova	275	2000	
Eagle	1-A	1	Ketchikan	920	2000	
Egegik	2-CA	3	Anchorage	350	4500	
Fairbanks	1	2	Ketchikan	970	25000	
Flat	2	2	"	1345	20000	
Fort Yukon	1-C	1	Fairbanks	180	3000	
Ganes Creek	2-B	1	Anchorage	265	3000	
Gold Run	1-K	3	Nome	40	3500	
Golovin	1-H	1	Koyuk	65	3500	
Gun Creek	4	3	Cordova	255	2000	
Haines	1	3	Ketchikan	330	2500	
Haycock	1-G	1	Koyuk	25	2000	
Healy	5	1	Seward	285	1500	
Homer	2-B	3	Anchorage	140	2000	
Iliamna	2-C	4	"	205	30000	
Johnson River	1	3	Ketchikan	840	3000	
Juneau	1	2	"	260	15000	
Kaltag	1-F	3	Nulato	35	3500	
Kasilof	2-B	1	Anchorage	80	2000	
Kenai	2-B	1	"	70	2000	
Ketchikan	1	1	Nome	1525	----	Water Landing only
Kiwalik	1-G	1	Koyuk	85	2000	
Kobuk	1-JA	1	Nome	310	3000	
Koggiung	2-C	3	Anchorage	295	4000	
Kotzebue	1-G	1	Koyuk	150	3000	
Koyuk	1	2	Ketchikan	1385	35000	

Koyukuk Station	1-B	3	Ruby	70	3500	
Livengood	1-D	1	Fairbanks	55	2000	
Louden	1	3	Ketchikan	1250	3500	
Lucky Shot	2-A	1	Anchorage	50	2000	
Manley Springs	1	3	Ketchikan	1060	5000	
Marshall	3-B	1	Bethel	75	3000	
Matanuska	2	3	Ketchikan	990	3000	
McCarthy	4-A	1	Cordova	145	2000	
McGrath	2	2	Ketchikan	1255	20000	
McKinley	5	1	Seward	275	3500	
Medfra	3	3	Ketchikan	1220	3000	
Minchumina	3	1	"	1110	3000	
Moose Creek	2	1	"	970	2500	
Moses Point	1-B	1	Koyuk	20	3500	
Momtrak	2-C	3	Anchorage	470	5000	
Nabesna	2	1	Ketchikan	765	1000	
Naknek	2-CA	3	Anchorage	320	4000	
Napamute	3	3	Ketchikan	1425	3500	
Nelchina	2	3	"	895	4500	
Nenana	3	2	"	1015	35000	
Ninilchik	2-B	1	Anchorage	105	2000	
Nome	1	2	Ketchikan	1525	25000	
North Fork	3	3	"	1175	5000	
Nulato	1	2	"	1295	35000	
Ophir	2-D	1	Anchorage	270	3000	
Palmer Creek	1-B	1	Fairbanks	65	3000	
Paxson	4	3	Cordova	225	5000	
Petersburg	1	1	Ketchikan	130	----	Water Lan
Pilgrim Springs	1-J	1	Nome	45	2000	only
Poorman	2-D	3	Anchorage	340	5000	
Portage	1	3	Ketchikan	1335	5000	
Rainy Pass	2	3	"	1145	5000	
Reindeer	2	3	"	1310	3500	
Ruby	1	1	"	1215	3000	
Saint Michael	1-F	3	Nulato	155	5500	
Salcha	1	3	Ketchikan	930	3500	
Seldovia	2-3	3	Anchorage	155	10000	
Seward	5	2	Fairbanks	375	25000	
Skagway	1	1	Ketchikan	350	5000	
Skwentna	2	4	"	1100	37000	
Solomon	1	1	"	1495	2000	
South Fork	2	4	"	1180	37000	
Spencer	5	3	Seward	45	2000	
Steel Creek	1-A	3	Ketchikan	885	4000	
Susitna	2	1	"	1055	2000	
Takotna	2	1	"	1270	2200	
Talkeetna	2	4	Seward	165	30000	
Tanana	1	2	Ketchikan	1105	15000	
Tanana Crossing	1	2	"	795	10000	

Talida	3-A	1	Fairbanks	195	3000	
Teller	1-K	1	Nome	65	2000	
Tetling	1	3	Ketchikan	760	3500	
Thompson Pass	4	3	Cordova	80	3000	
Tolovana	1	3	Ketchikan	1030	3500	
Tonsina	4	1	Cordova	125	2000	
Ugashik	2-CA	3	Anchorage	400	5000	
Unalakleet	2	1	Ketchikan	1475	2500	
Valdez	4	1	Cordova	60	10000	
Valdez Creek	5-B	1	Seward	305	3000	
Wales	1-X	1	Ketchikan	120	2000	
Wasilla	2-A	1	Anchorage	30	2000	
White Mountain	1	3	Ketchikan	1455	5000	
Whitney	2	3	"	1015	2000	
Willow	2	3	Seward	130	3000	
Wiseman	1-D	1	Fairbanks	195	2000	
Wrangell	1	1	Ketchikan	85	----	Water Landing only

Total $905,000

NOTES:

Item Numbers are 1, 2, 3, and 4 and Designate Following:

1 - Existing fields to be improved

2 - Existing fields to be made Class "A"

3 - Emergency fields to be built

4 - Class "A" fields to be built

Hall used Sterling's summaries and maps in preparing his recommendations for the Department of Commerce. He considered the size of the emergency landing fields at only 200 by 1,500 feet to be too small, but understood that Sterling had reduced the requested estimates on 500 by 3,000 foot fields because of the tremendous costs involved. Hall recalculated the costs for the larger fields, and together with other revisions this increased the entire proposal from Sterling's $905,000 to $2,269.000. The Department of Commerce should spend this suggested amount, he maintained, because a complete and comprehensive airport network would be of immeasurable importance to the territory. The other means of transporta tion, Hall exaggerated, were "but little better and no faster than walking," and this alone should make the advantages of the airplane apparent. Commercial aviation had increased rapidly in the last few years, he asserted, "and its curtailment would be a calamity" for the territory. During

the fiscal year ending June 30, 1934, Alaska's aviation industry had transported 10,194 passengers, carried 869,000 pounds of freight, and flown a total of 1,126,610 miles -- a truly magnificent achievement.[22]

Hall then developed a comprehensive airways system for Alaska which included a series of airfields lying along the best routes of travel. He also suggested the construction of five additional weather stations to be located at Anchorage, Bethel, McGrath, Boundary, Ketchikan, and perhaps a sixth one at Cordova, capable of forecasting and distributing weather reports like the two existing stations in Fairbanks and Juneau. The one-man station at Nome, inadequately equipped, needed to be upgraded. That was not all, for there also was a need for approximately thirty radio stations erected at locations commensurate with the airways system to be served. The United States Army Signal Corps, already operating more than fifteen radio stations in Alaska, could take over the operation of these additions with only a relatively small increase in personnel and funds. This would create a distinct airways radio system and avoid duplication of efforts by the Department of Commerce. Best of all, from the Alaskan perspective, Hall recommended that the federal government construct and maintain such a system, not only for the benefit of Alaskans but for the nation at large. What Hall apparently did not know was that federal funds already had been used for airfield construction in Alaska. Prior to 1933, such projects had been financed jointly by the territory, the municipalities and settlements, and to a lesser degree the Alaska Road Commission, although the latter, had, for the most part, been in charge of construction. In 1933, the Public Works Administration allotted $110,000 for building and improving territorial airfields. The largest chunk of money, $55,000, had been used for an airfield near Cordova, another $5,000 for one near Nome, and the rest for some fourteen other fields in different parts of Alaska.[23]

Hall's framework for the development of an Alaskan aviation system follows:

AIR FIELD CONSTRUCTION AND AIR NAVIGATIONAL DEVELOPMENT IN ALASKA

It is proposed by a series of air fields lying along the best routes of travel and tying in the principal towns and settlements of Alaska, to serve commercial development and to some extent to facilitate the travel of military aircraft and thus harmonize with the requirements of national defense.

Route No. 1. Ketchikan - Fairbanks - Nome. This route contemplates the building of Class A fields and improvement of existing fields to make them Class A fields, at the following places: Ketchikan, Juneau, Boundary (a field to be constructed in Alaska near the international boundary between the Territory of Alaska and Yukon Territory, Canada, on one of the tributaries of the White River or between the tributaries of the White River and those of the Tanana), Tanacross (formerly known as Tanana Crossing), Fairbanks, Tanana, Nulato, Koyuk and Nome, with auxiliary fields approximately every 100 miles in between dependent upon the topography of the country. Fields of a sort already exist at Juneau, Tanacross, Fairbanks, Tanana, Nulato, Koyuk and Nome, but none of these fields is sufficiently good to be entitled to Class A status. No land field whatever exists at the present time at Ketchikan or Boundary.

Route No. 2. This route ties in with Route 1 at Boundary and extends thence southwest to Anchorage and thence northwest via Rainy Pass to McGath, Flat, Unalakleet, Koyuk and Nome, with part of the route, from Koyuk to Nome, being identical with a part of Route 1. On this route it is contemplated to improve the existing fields at Anchorage, McGrath and Flat to make them first class fields and to build two fields of the same type, one at Skwentna River and one on the South Fork of the Kuskokwim and an auxiliary field about half way between near the summit of Rainy Pass. The construction of Class A fields on the Skwentna and the South Fork of the Kuskokwim is strongly recommended by Mr. Murray Hall, inspector for the Bureau of Aeronautics in Alaska, on account of the difficulties at times in getting through Rainy Pass.

If these fields are not built, a plane approaching Rainy Pass from either direction, in the event the Pass is found to be closed, would be obliged to fly back in one direction to Anchorage and in the other to McGrath. A number of auxiliary routes also branch off from Route 2 as shown by the map, to serve the surrounding country.

Route No. 3. This route may be described as starting at either Fairbanks or Anchorage. If the route is considered as starting at Fairbanks, the Class A fields would be Fairbanks, Nenana, McGrath (which is on Route 2), Flat (also on Route 2) and thence southwest to Bethel, with intermediate auxiliary fields. If the route is considered as starting from Anchorage, it will follow Route 2 as far as Flat and then proceed to Bethel. Bethel

is the principal settlement on the lower Kuskokwim and mail is now carried there on one of the star routes by air.

Route No. 4. This route, commencing at Ketchikan with a projected Class A field, proceeds over Route 1 as far as Juneau to another Class A field, and thence northwesterly along the coast of the Gulf of Alaska to Cordova, with a number of auxiliary fields inbetween, and thence northerly to Valdez, Copper Center and Fairbanks tying into Route 1 again at McCarty about 100 miles from Fairbanks. This route between Ketchikan and Cordova will probably not be much used for several years to come but the establishment of auxiliary fields along the coast between Juneau and Cordova is highly advisable both for commercial use and from a military standpoint. The part of the route between Cordova and Fairbanks is now used quite extensively and will be flown much more in the future with the establishment of auxiliary fields. It is contemplated to build what would be substantially a Class A field at Cordova, to improve the existing field both for land and water landings at Valdez so that it too will be substantially a Class A field, and to improve the field at Copper Center to make it a Class A field. The auxiliary fields are indicated on the map.

Route No. 5. Seward to Fairbanks. There is an existing field at Seward which should be made a Class A field, the same with respect to Anchorage, a new field should be established on the Talkeetna and several intermediate fields along the route northerly to Nenana (on Route 2) and thence to Fairbanks.

Route No. 6. This may be considered as beginning at Anchorage and extending southwesterly with a Class A field to be built on Iliamna Lake, and continued thence to Dillingham where another Class A field should be constructed, and thence to Muntrak on Goodnews Bay where an auxiliary field will serve for the present, with a branch south through Koggiung to Naknek to Egegik and to Ugashik on the Alaska Peninsula. The four fields last named will, as indicated by the map, be auxiliary fields. No field whatever exists at present at Iliamna Lake or at Dillingham. There is a very considerable commercial traffic already in this region and fields at these two places have been found to be necessary.

Water Ports. It should be noted here that a great deal of the air commerce in Alaska is carried on either sea planes, amphibians or planes equipped with pontoons. Along the coast and even in the interior this has been found the best and perfect means of air travel since water landings can be had on lakes and rivers in many places where no land fields exist. Cordova, for example, has an excellent water port as well as a land field, and the same is true of Valdez and several other places. At Fairbanks water landings can be made on the Chena Slough but the stream is so

winding and so narrow that such landings usually entail a considerable degree of danger particularly to pilots who are not familiar with the region. At Anchorage the water landings are made either on Lake Spenard, which is too small for a takeoff with heavily loaded ships, or on Cook Inlet, which is frequently too rough in the summer time and in the winter is full of floating ice.

Therefore it is recommended at Anchorage an artificial lake be created by the construction of a dam in a nearby stream thus impounding the water and furnishing a lake considerably more than a mile in length; and that at Fairbanks either a lake be created or that the channel of the stream be straightened in order to permit a safe water landing for aircraft. The air traffic at both Fairbanks and Anchorage is such that the suggested water landings are necessary in addition to the Class A land fields.[24]

While Hall had been preparing an aviation framework for Alaska, Lieutenant Colonel Henry "Hap" Arnold led ten Martin B-10 turn-engined bombers on a flight to Alaska. The Chief of the Army Air Corps, General Ben Foulois, had instructed Arnold to undertake a special assignment, namely to follow the early air trails pioneered by the Army in 1920 when General Billy Mitchell sent Captain St. Clair Streett in command of four DeHaviland 4-B biplanes on a flight from New York to Nome. Mitchell's objectives had been to keep his pilots sharp, give them experience at long-range navigation, and gather map information. Arnold's mission in 1934 was more complex, but no less daring, considering the large size of his planes in relation to the rather primitive existing landing facilities. His group was to take aerial photographs for navigation charts and future airway routes and to evaluate the feasibility of locating future defense bases in Alaska.[25]

In the summer of 1934, Arnold and his flight group circled over Anchorage and then landed at Merrill Field where they were greeted by throngs of friendly residents. Arnold and his executive officer, Major Hugh Knerr, interviewed local pilots to accumulate information about air routes, and equipment used, such as instruments, radios, charts, maps, and navigation aids. In addition, the bush pilots gave Arnold important hints on winterizing aircraft and power plants. The Colonel gathered similar data at other Alaskan locations and then took his flight of bombers back to the states and reported to his superiors in the nation's capital. He emphasized the strategic value of the Territory, evidently skillfully; although bureaucracies work slowly,

blueprints for military bases in Juneau, Sitka, Anchorage, and Fairbanks, and for naval installations along the coast and in the Aleutian Islands were drafted. Arnold's report materially aided these labors.[26]

The Colonel's flight undoubtedly reawakened military interest in northern aviation. Early in 1935, famed arctic explorer, lecturer, and writer, Vilhjalmar Stefansson attended a dinner in Washington hosted by an army general. During the course of the evening, Major-General Hugh A. Drum, the Assistant Chief of Staff, asked Stefansson about the relative wisdom either of stationing large, permanent military air forces in the north or providing ground facilities there with a skeletal staff. The latter would enable the army to deploy air power in the north in an emergency from bases in the states. Sometime later, Stefansson answered in a lengthy memorandum in which he considered the pros and cons of the proposition. He concluded that "for quickness and decisiveness of action, and for thorough adaptation of both personnel and equipment to Arctic and sub-Arctic conditions, it would be best to have a large force permanently in Alaska." A number of considerations, however, weighed against stationing a large airforce in the north. These included the much greater maintenance costs, and since the territory had no political clout, "the politicians would be opposed to large expenditures in Alaska." Furthermore, other powers in the area might consider such a force a threat to their security. Under these circumstances, Stefansson suggested that it might be ideal to have three main bases, in Minnesota, North Dakota, and Montana, similar in climate to interior and northern Alaska. Much of the training would take place in these three states, while the "final or post-graduate stage of training should be in Alaska in connection with esatablishing and maintaining there the necessary ground facilities for occupation by a large force that would come when wanted from somewhere south" of the forty-ninth parallel.[27]

A few months later, in May 1935, Major Carl Spatz of the Air Corps, the chief of the Training and Operations Division, recommended to the Chief of the Air Corps that the federal government construct commercial

air fields and airways in Alaska complete with night lighting, radio navigation aids and communications systems. Spatz supported this proposal by pointing out that adequate airways systems would aid Alaska's economic development and eventually warrant the costs of maintenance; furnish potential operating facilities for wartime use by the Air Corps so therefore should be as complete as possible; and the lack of railroads and roads in the north called for radio aids and a communications system as complete as possible to make operations safe. At the same time, an interdepartmental committee studied Captain Murray Hall's recommendations for the development of a comprehensive airways system for the North. The War, Navy, Interior, Post Office, and Commerce Departments were represented and considered the cost of construction and maintenance computed under five different schemes. These varied from a complete lighting, equipment, and radio system, costing $5,198,000 to build and $1,200,100 to maintain annually, to the cheapest scheme calling for day terminals, day intermediate fields and skeletonized radio equipment with a construction tag of $356,000. The War Department incorporated Spatz's recommendations into its proposal, and requested that seventeen landing fields be speedily developed. Fairbanks headed the list, followed by Ketchikan, Petersburg, Juneau, Valdez, Cordova, Seward, Anchorage, Copper Center, Galena, Nome, Bethel and Big Delta, and ending with Mumtrak.[28]

Despite planning, recommendations, and high hopes, Congress did not appropriate any monies for an Alaskan airways system. In the fall of 1936, Secretary of the Interior Harold L. Ickes, neatly summarized the state of Alaskan aviation. He asserted that the airplane rendered "a greater per capita service in that territory than anywhere else on earth . . . under the most extreme and hazardous conditions existing in any populated area." The secretary stated that there were "74 so-called airfields in Alaska," and the following data indicated their inadequacies:

2 out of 74 had more than one runway;
2 out of 74 had runways longer than 3,000 feet;
8 out of 74 had runways between 2,000 and 3,000 feet;
15 out of 74 had runways between 1,500 and 2,000 feet;
39 out of 74 had runways less than 1,500 feet.

Ickes asserted that more often than not Alaskan aviators were forced to use sandbars and clearings rather than the airfields. The only surfacing provided was that found at the site, and in a few cases when gravel was available it was used to fill holes. None of the fields had any lighting facilities whatever, except for Fairbanks and Anchorage which each had a rotating beacon and one flood light. No public radio facilities catered primarily to air service, but seven airfields had privately-owned radios. There were no accommodations at any of the fields, and there were no privately-owned hangers for visiting planes, except at two localities, and the facilities of these two were limited. There had been no planning in constructing the existing airfields on air routes fixed by nature and climatic conditions or fixed by centers of population; rather they have been constructed at points where most needed in order to move passengers and freight from a center point to a terminating makeshift field." The Secretary pointed out that fewer than half a dozen fields had been built purely for emergency and safety, and bush pilots customarily flew as much as 300 miles in a land plane without a single landing field. In view of these appalling facts, the Alaska Road Commission and the Bureau of Air Commerce of the Commerce Department, after consulting with representatives of the War and Post Office Departments, had prepared a program of airport development calling for the expenditure of $3,000,000. Unfortunately, Interior so far had been unable to secure emergency funds for this program. Ickes, therefore, expected to include a substantial amount in the 1938 Alaska Road Commission estimates, hoping to gradually eliminate presently existing hazards. He finally asked the War Department to instruct the Signal Corps to study the proposed airport construction program and furnish estimates for providing adequate communication aids and weather reports for this system.[29]

Despite all the planning and high hopes, however, it was not until 1937 that the federal government contributed any funds for the construction and maintenance of Alaskan airfields and sea plane ramps, platforms, and floats. These monies fell far short of what Hall, the

Air Corps, and Ickes had envisioned. During the 1937 and 1938 construction seasons, they amounted to a mere $214,117.31, the Territory contributed $282,827.74 and municipalities, commercial companies and individuals chipped in $31,066.90 for a two-year total of $528,011.95. The Alaska Road Commission built and improved some of these airfields, and so did the Civilian Conservation Corps, while the Territory contracted with private builders and municipalities for the others.[30]

In the fall of 1938, the Civil Aeronautics Authority became involved in the planning process for airports and airway facilities in Alaska. At an interdepartmental conference the CAA revealed its intention to improve a number of airfields in the larger municipalities, and also to install radio beams, radio communications, and make weather reports available. The CAA, however, stated that it did not intend to install modern equipment, but rather use the older, obsolescent but usable gear on hand. This plan made possible the provision of reasonable facilities over a considerable area rather than maximum facilities in a few places. The CAA intended to cover southeastern Alaska and the Aleutian Chain as far as Dutch Harbor with this communication network in addition to southcentral, interior, and northern Alaska, and eventually tie the system into the Honululu beam.[31]

War broke out in Europe on September 1, 1939 when Germany's panzer divisions invaded and quickly overran Poland. In the closing days of that conflict, Soviet forces joined the German effort and moved across the Russian-Polish border. Across the Pacific Ocean, the Japanese pursued their third year's effort to conquer China. On February 23, 1940, General George Catlett Marshall, the Chief of Staff, presented the Army budget for fiscal year 1941 to the Subcommittee on the War Department of the House Appropriations Committee. He reminded Subcommittee members of the existing crisis abroad, and urged that "any major developments there should be paralleled by added precautions in this country. If Europe blazes in the late spring or summer, we must put our house in order before the sparks reach the Western Hemisphere." The proposed budget was a modest one in view of coming events. Including a supplemental estimate and as reduced by the Bureau of the Budget,

it asked Congress for $906,137.254. It was the first defense budget for years to come dealing only in millions and not billions of dollars. The budget included $12,734,000 for the construction of an operating air base near Anchorage. The hearings concluded on March 26, 1940. A few days later the Subcommittee on the War Department reported the measure to the full Appropriations Committee, but minus the funds for the Anchorage base. Despite pleas by Marshall, Major General Henry "Hap" Arnold and Alaska's Delegate to Congress Anthony J. Dimond, the Subcommittee refused to budge, and on April 4 the House voted the appropriation without the Alaskan base.[32]

On April 9, 1940, Adolph Hitler's armies invaded Denmark and Norway and in the ensuing weeks occupied the two countries. When Marshall and Arnold appeared before the Subcommittee on the War Department of the Senate Appropriations Committee on April 30 and asked for the restoration of the Anchorage base, a different mood prevailed. Before the Senate Subcommittee finished its hearings on May 17, the German Luftwaffe had bombed Rotterdam without provocation or warning, and German armies had seized the Netherlands, marched through Belgium, and begun the invasion of France. The Senate restored the Anchorage base, and the House concurred. In 1939 Congress had appropriated $4,000,000 for the construction of a cold-weather testing station for airplanes near Fairbanks. Construction had started on Ladd Field in 1940. Now, Fort Richardson and its air establishment, Elmendorf Field, could be built. On December 7, 1941, the Japanese attacked the American Pacific fleet at Pearl Harbor. America was at war, but not a single military or naval base in Alaska was ready for action. Now Congress poured billions of dollars into the defense effort, and all the plans nurtured for years to create an integrated airways system were speedily accomplished.[33]

Footnotes

1. Report of Chief of Engineers, U.S. Army, 1927, Extract, Report Upon the Construction and Maintenance of Roads, Bridges, and Trails, Alaska (Washington: Government Printing Office, (1927), p. 1977, Hereafter cited as Extract, 1927.

2. Ibid, p. 1979.

3. Ibid., p. 1979

4. Ibid, p. 1980

5. Jean Potter, The Flying North (3030 Bridgeway, Sausalito, California: Comstock Editions, Inc., 1977), p.23. Hereafter cited as Potter, Flying North.

6. Ibid., pp. 23-24.

7. Ibid., pp. 24-26.

8. Ibid., pp. 29-34

9. Ibid., pp. 34-35, 52-54, 62-63. Eielson, the pioneer, perished in an attempt to take passengers and furs off the American motor trading ship, the Nanuk, ice-bound off the village of North Cape, Siberia, in November 1929. Not until February 18, 1930 did searchers find the pilot's body.

10. Ira Harkey, Pioneer Bush Pilot: The Story of Noel Wien (Seattle and London: University of Washington Press, 1974), pp. vii-viii. Hereafter cited as Harkey, Bush Pilot.

11. Ibid., p. 136.

12. Ibid., pp. 137, 139.

13. Jackson to Stines, May 7, 1925, Stines to Jackson, May 30, 1925, R. G. 30, ARC, box 65433, Federal Records Center, Seattle, Washington. Harkey, Bush Pilot, p. 137.

14. Stines to Jackson, June 1, 1925, Jackson to Stines, June 1, 1925, Jackson to Stines, June 2, 1925. RG30, ARC, box 65433, Federal Records Center, Seattle, Washington.

15. Harkey, Bush Pilot, pp. 138-139.

16. Ibid., pp. 140-141.

17. Ibid., pp. 142-144; Wien to Summers, June 12, 1925, Nylen et al. to Territorial Board of Road Commissioners, June 13, 1925, R.G. 30, ARC, box 65433, Federal Records Center, Seattle, Washington.

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19. Sommers to Hesse, June 19, 1925, in historical files of the Alaska Department of Transportation and Public Facilities, Fairbanks, Alaska.

20. Steese to Halsem, July 13, 1925, Sommers to Oliver, May 14, 1926, Sommers to Edmunds, July 25, 1925, R. G. 30, ARC, box 65433, Federal Records Center, Seattle, Washington.

21. Report of all Expenditures Aviation Fields, Calendar Year 1927, January 30, 1928, in historical files of the Alaska Department of Transporation and Public Facilities, Fairbanks, Alaska. Sterling to Hall, November 16, 1934, R. G. 30, ARC, box 65433, Federal Records Center, Seattle, Washington.

22. Hall to Assistant Director of Air Commerce, Bureau of Air Commerce, January 4, 1935, R. G. 30, ARC, box 65433, Federal Records Center, Seattle, Washington.

23. Ibid, Dimond to Gruening, January 10, 1935, R. G. 30, ARC. box 65433; Federal Records Center, Seattle, Washington.

24. Memorandum, "Air Field Construction and Air Navigational Development in Alaska," 1935, R.G. 30, ARC box 65433, Federal Records Center, Seattle, Washington.

25. Stephen E. Mills and James W. Phillips, Sourdough Sky: A Pictorial History of Flights and Flyers in the Bush Country (New York: Bonanza Books, 1960), pp. 111-113.

26. Ibid. pp. 114-119.

27. Stefansson to Drum, January 26, 1935, Stefansson Memorandum to Drum, January 26, 1935, R. G. 18, Central Decimal Files #686, N.A.

28. Spatz memorandum to Executive, May 6, 1935, Adjuntant General to Chief of Air Corps, May 3, 1935, Brigadier General O. Westover, Assistant Chief of the Air Corps to Chief of the Air Corps, May 9, 1935, R. G. 18, Central Decimal Files #68, N.A.

29. Ickes to Secretary of War, August 5, 1936, R. G. 18, Central Decimal Files #686, N.A.

30. Biennial Report of the Alaska Territorial Highway Engineer and Superintendent of Public Works, 1937-1938, (Juneau, Alaska: n. p., January 3, 1939), pp.61-65.

31. Memorandum on a conference with the CAA, September 30, 1938, R. G. 18, Central Decimal Files, #686, N.A.

32. United States Army, Alaska, The Army's Role in the Building of Alaska, Pamphlet 360-5, 1 April 1969 (Headquarters United States Army, Alaska: Anchorage, April, (1969), pp. 73-74.

33. Ibid.

CHAPTER ELEVEN

THE TRANSFER OF THE ALASKA ROAD COMMISSION

As early as February of 1917, the War Department had entertained the thought of transferring the Alaska Road Commission to the Department of the Interior, engaged in building the Alaska Railroad. The plan, recommended by Major General T. H. Bliss, was consistent with the War Department's intentions of drastically reducing its responsibilities in the north.[1]

Wilds P. Richardson had left his job as president of the Commission at the end of 1917. But after having spent practically all of his productive working years in Alaska, he retained a keen interest in the North. In the late fall of 1923, Richardson discussed Army activities in Alaska with John W. Weeks, the Secretary of War, and particularly the work of the Alaska Road Commission. The Secretary asked Richardson to obtain information on the travel and general business over the Valdez-Fairbanks trail. And although the Army's work in Alaska needed no defense, Richardson asserted, the secretary wanted to be armed "with the facts briefly stated, to answer any questions or criticisms that might be made, both as to the cost of the work and its past and present value."[2]

Colonel John C. Gotwals, the engineer officer of the Commission, complied with Richardson's request and furnished him with traffic statistics, taken at the Salcha Ferry near Munson's Roadhouse, covering the open season from May 18 to November 1, 1923.

	Persons	Autos	Trucks	Wagons	Horses	Tons
Commercial	1080	480	30	6	12	80
U.S. Government A.R.C.	180	12	148	8	24	122
Coast and Geodetic Survey	32	--	12	--	--	8.5
Signal Corps	81	--	55	2	4	40
	1,373	492	245	16	40	250.5

The above statistics reported the through traffic, but there also was considerable local movement from Valdez and Chitina not destined for Fairbanks. Gotwals had only been able to ascertain that teamsters freighted some 100 tons from Valdez to the vicinity of Copper Center. Additionally, there had been much winter freighting over the road during the last season, including moving supplies from Chitina to the Slate Creek and Mentasta mining districts, and at times even as far as the Shushanna mining area. And from Fairbanks one company had freighted 150 tons of mining machinery to Caribou Creek via the Salcha River. Gotwals estimated that in addition to the figures given in the table, another 500 persons and 500 tons of freight had moved over the road. A month later, Secretary Weeks proposed that the Bureau of Public Roads of the Department of Agriculture take over the functions of the Alaska Road Commission. The Bureau already operated in Alaska as elsewhere, constructing roads on federal lands for development purposes. Weeks, therefore, thought it unwise that there "should be two agencies requiring duplicate equipment doing the same type of construction in one locality." The Secretary considered this the best solution rather than transferring road-building responsibilities to the Department of the Interior, which had no organization nor expertise in this field. During recent reorganization discussions in Congress, Weeks had submitted this proposal to the lawmakers.[3]

Actually, it had been Alaska's Governor Scott C. Bone who had suggested that the Alaska Road Commission be abolished, but at the same time he had requested that Congress include the Territory in the Federal Aid Highway Act of 1916 and its various subsequent amendments which funnelled federal monies into road construction activities in the states and territories according to a complex matching formula involving population, size of the state or territory, and the acreage of the public domain in each jurisdiction. Congress had excluded Alaska from this legislation, ostensibly because the territory's vast area would have entitled it to receive an unduly large share of the total appropriation made under the act. Legislation introduced into the Senate and House in 1925 for the reorganization of the Administrative branch of the government abolished the Alaska Road Commission and transferred its duties to the Department

of the Interior, while at the same time including the Territory to share in all appropriations available for apportionment under the Federal Aid Highway Act.[4]

Alaska's delegate to Congress Dan Sutherland was unhappy with the proposal, and appealed to Secretary Weeks to exert himself on preserving the Commission. If the section of the measure abolishing the Alaska Road Commission could not be deleted, he asked that the War Department offer an amendment providing for the continuation of the Commission's work under the supervision of engineer officers detailed from the Army. Sutherland reminded the Secretary that appropriations for roads and trails in Alaska in 1920 had been barely sufficient to maintain the transportation system already constructed, much less develop new roads. In fact, progress in the transportation field had come to a standstill. Since then, however, the Chief of Engineers had persuaded Congress to gradually increase the annual appropriations, and for fiscal year 1926 that amounted to $900,000. Sutherland had done his part aiding this effort. The Commission had regained considerable momentum after it had reorganized its structure after the war. It had aggressively enlarged the organization and acquired much new mechanical equipment; extended its facilities to other bureaus of the federal government as well as the territory; prepared an extensive road program, and with that program increased funding made some progress in accomplishing. To terminate the Commission at this point would be disastrous for Alaska, Sutherland maintained, and he asked that the Secretary further consider the matter before the legislation came up for a vote in Congress.[5]

The delegate had the support of Major General H. Taylor, the Chief Engineer. He reminded the Adjutant General that for several years attempts had been made to include Alaska in the Federal Aid Highway Act, always unsuccessfully. The House Committee on Roads had held several hearings on the matter, and representatives of the War and Agriculture Departments had testified. But the Department of Agriculture and committee members had been unwilling to extend the Federal Aid Highway Act to Alaska in a fashion acceptable to Delegate Sutherland, namely providing greater funds for road and trail construction than available under ex-

isting law. In the meantime, the Alaska Road Commission had performed its work, praised by the Bureau of the Budget and the House Committee on Territories. In annual appearances before the Appropriation Committees of both Houses of Congress, the Alaska Road Commission had won the confidence of both, evidenced in the modestly increased funds these committees had made available. From the military point of view, Taylor continued, Army officers serving with the Commission received valuable training for their duties in wartime in road and trail location and construction and exploratory and reconnaissance surveys under pioneer conditions. Better yet, these men performed economically and efficiently essential work of permanent value.[6]

Taylor particularly objected to the abolition of "a going concern" with no concrete plans for anything to take its place. Nobody knew how the Secretary of the Interior intended to handle territorial road work, but it was known that he had "no personnel nor organization in Alaska equipped to take it over". Worse yet, the proposed legislation made no provision for safeguarding the system of military roads and trails which the War Department had constructed during the past twenty years. Taylor also criticized that section of the proposed legislation which transferred control from the Commission that was resident in the territory with full authority to meet emergencies and handle business on the spot without having to wait for permission from Washington, to a department in the capital "with all the attendant delays that are such a conspicuous feature of the usual handling of Alaskan affairs...." In fact, the Committees on the Territories for several years had been considering plans for centralizing control of all federal affairs relating to Alaska. Instead, the proposed legislation abolished the only federal bureau without long-range and unbusinesslike control from Washington.[7]

Taylor criticized the proposed measures from yet another angle, namely that they were uneconomical, because at least two organizations, and perhaps even four, reporting to different departments, would have to be created if these bills passed. He praised the Commission for handling other engineering work for which funds were provided. These included River and Harbor work for the Chief of Engineers, handling the water

supply at the Army's Chilkoot Barracks and administering the Sitka military cemetery for the Quartermaster General; the Commission also managed the Sitka National Monument and developed roads in Mt. McKinley National Park for the National Park Service; and finally, the Alaska Road Commission performed needed work for various municipalities and built roads, bridges, trails, and shelter cabins supported by territorial legislative appropriations. In short, inasmuch as the existing organization had fully proved its versatility, effectiveness and economy, Taylor recommended the maintenance of the status quo. After some internal soul searching, Secretary Weeks reconsidered his previous views and advised Congress that the abolition of the Alaska Road Commission would be premature, because throughout America's frontier history the War Department had performed work of a similar character to that of the Alaska Road Commission in opening up the West. Alaska still was a remote frontier, and it would be years before it reached a development stage comparable with that found in the contiguous states. In view of these facts, and the expressed desires of Alaskans, Secretary Weeks declared that his Department was willing to continue to sponsor the work of the Alaska Road Commission.[8]

Weeks might have added that much of the agitation for the abolition of the Alaska Road Commission came from advocates for a centralized Alaskan transportation administration within Congress as well as the Department of the Interior that had constructed the Alaska Railroad and now operated it. In 1923, the administration of President Warren G. Harding had consolidated the functions of the railroad and the Commission. As previously stated, Colonel James G. Steese, the president of the Commission, directed the merged transportation activities. By the end of the year, the two organizations had broken apart again, primarily because little hope existed for a permanent merger, and the differing natures of rail and road created internal problems. Geography confined train operations, and railroad maintenance was a year-round necessity. The Alaska Road Commission had far-flung responsibilities, but much of its work was intensely seasonal. The two organizations thus operated on different cycles. The merger, however, was one of many efforts to rationalize the federal bureaucracy in Alaska.[9]

In fact dissatisfaction with Alaska's laggard development reached back to a period following the American purchase of Russian America, when Sitka citizens had complained about the lack of economic development. Finally, in 1913, Secretary of the Interior Franklin K. Lane called for a local development board. Thereafter, the Department of the Interior and its Congressional friends urged a reorganization of the federal bureaucracy in Alaska. A variety of draft bills established a board comprising major bureau heads and other federal officials who could radically rearrange bureau activity and make other decisions subject only to the approval of the Secretary of the Interior. Historian William H. Wilson has stated that "insofar as these proposals recognized the need for a special, coordinated approach to northern lands, they were enlightened and progressive. Had their sponsors confessed that Alaska required a unique federal policy because of its particularly difficult climate, terrain, and geographical relationships, their candor might have carried the day" but rather than doing so, they argued that bureaucratic red tape had frustrated and defeated the efforts of the many hardworking and ambitious pioneers. In addition, journalists attacked federal bureaucrats routinely in the popular press for their indecisiveness and obstructionist methods. These insulting barrages about bureaucratic staff and methods were resented and added to the fears of bureaus threatened with a loss of their autonomy. From 1914 through the early 1920s, the bureaus worked with their Congressional sympathizers to ward off several development board bills. In the meantime, the Department of the Interior tried various temporary administrative solutions. Secretary John Barton Payne, Lane's successor, established an Alaska Advisory Committee which included representatives of his own department, the Post Office Department, the Department of Agriculture, and the Shipping Board. This committee studied reports, held hearings in Seattle, and submitted its recommendations for territorial development. Among these was one for the creation of a Permanent Interdepartmental Alaska Committee to be located in Washington. The committee was to include, in addition to the members of the Advisory Committee, representatives from the War, Navy, Agriculture, and Commerce Departments. Alaska's governor was to serve

in an ex-officio capacity, and it was to be chaired by a representative of the Department of the Interior. The Departments agreed, so Secretary Payne established the Committee with the approval of President Woodrow Wilson in December, 1920. Subsequently, this new entity met occasionally and made recommendations, but it lacked real authority. The Harding administration retained it, and renamed it the Alaska Interdepartmental Committee. In 1922 a local Alaska Council was appointed, which proved to be as ineffectual as the Washington Committee. Finally, at the request of Secretary of the Interior Hubert Work, President Harding abolished the Interdepartmental Committee in April 1923.[10]

It is against this background that one has to view the efforts of the Department of the Interior to assume the functions of the Alaska Road Commission - namely the desire to streamline and combine related responsibilities in one department. The Department of the Interior worried particularly about the continued deficits of the Alaska Railroad for which it was responsible, and despite drastic economy measures applied by the manager, Colonel Otto Ohlson, Congress applied heavy pressure for further cutbacks. In August 1931, the Special Select Committee on Investigation of the Alaska Railroad named the Howell Committee after its chairman, Senator Robert B. Howell, arrived in the Territory. The, Committees report was critical of the railroad's management and skeptical about its economic future. Senator Howell in particular argued that since no significant development had taken place along the railbelt, the line's success or failure should be judged by profit and loss alone.[11] The report revealed the railroad's many problems, and one among these was the trucking competition across the Richardson Highway from Valdez to Fairbanks. In order to cut this competition, the Department of the Interior proposed tolls be imposed for the use of the Richardson Highway. The way to impose tolls was to take over the Alaska Road Commission from the War Department.

Eventually, the administration of President Herbert Hoover prepared legislation for the transfer of the Alaska Road Commission to the Department of the Interior and asked Senator Howell and Representative Edward T. Taylor to introduce the legislation in their respective chambers.

This they did. The Senate passed the measure unanimously and the House passed the bill as well. Taylor praised the work of the Army engineers, but stated that the time had come to consolidate and systematize federal activities in Alaska. The transfer of the Commission was a first step in the right direction. Officials in the executive department had carefully considered into which department the Alaska Road Commission would fit best. Taylor argued that when members of Congress realized that the Interior Department has the public domain, "about 98 percent of this territory, the Mount McKinley National Park, the reindeer, the Alaska railroad, the governorship, the legislature, and the larger proportion of all the activities of Alaska in that department, the President and his Cabinet officers decided that this work should be transferred from the war Department to the Interior Department."[12]

Some members of Congress suggested that it might be best to consolidate road building activities in the Bureau of Public Roads, but deferred to administration desires in the matter. The House Committee on Territories considered the measure favorably in May 1932. Secretary of the Interior Ray Lyman Wilbur stated that the transfer was advisable "if we hope to succeed in our efforts to place the Alaska Railroad on a self-sustaining basis." Still another consideration in favor of the transfer was that it would enable Congress to review the budgets for the main transportation systems in Alaska in one department, because now the railroad, river, and highway systems would be under central administrative control and expenditures could be properly correlated. Wilbur promised no curtailment of the road building program for Alaska as a result of the transfer, a promise made to still fears many Alaskans had expressed to members of Congress.[13]

Secretary of War Patrick J. Hurley remarked that "while it is believed that the activities referred to have been efficiently and economically administered under existing law," his department had no objections to the transfer. However, Representative Edward T. Taylor, who had authored the House measure, was curious to learn how the Department of the Interior proposed to carry out its new duties. Secretary Wilbur testified that he intended to assign the administration of the Commission to Alaska's

governor, an employee of the department who was located in Juneau as were the headquarters of the Commission. The War Department normally assigned six army officers to the Alaska Road Commission, although there were only five in 1932. In addition, a few civilians were permanent employees, occupying positions such as senior engineers, superintendents and assistant superintendents, disbursing clerks, foremen and mechanics, among others. There also were some ninety-nine temporary employees, many of whom had worked for the Commission for many construction seasons. Payroll expenses for permanent employees in 1931 amounted to $109,920, with an estimate of $110,770 and $111,540 for 1932 and 1933, respectively. The salaries and wages for temporary employees for 1931 had come to $817,463, and with estimates of $762,275 and $600,505 for 1932 and 1933, respectively. Secretary Wilbur intended to maintain as much of the existing civilian organization as possible with the prospective reduced appropriations, but he planned to relieve the Army officers of their duties.[14]

Wilbur's testimony satisfied Representative Taylor, who was of the opinion that there existed "an unnecessary amount of government of Alaska by too many departments, bureaus, boards, commissions, and officials," and he thought that much of this should be gradually and systematically consolidated, combined, and coordinated wherever reasonably possible. Such a course, Taylor and the Committee believed, would be in the interest of the federal government and would speed the orderly development of Alaska.[15]

The Senate Committee on Commerce also reported the transfer measure favorably. The Senators, however, stressed that truck competition over the Richardson Highway would increasingly affect the Alaska Railroad adversely. Therefore, besides transferring the Commission, the measure also authorized the Secretary of the Interior to fix and collect tolls on the Richardson Highway "where necessary or available in the public interest."[16]

Colonel Otto F. Ohlson already had warned Fairbanks merchants that they were unwise in "patronizing temporary fair-weather competition of the railroad that did not contribute to the upkeep of Fairbanks." He reminded members of the Fairbanks Commercial Club that the railroad had

been built "for the people of Alaska and for the purpose of developing the Territory, and that they needed it." Ohlson told his listeners that the railroad spent between one to two million dollars annually; that it rendered expensive service in the winter, operating rotary snow plows in order to get the trains through; and that unless the inhabitants of the railroad belt did not give their loyal support to the railroad, "there was a possiblity of it being closed down during the wintertime, necessitating merchants having to lay in a 7-month [sic] supply which they could not afford to do in these times because of lack of capital and credit." Continuous service required patronage in the summer as well as in the winter, Ohlson had concluded.[17]

Secretary Wilbur told the Senators that he had not urged the transfer "as a matter of economy in road building but to make possible a smaller deficit on the Alaska Railroad and in the interest of effective coordination of related activities now handled by two departments." He once again stated that Alaskan citizens and organizations need not be afraid that his department would neglect the road building program in the north, nor would civilian administration be more expensive than the military one. In fact, he concluded, "it would be our endeavor to continue the efficient operation now maintained by the War Department."[18]

Both houses of Congress passed the transfer bill, and the Alaska Road Commission became a part of the Department of the Interior, effective July 20, 1932. For twenty-eight years the Commission, under the supervision of the War Department, had labored diligently to construct a basic transportation network. The work in Alaska had offered invaluable experience in northern construction problems to many young Army officers. Alaskans had greatly benefited from the dedicated labors of the organization, and although there had been occasional criticism, the majority of northern residents approved of the Commission's efforts. During its last year of operation under the War Department, the Commission had largely attempted to maintain the exsiting transportation network, and to improve the more important routes for the use of motor vehicles. Inadequate appropriations had confined new construction to a few major projects which already had been underway for a number of years. The

Commission had built 40.15 miles of new roads, 20 miles of sled roads, 130 miles of trails, 520 linear feet of bridges with over 60-foot span, 3,158 linear feet of trestle span bridges, 1 airplane landing field, and 4 shelter cabins. The Commission reconstructed 75.6 miles of road, surfaced 107.37 miles of road, and replaced numerous culverts. In addition, it maintained 1,304.13 miles of road, 74 miles of tramway, 813.5 miles of sled road, 4,732.25 miles of permanent trails, 329 miles of temporary flagged trails, 26 airplane landing fields, and 36 shelter cabins.[19]

By 1932, the Alaska Road Commission had constructed a transportation system of 11,231 miles consisting of 1,627.5 miles of roads, 74 miles of tramroads, 1,495.5 miles of sled roads, 7,322 miles of trails, and 712 miles of temporary flagged trail. Between 1905 and 1932, the Commission had expended a total of $18,312,825.40 from all sources, but War Department appropriations accounted for $11,895,928.42 of this total.[20]

The Commission headquarters were at Juneau, and it also maintained a suboffice in Washington, D.C. It had divided the territory into seven districts and one subdistrict. A superintendent in each district directed the work of the local foremen. Employees of the Commission all were experienced men who, in nearly all cases, had served the organization for many years. The Commission, because of the high cost of labor, had purchased much mechanical equipment over the years, enabling it to handle engineering construction anywhere in the territory.[21]

In short, the transfer ended an important era in Alaska's transportation history and the beginning of another. In 1932, however, nobody could foresee what the new era would be like, nor could anyone guess the bitter controversies which were to arise over the imposition of tolls on the Richardson Highway.

FOOTNOTES

1. Bliss to Secretary of War, February 6, 1917, Records of the Adjutant General's Office, 1780's to 1917, AGO Doc File, various files pertaining to Alaska, R. G. 94, N.A.

2. Richardson to Board of Road Commissioners for Alaska, November 3, 1923, RG 30, ARC, box 65481, Federal Records Center, Seattle, Washington.

3. Gotwals to Richardson, November 20, 1923, R.G. 30, A.R.C., box 65481, Federal Records Center, Seattle, Washington; Weeks to Representative Louis C. Cramton, December 19, 1923, R.G. 94, Records of the Adjuntant General's Office, 1780s to 1917, AG Doc File, various files pertaining to Alaska, N.A.

4. 39 Stat. 355, July 11, 1916; 42 Stat. 212, November 9, 1921; G. 3445 and H.R. 9629, 1925.

5. Sutherland to Weeks, January 28, 1925, Taylor to Adjutant General, February 3, 1925, R.G.94, Records of the Adjutant General's Office, 1780s to 1917, AF Doc File, various files pertaining to Alaska, N.A.

6. Ibid.

7. Ibid.

8. Ibid; Weeks to Mapes, February 12, 1925, JR.G. 94, Records of the Adjutant General's Office 1780s to 1917, HGO Doc File, various files pertaining to Alaska, N.A.

9. Wilson, Railroad in the Clouds, pp. 156-159.

10. Ibid., pp. 155-156.

11. Ibid., pp. 198-199.

12. Conf. Record, 75C., 1 S., pp. 14076-14077 (June 27, 1932).

13. U.S. Congress, House, To Transfer the Administration of the Board of Road Commissioners in Alaska from the War Department to the Department of Interior, H. Rept. 1444 to accompany H.R. 11717, 72 C., 1 S. (Washington: Government Printing Office, 1932). pp. 1-2.

14. Ibid., p. 2.

15. Ibid., p. 3.

16. U.S. Congress, Senate, Providing for the Transfer of the Duties of the Board of Road Commissioners in the Territory of Alaska to the

Department of the Interior, and for other purposes, Senate rept. 753 to accompany S. 4525, 72C., 1S. (Washington: Government Printing Office, 1932), p. 1.

17. Ibid., p. 2.

18. Ibid., p. 3.

19. Alaska Road Commission, Twenty-Eighth Annual Report of the Alaska Road Commission, Fiscal year 1932, Upon the Construction and maintenance of military and Post Roads, Bridges, and Trails; and of other roads, Tramways, Ferries, Bridges, Trails, and Related works in the Territory of Alaska (Washington: Government Printing Office, 1932), p. 2.

20. Ibid., pp. 5-7

21. Ibid., pp. 3-4

22. The following describes the organization which the Department of the Interior, together with the governor of Alaska, worked out:

The Honorable

The Secretary of the Interior

My dear Mr. Secretary:

Transmitted herewith is an Organization Chart of the Alaska Road Commission and a list of permanent employees showing the salaries and classifications in which they have been carried by the Alaska Road Commission.

Under your order, No. 585, July 1, 1932, Mr. Ike P. Taylor was designated as Acting Chief Engineer.

The Organization chart shows an Assistant Chief Engineer, which corresponds to the position formerly held by Mr. Taylor and which is essential to the proper functioning of the organization. This position has not been filled but there are letters in the mail requesting the appointment of Mr. Hawley Sterling, who is eminently qualified for the position but who is now employed in a temporary capacity because of difficulties with the Civil Service Commission who have declined to certify him and insisted that a selection be made from the eligible list on file with the Civil Service Commission in Seattle. If it is impossible to designate Mr. Sterling, we wish to select one of the other Field Superintendents for this position and will submit appropriate recommendations on receipt of a decision regarding Mr. Sterling.

In the Juneau office Mr. Gustavus H. Skinner is Chief Clerk. He has occupied this position for many years is thoroughly familiar with every phase of the activities and is eminently qualified to discharge his duties. He is the only employee in the organization who can discharge these duties and his continuation in that position is earnestly recommended. The other clerks in the Juneau office are Arthur Adams, Mrs. H. L. Jewett, Gertrude K. Waltonen, Mrs. Ideal Wildes, Edna M. Smith and Harry E. Brown. They should be continued in their present positions for the time being and until we have had time to determine whether or not their services are necessary to perform the required work. The list of employees shows Lance E. Hendrickson as Senior Draftsman in the Juneau office. Mr. Hendrickson has been employed in a dual capacity under the Rivers and Harbor work and the Alaska Road Commission. He is not listed in the Organization Chart for the reason that it seems probable that there will not be any necessity for such position after the close of the present field season. We desire further time to consider the division of the duties which must occur, in view of our reorganization, before making definite recommendations. He should be continued on the roll in his present capacity for the time being. In addition to the employees listed, there are between 300 and 500 temporary employees, consisting of foremen, skilled and unskilled laborers, cooks, warehousemen and truck drivers. This number varies each day. Reports will be made each month showing the total number on the rolls.

The position of Locating Engineer is held by Mr. Donald MacDonald of Fairbanks. His duties require him to make surveys of new projects and resurveys of existing projects where changes are contemplated. He is carried on the roll as Associate Engineer. So far as can be determined at the present time there is sufficient work to justify his continuation.

Mr. John Coats, with headquarters at Chitina, is master mechanic. His duties require him to supervise the maintenance and repair of all of the motorized equipment of the Road Commission and in this capacity he is required to visit each district where equipment of this character is used. He is well qualified for these duties and his services are necessary.

Valdez District - (Headquarters, Valdez) -
Thomas H. Huddleston, Superintendent

Mr. Huddleston has been with the Commission for a great many years and is well qualified for his position. The Valdez District embraces the Richardson Highway from Valdez to Willow Creek and a number of other small projects. Mr. Earl C. Simmons is Disbursing Clerk for the Valdez District. In each district where a large number of seasonal and temporary employees are engaged, it is absolutely necessary to have a Disbursing Clerk so that the employees may be paid promptly at the termination of their services.

Southwestern District - (Headquarters, Anchorage) -
Morgan C. Edmunds, Superintendent

This district embraces the area tributary to the Alaska Railroad, Mt. McKinley National Park and the Alaska Peninsula. Mr. Edmunds has been with the Commission for many years and is well qualified. Mr. Anton Eide is at present Assistant Superintendent. His salary, however, is being paid from a special appropriation for the maintenance of the Lowell Creek project at Seward and it is anticipated that within the next two or three months the work will be completed, and, under the law, no further appropriations can be made for this project, hence, he will be retired since he has reached retirement age. At the present time it is not contemplated that this position will be filled on Mr. Eide's retirement. Mr. Fred J. Spach, with headquarters at Anchorage, is Assistant Engineer. He is well qualified and functions as assistant to Mr. Edmunds. His services are necessary. Mr. John A. Borges is Deputy Disbursing Clerk and has functioned in this capacity for many years. He is well qualified and should be continued in his present capacity.

Nome District - (Headquarters, Nome) -
Ross J. Kinney, Superintendent

This district embraces the projects on the Seward Peninsula. Mr. Kinney has been with the organization for a great many years and is well qualified and thoroughly familiar with all of the projects and the policies of the Commission. He should be retained in his present position. Mr. D. E. Dunbar is Disbursing Clerk and has discharged his duties in a satisfactory manner. He should be retained.

Chitina District - (Headquarters, Chitina) -
Robert J. Shepard, Superintendent

Mr. Shepard has been with the Alaska Road Commission in various capacities for a great many years and is well qualified to perform the required duties. Mr. Frank Shipp is Assistant Superintendent. He is an old employee and will be eligible for retirement in a short time. From the information at hand it appears that with the retirement of Mr. Shipp, and until there is an increase in our appropriations, it will not be necessary to fill his position. Mr. William J. Niemi is Assistant Engineer and is well qualified for his position. It is anticipated that if we do not fill Mr. Shipp's position on his retirement many of the duties will be assigned to Mr. Niemi. Dean H. Kelsy, Deputy Disbursing Clerk, has been with the Commmission for many years and should be continued. Russell J. Sullivan is shown as storekeeper. His services are necessary during the season of operations, but it is intended to furlough him at the end of that time and re-employ him again, if available, at the beginning of next season's operations.

Fairbanks District - (Headquarters, Fairbanks) -
Mr. Frank Nash, Superintendent

Mr. Nash has been associated with the Commission for many years and is well qualified for his duties. He should be continued in his present capacity. Clarence E. Burglin, Assistant Engineer, is one of the younger employees of the Commission, but he has discharged his duties in a very satisfactory manner and should be continued in his present capacity. Mr. Peter Grandison, Disbursing Clerk, has functioned in this capacity for many years and should be continued. Vincent H. Pierce is Clerk for the Fairbanks District. He should be continued in his position until it can be ascertained whether or not his services will be required in performing the work authorized under the present appropriations. Russell R. Robinson is shown as storekeeper and he has been employed in this capacity in the past and was given the rating by the Civil Service Commission. In view of the reduced appropriations, he was not continued as storekeeper this year but is working as a laborer in one of the road crews. Fairbanks is one of the most important stations, and while the services of a storekeeper are not required at the present time and the position is not filled, it is deemed advisable to keep the designation.

Kuskokwim District - (Headquarters, McGrath)
Mr. Hawley Sterling, Assistant Superintendent

Mr. Sterling is not carried on the list of permanent employees because he is employed under a temporary appointment. This position will be discontinued at the close of the present working season and hereafter a foreman will be detailed to have charge of the work.

Southeastern District - (Headquarters, Juneau) -

This district embraces the territory in Southeastern Alaska and a sub-district which included Eagle on the Yukon River. Each year a foreman is employed to supervise the work in that region. The other activities of the Commission in the Southeastern District are administered through the headquarters office.

Very truly yours,

Governor

ORGANIZATION CHART

ALASKA ROAD COMMISSION

SECRETARY OF INTERIOR

GOVERNOR

Disbursing Clerk

CHIEF ENGINEER

ASST. CHIEF ENGINEER

JUNEAU OFFICE
Chief Clerk
6 Clerks

LOCATING ENGINEER
MASTER MECHANIC

CHITINA DISTRICT
Superintendent
Asst. Superintendent
Asst. Engineer
Disbursing Clerk

VALDEZ DISTRICT
Superintendent
Disbursing Clerk

FAIRBANKS DISTRICT
Superintendent
Asst. Engineer
Disbursing Clerk
a Clerk

SOUTHWESTERN DISTRICT
Superintendent
Asst. Superintendent
Asst. Engineer
Disbursing Clerk

KUSKOKWIM DISTRICT
Asst. Superintendent

NOME DISTRICT
Superintendent
Disbursing Clerk

SOUTHEASTERN DIST.
Eagle Sub District
General Foreman

R. G. 126, Central Classified Files, 9-1-55, N.A.

CHAPTER TWELVE

TOLLS ON THE RICHARDSON HIGHWAY

For years, Congress and the federal government had been dissatisfied with Alaska's uneven, slow development. As early as 1913 Secretary of the Interior Franklin K. Lane had called for the creation of an Alaskan development board. Subsequently, Interior and its Congressional friends urged a reorganization of the federal bureaucracy in the north. Many draft bills established a board comprising major bureau and agency heads and other federal officials who could recast federal activities in a major fashion and make other basic decisions subject to the approval of the secretary of the interior. Misunderstandings on the part of Congress and infighting among bureaucrats doomed these efforts, however, and while Congress struggled with the concept of development boards, Interior tried temporary solutions, which led to the consolidation of The Alaska Railroad and the Alaska Road Commission in the spring of 1923. By May of that year the Railroad and the Road Commission used each other's men, equipment, and supplies interchangeably.

Alaska Road Commission and Alaska Railroad Merger

James G. Steese directed the merged transportation agencies. With a trim build, neatly dressed and sporting a trim mustache, Steese at forty-one was a successful career officer. A West Point graduate of the class of 1907, he had served four years in Panama during the construction days. He taught several years at West Point and Forts Riley and Leavenworth and became the assistant chief of engineers. Promoted to full colonel in 1918, he won an appointment to the general staff, and in July 1920 assumed the presidency of the Alaska Road Commission. As a bachelor without a family to yearn for warmer climates, Steese was very well fitted for duty in the north.[1]

Steese was pleased with the merger, and thought that it immediately speeded development work according to a unified plan, and better yet, decisions could quickly be made in the field. Six months later, in

October 1923, the consolidated operations ended. The Railroad had many problems, and probably the most important was the line's poor condition. Upheavals in management continued to shake the Alaska Railroad, and its troubles did not end until the appointment of strong-willed and industrious Otto F. Ohlson as general manager in 1928. In response to heavy Congressional pressures for economy, Ohlson ran a tight operation. He consolidated sections and discontinued stations, bought used rolling stock, and most importantly, raised freight rates to the ire of Alaskans. Soon, Ohlson fought competing trucks, buses, boats and airplanes, mostly in the summer for the tough winters made operations for all but the Railroad nearly impossible. The competition hauled almost entirely high-value perishables, first class freight, and passengers. Competition started in earnest in 1931 after Congress had mandated drastic rate increases designed to put the Railroad on a self-sustaining basis. Competition continued despite the Railroad's low summertime rates and a system of licensing and tolls on the Richardson Highway. And as competition continued, its emotional context expanded until truckers became the heroes, and Ohlson and the Railroad the villains, of Alaska transportation.[2]

Source of Authority

Only as a last resort did Ohlson accept the idea of a toll on highway tonnage. The Department of the Interior received its authority to regulate traffic and impose license fees and tolls in the 1932 transfer of the Alaska Road Commission from the War Department. Now, one administative head possessed the power to control the competition between traffic on the Richardson Highway and the Alaska Railroad. The Act also contemplated an equilization of rates between the railroad and the highway transportation system so that the latter would not encourage the diversion of passenger and freight traffic from the railroad to the highway. Until the transfer in 1932, no formal regulations governed the speed, weight, or type of vehicle on Alaska's roads. Regulations were needed to protect the system, particularly during the soggy breakup

season when roads became very soft, against the ever more powerful and heavier cars, buses, and trucks. On February 15, 1933 the secretary adopted regulations governing the use of the Richardson Highway. Subsequently amended on June 13, 1933, they were designed to accomplish three goals: 1) regulate the weights of vehicles; 2) the size of vehicles; and 3) set up a registration and license system requiring all vehicles to be registered and pay a license fee. The purpose of the registration and license fees was to aid in the maintenance of the road and reduce the competition of the highway over which common carriers operated in direct competition with the railroad. Failure to comply with the regulations established by the Secretary of the Interior would perhaps have constituted a crime. However, since the Act contained no express language on the subject, the courts probably would not have sustained any attempt to make a violation a basis for prosecution.[3]

Governor Parks Confused

Alaska's Governor George A. Parks was confused about the various proposals by the Department of the Interior to issue new rules and regulations. Nobody had informed him, and whatever information he possessed had been obtained from press notices. Parks guessed, however, that these proposals were designed to equalize the rates of the Alaska Railroad and those charged by carriers on the Richardson Highway. The governor predicted that it would be difficult to fix tolls. For example, bus companies operating between Fairbanks and Valdez charged ten dollars for a one-way ticket at the height of the competition in 1932, while the railroad cost forty-seven dollars from Seward to Fairbanks. Many Alaskans lived along the highway and traveled a great deal. Obviously, they did not compete with the railroad. Additionally, several hundred individuals from Fairbanks and coast points made weekly trips along the highway for recreational purposes. Many Fairbanksans owned summer cabins at Harding and Birch Lakes some sixty miles south of Fairbanks, and others traveled to Paxson's Lodge on fishing excursions, a point almost half-way between

the terminals. All of these people did not compete with the railroad, and therefore should not have to pay tolls. Furthermore, imposing tolls suggested that the government assumed the obligation to keep the road open at all times for traffic. Would claims accrue against the Government in the event of wash out or slides? This might delay traffic for several days and cause carriers who had paid tolls at Valdez to lose loads of perishables.[4]

This was not all, however, for how should tolls be collected? the governor asked. During the summer period with practically continuous daylight traffic was underway at all hours of the day and night. The law restricted employees to eight working hours per day. Since preliminary investigation revealed that tolls would have to be collected at two points along the highway, this necessitated stationing three men at each station unless the road was closed for a certain period each day. In conclusion, Parks recommended that Ohlson be instructed to direct his traffic manager to study the problem carefully and cooperate with the governor's office in preparing recommendations for approval by the Secretary of the Interior.[5]

The Department of the Interior Confused

If the governor was confused, so was the Department of the Interior. E. K. Burlew, the administrative assistant to the Secretary, maintained that local traffic should not be charged but only buses and trucks acting as common carriers in competition with the railroad and tolls should be collected through a license system because hiring a collection staff would be too expensive. Colonel Ohlson traveled the highway in early July and reported that the low rate of $10.00 in effect at the beginning of the season had been increased to $25.00 for a one-way ticket Valdez - Fairbanks or Chitina - Fairbanks. Since the railroad charged $47.05 for a one-way trip from Seward to Fairbanks, the proposed toll had to be the difference of $22.05 to be effective. However, such a measure, however, he warned would trigger serious protests and antagonistic feelings among northern residents. Echoing Governor Parks,

Ohlson stated that Alaskans would argue that the imposition of tolls would obligate the government to maintain the highway in good condition. Ohlson asked that he be permitted to lower the freight and passenger rates to Fairbanks to a competitive level while the Richardson Highway was open during the warm season.[6]

Interior Recommendations

By the end of August, 1932 Interior made the following recommendations as to the administration of tolls on the Richardson Highway:

1. That the Department proceed with due caution as to precedent regarding highway tolls, giving regard to present practice on toll highways and bridges.
2. That pleasure cars on single trips, as well as residents along the highway, should not be charged tolls.
3. That tolls be charged buses, trucks, or any type of common carrier for hire.
4. That tolls should not be charged to the extent of the amount needed to make the railroad competitive with highway traffic or freight haulage. No attempt should be made to equalize rates between the railroad and the highway.
5. Tolls, where charged, should be collected through a system of licenses, eliminating the necessity of a collection staff.
6. To make railroad haulage rates competitive with highway haulage, lower freight and passenger rates should be used during the season the highway is open.

Both Governor Parks and Colonel Ohlson considered these recommendations, but rejected all except the last one as impractical. Instead, both men advocated regulations governing the size and weight of all vehicles and the speed of all traffic. Such regulations, properly enforced, would reduce maintenance costs and render freight transportation from Valdez to the interior unprofitable with the exception of certain perishable goods. These traffic regulations, together with lower railroad freight and passenger rates during the warm season would solve the problem.[7]

In early December 1932 Interior had decided to follow the suggestions of the two men to draft regulations governing vehicle traffic on Alaskan roads. But it also desired to include a schedule of registration and license fees for commercial passenger cars and trucks operating on the Richardson Highway. In the preliminary draft no wheeled vehicles exceeding 10,000 pounds gross weight, including load, were allowed to operate on Alaskan roads. Vehicles were restricted to 7.5 feet in width and 20 feet in length, including trailers. This provision was to protect the roads, particularly during spring break-up when heavy trucks had caused serious damage. Alaskan bridges were none too sturdy, and therefore Interior restricted the moving load on any bridge to be no greater than 20,000 pounds for any vehicle having a length of not less than 14 feet. No more than two successive loads were allowed on any span bridge at once. In addition, motor vehicles were to be operated at a safe speed and in a safe manner. No truck weighing in excess of 6,000 pounds was to drive faster than 25 miles per hour.[8]

Vehicle Permits

Every motor vehicle operating on the Richardson Highway was to obtain a permit for a nominal fee of one dollar. In addition, each vehicle was to pay a license fee, the amount depending on its classification. Class A vehicles, which included all conveyances used for commercial or pleasure purposes not listed in classes B and C were exempt. Class B vehicles carrying from five to fifteen passengers were to pay license fees ranging from $100 to $175, depending on size. Class C vehicles up to 7,000 pounds gross weight were to pay $100, those above 7,000 pounds but below 10,000 pounds were to pay $150, and finally automobiles operating as Class B up to a weight of 7000 pounds were to pay the minimum charge for their class, plus an additional $100. Shortly thereafter, the solicitor of the Department of the Interior discovered that there was no statute which provided penalties for the violation of these new regulations. He suggested that the department draft a measure for Congressional approval correcting this oversight.[9]

The 1932 Democratic Landslide

In the meantime, American voters rejected the Republicans in the 1932 elections and chose Democrat Franklin D. Roosevelt as the new chief executive. Roosevelt's secretary of the Interior, Harold L. Ickes, inherited Alaskan problems, including the regulations governing automobile traffic in the north and the imposition of license fees for use of the Richardson Highway. Ikes agreed with his predecessor's actions, and in reply to a protest from the City Council of Fairbanks stated that American taxpayers for many years had paid the deficits incurred by the Alaska Railroad. He could see no apparent reason why the federal government should maintain a highway which further reduced railroad revenues. And although the fees to be charged did not cover the maintenance of the highway, nevertheless the monies collected helped reduce the subsidy somewhat and above all would "show an effort on the part of the people of Alaska to share in the expense now carried completely by the taxpayers of the States."[10]

Delegate Dimond Unhappy With Tolls

Alaska's newly-elected delegate to Congress, Anthony J. Dimond, was unhappy with the imposition of license fees or tolls for the use of the Richardson Highway. Dimond, a tall, powerfully built individual had grown up on his father's farm near Palatine Bridge, New York. Born in 1881, he finished high school in Amsterdam, New York, and completed an additional fifth year of schoolwork which qualified him as a teacher. Working on the farm, he taught an eight-grade country school during the winters, studied Latin and mathematics and also read law for about three years under the supervision of an Amsterdam attorney. In 1905, Dimond came to Alaska where he worked as a prospector, miner, teamster and waiter. In 1911, a hunting accident which nearly cost him his life left Dimond permanently with osteomyelitis, an infection of the bone, then incurable. Realizing that his prospecting career had ended, Dimond resumed the study of law and was admitted to the Alaska Bar in mid-

December, 1912. Appointed U.S. Commissioner at Chisana, center of a recent gold strike, he became a law partner in a Valdez firm in 1914. He participated in civic affairs in Valdez and eventually won a seat in the territorial senate. In 1932 he ran for the delegateship against James Wickersham and routed the incumbent in the Roosevelt landslide.[11]

The new delegate told Secretary Ickes that the whole scheme of imposing registration and license fees should be set aside and "no further order or regulation made except such as may be necessary to prevent the use of the road by trucks or cars as might not be suitable for the type of road which exists." In fact, instead of trying to prevent the use of the highway through fees and tolls, the Department of the Interior should encourage the use of the railroad by lowering its passenger and freight rates. Ickes was not moved by the delegate's arguments and repeated his belief that the federal government should not be required to build and maintain a highway to compete with its own railroad which operated at a loss. Indeed, Ickes thought that the fees should be extended to cover private passenger cars, as well as privately owned trucks carrying merchandise for their owners. Accordingly, Ickes informed the delegate, he had amended the regulations to embrace private passenger cars and trucks.[12]

Ickes Chastises Troy

Ickes had consulted Alaska's new Democratic Governor, John W. Troy, on the automobile license fees for the use of the Richardson Highway. Troy had opposed the fee system, and on July 6, 1933 Ickes read an editorial in the Daily Alaska Empire entitled "An Unjust Tax," criticizing the Department of the Interior and the Secretary. Ickes had been told that Troy owned the newspaper. As owner he presumably controlled editorial policy, and Ickes wanted to know how the Governor could reconcile this attack on the administration with the loyalty expected of a presidential appointee. The Secretary lectured Troy that as an employee of the Department of the Interior he was not permitted to criticize a federal policy once it had been established. Troy obviously did not

understand the temper of Congress, "although it has been expressed frequently and emphatically, with regard to Federal appropriations for Territorial support." Congress no longer wishes to subsidize Alaska, Ickes stated, and Alaskans had to realize that "self-support and the independence that goes with it is more important to their welfare than Federal 'hand-outs'....." In fact, even those who believed that the federal government owed "Alaska a living must affirm that a liberal subsistence has been provided for many years." The time had come, Ickes concluded, to measure the rights of Alaskan citizens against those of the taxpayers in the contiguous states and establish a mean "that is not disproportionate on either side."[13] The Secretary obviously had forgotten that northern residents were American citizens and taxpayers, and not mere colonial subjects.

Troy Defends Himself

Governor Troy quickly assured the secretary that he no longer owned the newspaper referred to, and in fact had not read the offending editorial. And in case he no longer could loyally support the administration, Troy stated, he would immediately submit his resignation. Ickes seemed to be satisfied with Troy's assurances, and that settled the matter. In the meantime, however, the Juneau and Fairbanks Chambers of Commerce vociferously objected to the toll system, as did political and civic organizations as well as individuals who all called for the revocation of the regulations, claiming that while law abiding citizens paid the license fees, others deliberately avoided them without punishment. And indeed, without amending legislation so as to provide penalties for violating the secretary's regulations, the government could undertake no prosecutions.[14] In the meantime, however, affected citizens complained.

Homesteader Warren Complains

Jack Warren, a homesteader near Fairbanks, was one such law-abiding

individual who had paid the $101 license fee on his truck and six dollars for his car. Living twenty-four miles south of Fairbanks on the Richardson Highway, Warren cut and sold firewood in the city. He did not object to paying the license fee - if everyone paid equally and the regulation was enforced. But he knew of sixteen trucks which used the highway more than he did and yet their owners had avoided the required payment, enabling them to "profitably market their wood for less than I can, thereby getting all the business." Still other trucks traveled the entire length of the highway, competing with the railroad by carrying freight from Valdez. They did not pay, either. "Thus I pay a high freight rate for everything I use coming over the Alaska Railroad and then a high tax to get merchandise just twenty-four miles out on the highway," Warren complained to Ickes. He demanded redress for this outrage, for only a few had paid the fees "while the others laugh at you and your regulation and at us, the poor saps who did pay it."[15] And while most motorists ignored the license fee requirements, the department also found that it was unable to enforce the provisions regarding weight, safety, and speed.

Very Little Money Collected

For all the dissatisfaction with the prevailing license fee system, the federal government collected very little money. For example, in 1933 some 113 class A vehicles paid a license fee of $6.00 each for a total of $678.00, no class B licenses were taken out, and only four class C were paid, three at $101.00 each and one at $151.00 for a grand total of $1,132.00. Governor Troy readily admitted that the registered class A automobiles did not represent the total number of privately owned cars using the highway because the majority of owners simply did not bother to take out licenses. Several of these individuals not complying with the regulations had been reported to the U.S. District Attorney, but he had advised that he could not prosecute under existing laws. The Governor urged the Department of the Interior to obtain legislation providing penalties for the violators of the regu-

lations, because those who obeyed the law increasingly resented those circumventing it. As a matter of fact, Troy thought that reducing railroad fares would do much more to divert passengers and freight from highway competition than license fees could ever hope to achieve. Although the governor opposed the licensing system per se he realized that it appeared to be necessary, for the purpose of diverting traffic to the railroad. He therefore proposed that only trucks, busses, or passenger cars hauling freight and travelers from Valdez to Fairbanks or vice versa be licensed and that all other vehicles be freed from these fees. Troy mentioned that all through traffic on the Richardson Highway had to use the ferry crossing the Tanana River some seventy-three miles southwest of Fairbanks. It might be practicable to establish a toll collection facility at that point which would catch all commercial through traffic. Secretary Ickes liked the toll idea and asked the governor to work out a rate structure.[16]

Troy's Proposals

Troy thereupon proposed that all vehicles using the Richardson Highway be assessed a five-dollar annual registration fee, while commercial vehicles pay five dollars per passenger and two dollars per 1,000 pounds or fraction thereof for net loads. In the meantime, however, nothing could be done in collecting either licenses or tolls or in enforcing the regulations which had no enforcable penalty clause. The Department of the Interior appreciated the governor's suggestions, but had been unable to persuade Congress to define an offense and provide a penalty for the Richardson Highway situation. Furthermore, changing from a license to a toll system probably would have to be approved by the president, and still would not cover the use of the road at either end.[17] The question of the license fees was becoming very complicated, indeed.

Get The Traffic Back To The Railroad

Early in 1935, Ohlson and Ike P. Taylor, the chief engineer of the

Alaska Road Commission, attended a conference in Washington, and, together with other department employees, proposed to strike at the truckers where they could be hurt most. They adopted Governor Troy's scheme to collect a toll at the Commission-operated ferry across the Tanana River at McCarty, now Big Delta. Taylor recommended collecting a toll of 2.5 cents per ton-mile at the ferry. Thus the rate for one ton going the full distance was $9.27, a charge which they believed would return some traffic to the railroad. Truckers could refuse to pay, and they could not be prosecuted for non-payment. But they could not cross the river until they paid. Secretary Ickes issued the new orders governing the "use of roads, trails, and other works" on March 25, 1935. They included the new tolls and deleted the license fees.[18]

Alaskan Continue Protests

The Valdez Chamber of Commerce and a sizable group of Fairbanks citizens protested the tolls even more vehemently than the fees. The Chamber denied that the Richardson Highway represented a threat to the Alaska Railroad since freight deliveries occurred only during the open season from June 15 to October 15. Only twenty percent of the total tonnage hauled over the highway during these short five months reached Fairbanks, while eighty percent were transported to Copper Center and other points adjacent to the highway not reached by any other transportation. The Chamber concluded that the tolls "are a rank discrimination entirely un-American and contrary to the usual procedure in the encouragement of the development of a pioneer country as no tolls are assessed on any other highway in Alaska." The Chamber pointed out that there were no plans to collect tolls on the highway under construction from Anchorage to the Matanuska Valley which paralleled the Alaska Railroad. The Fairbanks citizens claimed that the tolls were confiscatory, not in the public interest, increased the living costs for Interior residents, created unemployment, discriminated against citizens in the Interior; and that they were "un-American and an unjust burden upon the pioneer people of Interior

Alaska." Some ninety-two petitioners asked President Roosevelt and Secretary Ickes to revoke the order "forthwith" and grant Interior residents "their accustomed right to the free use of the Richardson Highway...."[19]

New System Seems To Work

But despite these protests, the new system seemed to work, at least for a while. The truckers could not evade the toll station, for they had to cross the river. Highway tonnage destined for Fairbanks slipped from 734 tons in 1934 to 304 tons in 1935. Regular ferry collections for the crossing at one dollar per vehicle decreased from $1,186.00 in 1934 to $967.00 in 1935. The new toll brought in a total of $2,856.00 in 1935. But Ohlson's hopes were shortlived, because with financial aid from interested parties in Fairbanks and Valdez, the truckers soon regained the tonnage they had lost. By 1939, the trucking business boomed: and confident of public support, the truckers were prepared to evade the tolls by subterfuge if possible and force if necessary. In September 1939, Clyde Gordon, a motor truck operator, reached the McCarty ferry with a load of fuel oil. Toll collectors Lloyd Hansen and Charles Simmons denied Gordon the use of the ferry when he offered payment only of the vehicle toll of one dollar. They demanded that he pay the 2.5 cents per ton-mile from Valdez to Fairbanks. Gordon returned to his truck which he parked some 200 yards south of the ferry landing and within a short time U.S. Deputy Marshal Einar A. Tonseth arrested him at the request of Frank Nash, the superintendent of the Commission for the Fairbanks district. No complaint had been filed had nor a warrant for arrest been issued. The deputy marshall took Gordon to Fairbanks after forcing him to leave his truck south of the ferry. Once in the city, he was set free. Gordon thereupon filed a suit against the ARC asking that the judge issue an injunction preventing the collection of tolls on the highway, insisting that neither Ickes nor the Alaska Road Commission had the right to impose tolls which were "designed to annoy, harass, and penalize" those transporting

freight over the highway. What Gordon had failed to mention in his civil suit was that he had parked his truck in such a fashion that it blocked all other traffic. Only after he refused to move the truck did Tonseth arrest him. On July 26, 1940 Federal District Court Judge Harry E. Pratt rejected Gordon's suit, stating that the Secretary of the Interior had the authority to level tolls and that he did not "act beyond the power delegated and that he did not act capriciously and arbitrarily." A month later Gordon appeared in the U. S. Commissioner's Court on a charge of disorderly conduct, based on his having again blocked the Richardson Highway at the McCarty ferry crossing just a few days earlier. This was the second time the ARC accused him of obstructing access to the ferry. This time Benjamin D. Stewart, Jr., a civil engineer with the ARC signed the complaint on which the warrant of arrest was issued. Deputy U.S. Marshal Pat O'Connor made the arrest after Gordon parked his truck diagonally across the road in front of the toll booth. He refused to pay, and did not do so until after he was arrested. Then the ferry took him across the river and he drove into town. The jury listened to the testimony and shortly thereafter returned its verdict of "not guilty." The jury verdict proved that there was much support for the trucker's position. In fact, after the verdict officials of the ARC were "somewhat up in the air as what to do in case the truck drivers try another such stunt, as it will apparently do no good to have them arrested and appears very doubtful if a jury could ever be secured in Fairbanks that would return a verdict of guilty, no matter how strong the evidence."[22]

Truckers Rebel

By the summer of 1940, truckers sometimes unloaded their trucks at the river and shipped their loads across on a motorized, homebuilt scow defiantly waving a skull-and-crossbones flag. They then drove their empty trucks onto the ferry, paid the required one-dollar fee and reloaded after debarking on the north bank. The Fairbanks Daily News Miner reported that "Truckers Refusing Toll Pay; Richardson Highway

Battle Flares as Freighters Buy Boats." Six Fairbanks trucking companies were determined not to pay the government tolls, and had hauled a number of large motor boats to Big Delta to tow their scows. Alaska's acting Governor E. L. Bartlett reviewed the situation for the Department of the Interior, and suggested that an alternative toll station could be established at Shaw Creek, somewhat closer to Fairbanks than Big Delta. That would require the establishment of a separate organization there, however, and add to the costs. Bartlett warned Washington, however, that "the substantial and informed opinion at Fairbanks, is that no matter where a toll station is established or how it is established no jury could be found locally to convict a man for failing to pay the toll." Before the department responded to this latest incidence, six truckers, members of the Tanana River Transportation Company arrived at the ferry crossing northbound in the early evening hours of September 15. The group lingered on the south side and made no attempt to cross the river on the ARC ferry or on their own boats and small barge. Shortly before midnight the ferry operator, Floyd Hansen closed for the night and remarked that "anyone wanting to cross the river could go ahead, use the ferry and take themselves across...." The truckers took Hansen at his word and took their loaded vehicles across. They then gave Clyde (Doc) Gordon, the individual operating the gas boat and barge at Big Delta for the freighters five dollars to pay the ferry charge.[23]

Toll Rebellion Continues

Superintendent Frank Nash quickly replaced ferryman Hansen with Otto Bayles and instructed him to take along padlocks and chains to secure the ferry, when it was not in operation. The truckers, however, continued to use the ferry without paying the tolls. In the early morning hours of September 20, Gordon and a few other men hooked onto the ARC ferry with the trucker's power boat, called the Paul Bunyan, and towed six trucks across the river and then returned the ferry to the south banks. The truckers continued to use the ferry whenever they arrived

at Big Delta, either loaded or empty. Bayless kept the steering wheel locked, but made no attempt to lock it to the shore as it seemed likely that sooner or later violence would erupt and somebody would get hurt. Early on the morning of September 25, the Paul Bunyan broke down, so the truckers broke the chain and operated the ferry under its own power. A day later the Department of Justice dispatched Deputy U.S. Marshal Pat O'Connor to Big Delta to restore order. Since they had succeeded before, O'Connor's presence did not intimidate the truckers who continued their assault on the toll system. Within a short time, the Deputy Marshal arrested fourteen truckers who refused to pay tolls. After each arrest, he allowed the individuals to take his loaded truck across the river without toll payment and permitted the driver to proceed to Fairbanks on his own recognizance. U.S. Marshal Joseph McDonald jailed the men for a few hours, and then Judge Pratt released them after the prisoners had applied for a writ of habeas corpus.[24]

Trial Of The Truckers

The joint trial of the fourteen men accused of disorderly conduct for the alleged blocking of the Richardson Highway at the Big Delta ferry crossing lasted a day and a half before United States Commissioner William V. Growden. The jury of seven men and five women deliberated only one-half hour and returned a verdict of "not guilty." United States Attorney Ralph J. Rivers remarked in disgust that he had "just lost the first highway blockade case on an absolutely arbitrary acquittal by a local jury...." In fact, most Fairbanksans considered taking the ferry as a protest against the toll as a type of "Boston Tea Party patriotism." Under the circumstances, with no provisions for punishing toll evaders on the books except the disorderly conduct statute, Rivers saw little sense in prosecuting additional cases.[25]

Rivers did not know it yet, but a day earlier, on October 14, a number of truckers seized Dennis Doyle, the Deputy U.S. Marshal stationed at Big Delta, took his shotgun and locked him into the Commission

scale house. They then moved ten loads of freight across the river on the ferry without payment of toll. After the truckers had finished their work, they released Doyle and gave him back his gun. There were no arrests. As soon as Rivers heard of the incident he declared that "assaulting an officer in the performance of his duty" constituted a felony with a maximum punishment of three years in jail or a $5,000 fine or both. Rivers planned to present the case to the grand jury. The issuance of warrants for arrest and subsequent trial in the district court, he stated, would depend on the return of indictments by the grand jury. A couple of days later, Nash ordered the ferry drydocked for the season because of low water and running ice in the river. Nash was relieved that his troubles had ended, at least for the time being.[26]

Governor Gruening Is Angry

While the traffic on the Richardson Highway ended with the onset of winter, the paper war over tolls continued. Alaska's Governor Ernest Gruening was angered by this "latest carefully planned act of violence" and thought it essential "that justice be meted out to the culprits if the Department's highway regulations are ever to be enforced." He suggested that the Department of Justice act "promptly and vigorously," and, if necessary, station a force of U.S. Deputy Marshals "sufficiently great to prevent a repetition of this latest performance."[27]

Gruening soon learned that the grand jury in Fairbanks had refused to return an indictment against the truckers because they considered the Richardson Highway toll discriminatory and retarding the development of Alaska. The governor relayed the news to Secretary Ickes. He clearly was unhappy about the action of the grand jury, but apart from the toll evasion - which had cost an estimated $7,633 in 1940 - there had also been the persistent overloading of trucks, adding further to highway maintenance costs. Obviously there was a toll rebellion on the Richardson Highway, and Gruening suggested that in the 1941 season the department should meet these challenges and, regardless of cost,

enforce the regulations. Gruening had strong opinions on the subject, but throughout the winter of 1940-41 his superiors endlessly debated the question of what to do about the toll rebellion in far off Alaska. Learned lawyers exchanged complicated opinions, and administrators simply scratched their heads. By April 1941, Secretary Ickes, although loath to admit it, had to confess that the federal government was powerless to secure compliance with the regulations "issued under law by the Secretary of the Interior and approved by the President."[28]

U.S. Deputy Marshals At Ferry

By May 1941, Ickes informed the governor that the Department of Justice had authorized the stationing of two U.S. Deputy Marshals at the Big Delta ferry. If these law officers were unable to control the situation, Gruening was to close the highway to all through traffic. The governor thought that two deputies should be able to enforce the law, but warned that U.S. Marshal McDonald had connived with the truckers last year. He should be informed that unless he performed his duties he and his Deputy Marshals would be fired.[29]

Gruening was convinced that the toll rebellion would continue. Already, the truckers were constructing a big scow at Big Delta to be used to haul their trucks across the river. The governor had looked into the possibility of having the government withdraw all the surrounding land from entry, thus making it impossible for a rival ferry to operate. Unfortunately, some homesteads already had been claimed and the competing ferry would operate from this privately held ground. Other alternatives for collecting tolls existed not far from Big Delta in places where the road was narrow with a cliff on one side and the river on the other. Abandoning maintenance on the highway was another possibility, for it soon would become impassable. As a last resort, "a discharge of buckshot into one of the truck's gas tanks and tires would have a decidedly deterrent effect upon the violators," Gruening thought.[30]

Truckers Use Their Own Ferry

By June Marshal McDonald reported that all was quiet at Big Delta because the truckers used their own ferry to cross the river and then resumed their journey north to Fairbanks. The Marshal suggested that the Commission establish a toll gate at Shaw Creek bridge, twelve miles north of Big Delta. At this point the road made a sharp descent to the river level, crossing Shaw Creek over a bridge. He offered to station his deputies there, but the ARC was unclear about whether it had the authority to proceed in the matter.[31]

Compromise Reached

On July 18, 1940, Ickes adopted McDonald's suggestion and revised the regulations which now prohibited any vehicle transporting freight to pass Shaw Creek bridge without proof of payment of tolls. The ARC constructed a toll gate, which, however, truckers presumably pulled out and destroyed. Before deputies could be stationed at Shaw Creek and a new toll gate be built, the truckers and the government reached an agreement. Until a court decided upon the validity of the tolls, the operators agreed to pay the toll which was to be placed in escrow. George W. Folta, the Counsel-at-Large for the department, negotiated the agreement. The truckers insisted, and Folta agreed, that the validity of the tolls be tested in the Appellate and Supreme Court.[32]

World War II Solves The Problem

On October 17, 1941, the district court in Fairbanks upheld the validity of the tolls. By the summer of 1942 there was no doubt that the tolls only added to the cost of supplies and equipment for federal wartime projects. Colonel Ohlson had his hands full in moving an unprecedented volume of military freight and keeping his railroad from collapsing under its weight. The small amount of truck cargo destined for Fairbanks civilians no longer mattered. On July 15, 1942 Ickes

removed the tolls, and they were never restored. The demands of war had disposed of the dispute.[33]

FOOTNOTES

1. Wilson, Railroad in the Clouds, pp. 155-156.

2. Ibid., p. 207.

3. Ibid., pp. 210-211.

4. Governor George A. Parks to Secretary of the Interior, July 5, 1932, Central Classified Files, 9-1-55, part 1, Record Group 126, N.A.

5. Ibid.

6. E. K. Burlew to Judge Finney, July 7, 1932, Ohlson to J. M. Dixon, July 9, 1932, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

7. Memorandum by Dobbel, executive assistant to the secretary, August 20, 1932. Parks to Secretary of the Interior, October 11, 1932, Ohlson to Secretary of the Interior Lyman Wilbur, October 28, 1932, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

8. Burlew to Ohlson, December 1, 1932, Regulations Governing Traffic On The Richardson Highway, Territory of Alaska, February 15, 1933, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

9. Finney memorandum, March 7, 1933, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

10. Harold L. Ickes, Order No. 640, June 13, 1933 and Appendix, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

11. Mary Childers Mangusso, "Tony Dimond," The Alaska Journal, Autumn 1982, pp. 11-23; Dr. Marie Therese Dimond, Sister, Notre Dame de Namur, interview with Claus-M. Naske, April 20, 1975, Washington, D.C.

12. Dimond to Ickes, June 2, 1933, Ickes to Dimond, June 13, 1933, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A. The regulations follow in full:

REGULATIONS GOVERNING TRAFFIC ON ALL ALASKAN ROADS AND HIGHWAYS

In accordance with the act of June 30, 1932 (47 Stat. 446) the following regulations are promulgated for governing traffic on all Alaskan roads and highways constructed wholly or in part from Federal funds by the Alaska Road Commission.

1. No wheeled vehicle shall have a gross weight including load, exceeding 16,000 pounds, no single wheel load shall exceed 6,000 pounds and the maximum load per inch diameter of pneumatic tire shall not exceed 500 pounds and per inch width of steel tire not to exceed 300 pounds, except that any vehicle exceeding these limits which has prior to the issuance of these regulations, been in use on the roads covered by these regulations. Such vehicles may be operated only by special permit, which may be obtained upon application to the Commission, subject to revocation should damage occur to the roads as a result of the operation of such vehicle.

2. The moving load on any bridge shall not be greater than 20,000 pounds for any conveyance having a length of not less than 14 feet. Not to exceed two such successive loads shall be allowed on any span bridge at once. If conveyance is of crawler type the bearing per square inch of tread shall not exceed 10 pounds.

3. During the period of thawing in the spring and after periods of continuous rain, the load limits specified above may be reduced for limited time by order of the local superintendent to such an extent as may be necessary to protect the roads from damage.

4. No motor vehicle shall be operated at speed which may be considered unsafe or in a reckless or careless manner. Any motor vehicle operated at speed such that it can not be brought to a stop within the length of road visible to the operator at any time or any such vehicle not properly equipped with brakes will be considered careless and reckless operation. No truck, the gross load of which exceeds 6,000 pounds shall be operated at a speed exceeding 25 miles per hour.

5. Failure to comply with the regulations herein set forth will subject the owner of the motor vehicle to liability for any damage occasioned thereby, and in the discretion of the Alaska Road Commission, the offender may be denied the privilege of using the roads to which these regulations are made applicable.

REGULATIONS GOVERNING TRAFFIC ON THE RICHARDSON HIGHWAY TERRITORY OF ALASKA

In accordance with the act of June 30, 1932 (47 Stat. 446) there are hereby promulgated the following regulations governing traffic on the Richardson Highway.

1. Licenses: A permit or license shall be required of every motor vehicle operating over the Richardson Highway. Such license shall be issued by the Alaska Road Commission upon application, shall be good during the year of issue, expiring on December 31st

of each and every year and shall be renewed annually upon application to the Commission. The application for registration must state the class of vehicle and such other information as the Commission may require. It must contain an agreement that applicant will waive the Government's responsibility for maintaining the Richardson Highway passable at all times and that applicant will not carry passengers for hire unless registered under Class B nor transport freight commercially unless registered under Class C, described below. When such license is issued to the applicant he will be provided with a sticker to be placed on the windshield which will signify that the motor vehicle in question is so registered for the current year. The nominal fee of $1.00 (one dollar) shall be collected for this registration.

2. Classes: All motor vehicles operating on the Richardson Highway should be divided into three main classes:

A. All motor vehicles used for commercial or pleasure purposes not listed in Classes (B) or (C) below;

B. All motor vehicles carrying passengers for hire;

C. All motor vehicles transporting freight for hire.

In addition to the fee required for every motor vehicle operating over the said highway, a license fee shall be required for each motor vehicle listed under either Class B or Class C or Class C when operated under Class B, in an amount to be determined annually by the Alaska Road Commission with the approval of the Secretary of the Interior. A distinguishing windshield sticker shall be issued for vehicles in Classes B and C.

3. Operation of Motor Vehicles: No wheeled vehicle shall have a gross weight including load, exceeding 10,000 pounds, no single wheel load shall exceed 3,500 pounds, and the maximum load per inch diameter of pneumatic tire shall not exceed 500 pounds and per inch width of steel tire shall not exceed 300 pounds. The width of vehicle or load shall not exceed 7 1/2 feet and the length including trailer shall not exceed 20 feet. If it is necessary to move loads of greater width or length than above specified, a special permit may be granted for each such case.

The moving load on any bridge shall not be greater than 20,000 pounds for any conveyance having a length of not less than 14 feet. Not to exceed two such successive loads shall be allowed on any span bridge at once. If conveyance is of crawler type the bearing per square inch of tread shall not exceed 10 pounds.

No motor vehicle shall be operated at a speed which may be considered unsafe or in a reckless or careless manner. Any motor vehicle operated at a speed such that it can not be brought to a

stop within the length of road visible to the operator at any time or any such vehicle not properly equipped with brakes will be considered careless and reckless operation. No truck, the gross load of which exceeds 6,000 pounds shall be operated at a speed exceeding 25 miles per hour.

4. Penalties: All permits or licenses issued by the Alaska Road Commission under these regulations shall be subject to revocation for failure to comply with any regulation herein set forth, and any person, firm or corporation who shall operate a motor vehicle over said highway, without having secured a permit or license as herein provided, or who shall operate such vehicle after such permit or license shall have been revoked for violation of any of these regulations, shall be subject to the same penalties as the laws of the Territory may provide for a like offense in said territory.

13. Ickes to Troy, July 20, 1933, Central Classified Files 9-1-55, part 2, R.G. 126, N.A.

14. Troy to Ickes, July 30, 1933, James D. Cunningham memorandum for Burlew, January 25, 1934, Central Classified Files, 9-1-55, part 2, R.G. 126, N.A.

15. Warren to Ickes, October 5, 1933, Central Classified Files, 9-1-55, part 2, R.G. 126, N.A.

16. Troy to Burlew, January 20, 1934, Ickes to Troy, June 7, 1934, Central Classified Files, 9-1-55, part 2, R.G. 126, N.A.

17. Thomas to Burlew, July 31, 1934, Central Classified Files, 9-1-55, part 2, R.G. 126, N.A.

18. Department of the Interior, Order No. 905, March 25, 1935, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

19. Valdez Chamber of Commerce to Ickes, February 9, 1935, Fairbanks citizens to Roosevelt and Ickes, May 14, 1935, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

20. Traffic on Richardson Highway at McCarty Ferry, December 6, 1935, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

21. In the District Court for the Territory of Alaska, Fourth Division, Clyde Gordon, Plaintiff, vs. Frank Nash, Lloyd Hansen, and Charles Simmons, Defendants, September 18, 1939, Nash to Juneau Headquarters, Alaska Road Commission, September 20, 1939, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

22. Opinion, Clyde Gordon vs. Frank Nash et al., July 26, 1940, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A. Fairbanks Daily News-Miner, August 14, 1940; Nash to Juneau Headquarters of the Alaska Road Commission, August 16, 1940, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

23. Wilson, Railroad in the Clouds, p.212; Fairbanks Daily News-Miner, September 17, 1940; Nash to Juneau Headquarters, Alaska Road Commission, September 20, 1940, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

24. Fairbanks Daily News-Miner, September 26, 30, 1940; Nash to Juneau Headquarters, Alaska Road Commission, October 1, 1940, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

25. Fairbanks Daily News-Miner, October 3, 1940; Rivers to Nash, October 15, 1940, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

26. Fairbanks Daily News-Miner, October 15, 16, 1940.

27. Gruening to Ickes, October 25, 1940, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A. A summary of traffic at Big Delta for 1939 and 1940 and an estimate of toll evaded in 1940 follows:

	1939	1940
Govt. vehicles	342	417
All other vehicles	1800	2142*
Total	2142	2559
Govt. passengers	761	691
Other " Local traffic	2090	2197
Other " Commercial	2920	3578
Total	5771	6466
Freight Excl. Govt. Local Tons	31.95	9.00
" " " Through "	1408.15	2167.50*
Total	1440.10	2176.50
Ferry charges collected	$1800.00	2093.50**
Tolls collected	13252.34	12439.17**

*These include vehicles and tonnage on which no ferry charge was made as shown below.

**Does not include established amount of toll and ferry charges evades as shown below.

Estimated amount freight moved across river by other means than ARC ferry	481 tons
Estimated amount freight moved across river on ARC ferry by freighters who took over ferry and did not pay toll	270 tons
Estimated amount freight moved across river on ARC ferry by ferryman upon order of Deputy Marshal after he had arrested drivers for blocking road. No toll paid	72 tons
Total estimated freight on which toll not paid	823 tons
Vehicles crossed on ferry while being used by truckers - no ferry charge paid	49
Estimated toll evaded 823 tons 305,333 ton miles @ .025 (Assumed all above freight moved Valdez to Fairbanks, 371 miles)	$7633.32
Ferry charges evaded	49.00
Total estimated evasion	$7682.32

The increase in number of vehicles crossing the ferry is partly accounted for by the fact that the road was open between Valdez and Fairbanks about two weeks earlier in 1940 than in 1939 thus increasing the length of open season about 10%. This also partly accounts for increase in freight hauled.

28. Alaska Daily Press, October 29, 1940; Gruening to Ickes, October 30, 1940, Ickes to Attorney General, April 10,1941, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

29. Gruening to Ickes, May 29, 1941, Central Classified Files 9-1-55, part 2, R.G. 126, N.A.

30. Ibid.

31. McDonald to Attorney General, June 16, 1941, Central Classified Files, 9-1-55, part 2, R.G. 126, N.A.

32. United States of America, Plaintiff, vs. Lawrence J. Rogge et al., August 15, 1941, Office File of G. W. Folta, Counsel-at-Large, Juneau, Alaska, R.G. 48, N.A. Folta to Margold, August 19, 1941, Central Classified Files, 9-1-55, part 1, R.G. 126, N.A.

33. United States of America, Plaintiff, vs. Lawrence J. Rogge, et al., October 17 1941, Order No. 1715, July 15, 1942, Central Classified Files, 9-1-55, part 2, R.G. 126, N.A.

CHAPTER THIRTEEN

THE DIFFICULT YEARS OF THE EARLY 1930s

Alaska had changed substantially between 1905, when the War Department assumed the responsibilities for building and maintaining wagon roads, bridges, trails, and sled roads, among others, when the Department of the Interior took over these duties on July 1, 1932. The War Department turned over an 11,231 mile long transportation system, of which, however, only 1,627.5 miles consisted of roads. Still, it was a substantial achievement, considering the fact that in 1905 there had been less than a dozen miles of wagon roads in all of Alaska.

Transportation Systems

With the increase in road and railroad mileage, and the expanding air transportation system, steamboat travel on the Yukon River had continued to dwindle until in 1930 there was only one boat every two weeks plying between Nenana and Holy Cross, owned by the Alaska Railroad. A gasoline launch, operated by a commercial company, irregularly served points between the mouth of the river and Holy Cross. One steamboat came down from Dawson once every two weeks and traveled up the Tanana River to Nenana. Gas or steamboats supplied small communities located on the tributaries of the Yukon and Tanana Rivers usually only twice a year, in the spring and again in the fall. The price of these services was exorbitant.[1]

The Alaska Railroad

The Department of the Interior managed the Alaska Railroad which ran two trains weekly in the summer and one in the winter. The Copper River and Northwestern Railway had closed during the winter because the owners had shut down the Kennecott mine because of low copper prices. This had deprived the railroad of its chief income source, transporting the metal between Kennecott and Cordova. On the Seward Peninsula, the

Alaska Road Commission maintained the seventy-four mile long narrow gauge railroad from Nome to Shelton which the territory of Alaska previously had purchased from its owners. It was a railroad without headquarters, shops, roadhouses, stations, telegraph operators, or schedules. Those who traveled it owned their transportation, using the track whenever convenient. It was known as the "pupmobile" of the North, because dogs customarily pulled the light push cars which could be lifted from the rails when meeting someone from the opposite direction. Hawley Sterling, a long-time employee of the Alaska Road Commission, remarked that "any arguments upon meeting were usually between the 'locomotives' rather than the 'engineers'"[2]

Air Transportation

Just as horses had partially replaced dogs, now the airplane consigned both to obscurity for long distance travel. Airplane companies operated in Anchorage, Fairbanks, and Nome. Licensed bush pilots flew for hire, and fares between Fairbanks and Nome and Anchorage or Fairbanks and McGrath had been reduced to $200.00 and $100.00, respectively. The territorial legislature had financed the construction of scores of airfields, and "Outside" capital had become interested in commercial possibilities of Alaskan aviation, particularly a future route through Canada and Alaska to the Orient. In mid-summer 1934, Lieutenant Colonel Henry "Hap" Arnold led a flight of ten Martin B-10 twin-engined bombers to Alaska. Chief of the Army Air Corps, General Ben Foulois, had given Arnold the special assignment to follow the early air trails pioneered in 1920 when General Billy Mitchell had sent Captain St. Clair Streett in command of four biplanes from New York to Nome. This famous flight of the Black Wolf Squadron had demonstrated the feasibility of air transportation from the contiguous states to Alaska. Arnold's 1934 mission was far more sophisticated for his intention was to take aerial photographs for navigation charts and future airway routes, and to evaluate the feasibility of locating future defense bases in Alaska.[3]

Shrinking Funds

Congressional appropriations for the Alaska Road Commission shrank from a peak of $1,013,577.53 in 1926 to $448,777.90 in 1933, despite the fact that more road miles had to be maintained. Yet much had been accomplished despite the financial shortages. The Richardson Highway was gravel; surfaced for its entire length, and automobiles could travel comfortably from Valdez to Fairbanks in two days without danger of becoming stuck in mud in a poor section. Passengers could travel the distance for as little as fifty dollars.[4]

Upgrading Roads and Machinery

The Alaska Road Commission had completed the Steese Highway from Fairbanks to Circle City on the Yukon River, and graveled the surface over the worst sections, encouraging placer mining along its route. From the Alaska Railroad, passengers could drive sixty-five miles into Mount McKinley National Park, and the Commission had built or was in the process of constructing other branch roads from the railroad. Good, short roads adjacent to coastal towns in the National Forests already existed or were being built, and vast improvements in road machinery had contributed to the progress. Tractors had proven their versatility in northern operations, and not only had replaced horses in road construction, but displaced these animals for winter freighting as well. Scrapers, graders, maintainers, and trucks had steadily improved in performance and eliminated much of the heavy manual labor. Hawley Sterling remembered that the father of the Alaska road system, General Wilds P. Richardson, or the "much beloved Colonel Dick to his friends," had last visited Alaska in 1925. He had died four years later. To his memory, a plaque in granite stood in Isabelle Pass along the road named in his honor. "No conscientious road man ever passes this monument," "Sterling recounted, "without stopping for a brief ceremony of good cheer in Colonel Dick style."[5]

Operations in 1933

In its 1933 annual report, the Commission stated that "the general scheme of operations is practically the same as under the War Department," except that the military officers had all departed. As before, the Juneau headquarters, staffed by a chief and assistant chief engineers and the required clerical assistants, was located in the Federal and Territorial Building. The disbursing officer for the Department of the Interior at Juneau handled Commission finances. The Commission used Alaskan products in its work whenever price and quality compared favorably with the cost of the same items delivered to warehouses in the Territory. A governmental agency in Seattle, acting also for various other federal bureaus operating in Alaska, bought all supplies not obtainable locally. The individual bureaus shared the cost of this service on a pro rata basis. The Commission's share consisted of four percent of the invoice price of items purchased.[6]

Alaska Road Commission Employees

The Alaska Road Commission hired both common and skilled labor in the Territory. Decreased appropriations because of the Depression had resulted in shorter work periods for even the most senior employees, and others the Commission had not been able to hire at all that season. The Commission noted "the exceptional loyalty to the organization which is manifested generally even by the lowest paid laborers." The Commission explained that this was probably because "as a whole Alaska labor is probably superior to that found elsewhere." What the Commission did not mention was that seasonal employment suited the Alaskan lifestyles of its employees, many of whom utilized the off-season for hunting and trapping, or traveled outside to spend the winters in warmer climates.[7]

Districts and Subdistricts

The Alaska Road Commission in 1933 maintained five districts and two

district suboffices, located at Valdez, Anchorage, Nome, Chitina, and Fairbanks, and Eagle and Takotna. The Commission closed the two district suboffices during the winter months. In fact, during the winter of 1932-33, the Commission had decided to discontinue the Kuskokwim district suboffice located at Takotna. Increased air travel, which caused a marked decrease in the use of winter trails, made this move necessary. It saved $2,500, and the Anchorage district office now handled the summer season operations. The Juneau headquarters office now supervised projects in the vicinity of Bethel which formerly had belonged to the Kuskokwim suboffice at Takotna.[8]

Multiple Responsibilities

As before, the Commission handled or supervised construction projects for other federal bureaus and the territorial government. This work consolidation had saved considerable tax dollars over the years, particularly on small projects in isolated sections of Alaska. This was especially true of small territorial road projects which were not included in the Commission's general road program.[9]

Difficult Construction Problems

Alaskan construction posed special problems because of the Territory's peculiar physical and climatic conditions. Permafrost and thawing during the summers required that special precautions be taken for proper drainage. It was frequently necessary to build intercepting ditches on the uphill side of a road to drain off the water. After vegetation had been stripped from the projected roadway, it was necessary to allow the ground to thaw, settle, and consolidate for several months before the grading could be completed and the surface finished. Often, it required several weeks to permit thawing, settling and drainage to occur. In order to keep the road open for traffic during this period it was necessary to corduroy the stretch in question. Once exposed, the subsurface ice continued to thaw, often

causing banks to slough which resulted in mud slides covering and blocking roads.[10]

Alaska's climate called for special revetment and stream control methods to withstand the destructive effects of sudden floods and washouts caused by the rapid runoff from melting snow, heavy rains in the mountains, or the release of impounded waters by breaks in glaciers. The Commission had found that the most suitable type of revetment for this purpose consisted of brush bundles wrapped in wire and weighted down with stones to prevent its washing away. Raging streams and rivers needed to be controlled at times, but most often they had to be crossed. The Commission built bridges of native fir or imported timber or steel, depending on their importance, and was in the processing of replacing culverts made of native lumber with metal culverts which did not rot.[11]

Accomplishments

The small appropriation forced the Alaska Road Commission to confine its work largely to maintenance and improvement of the chief existing routes. The Commission accomplished the following work during the fiscal year 1933:

> New construction of 21.5 miles of road, 59.5 miles of sled road, replacement of 340 linear feet of bridges of 60-foot span or over, and 1,732 linear feet of trestle span. It reconstructed 30.6 miles of road; surfaced 54.14 miles of road with 72,387 cubic yards of gravel; and built 319 linear feet of retaining walls, and replaced numerous culverts. The Commission maintained 1,552 miles of road, 74 miles of tramway, 707 miles of sled road, 4,687 miles of permanent trail and 329 miles of temporary flagged trail.[12]

John E. Ballaine and The Anchorage - Matanuska Road

It had been a poor year for the Alaska Road Commission, but prospects

for the future looked brighter as President Franklin D. Roosevelt's various New Deal agencies became operational. There were hopes that the Public Works Administration, provided for in the National Industrial Recovery Act, might allocate substantial monies for Alaskan road work in 1934. In the fall of 1933, Anchorage residents, as they had done for a number of years, once again pleaded that the Commission construct the Anchorage-Matanuska Road. On a previous occasion the Commission had turned the project down because it paralleled the Alaska Railroad and the money could better be used elsewhere. The proposed road also had its critics, and one of these was John E. Ballaine, a northern railroad promoter, businessman, and former general manager of the dejunct Alaska Central Railroad. Ballaine objected to the project because the road would parallel the Alaska Railroad all the way to Matanuska and compete with it for freight, and, unlike claimed, not open "as much as an acre of agricultural land anywhere north of Eagle River. Furthermore, the argument that the road would provide miners with access to Anchorage simply was not true. There was "not a single miner, not a single mine, not a single prospect or indication [of any minerals] anywhere between Anchorage and Matanuska, 35 miles in the valley or in the adjacent mountains...." it was unnecessary to build the road because the Alaska Railroad already connected Anchorage with the road system in the Matanuska - Wasilla region. Furthermore, farmers already within three miles of Anchorage, and with vacant agricultural lands in a radius of eight miles of the city would be able to supply a settlement of one-hundred times its present population with agricultural products. Finally, Ballaine addressed the fact that Anchorage citizens for nine years had urged the construction of the proposed road and in 1933 alone had expended about $4,000 by voluntary subscriptions, the Alaska Railroad had given its blessings once, and the Territorial Legislature had approved the proposal twice. That still was no reason to waste precious monies on the project, because "the identical reasons can be presented in favor of auto road building in thirty or more other localities in Alaska, not one of which has roads connecting either with the railroad or with navigable waters." Ballaine suggested that if funds were available they should be spent in providing access to

"an extensive shelf [of land] between Cook Inlet and the Kenai Mountains, an area 30 miles wide by 110 miles long, having rich soil over most of it...." This area, he claimed, was the potentially richest part of Alaska with birch and poplar forests, and thousands of acres of "luxuriant blue stem and red top grasses." The region about 2.2 million acres was washed by the "Japan current and yet being sheltered from the ocean by a projecting spur of mountains." With a benign climate, Ballaine suggested that it could comfortably support about 500,000 "hardy Americans" pursuing general agriculture, fruit growing, gardening, dairying, fishing, mining, and lumbering.[13]

Ballaine still had another proposal up his sleeve. He proposed that the Commission build a road between the end of the Chickaloon branch of the Alaska Railroad and the Richardson Highway at Gulkana, traversing a mineralized zone for forty miles out of Chickaloon. This would open rich country and allow the Commission to abandon some 250 miles of the Richardson Highway which wound "through barren country where no population or industries ever will be...." Such a scheme he claimed, "would abolish for all time the present destructive competition by the Richardson Highway against the railroad, and would benefit Anchorage and all the rest of the railroad belt incomparably more" than the proposed auto road to Matanuska.[14]

Governor Troy Refutes Ballaine

Alaska's Governor John W. Troy refuted Ballaine's criticisms, pointing out that the proposed road paralleled the railroad for only twenty-three miles out of Anchorage and then swung away and went through much good farmland between the Knik River and Palmer. Near Palmer, it connected with the 118 miles long Wasilla - Matanuska - Palmer road system, half of which was surfaced with gravel. The whole system was passable by automobiles during the summer. Unfortunately, the railroad operated only one weekly freight schedule throughout the year. This permitted only weekly delivery of farm products to the Anchorage market. Troy thought that the construction of the road would stimulate the approximately fifty homesteaders in the area to produce larger crops for

the city market. It was true, of course, that there were numerous projects throughout Alaska which had been endorsed by the citizens in their vicinities, but the argument in favor of the Anchorage - Matanuska project was that it served one of the larger population centers in the Territory.[15]

With the receipt of Public Works Administration monies, the Commission took over the Anchorage - Eklutna Road which Anchorage had started and partially graded. In the late fall and winter of 1933, the Commission graded 12 miles of this road, constructed bridges over Eagle River and Peters Creek, and put in a 300 foot steel bridge with a 120 foot approach over the Matanuska River at Palmer.[16]

Plans for a Juneau Douglas Bridge

The availability of Public Works Administration funds prompted Governor Troy to apply to the Corps of Engineers for permission to build a highway bridge across Gastineau Channel, connecting the cities of Juneau and Douglas on Douglas Island. Lieutenant Jon R. Noyes of the Corps held a public hearing on the application on November 8, 1933, where he explained that the Corps had to consider applications of that kind under the provisions of the Rivers and Harbor Act of 1899. The Governor asked for permission to build a bridge, composed of a fixed high level span 400 feet long across the channel at its narrowest point, and pile approaches on both sides for a total length of about 1300 feet, and rock fills on both ends connecting with the existing street system in Juneau and with the road extending northward from Douglas. The bridge was to be about 380 feet wide with a clearance of 50 feet above mean sea level which was about 38 feet above the highest recorded tide. Previously the War Department had issued permits for overhead cables across the channel to the electric company of Juneau and the Alaska - Juneau Gold Mining Company. Both permits, which had been in effect for about twenty years, crossed the navigable part of the waterway at an elevation of fifty feet or slightly greater. The clearances required of those two cables was above mean high water which was somewhat higher than that

requested for the bridge.[17]

Nobody at the hearing objected outright to the proposed bridge. Tom Gardner, for example, represented a lumber company which used the basin above the bridge site for storing log booms. His company had never experienced any difficulties in going to that part of Gastinear Channel above the bridge site at any stage of the tide passing under the existing wires and transmission lines. B. Frank Heintzleman, a forester employed by the Department of Agriculture, cautiously suggested that "it would be a big mistake to close the channel above the bridge to any future industrial development." Perhaps some investors "might want to start something up there which would require more clearance for vessels than these bridges you contemplate." Heintzleman proposed the construction of a draw bridge which would eliminate the problem. Then it would be possible to lower the bridge down to eight feet above the highest high water.[18]

None of the twenty-two witnesses who testified objected to the original bridge plans, and there was no real support for Heintzleman's draw bridge idea. It was not long before the Corps of Engineers issued the permit for the construction of the Juneau-Douglas Bridge, the Commission signed the necessary contracts, and the foundation work on the project began on April 23, 1934.[19]

The Governor's Construction Proposals

In late November 1933, Governor Troy had assembled a long wish list of roads, airfields, and other related projects to be built with funds to be appropriated by the Public Works Administration. It was an expensive request, consisting of twenty-five projects with a combined price tag of $6,552,000. Unfortunately, however, Public Works Administration funding fell far short of requirements, only partially funding fourteen projects to the tune of approximately $964,000.[20]

Early in 1935 the Bureau of Public Roads in the Department of Agriculture evaluated the governor's proposed projects. As previously mentioned, the BPR had taken over construction of roads and trails in

Alaska's National Forests in 1922, a task performed by the Alaska Road Commission up to that time. The two organizations had developed quite different and distinct philosophies governing their construction activities in Alaska. The BPR noted, rather disdainfully, that Commission projects largely consisted of "surface construction more or less in the nature of expediency," in short, of very low standards, This resulted in subsequent heavy repair and maintenance expenses. "Such roads," a Bureau of Public Roads spokesman pointed out, could "be handled quickly by day labor or force account methods" and naturally did not involve "extensive long range careful planning."[21]

The work done by the Bureau of Public Roads contrasted sharply with that performed by the Commission. The BPR had constructed about 304 miles of roads in the Chugach and Tongass National Forests at a cost of $6,278,273. Many of the Forest highways were situated near population centers, particularly Juneau, Ketchikan, Seward, and Skagway, and smaller settlements such as Wrangell, Petersburg, Sitka, Katalla, and Cordova. Nearly all of these roads were usable throughout the year. The work of the Bureau of Public Roads had been performed with careful surveys, with plans, designs, and construction intended for continued service over a long time period. After many years of Alaskan experience, the BPR was convinced that "such relatively permanent construction on rather narrow surfaced widths but with good grade, alignment and structures has been good policy." Naturally, work had been slow but steady, and in some instances portions of the highways needed to be improved to higher standards of widths and surface thickness. The BPR spokesman asserted that short season roads, such as mining service roads, "ought similarly to be always in usable condition."[22] A noble ideal, but unattainable for the Alaska Road Commission which had to build and maintain roads, bridges, trails, tramways and airfields in all areas of Alaska outside of the Chugach and Tongass National Forests which covered approximately twenty million acres. Alaska contains about 365 million acres. Deducting the 20 million acres of National Forests left the Board with responsibilities over an area of 345 million acres. From 1905 to 1935, the Board had spent a total of $22,107,953 from all sources and built 1,653 miles

of roads, 74 miles of tramway, 549 miles of sled road, 4005.5 miles of permanent trail, and 304 miles of temporary flagged trail. In 1935, the Board had added 121 miles of road, 8 miles of sled road, 6 miles of tramroad, 126 miles of trail, 848 linear feet of timber bridges over 38 foot span, 1,120 linear feet of steel bridges of 300 foot span or over 1,836 linear feet of timber trestle span bridges, 432 linear feet of concrete girder span, and 2 airfields.[23] Alaska Road Commission Construction standards might not have been as high as those of the BPR, but at least the Commission had succeeded in providing Alaska with a rudimentary transportation system of approximately 7,000 miles. That had been an extraordinary achievement, considering the Territory's difficult geography and climate and the Commission's meager financial resources.

In the summer of 1936, Delegate Dimond appealed to the House of Representatives to approve a ten-year road construction program for Alaska at a total cost of $20 million, or $2 million per year. Such a program, consistently carried out, would give Alaska "a really efficient and useful system of roads and one that would be bound to stimulate speedily the settlement and the economic development of the Territory." Unfortunately, Alaska in 1936 possessed only approximately 2,400 miles of motor roads, 1,500 miles of sledroads, and 7,000 miles of trails. Dimond explained to his colleagues that Alaskan trails were "pack paths through the forests and over the tundra, and not capable of being traversed by vehicles of any description." Only 2,400 miles of motor roads in a region of 586,000 square miles was not much, he complained. Indeed, "the State of Delaware, with a proportionate road mileage, would have just about 10 miles of highway in the entire State." Dimond observed that "even Delaware would feel rather cramped with only that much in the way of roads."[24]

Dimond told his fellow lawmakers that the $20 million requested for the ten-year period included not only construction but also maintenance costs from year to year. It did not include the substantial Territorial contributions for Alaskan roads. In fact, except for roads built in the National Forests and in Mount McKinley National Park, Alaska's citizens had paid approximately 32.3 percent of the entire cost

of construction and maintenance of all Alaska roads through 1935.[25]

Dimond continued that even at the end of the ten-year period when the $20 million had been expended, the Territory still would not have all the roads it needed. Dimond predicted that such a construction program would stimulate the "economic exploitation" of Alaska. There was no need to look beyond the ten-year period at present to determine what might be required for the future. "Eventually," he stated, "I hope to see a highway over which one can drive from New York City to Bering Sea without a break." All that lay in the future, however, and "for the present we must be more modest," and plan as presented "for immediate road development in Alaska has nothing in it of the unreasonable or extravagant."[26]

Dimond concluded by listing 24 small local roads which cost an estimated $343,000 to build. All 24 were badly needed, and all only served local requirements. The list follows:[27]

Name of project:	Amount
Valdez-Mineral Creek	$20,000
Kanctak-Becharof Lake	10,000
Campbell Creek Road	4,000
Lake Otis Road	3,000
Faith Creek Road	6,000
Porcupine Creek Road	12,000
Cleary-Summit-Chatham Creek	6,000
Happy-Goldstream Road	15,000
Farmers-Birch Hill Road	14,000
Bettles-Coldfoot	20,000
Bessie-Snake River Road	20,000
Marvel Creek Trail	5,000
Vault Creek Road (3 miles)	3,000
Mason Creek Road (5 miles)	5,000
Grant Creek Road (4 miles)	4,000
Nenana-Mission Road	4,000
Cripple-Cripple Mountain	20,000

Homer Road Extension	38,000
Marshall Road	6,000
Candle Creek Road Extension	12,000
Marsh Branch, Anchorage	6,000
Pt. Gustavus Road	15,000
Teller-Bluestone	20,000
Seldovia-McDonald Spit	75,000
Total	$343,000

Dimond followed the list of small projects with a more substantial one which, in his estimation, needed to be constructed without delay. He gave the location of the road and an estimate of the funds needed to complete each project. The list follows:[28]

Olnes-Livengood

Estimated to complete..... $215,000

This road is necessary, indeed absolutely necessary, for the development of the extremely promising Livengood mining region. The work was commenced with Public Works funds; $295,000 of such funds having been spent thereon. It is estimated that $215,000 is necessary to complete the work. This project is surely entitled to a high degree of priority and should be undertaken without delay. The road can be completed economically in 18 months from the date the work begins.

Shelton-Dahl

Estimated to complete..... $35,000

This project was estimated to cost in the beginning $170,000, and an allotment from Public Works funds of $135,000 was obtained and spent. The project provides for the construction of 6 miles of tram as an extension of the Nome-Shelton tram, a ferry over the Kuzitrin River, and the construction of 10 miles of tractor road east of the river. Completion of this road will provide easier access to a known productive placer field, reducing the present freight rate thus enabling operators to work lower-grade gravels and thus, in turn, provide employment for a very considerable number of persons in an industry where competition does not exist.

Kantishna-Park Boundary

Estimated to complete..... $50,000

This project calls for the construction of 6 miles of road, and when completed it will connect with the road which traverses Mount McKinley National Park. The completion of this road will unquestionably stimulate the Kantishna mining district, which is one of great promise. The Kantishna district is the only district in Alaska which holds excellent prospects of being developed for its silver ore. The road would be an important feeder to the Alaska Railroad, a point worthy of consideration. The road can be completed within 5 months after construction begins.

Talkeetna-Cache Creek

Estimated to complete..... $150,000

The district supplied by this road affords employment in the placer fields for 100 men during the summer months. The present poor road has been in existence for 14 years as a passable wagon road. It is planned to improve it to a truck-road standard and to extend it to existing placer operations, enabling operators to materially reduce freight costs, thus again permitting the working of lower-grade gravels and an increase in employment and additional tonnage for the Alaska Railroad. The plans call for construction of the road in a period of 15 months after commencement of work thereon.

Cantwell-Valdez Creek

Estimated to complete..... $345,000

This road will connect the very important mining district of Valdez Creek with the Alaska Railroad. The building of the road is certain to furnish additional traffic to the Alaska Railroad, and thus make the railroad what it was designed to be, a large factor in the development of the country through which it passes. Some money, approximately $25,000, from Public Works funds has been expended on the project for bridge construction. The road is of distinct merit. An estimate has been made that 30 months will be required for construction, embracing three summer working seasons.

Hot Springs Road System

Estimated to complete..... $80,000

An allotment of $10,000 from P. W. A. funds has been expended

on this project for preliminary construction of a tractor road. Recent developments in placer mining in the area indicate the necessity for a truck rod, and the estimate has been increased accordingly. The road will serve a producing placer camp which has been handicapped due to lack of adequate transportation. If the work is started on June 1, it may be completed within 16 months.

Willow Creek System

Estimate to complete..... $80,000

The Willow Creek system supplies an outstanding mineral region of Alaska with the necessary roads, but the system is far from being complete. The additional amount estimated, $80,000, allows for the improvement and graveling of the Willow Creek-Lucky Shot Road and for the construction of the proposed 2-mile Willow Creek Spur Road, which will serve new lode properties now having no road. This road system also is a feeder to the Alaska Railroad. Work can be completed in one working season.

Takotna-Nixon Fork

Estimate to complete..... $150,000

The town of Takotna is situated 65 miles up the Takotna River from the Kuskokwim River. It supplies the entire mining community in the vicinity of Takotna and Ophir and is the terminus of a road leading to Ophir and the Yukon watershed. The Takotna River on its upper reaches is a very unreliable means of transportation due to swift water and bars. In dry seasons it is impossible to get freight by river to Takotna, and in several instances spring freight has had to lay at McGrath until November and then has been hauled on the snow. The first 20 miles of the Takotna River--from McGrath to the mouth of the Nixon Fork--is always navigable. It is proposed to build a road 15 miles long from Takotna to this point, doing away with 45 miles of very uncertain river travel and making this community accessible at all times in summer. The work can be completed within two working seasons of 5 months each.

Poorman-Ruby

Estimated to complete..... $200,000

The construction of a passable wagon road 56 miles between these two points was recently completed, reducing the freight rate from 12 to 6 cents a pound. It is proposed to improve and gravel

this road, which will further reduce the freight rate to not more than 2 cents a pound. This will allow lower grade ground to be worked and stimulate gold production in this vicinity, leading again to material increase in employment in working the low-grade placer grounds which will be made available for operation by the road. Work can be completed in two working seasons of 5 months each.

McCarthy Road System

Estimated to complete..... $84,000

This road system is connected with the Copper River & Northwestern Railroad near its terminus at the Kennecott mine--the point of departure of the railroad being at the town of McCarthy. These roads serve operating placer mines which have been worked for years, and lead to numerous promising gold-lode prospects. A large part of the expenditure in this region has been made in building and maintaining a bridge across the Nizina River. This bridge is absolutely necessary. In former years it was crossed by fording or swimming, and many lives were lost. No large-scale operations can be carried on under such circumstances. The work may be completed in two working seasons. This system embraces much-needed construction to supply road facilities for the important Bremner mining district.

Iliamna Bay-Iliamna Lake

Estimated to complete..... $30,000

This is a part of a transport route to connect Bristol Bay with the Gulf of Alaska through Cook Inlet. The use of this route saves approximately 2,000 miles of travel by sea around the end of the Alaska Peninsula. The construction of this road, coupled as it is with travel by boat on Iliamna Lake and on the Kvichak River into Bristol Bay, gives facilities for a great saving in transportation costs. The route is already extensively used. The work may be completed in one working season.

Newhalon-Lake Clark

Estimated to complete..... $40,000

This project will require the construction of 7 miles of road providing a portage from Lake Iliamna to Lake Clark. There is a large native settlement on Lake Clark; at the present all supplies for the Lake Clark area are packed across this portage on men's

backs. Work can be completed within 6 months.

Gulkana-Nabesna

Estimated to complete..... $245,000

Estimated cost $450,000; allotted from Public Works funds, $205,000; balance unallotted, $2455,000. The balance required will complete this road to one of the most promising hardrock sections in Alaska. One mine is now milling $1,000 per day. According to the Geological Survey, there are many possibilities of additional deposits being found. With the completion of the road, the district will see an influx of prospectors who will undoubtedly prove the prediction of the geologists. Work can be completed within 18 months from commencement, provided it is started at the beginning of a working season.

Goodnews Bay-Platinum Creek

Estimated to complete..... $35,000

This project provides for the construction of 9 miles of road connecting placer platinum mines with ocean boats at Goodnews Bay. One of the larger mining companies has tentatively agreed to provide the balance of the funds required above this estimate for completion. Work can be completed within 6 months.

Chistochena-Slate Creek

Estimated to complete..... $40,000

This provides for the improvement of an existing trail, 40 miles in length, to provide for freighting by tractors to serve a producing placer-mining area. Work can be completed within 6 months.

Colorado Station-Wells Mine

Estimated to complete..... $75,000

This projct provides for the construction of 10 miles of road from the Alaska Railroad to a lode mine now being developed on a very considerable scale. The road is an absolute necessity for the mineral development. The working of the lode property in question, now apparently amply financed, will give employment ultimately to several hundred men and will not throw anybody out

of employment. The road is eminently justified from an economic standpoint. It has been estimated that by commencing work on the project at the beginning of the season the work can be completed within 18 months.

Kenai Lake-Kenai-Homer

Estimated to complete..... $1,100,000

This is one of the most important road projects in all of Alaska. A road has heretofore been built from Seward to the east end of Kenai Lake and from Moose Pass, which is approximately 12 miles from the east end of Kenai Lake to Sunrise and Hope on Turnagain Arm. A branch of this road has been constructed--the construction is not completed--to the west end of Kenai Lake. From the west end of Kenai Lake the plan is to build the road to the town of Kenai on Cook Inlet and thence south to a small settlement called Homer, on Kachamak Bay. This would open up and make available for settlement some of the best agricultural land in Alaska. It should be noted here that the so-called "missing link" between the east end of Kenai Lake and Moose Pass is now under construction. With the completion of the "missing link" and the building of the Kenai Lake-Kenai-Homer Road all of that very large region will be rendered accessible to settlers, and, more important, the settlers will have access to the market which will be afforded through Seward and through other towns along the Alaska Railroad. It is to be noted here that Seward is situated on the shores of Resurrection Bay and is the southerly terminus of the Alaska Railroad and is the northerly terminus of the main steamship line which serves Alaska. Out of Seward runs another steamship along the shores of the Alaska Peninsula and into Bristol Bay, as well as smaller motor vessels to other parts of the general region. The Kenai Peninsula district has probably attracted more attention as a farming region in recent years than almost any other part of Alaska, except the Matanuska Valley in which the Government has recently aided in establishing a number of farm families. The climate of Kenai Peninsula is comparatively mild, the soil is deep and fertile, and the rainfall sufficient without being excessive. It is reported that 58 families moved into this region last year immediately north of Homer. At the present time, however, the country is not accessible because, except for a very short distance out of Homer, no roads exist. A farmer away from a road on the Kenai Peninsula is so effectively isolated that the settlement of the country cannot proceed until the road is built.

Moreover, the adjoining waters of Cook Inlet and Kachemak Bay contain plentiful supplies of salmon and herring. The packing season for both species of fish is so short that the settlement of farmers in the region would aid greatly to a balanced economic life.

The construction of this road is absolutely necessary for the development of the district to be served, and the district in question is one which, according to all present indications, would be rapidly settled and would maintain in comfort a considerable population if the road were built. The chamber of commerce of the village of Seldovia, situated on the south shore of Kachemak Bay, has received hundreds of letters from prospective settlers inquiring about conditions in the region, and more than 1,300 people already residing in the district who would be directly or indirectly benefited by the road have joined in a petition for its construction.

The period of construction of this road would probably cover three working seasons in order to do the work economically and without the establishment of an unduly large working force.

Fairbanks-Chena Hot Springs System

Estimated to complete..... $530,000

This route is now supplied by winter train and is entirely inaccessible in summer except for airplanes. Agitation for a summer road has been going on for 16 years. The construction of such a road would provide access to a known health resort and to producing placer fields, thus providing increased employment. If work is commenced at the beginning of any season it may be completed economically in three seasons or within a total period of 30 months. No complete engineering data is available, and therefore no reliable estimate of the ultimate cost can be given.

While the Fairbanks Chena Hot Springs system is stated separately and the Livengood road is considered, and properly so, as an individual project, in reality the Fairbanks-Chena Hot Springs-Livengood system should all be included in one set-up of roads for that region. It is realized, of course, that not all of it can be put into construction at once, so particular emphasis has been placed, first, upon the completion of the Livengood road, and, second, the Fairbanks-Chena Hot Springs project. But utlimately Rampart should be connected with the others, and when that is done the larger part of the road-building program for that particular region will be well taken care of.

Nenana-Bonnifield Country

The Bonnifield country has definite possibilities for both placer and lode development. The Alaska road system should be extended into that district. Such a road, like many others des-

cribed, is bound to lead to largely increased mining operations and thus to increased employment.

Snag Point-Lake Aleknagik

Estimated to complete..... $125,000

This proposed road would connect Snag Point on Bristol Bay with Lake Aleknagik, out of which Hood River flows, thus more adequately opening to development a mining and fishing region. Recently a road was built between Snag Point and Kanakanak which would be extended on to Lake Aleknagik by the proposed construction. The population of the region is increasing, and by reason of the wealth of its fisheries and prospects inland for mineral development there is ample justification for construction of the road desired.

Naknek-Egegik

Estimated to complete..... $200,000

Naknek and Egegik are settlements on the shores of Bristol Bay. Large salmon-packing operations are carried on at each place. Traveling in the summertime is confined to small boats, either those using sails or powerboats. No shelter is available for 40 miles. In this connection it is worthy of note that commercial fishing in Bristol Bay is confined to sailboats, and no powerboats are permitted to be used. A reindeer company owns a herd of approximately 5,000 reindeer stationed at Naknek. The surplus deer of this herd could be quite extensively used by the people employed in the salmon-packing operations, but under present conditions no market can be obtained by reason of lack of transportation. If the road were built, the reindeer owners would be able to sell their meat to the canneries. A road through this part of the country would be easy to build, since it is mostly flat country, containing some graveled hills, with no heavy rock-work to be done and no large streams to be crossed. Many sturdy pioneers already make their homes in that region. Their comfort and material welfare would be greatly enhanced and the population of the district enlarged by the building of the proposed road.

Georgetown-Flat (50 miles)

Estimated to complete..... $500,000

The construction of this road would effect a saving of 2 cents per pound on all freight going into the Flat district, (annual

gold production over $400,000) and make it possible for lower-grade placers to be worked. More than 1,000 tons of freight were required last year. It would also provide much cheaper transportation for placer workings on the immediate route and make accessible promising quicksilver prospects. It would allow the Flat district to receive freight from 2 to 4 weeks earlier in the spring, and 2 to 4 weeks later in the fall. Its construction would solve the problem now being agitated of changing the course of the Iditarod River to permit small boats to reach Iditarod City. At present they are obliged to discharge their cargo on the banks three-fourths of a mile from the warehouses except at high-water stages. If work is commenced about June 1 of any year it can be completed in three working seasons, or within a period of 30 months.

Nome-Council

Estimated to complete..... $200,000

The Nome-Council road is a road commencing at Nome extending back to the foothills and then taking an easterly direction crossing the Flambeau, Eldorado, and Bonanza Rivers to Solomon River, and thence on to Council on the Niukluk River, a total distance of about 75 miles. Out of Nome a road now exists about 43 miles and the balance of the route is supplied after a fashion, by a sled road. The motor road should be completed to Council in order to furnish adequate transportation for that entire region. All of the rivers crossed have been and still are producing placer gold and some of them, like Solomon River and Ophir Creek, have produced many millions. With respect to many of them, on account of the existing high cost of operation due in part to high cost of transportation, only the highgrade ground was worked. Here again is a field for operating low-grade ground and thus furnishing employment to many people.

Nome-Teller

Estimated to complete..... $360,000

Teller is quite an important settlement on Port Clarence--the harbor is measurably protected. The distance between Teller and Nome is approximately 80 miles. A road would be of very much benefit to all of the people of that region. At the present time a road has been built out of Nome going by way of Little Creek and turning westward across Snake River to the Third Beach line of Sunset Creek, a distance of 12 miles, which is the end of the road at present. The road should be extended westward across Penny, Cripple, and Sinrock Rivers to the Bluestone and Gold Run Creeks, and thence on to Teller. All of the creeks mentioned have been

producing gold for more than a quarter of a century but only the richest spots could be mined under the conditions that have existed in regard to roads.

Copper Center-Chickaloon-Palmer

The Richardson Highway, extending from Valdez on the southerly seaboard of Alaska to Fairbanks in the interior, passes through the settlement of Copper Center, about 103 miles north of Valdez. The Anchorage-Matanuska Valley region is supplied by a local road system recently materially enlarged and expanded. No connection exists, however, between the Matanuska Valley-Anchorage region and the main highway system of Alaska, of which the Richardson-Steese Highway is the principal part. Eventually a road should be built from Copper Center by way of Tazlina River over the summit, which is not high, down the Chickaloon, and thence on to Palmer, there to connect with the Anchorage-Matanuska roads. (No estimate is given of the cost because engineering data are not available).

Cordova-Thompson Pass

Cordova is a substantial city on the southern seaboard of the main body of Alaska. It is the seaboard terminus of the Copper River & Northwestern Railway. Eighty miles to the north lies the city of Valdez, which is the seaboard terminus of the Richardson Highay. In order to give the Cordova region access by highway to the interior of Alaska a road, if geographically feasible, should connect Cordova with the Richardson Highway, and that connection can probably be made at or near Thompson Pass, about 26 miles northerly from Valdez. At the present time no sufficient survey of such a connection has been made to determine whether the building of such a road is practicable, but many who are acquainted with the country through which the road will pass say that it is. Therefore it is included in this list of road projects for Alaska.

Beaver-Caro-Little Squaw

Estimated to complete..... $290,000

Total estimated cost $300,000, of which $10,000 has already been allotted from Public Works funds. A winter sled road now serves placer operators and quartz prospects in this district. Recent developments indicate that prominent mining concerns have done sufficient work on one of the lode prospects to warrant a continuation of expenditure probably leading to actual mining. This will necessitate summer traffic to this district. It is proposed to con-

struct a summer tractor road for this purpose at a cost of $300,000. The total distance is 120 miles. If work is commenced at the beginning of any season it may be completed economically within three seasons.

McCarty-Canadian Boundary

Estimated to complete..... $2,250,000

This proposed road is part of the so-called International Highway through British Columbia and Yukon Territory, Canada, into Alaska to connect with the present Richardson Highway in Alaska at McCarty. The road is described in the Report of the Commission to Study the Proposed Highway to Alaska. This project is of the greatest importance to Alaska as a whole, and if constructed under a general agreement with Canada to construct the portion of the route through that country necessary to reach the United States, it should be given very early priority. It seems likely that not less than four summer seasons will be required to complete the Alaskan sections requiring 182 miles of new construction accessible now at only two points. It seems also probable that the same length of time will be necessary for the construction of the proposed highway which lies in British Columbia and in Yukon Territory.

The construction of the McCarty-Canadian boundary road in, of, and by itself is amply justified and construction should be undertaken immediately even though the remainder of the International Highway is not built at the present time, for the reason that the building of this road, which lies entirely in Alaska, will make accessible for development enormous areas of placer-mining ground, some of which has been worked for years, and will make available for exploitation and development large areas of what is generally referred to as low-grade ground, thus very largely extending placer operations and leading to greatly increased employment. One feature of road building in Alaska is that the construction of most of the roads under consideration will not only give employment during the construction period but the building will make available for development large areas of mining country as well as agricultural lands, and in the mining country alone it is estimated that the building of the roads will give employment to at least 2,000 additional men for many years to come. Hence the benefits of the building of the roads here recommended are of very large scope and extend indefinitely in the future. In this connection it should be noted that, according to a report of the Department of Agriculture, the building of this road will make available and accessible for settlement approximately 750,000 acres of the best agricultural land in Alaska located in the Forty-mile country. The building of this road would give direct road connection with the

very important city of Dawson in Yukon Territory, Canada, since an existent low-grade road extends westerly from Dawson to a point very close to the boundary between Yukon Territory and Alaska.

In addition to its local benefits, as above indicated, the McCarty-Canadian boundary road is an integral part of the proposed British Columbia-Yukon-Alaska Highway.

Congress did not appropriate the needed funds. While some of the projects eventually were built, others never emerged from the planning stage. Indeed, not until 1948 did Congress approve an accelerated road construction program - and that step was made necessary by the Cold War.

FOOTNOTES

1. Hawley Sterling, Transportation in Alaska, pp. 18-19, 1945. Manuscript in the possession of Ben Stewart, Fairbanks, Alaska.

2. Ibid., p. 19.

3. Stephen E. Mills and James W. Phillips, Sourdough Sky: A pictorial history of flights and flyers in the bush country (New York: Bonanza Books, MCMLX), pp. 111-112.

4. Alaska Road Commission, Annual Report, 1935, p. 4.

5. Hawley Sterling, "Transportation in Alaska," pp. 19-21, Manuscript in the possession of Ben Stewart, Fairbanks, Alaska.

6. Alaska Road Commission, Annual Report, 1933, p. 6.

7. Ibid.

8. Ibid., p. 8.

9. Ibid.

10. Ibid.

11. Ibid., p. 9.

12. Ibid.

13. Ballaine to Ickes, September 16, 1933, R. G. 30, Alaska Road Commission, Box 65481, Federal Records Center, Seattle, Washington.

14. Ibid.

15. Troy to Ickes, October 2, 1933, R. G. 30, Alaska Road Commission, Box 65481, Federal Records Center, Seattle, Washington.

16. Alaska Road Commission, Annual Report, 1934, p. 10.

17. Minutes of hearing on application of the governor of Alaska for a permit to construct a bridge across Gastineau Channel, November 8, 1933, R.G. 30, Alaska Road Commission, Box 65482, Federal Records Center, Seattle, Washington.

18. Ibid.

19. John W. Troy, "Alaska Road, Air Field and Other Related Projects Recommended to Honorable Harold L. Ickes, Secretary of the Interior for Construction under the Public Works Section of the National Industrial Recovery Act," November 27, 1933, Troy to Ickes, March 13, 1934, R.G. 126,, Central Classified Files: 9-1-55; N.A., Alaska Road Commission, Annual Report, 1934, p. 43; Annual Report, 1933, p. 2.

20. John W. Troy, "Alaska Road, Air Field...."

21. Chief of Bureau, Bureau of Public Roads to Secretary of the Interior Ickes, April 22, 1935, R.G. 126, Central Classified Files, 9-1-55, N.A.

22. Ibid.

23. Alaska Road Commission, Annual Report, 1934, p. 1.

24. Exerpt, Cong. Record, 74C, 2S., "Roads for Alaska," Remarks of Hon. Anthony J. Dimond, June 16, 1936, Anthony J. Dimond Papers, Box 32, file Roads, folder A, University of Alaska Archives, Fairbanks, Alaska.

25. Ibid.

26. Ibid.

27. Ibid.

28. Ibid.

CHAPTER FOURTEEN

THE LATTER YEARS OF THE LEAN 1930s

Year after year it was the same story - endless requests for roads from all sections of Alaska, but too little money to meet these needs. For example, there were the mining operations in the Cache Creek Mining District near Talkeetna. Merle H. Guise, the vice-president and consulting engineer for the Peters Creek Mining Company, Inc., one of the operations in the area, appealed to the Commission to improve the Peters Creek Road and airfield "so we really could go ahead and mine. I mean in a real manner, so as to get some real 'dust' out, and some freight in, and I know my people would back me in this section or any section where there was a chance of really 'opening up'...." Although willing to help, Ike P. Taylor, the Chief Engineer of the Alaska Road Commission, was pessimistic about the outlook for the 1936 season. Appropriations for Alaskan roadwork in the Department of the Interior budget were meager. Taylor doubted that the Commission would be able to undertake any extensive road improvements in the Talkeetna district, because expected funds provided only for maintenance and minor improvements to the existing road system. Guise, of course, was disappointed by the unwelcome news. Not much work remained to complete the road up Peters Creek from the Peters Creek bridge on the Talkeetna-Cache Creek Road. It only needed to be widened sufficiently to allow tractors to haul in the large machinery ready for assembly. "The areas of pick and shovel [mining] ground remaining in this and other placer camps" in Alaska is limited, Guise told Taylor, and "it is absolutely necessary that we have some better means of transportation if we are to operate in any practical manner." This included the proposed airfield, for the existing landing strips were only safe for winter operations and "extremely unsafe for summer use." Guise believed that the mining operators in the district could guarantee a sufficient tonnage for weekly air service from Anchorage. Guise clearly was frustrated. Petitioning for roads and airfields season after season had only brought piecemeal results. Air fields, such as the one his

company requested, were far more important for developing Alaska than spending enormous sums on a few large airports, Guise asserted, and it was particularly stupid to waste millions of dollars "in a vain effort to grow pineapples or coconuts or whatever it is hoped to grow in the Matanuska Colony...." Guise referred to President Franklin D. Roosevelt's New Deal effort which had resettled some 200 families from Michigan, Wisconsin, and Minnesota in the Matanuska Valley, approximately 50 miles north of Anchorage. Clearly, Guise was frustrated and promised also to appeal for help to the Territorial Board of Road Commissioners for help on the road and airfield because it was "extremely vital that we have better transportation this summer if we are not to be checked or defeated in this venture...." He intended to "use every means at hand to secure such improvements, or to find out why legitimate mining ventures and worthwhile mining districts are neglected while wellnigh worthless and useless projects are flooded with money from several sources. "Guise obviously exaggerated, because projects seemingly worthless to him served the vital needs of some other user constituency. The complaints of Guise and his fellow miners, however, were effective, because the Commission expended $5,514.25 on the Talkeetna-Cache road, and $19,067.81 on the Peters Creek road in the 1936 working season.[1]

Talkeetna - Cache Creek Mining District

During the 1938 construction season, the Commission expended further funds in the Talkeetna-Cache Creek mining district. At the end of February, the Anchorage district office of the Commission sent a bridge crew of nine men to Talkeetna. The men arrived in Talkeetna on the same day about midnight, and the next day started moving equipment across the Susitna River. After establishing camp at the Peters Creek bridge, the men demolished the old wooden bridges across Peters, Croto, and Upper Peters Creeks and replaced them with a 150 foot span on steel piling piers, an 80 foot span and two 18 foot steel approaches, all on steel piling piers, and a 56 foot girder span, on concrete piers

resting on solid rock, respectively. A. F. Ghiglione constructed the first two bridges, and Amos Morse the last one. At the end of the season, Superintendent M. G. Edmunds reported that the total cost of the bridges had been as follows: Peters Creek bridge $10,079.36, Croto Creek $5,885.72, and Upper Peters Creek $5,212.61. The Commission continued to spend funds for maintenance and improvements in the Talkeetna-Cache Creek district. In 1939 it amounted to $37,020.32; in 1940 it came to $21,731.67, with another $150.76 for the Talkeetna airfield; in 1941 it amounted to $21,342.05; in 1942 to $24,175.94; and it declined to $11,215.05 in 1943; to $3,206.86 in 1944, and again rose slightly to $5,830.12.[2] The War Production Board issued the "Gold Mining Limitation Order L-208" on October 8, 1942 which made the industry non-essential to the war effort. In 1943, gold production dropped 20 per cent over the previous year's level, and the industry never really recovered from the near shutdown during the war. With a deemphasis on gold mining, the Commission used its funds for work on the main road system and work in and near Alaska's urban centers.

The Iliamna Lake District

Alaska's residents lived in widely scattered locations, and every settlement at one time or another appealed to the Commission to construct relatively short roads connecting to the railroad, a major road, or to tidewater, For example, in early 1936 the Seward Chamber of Commerce petitioned the Commission on behalf of the people of the Iliamna Lake District to extend the existing Iliamna Bay Pile Creek road another 2.5 miles to the shores of Iliamna Lake. The Commission had built the existing road in the 1920s. Substantial freight came over the road, but lake boats and scows were unable to ascend Pile Creek to the end of the road. Therefore, smaller craft had to be used on the leg from Pile Creek to Iliamna Lake, where the freight once again had to be transferred to larger boats for distribution to points along that body of water. There was no money to respond to the request that season, so in early 1937, residents of the region

prepared a petition and a summary of why roads where needed in the Iliamna and Lake Clark region. At the present, the petitioners pointed out, the region could be reached via the Kvichak River from Bristol Bay. The first route, they argued, was long, costly, and not always satisfactory because of the tides and unpredictable weather in the Bay. This caused time delays and soaring freight rates which discouraged potential settlers from coming into the region. A great deal of money already had been spent on the Iliamna Portage, but it could not be fully utilized because of the swiftness of the Iliamna River which constantly shifted its channels and which only small skiffs equipped with outboard motors could navigate. Unfortunately, even this was impossible for a large part of the shipping season because the water was so low that motors were often damaged. It was almost impossible to haul large amounts of supplies downstream during the dry months of June through August. Goods, therefore, had to be piled up on the bank of the Iliamna River waiting for high water. What was needed to remove this bottleneck, the petitioners pointed out, was the construction of a 2.5 mile road from the Portage to Pile Bay. The Commission already had surveyed the route, the petitioners pointed out, so their request was not a new one. From Pile Bay, lake boats easily could haul freight and supplies, which would increase traffic over the portage which had been under-utilized.

Road from Iliamna Lake to Lake Clark

The petitioners also argued that the Commission should build a road, approximately 14 miles in length from Iliamna Lake to Lake Clark. The shores of the latter offered ideal residential sites as well as homesteads. The soil, after proper cultivation, yielded many types of vegetables and domestic plants. In fact, even strawberries thrived on the shores of the lake, and there was no telling what a garden enthusiast might be able to do."[4]

Mineral Deposits

In addition, the region contained valuable metal deposits such as gold and copper, and many prospectors already held mining claims," anxiously waiting for proper transportation facilities so that they could easily bring in the needed machinery." In short, the construction of these two roads would be of great benefit to Alaska because it would result in increased revenues from taxation. The region, blessed with favorable climate, had needed no federal assistance. In fact, all White and Native families as well as individuals were self-supporting. Progress, however, demanded the construction of roads. This task, however, was the responsibility of the Territory "desiring such progress" and could not be undertaken by individuals. These arguments must have been persuasive, for in 1937 the Commission allotted $4,646.55 for the project, and this rose to $32,833.40 in 1938, enough to finish the two projects.[5]

Telephone Communications

Roads and trails enabled Alaskans to obtain supplies, develop mineral properties, and reach the outside world. Telephone communication enabled residents to make immediate contacts with one another, relay vital information, and request help when needed. In the first decade of the twentieth century the U.S. Army had constructed a lengthy telegraph system linking Alaska with the outside world. After radio communication made the telegraph line obsolete, the Signal Corps abandoned it. In 1926 the Alaska Road Commission took over the line from Valdez to Fairbanks, a distance of 371 miles, and maintained and operated it. In 1927, the Commission constructed a branch line of 39 miles to Chitina, and added another 106 mile branch line to Nabesna in 1930 to 1934 in connection with road construction in that area. In 1936, the Alaska Road Commission owned a total of 516 miles of line. Construction had cost $3,264 and the average cost of annual maintenance amounted to $6,500. The highway line connected the Fairbanks switch-

board to all city phones. Furthermore, phones had been installed in all roadhouses and construction camps along the route. In addition, the Commission maintained a small switchboard at Copper Center, which served to connect Nabesna, Chitina, and Valdez. It was impossible to obtain a through connection from Fairbanks to Valdez, but messages to the latter city could be relayed via the Rapids Roadhouse. The old line, however, was not in top shape and it was impossible to maintain uninterrupted service at the level of maintenance performed. This was particularly true after the Commission camps along the route had closed for the winter season.[6]

Comptroller General Critical

Within a short time, the Comptroller General of the United States wanted to know if the Commission collected tolls for the phone services it provided. The answer was negative. The Commission requested the Fairbanks Telephone Company to run the line through its exchange, and allowed it to make a charge to reimburse it in exchange for the services rendered. Rates charged varied from a low of $0.25 from Fairbanks to mile 18 on the Richardson Highway to a high of $0.75 for a call from Fairbanks to Rapids. There were no charges for official government calls. All roadhouses south of Rapids paid a modest fee directly to the operator of the Copper Center switchboard of the Alaska Road Commission. Taylor explained that it would have been absurd to charge tolls for a telephone service which was so unreliable, particularly after the Commission camps had closed for the winter season. He estimated that the Fairbanks Telephone Company probably collected no more than $250 per annum for its services. Taylor doubted that the company would handle this service for any less money than it now received. If the government decided to discontinue the service through the Fairbanks Telephone Company exchange, Taylor pointed out, it would inconvenience the Commission, and require the installation of additional phone equipment in its Fairbanks office, warehouse, shop and garage.[7]

Federal Investigation

The Comptroller General investigated the matter, and reported that the Fairbanks Telephone Company collected approximately $720 per annum, rather than the $250 Taylor had estimated, from calls made over a line built and maintained at public expense. There was no compensation to the United States. In addition, the Commission now had installed and maintained a government-owned switchboard in the home of Frank H. Carroll at Copper Center which served 386 miles of telephone line south of Rapids. The Comptroller General discovered that Carroll was an employee of the Commission who worked as a telephone line repairman at a rate of $8.00 per day when actually needed. His wife, Wayla Carroll, served as Commission telephone operator at a salary of $420 per year. The Comptroller General was shocked to discover that as additional compensation, Frank H. Carroll was permitted to charge individuals and business concerns for the privilege of connecting privately-owned telephones to the government line and retain the proceeds for his personal use. The Comptroller General estimated that this amounted to an additional $3,000 per year.[8]

Formal Contracts to be Drawn

The Comptroller General objected to this casual arrangement, and insisted that formal contracts be drawn up and the proceeds split between the private operators and the federal government. Taylor agreed to comply with the wishes of the General Accounting Office. The Fairbanks Telephone Company stated that in order to split the receipts, toll charges would have to be doubled to make it worth its time to handle them. R. J. Shepard, the superintendent of the Chitina Commission office, recommended that a full-time operator be hired and the Commission collect the tolls. He insisted that Wayla Carroll receive the civil service appointment as operator. The Carroll family had given seven and a half years of excellent service to the Commission, in fact had built their family life to fit the job, and there-

fore should be kept on. Mrs. Carroll was a paid observer for the U.S. Weather Bureau, and these duties fit in well with those of a switchboard operator. In any event, Shepard was anxious to get the matter resolved in a fashion acceptable to the General Accounting Office.[9]

Tolls Increased

In the middle of June 1939, Chief Engineer Taylor increased the toll rates for the Richardson Highway line by about fifty percent, and announced that the Fairbanks Telephone Company would collect the monies under the terms of a contract. For the Carrolls the Chief Engineer drew up a formal contract. Taylor then asked the General Accounting Office to review the two documents, and if not satisfactory, indicate what changes were necessary. He asserted that the Commission was anxious to comply with General Accounting Office guidelines, "even to the extent of abandoning the line if there is no other alternative." He was reluctant to do that however, because the line passed through "a pioneer section where communication facilities are wholly lacking," and numerous small mine operators depended on this service. The General Accounting Office, however, objected to the contract between the Commission and Frank H. Carroll because it was for personal services in connection with the maintenance and operation of the telephone exchange at Copper Center for a fixed sum plus certain phone rentals. At the same time it contemplated using the services of the contractor as a lineman, when needed, at a wage of eight dollars a day. This not only involved dual employment and double compensation contrary to law, but also involved the expenditure of receipts which, by law, had to be deposited into the Treasury of the United States as miscellaneous receipts.[10] The General Accounting Office had expended thousands of dollars in investigating and reporting upon a matter which involved about $3,000 per year. Unwilling to make exceptions for Alaska's unique circumstances, it destroyed a telephone system which, albeit primitive, had served the Alaska Road Commission and numerous

residents very well for a number of years. Fortunately, radio communication came into use during World War II and made the primitive telephone system totally obsolete.

Mileage Abandoned

Alaska was in a period of transition. As already pointed out, the heavy use of the airplane and the decline of the mining industry enabled the Alaska Road Commission to slowly abandon many shelter cabins, various short roads, and some trail mileage. In 1936, for example, the Commission abandoned the Donnelly-Washburn project which had cost a total of $33,460.06 for construction and maintenance through June 30, 1936. Ester-Dunbar at $19,405.18, Fox-Steel Creek at $855.75; Vault Creek at $4,875.20; Gilmore Creek at $1,562.00; Mile 34-Lynx Creek at $22,192.66; Bessie-Dry Creek and Dry Creek-Newton at $3,289.20 and $623.74, respectively; Glass Gulch at $1,125.73; Center Creek at $2,803.80; Lewis Landing-Dishkaket and Nulato-Dishkaket at $483.37 and $735.88, respectively; Kern Creek-Knik and Kenai Lake-Kern Creek at $13,891.95 and $6,833.20, respectively; Mile 27-Mile 29, Alaska Northern Railroad at $741.66; Kenai Lake-Mile 27 Alaska Northern Railroad at $1,595.81; Kern Creek-Indian Creek at $3,758.26; Knik-Susitna at $8,437.44; Dishkaket-Kaltag at $4,290.00; Susitna-McDougal at $8,640.21; McDougal-Cache Creek at $7,350.00; Lakeview-McDougal at $3,675.00; Cripple and Penny Rivers at $8,801.79 and $1,967.08; Otter Creek at $1,802.52; Kugruk River Approach at $488.00; Otter Creek Towpath at $488.23; Summit-Otter Creek at $5,047.66; Fairangel Extension at $104.20; Moose Creek-Baxter at $2,218.62; Valdez-Quartz Creek at $524.75; Valdez-Glacier at $616.91; Shoups Bay at $3,457.25; Katalla-Chilkatat $7,752.56; Elliott-Kotsina at $6,858.42; Brooks Tram at $63,455.39; Cripple-Lewis Landing at $100.00; and Matanuska-Chickaloon at $11,268.30. That was just for one year. The Commission also turned over numerous projects to other departments for continued improvement and maintenance, such as the Juneau-Sheep Creek road and the Sunrise-Hope connection. Still, at the end of the 1936 fiscal year the Commission boasted of 2,037 miles

of road and tramroad, most of it suitable for automobiles, 1,630 miles of winter sled road, 7,151 miles of trail and 314 miles of flagged trail. As of June 30, 1936, the Commission had expended $22,958,891.09, of which $12,104,550.55 had been utilized for new work and $10,854,340.54 for maintenance and improvement.[11]

Status of Roads in 1940

By June 30, 1940, roads and tramroads had grown to 2,212 miles of which about 80 percent was suitable for automobile travel; winter sled roads had decreased to 1,464 miles and trails to 6,494 miles and flagged trails to 240 miles. By June 30, 1945, automobile roads had grown to a total of 2,517 miles while winter sled roads had further decreased to 1,250 miles, and trails and flagged trails to 4,115 miles and 164 miles, respectively.[12]

Trails in the Bethel Area

There were regions in Alaska, however, where Shelter cabins and trails continued to be important. The Bethel area in western Alaska was a good example. Located on the Kuskokwim River, the settlement was a supply center for villages throughout the region. H. M. "Big Hans" Hansen contracted with the Commission for the construction of shelter cabins and the staking of trails. Work in these remote areas was difficult, at best. Hansen was to build a few shelter cabins, but noted that the construction material he had received "all green and wet and the time" he handled it. He also told the Commission that additional lumber needed to be purchased locally, at higher prices, to compensate for the shrinkage. He discovered, for example, that "none of the 8-inch lumber measures over 7-inches; there is also a lack of extra lumber to take care of the door and window casings." Hansen was an experienced builder. He recommended double-pane windows, with celotex and building paper. Solid insulation was a necessity, he pointed out, because there was little heating fuel along the trails.[13]

Metal Pipes a Failure

Staking trails with pipes in the region had been a failure, Hansen stated, because most of the pipe driven into the ground between the Bethel-Goodnews Bay trail leaned at a 45 degree angle. The metal pipe was a perfect conductor for the sun's heat, thawing the permafrost to the bottom of the pipe. Strong winds, common in that section, caused the pipes to lean over. None of the pipe had been driven less than three feet. Whenever the ground had proven too hard to drive the pipes, workmen had built tripods, and these had withstood the climatic elements exceedingly well. Hansen recommended the erection of tripods to mark the trail from Johnson River to Kinak Village, and from Bethel to Nuntchak. Hansen offered to tripod the trails at $32.00 per mile, with tripods 500 feet apart. Since there were not enough iron pipes on hand, Hansen proposed to use spruce poles to make up the shortage. Hansen also offered to build the shelter cabin on the Johnson River to Kinak Village trail, including two extra windows, stove and stove pipe for $500.00, "work guaranteed and job complete before July 1, 1937 - but will not take the job for day labor. This is the best I can do and if satisfactory with the A.R.C. let me know at earliest date. All my work is guaranteed or no pay." Hansen's offer was acceptable to Chief Engineer Taylor, although he reminded Fred J. Spach, the assistant engineer of the Commission in Anchorage that it still was necessary "to write up invitations and call for bids at Bethel." This was a necessary legal formality, Taylor implied, and continued that Spach should send Hansen "an invitation direct and it will, of course, be necessary to explain to him that it is impossible to give him the work on contract without formally calling for bids." The Commissioner awarded Hansen the contract for building the shelter cabin in that same year, and the one for trail staking in 1938.[14]

The Cook Inlet-Kenai Peninsula Region

Although nobody had any inkling in the late 1930s that the Cook

Inlet-Kenai Peninsula region would experience dramatic growth in the post-war periods, settlers already had started moving into the area in the late 1930s. The region's towns still were small. Anchorage, for example, had a population of only 2,736 in 1930, and Seward a modest 935. By 1940, Anchorage had almost doubled to 4,229 souls, and Seward had registered a small increase to 949 residents. Mr. C. Edmunds, the Commission Superintendent in Anchorage, noticed the growth on the Peninsula on a visit to Homer in early 1939. While there, he attended a meeting of the Homer Civic League whose members told him, that there had been an influx of families into the Homer district within the last two years. Since all the lower benches in the vicinity already were homesteaded, these folks had taken out land on the higher benches to the west of the settlement. No roads existed to serve these newcomers, and eventually numerous spur roads would be required to reach the various homesteads. League members suggested that the Commission should begin a survey for a road between Homer and Kenai, because that would let prospective settlers know where to locate.[15]

Proposed Road from Kenai to Homer

Taylor thought the idea of having settlers located along the line of a proposed road a good one - but "when we put in stakes for a road the people will reasonably expect that the road will be built soon." With the small funds available, he stated, the location had to be a short one so as not to disappoint the settlers. At the end of 1939, the newly-formed Kenai Development League of Homer, Alaska, appealed to the Commission, Territorial Governor Ernest Gruening and Delegate to Congress Anthony J. Dimond to funnel some territorial or Works Progress Administration money into their region. About 320 individuals resided in the area, and many needed immediate work relief. If funds could be obtained, these people could be put to work to build sorely needed roads connecting the homesteads to the already existing system. In addition, the Homer dock needed repairs badly. It was the community's only facility through which vitally needed supplies could be

brought in. The League estimated that $18,000 would at least start the work. Superintendent Edmunds met with League members and listened to their request, but cautioned that funds were limited.[16]

Access Road to Homer Homesteaders

By 1940, however, the Commission had started to build a road along the high benches where several newcomers had settled. This irked some of the older settlers, and John Bandvold, their spokesman, protested the location, stating that the road on top of the bench would be useless to those who had homesteads on the lower benches. Furthermore, the top of the bench would be blanketed by snow anywhere from six to ten feet deep. The location along the side hill Brandvold and his group had asked for would be "bare of snow entirely and this road will be bare at least three months longer each year than any of the roads that you can build on top of the ridge." What Brandvold and his group objected to was that they would have to climb to the top of the bench to reach the road and "go at least three times as far to get to the store and post office...." Had the Commission accommodated their wishes and built a road along their homesteads, the distance to the store and post office would be shortened by three to seven miles. "That means a whole lot in the winter," Brandvold concluded, "when the days are short and the weather is cold and the snow is several feet deep."[17]

Complaints Unjustified

C. Arvid Swanson, a spokesman for the majority of the homesteaders in the Homer area was acutely embarrassed by the complaints of Brandvold's group. He assured the Commission that the majority of residents realized that road building funds were limited and not everything desirable or needed could be accomplished in a year. In short, most everyone agreed that "the Road Commission is doing a fine job and the majority are more than pleased with the way the work is progressing." Taylor was pleased with Swanson's assurances, and told Brandvold that "no subversive in-

fluence has been brought to bear to cause the road to be located along the top of the bench rather than to build the long grade up the hill" as his group had desired. With the large number of settlers in the region it was "impossible to provide a road to each man's homestead and it was felt if we could get in the main roads that each individual homesteader could then ready the road nearest to him.[17] Obviously, the Commission had carefully considered the various alternatives, and decided, as in other cases, to put very limited funds into the construction of trunk roads in the best location to serve the greatest number of people.[18]

Small Appropriations

Unfortunately, it was apparent that appropriations for the Alaska Road Commission under the Department of the Interior were consistently less than what they had been under the last ten years under War Department Administration. The years from 1932 to 1941 were extremely lean ones for the Commission, and all it was able to do was to maintain the 2,200 miles of low-standard roads, with small improvements, and try to maintain the 10,000 miles of trails which had been constructed by 1932. As already stated, the Commission was able to abandon some trail mileage during this decade and use the savings for small improvements to existing roads. The Commission submitted adequate estimates to the Department of the Interior each year, but nobody there really fought for the agency before Congress. Alaska's Delegate to Congress, Anthony J. Dimond, had submitted a ten-year, twenty million dollar road construction plan to Congress in 1936, as already mentioned. All to no avail. Early in 1938 Delegate Dimond tried again when testifying before the subcommittee of the House Appropriations Committee concerned with the activites of the Department of the Interior. He opened his remarks by stating that it was very difficult to make anybody understand the need for roads in a country which had so few. The Department of the Interior had budgeted a mere $535,000 for the Alaska Road Commission for 1939. That amount, Dimond pointed out, was not even

sufficient to maintain the existing system, and "if we are going to develop Alaska, we must have more money for roads. We are simply at a standstill with $535,000." Dimond asked for many other items, such as funds for the construction of emergency airfields and airports, for the rehabilitation of the Alaska Railroad, and for defensive installations, among others. Dimond told his colleagues that Alaska was situated on the direct line between the Orient and the United States. Should a hostile power seize Alaska, it would be within 747 miles of Seattle, Washington, "a nice comfortable airplane range." Alaskans demanded to be protected by their government, because without that protection they knew that they would be the first victims should war break out. Congress did not respond. As planned, it appropriated $535,000 for 1939.[19]

European Events Affect Alaska

One event in far-off Europe eventually was to effect Alaska in a revolutionary fashion. On September 1, 1939, Germany's armed forces invaded Poland, and on September 3, Great Britain and France declared war on Germany. World War II had begun. In the spring of 1940, Nazi forces invaded Denmark and Norway. For the first time, Congressmen realized that the Scandinavian Peninsula was just over the top of the earth from Alaska, and that bombers, which could fly such a distance, existed. This sudden insight, Dimond later believed, brought about a turning point in Alaska's fortunes and history. In fact, year 1940, Congress appropriated $39,823,285 for defensive installations, ranging from a Sitka Navy air base to a Kodiak Navy air base, and from a Fairbanks Army air base to an Anchorage Army air base. Dimond remarked that "at least a fair beginning has been made upon the construction of national-defense works and facilities in Alaska." The 1941 appropriation for the Alaska Road Commission doubled, from $560,000 in 1940 to $1,130,000 in 1941. Indeed, Dimond believed that much more would be required, including numerous airfields and the long proposed highway to Alaska.[20] He did not then know how correct his forecast was, because

between 1941 and 1945, the federal government spent approximately two billion dollars in Alaska, triggering an economic boom far greater than that caused by any of the previous gold rushes.

FOOTNOTES

1. Guise to Taylor, January 8, 1936, Taylor to Guise, January 28, 1936, Guise to Taylor, February 22, 1936, R.G. 30, Alaska Road Commission, box 65479, Federal Records Center, Seattle, Washington; Alaska Road Commission, Annual Report, 1936, p. 32.

2. Edmunds to Taylor, February 16, 1939, R.G. 30, Alaska Road Commission, box 65479, Federal Records Center, Seattle, Washington. Alaska Road Commission, Annual Report, 1939, p. 32; Ibid., 1940, pp. 32-33; Ibid., 1941, p. 25; Ibid., 1942, p. 24; Ibid., 1943, p. 24; Ibid., 1944, p. 21; Ibid., 1945, p. 22.

3. Fryer to Commission, April 1, 1936; residents to Commission, February 4, 1937, R.G. 30, Alaska Road Commission, Federal Records Center, Seattle, Washington.

4. Ibid.

5. Ibid.; Alaska Road Commission, Annual Report, 1937, p. 36; Ibid., 1938, p. 34.

6. Taylor to Hampton, November 24, 1937, R.G. 30, Alaska Road Commission, box 65410, Federal Records Center, Seattle, Washington.

7. Hampton to Taylor, November 30, 1937, Taylor to Hampton, November 30, 1937, Taylor to Hampton, April 14, 1938, R.G. 30, Alaska Road Commission, box 65410, Federal Records Center, Seattle, Washington.

8. Comptroller General to Hampton, April 14, 1938.

9. Taylor to Shepard, April 10, 1939, Taylor to Nash, April 10, 1939 Shepard to Taylor, May 1, 1939, R.G. 30, Alaska Road Commission, box 65410, Federal Records Center, Seattle, Washington.

10. "Notice To all Concerned," June 16, 1939, "Invitation For Bids," June 20, 1939, Memorandum by G. H. Skinner for Fred R. Geeslin, December 4, 1939, Elliott to Secretary of the Interior, December 27, 1939, R.G. 30, Alaska Road Commission, box 65410, Federal Records Center, Seattle, Washington.

11. Alaska Road Commission, Annual Report, 1936, pp. 14-16, 19, 21-24, 26-28, 33-35, 30, 23, 10.

12. Alaska Road Commission, Annual Report, 1940, p. 9; Ibid., 1945, p. 8.

13. Spach to A.R.C., November 28, 1936, R.G. 30, Alaska Road Commission, box 65637, Federal Records Center, Seattle, Washington.

14. Ibid.; Spach to Taylor, February 16, 1937, Taylor to Spach, February 23, 1937, Taylor to Spach, February 24, 1937, R.G. 30, Alaska Road Commission, box 65637, Federal Records Center, Seattle, Washington; Alaska Road Commission, Annual Report, 1937, p. 40; Ibid., 1938, p. 44.

15. George W. Rogers and Richard A. Colley, Alaska's Population and Economy: Regional Growth, Development and Future Outlook, Vol. II, Statistical Handbook (College, Alaska, University of Alaska, 1963), p. 27.

16. Edmunds to Taylor, February 17, 1939. A list of more permanent homesteaders in the vicinity, showing the sections where they were located as follows:

Homestead Owners - Homer and Vicinity
March 1, 1939
Township 5, South, Range 12 West

Sec. 25	James White
Sec. 29	Curtis M. Huffman
Sec. 31	George T. Press
	Wilhelm Burgie
Sec. 32	Wm. Bechdol
	Wendell Thurston
	George Kirkpatrick
	Thizza G. Holmes
	Bernard Ekkleboom
Sec. 33	Ernest Edw. Bird
Sec. 34	L. M. Moore

Township 5 South, Range 13 West

Sec. 31	Stanley Jones
	J. O. Alberson
	Ray B. Malone
	Orvan Officer
Sec. 32	Orvan Officer
	E. L. Bunnel
	D. E. Mervin
Sec. 33	D. E. Mervin
	C. E. Halstead
	M. M. Myers
	Fred Harbinson
Sec. 34	Fred Harbinson
	F. E. Nightenhelser
Sec. 35	F. E. Nightenhelser
	Wm. H. Fletcher
	Tom P. Caughlin
Sec. 36	Tom P. Caughlin
	W. J. Frazier

Township 5 South, Range 14 West

Sec. 25	W. F. Borton	Sec. 36	Wm Scott
	Wm Scott		F. A. Wolfe
Sec. 26	Mainhardt Bredt		Howard A. Wilford

Township 6 South, Range 14 West

Sec. 1	Stanley Jones	Sec. 12	R. M. Campbell
	Howard A. Wilford		Joe R. Johnson
Sec. 2	O. L. Jones		Robert W. Kranich
	Edwin Herndon		H. P. Sheard
Sec. 3	Milton Howe		Paul W. Poelette
	Edwin Herndon	Sec. 13	Laura M. Feehan
Sec. 4	Sam Gasparic		Guy Waddell
	Dave Jones		Walter Bell
Sec. 7	Richard B. Gray		Sam Pratt
Sec. 8	Richard B. Gray		Olaf T. Svedlund
Sec. 9	Dave Jones	Sec. 14	Olaf T. Svedlund
Sec. 10	Frank Hopper		Sam Pratt
	Albert L. Hughes	Sec. 15	Andrew O. Aasland
Sec. 11	Homer Lathan	Sec. 22	Andrew O. Aasland
	Buster Goss	Sec. 23	Sam Pratt
	R. L. Monroe		Emil P. Rose
		Sec. 24	Sam Prat
			Guy Waddell
			H. A. Wells
			Frank Memec

Township 6 South, Range 13 West

Sec. 1	W. J. Frazier	Sec. 6	H. K. Allen
	Star Nielsen		Ray B. Malone
	Ras P. Nielsen		B. B. Smeltzer
	Jack Dietz		Chris Anderson
	Chas. Sharp	Sec. 7	Bob C. Cutler
Sec. 2	Tom Caughlin		Wm. Laurence
	Donald Ingalls		E. V. Kirsch
	Wm. H. Feltcher		Joe W. Tolbert
	Wm. G. Sanford	Sec. 8	Frank Selente
	Chas. Miller		James Faulk
Sec. 3	Wm. G. Sanford		Wm. F. McMichael
	O. S. Woodman		Karl Rosenberg
Sec. 4	George Dahlgren	Sec. 9	Frank Tucker
	Floyd Manseth		Floyd Race
	Harold Davies		J. A. Remer
	Erling Broderson		Mabel Shotter
Sec. 5	George D. Earl		Mabel S. Svedlund
	Luke M. Wilkerson	Sec. 10	Wm. Zook
	E. L. Bunnel		Enoch S. Nordby
	Orvan Officer		Edw. S. Slavin
	H. K. Allen		J. W. Palmer

Township 6 South, Range 13 West (Con.t)

Sec. 11	Claude D. Grahem		
	G. Winnie		
	J. P. Howver		
	Chas. Miller		
Sec. 12	Jack Dietz		
	Chas. Sharp		
	Ras. P. Nielsen	Sec. 19	H. A. Wells
	Alex Mathesen		Frank Nemec
Sec. 14	Sol Brososky		Cyrus W. Harrington
	Beers		Mrs. C. W. Harrington
	Wm. C. Sec or		John R. Crittendon
Sec. 15	Edw. S. Slavin		Glen Bowers
	J. W. Lamb		M. A. Berry
	Grover C. Price	Sec. 20	M. O. Svedlund
Sec. 16	Mabel S. Svedlund		J. R. Lee
	John Christensen		Thomas Shelford
	Frank Groth		Carl Sholin
	James Waddell		Andrew Sholin
	Alexander McLarin		O. Munson
Sec. 17	Milo Kallman	Sec. 21	A. A. Mattox
	Andrew Sholin		Homer Civil League
	Virgo B. Anderson		H. G. Kohler
	M. O. Svedlund	Sec. 22	Homer Civic League
			Sol Brososky
Sec. 18	Andrew L. Bernard		Wm. C. Secor
	Ole Harrsturd	Sec. 23	Wm. C. Secor
	Laura M. Feehan	Sec. 27	C. W. Harrington
	Walter Bell	Sec. 29	O. Munson
	Mrs. C.W. Harrington	Sec. 35	Ralph Anderson
	M. A. Berry	Sec. 36	Ralph Anderson

Township 6 South, Range 12 West

Sec. 3	L. M. Moore	Sec. 6	Wm. Bechdol
Sec. 4	Corlette A. Therian		Whilhelm Burgie
Sec. 5	George Kirkpatrick		George T. Press
	Wm. Bechdol		Ford W. Bechdol
	D. C. Liles		Torr S. Lund
			Levi W. Holmes
			Lee
		Sec. 7	Ford W. Bechdol
			Torr S. Lund

R.G. 30, Alaska Road Commission, box 65479, Federal Records Center, Seattle, Washington.

16. Taylor to Edmunds, March 9, 1939, Jones to A.R.C., December 9, 1939, R.G. 30, Alaska Road Commission, box 65479, Federal Records Center, Seattle, Washington.

17. Brandvold to Taylor, June 16, 1940, R.G. 30, Alaska Road Commission, box 65479, Federal Records Center, Seattle, Washington.

18. Swanson to Taylor, July 8, 1940, Taylor to Brandvold, July 13, 1940, R.G. 30, Alaska Road Commission, box 65479, Federal Records Center, Seattle, Washington.

19. Cong. Record, Appendix, 75C., 3S, pp. 1382-1385; Alaska Road Commission, Annual Report 1939, p. 1.

20. Naske, An Interpretative History, pp. 56-57; Cong. Record, Appendix, 76C., 3S., p. 4599.

CHAPTER FIFTEEN

THE WAR YEARS

Construction on Alaska's defensive installations had started in a leisurely fashion in 1940. Alaska's Governor Ernest Gruening was vitally concerned with the territory's defenses. In the fall of 1940 he urged the Division of Territories and Island Possessions, to whom the Alaska Road Commission reported, to set aside the Commission's normal budget item, for its construction season and replace it with a much more extensive program emphasizing routes of particular interest in connection with the national preparedness program. Gruening had been informed that the Army would support such a course of action. He therefore recommended that the Division confer with Army officials and immediately prepare the following estimate for submission to the Bureau of the Budget:

> A connecting link from the Anchorage road system to the Richardson Highway at a cost of $1,500,000; extension of the road from Seward across Turnagain Arm of Cook Inlet and into Anchorage at a cost of $1,000,000; and improvement of the Richardson Highway at a cost of $2,500,000 for a total of $5,000,000.

The above projects, Gruening claimed, were indispensible from a military standpoint, but also would be of inestimable benefit for Alaska's development. Should funds be appropriated, the governor stated, they would immediately become available and not lapse until the projects had been completed.[1]

Military Priorities

The military quickly responded to Gruening's initiative with its priorities. Lieutenant General John L. DeWitt, the Commanding General of the Fourth Army, and General Simon B. Buckner, Commander of U.S. forces in Alaska, agreed that the Alaska Railroad from Seward to Anchorage had to be shortened and the terminal relocated. This was the first priority. They recommended, therefore, that a 14 mile railroad

spur be built from Portage, 66 miles north of Seward on the railroad, to Portage Canal on Prince William Sound where the new terminus was to be located. The troops at Fort Richardson near Anchorage, then under construction, received all of their supplies, munitions, and personnel from Seward by railroad to Anchorage. Should the Seward port facilities and the railroad be damaged or destroyed, this would cut off the Anchorage garrison completely. Valdez was an alternate port, but supplies destined for Anchorage had to be transported via truck north to Fairbanks and then be shipped out to Anchorage by rail. The second priority was the construction of a highway connecting Anchorage and Valdez via the Richardson Highway at the earliest practicable date and the best route from the standpoint of distance, economy of maintenance, and the ability to keep the road open during the winter. Henry L. Stimson, the Secretary of War, directed that $5,300,000 be included in the next department budget to cover the estimated cost of relocating the southern terminus of the Alaska Railroad, and requested that Secretary of the Interior Harold L. Icke include $1,500,000 in his fiscal 1942 estimates for the Alaska Road Commission to cover the cost of building a highway connecting Anchorage and Valdez via the Richardson Highway.[2]

Another Lean Year in 1940

While the War Department had started the preliminary steps to extract the funds for these two projects from Congress, the Alaska Road Commission had another lean year in 1940. Congress had appropriated $560,000, as already stated. Added to that was another $140,000 from the Alaska Fund, while the Territorial Legislature appropriated $213,085, the National Park Service contributed $50,300, and individuals and corporations helped out with $12,341 for a total of $975,726 for the 1940-1941 year. Accordingly, Commission work was limited mainly to maintenance and some improvement of the existing system. It constructed 19 miles of new roads which consisted chiefly of short extensions or branch roads to existing routes, financed mostly by Territorial monies. It also built 53 miles of new sled roads. Utilizing National Park

Service funds, the Commission widened and graveled the highway through Mt. McKinley National Park to Mile 43.9 and graded the road to Mile 51. It continued to extend the Bunker Hill-Kougarok road an additional 3.75 miles to Mile 14.25; made passable to Mile 8.75 from the river the new road which was to connect the Takotna and Ophir mining districts with steamboat navigation on the Kuskokwim River and also worked on the 1.50 mile stretch from the Takotna road to the Takotna River, and built a 1.25 mile branch road into Candle Creek; the Commission assumed maintenance responsibilities for 60 miles of the abandoned Copper River and Northwestern Railway between Chitina and McCarthy which was used as a tramroad; it maintained the 10 mile branch road from the Anchorage-Palmer road leading to Eklutna Lake, and improved 5 miles of the Eagle-Liberty road leading into the Fortymile mining district for automobile travel. The Commission built three miles of secondary farm roads at Homer, and dug a 150 by 2,000 foot canal, about 8 feet deep, between Lakes Hood and Spenard to create a pontoon landing pond, allowing airplanes 6,100 feet take-off space; and with Territorial funds built new airfields at Nation, Beaver, Stevens Village, Rampart, Wiseman, and the Cliff Mine.[3]

Defense Money Revives Road Construction

For the 1941 working season, the Commission received $570,000 from Congress, another $150,000 from the Alaska Fund, and a $214,798 appropriation from the Territorial Legislature. Furthermore, War Department endorsement bore fruit in the form of a $1,000,000 appropriation to start the construction of the Glenn Highway, connecting Anchorage and Valdez via the Richardson Highway. The new road was named after Captain, later Major General Edwin Forbes Glenn, who in 1898 and 1899 explored routes to the Copper and Susitna Rivers, and then searched for a way to the Tanana River from Cook Inlet. In April of 1941, the Commission started work at both ends on the Glenn Highway, but because of the late arrival of equipment work had just gotten well under way at the end of June, 1941. In the meantime, General Buckner, now the commanding

general of the Alaska Defense Command, was convinced that in case of war troops would have to use the Richardson Highway. He had been over the route and found it insufficient for military purposes. Buckner urged Commission members to widen and straighten the highway where needed, strengthen all bridges to accommodate 15 ton loads, and replace the ferry across the Tanana River at Big Delta with a bridge. Thereupon, the Department of the Interior, at Buckner's request, included $600,000 for the contemplated bridge work, $124,000 for a bridge across the Tanana River, and $1,400,000 for improving and straightening the the Richardson Highway where necessary. The War Department endorsed the request as "necessary from the standpoint of National Defense."[4]

The 1942 Season

For the 1942 work season, Congress granted the Commission $684,500, another $151,000 came from the Alaska Fund, and the Territorial legislature contributed a miserly $127,338. There was an allotment of $500,000 for the construction of the Glenn Highway, and another $2,200,000 for the strengthening of bridges and the widening and realignment of the Richardson Highway. War Department endorsement opened Congressional purse strings, the Alaska Road Commission discovered.[5]

Military Projects

Obviously, the military buildup stimulated the construction industry, revitalized the Commission, and brought to fruition long cherished plans for roads. For example, the Navy and Army sponsored massive defense construction projects on Kodiak Island and surrounding smaller islands. The Army and Navy requested that the War Department endorse construction of 70 miles of access roads at an estimated cost of $2,735,500, to be built by the Public Roads Administration. These projects included a patrol road around Nyman Peninsula from the permanent dock to the Buskin River; a road from the north boundary of the Naval Reservation through Kodiak to Spruce Cape; an access road from

the Naval Station to Broad Point, and one from Broad Point road to Cape Chiniak; an access road from Kalsin Bay to Portage Bay, and another from Buskin Lake to Sharaton Bay. The Public Roads Administration also was to build a road from Anchorage to Potter - Gull Rock - Hope, connecting with the existing Hope - Sunrise - Seward road, another from Anchorage to Portage - Whittier, and three roads connecting towns with their airports, namely Juneau, Cordova, and Naknek. Alaska finally was on its way in acquiring an integrated transportation network.[6]

Japanese Attack Pearl Harbor

Military expenditures lured thousands of construction workers to Alaska, but to most northerners war seemed far off. That changed suddenly when the Japanese attacked the American Naval base at Pearl Harbor on the Hawaiian Island of Oahu on December 7, 1941. The next day the United States was at War. At the end of January, 1942, Assistant Secretary of State, A. A. Berle, Jr. addressed the question of a highway to Alaska. He believed that Canada would agree to the construction of such a highway, provided the United States undertook the job. He pointed out that the Canadians would probably prefer to have the road run from Vancouver to Prince George, British Columbia, and from there to Dawson in the Yukon Territory and thence to Fairbanks. Berle recommended, however, that the State Department favored a route from Edmonton, Alberta, to Ft. St. John, British Columbia, to Watson Lake and Whitehorse in the Yukon Territory and from there to Fairbanks. Incidentally, that was the route the War Department preferred as well. On February 13, 1942, Brigadier General L. T. Gerow, the Assistant Chief of Staff, informed Berle that the Permanent Joint Board on Defense, United States and Canada was making preparations for the construction of a highway along a chain of airfields built close to the following route: Fort St. John - Fort Nelson - Watson Lake - Atlin - Whitehorse - Kluane - Big Delta - Fairbanks.[7]

A Highway to the North

Serious discussions about such a highway leading to the North had begun as early as 1929. Foremost among its proponents was Donald MacDonald, a locating engineer for the Alaska Road Commission. In that same year interested individuals established the International Highway Association with branches in Fairbanks, Dawson City, Yukon Territory, Vancouver, British Columbia and Seattle. Soon many associations, such as Chambers of Commerce, auto and mining clubs, the American Automobile Association and the U.S. Chamber of Commerce, among others, supported the IHA plan. In 1930, Congress established a Commission to cooperate with Canadian representatives in determining the feasibility of such a highway. In its 1933 report the Commission found the project to be entirely feasible and recommended that it be built. MacDonald, in fact, already had made a reconnaissance of part of the route between McCarty and the Canadian border.[8]

The Alaska International Highway Commission

Alaska's Delegate Dimond subsequently introduced a measure for such a highway, but nothing came of it. In 1938 Congress created the Alaska International Highway Commission to make another study. Donald MacDonald was a member of this Alaska International Highway Commission, together with Congressman Warren G. Magnuson (D., Washington), James W. Carly, a Seattle consulting engineer, Thomas Riggs, former Governor of Alaska, and Dr. Ernest H. Gruening, the Director of the Division of Territories and Island Possessions of the Department of the Interior. The Commission, together with its Canadian counterpart, recommended the construction of such a highway, although opinions as to routing differed. As late as August 1940 the Secretary of War told a Congressional Committee that such a highway had no military value. In November 1940 the Permanent Joint Board on Defense, United States and Canada, considered the highway question at a meeting in Vancouver, but decided not to make any recommendation on the subject. It concluded, however,

that the military value of such a road would be negligible. In the fall of 1941, the War Department altered its view somewhat in view of the uncertainty as to who would ultimately control Siberia, the Soviet Union or Nazi Germany, and the construction of numerous Army airfields in Alaska. The War Department stated that such a highway would have some strategic value but it did not recommend that it be given high construction priority.[9]

Navy Asserts It Can Protect Alaska

On February 5, 1942 the Navy informed Chief of Staff George C. Marshall that the Navy "can afford protection to the sea communications between the West Coast and Alaska adequate to ensure the maintenance there of all Army garrisons and the civilian population." Admiral Ernest J. "Ernie" King, the Navy Chief of Staff and Commander in Chief of U.S. Navy Operations told Marshall that he thought it improbable "that the enemy can obtain a foothold in Alaska from which he could render our sea communications dangerous." King, therefore, disagreed with the thesis that a road to Alaska was necessary because the Navy "cannot afford adequate protection to the shipping destined for that region." Obviously, the American representatives on the Permanent Joint Board on Defense, United States and Canada could not be allowed to express different opinions because that would raise doubts as to the military necessity for the highway. The Navy soon fell into line. Soon thereafter the Alaska International Highway Commission and its Canadian counterpart protested the selection of the route linking the airfields, only to be told that military expediency directed the location of the route. In fact, troops already were on their way North, and Secretary Stimson assured the critics that the Army would have a pioneer road finished by the end of the 1942 construction season.[10]

President Roosevelt on February 11, 1942 had given the green light to proceed and soon the necessary formalities with the Canadian authorities had been satisfactorily concluded. The U.S. Army vanguard

arrived in Dawson Creek, on March 9, 1942, and soon thousands of men, both military and civilian, toiled in the wilderness and completed the pioneer road on November 20, 1942. Officials estimated that the pioneer road had cost $27,745,000, with $17,548,000 being the Army portion, and the balance funds from the Public Road Administration. By June 30, 1945, the Public Roads Administration had spent a total of $123,093,443 for the 1,477.5 mile long ALCAN Highway, at an average cost of $83,311.97 per mile.[11]

The Alaska Highway

The Alaska Highway, as the road came to be called, joined the Richardson Highway at Big Delta. A branch of the Alaska Highway extended 135 miles from a point near the junction of the Tok and Tanana Rivers to Gulkana on the north - and - south section of the Richardson Highway which provided coastal connections with Valdez and with Anchorage via the Glenn Highway. Alaska certainly was in the news. One contemporary journalist, Richard L. Neuberger then serving in the Army, reported early in 1942 that the Territory had not been so conspicuous and prominent in the American press since its purchase in 1867. He anticipated that the war would speed Alaskan development and progress significantly. A rash of articles appeared extolling the strategic importance of Alaska in the defense of the western shores of the United States, and Ernest K. Lindley of Newsweek reminded his readers early in 1942 that General "Billy" Mitchell in the mid-1930s had emphatically stated that Alaska was the most important strategic spot on the globe in the age of air power. Nobody had listened at that time. Americans were shocked when enemy forces invaded and occupied Attu and Kiska on the Aleutian Chain in the summer of 1942. America's pride was hurt, and citizens were united in their determination to drive the enemy from American soil. Thousands of troops poured into Alaska to participate in its defense and prepare for the recapture of the two islands.[12]

The 1943 Season

The year 1942 had been an eventful one in Alaska. For the 1943 working season, Congress appropriated $999,900, to the Commission, another $125,000 came from the Alaska Fund, while the Territorial contribution declined $21,035 from 1942 to a mere $106,301. Congress allotted another $500,000 for the completion of the Glenn Highway which the Commission completed and opened for traffic on November 5, 1943. Much work remained on this road for final completion, but at least it was passable - and the Commission kept it open throughout the winter. The Commission also accomplished much work on the straightening, upgrading and bridge re-construction on the Richardson Highway. It also built a new steel bridge across the Tanana River near Big Delta consisting of two 300 foot spans. This new bridge replaced the ferry, and the Commission also constructed heavy duty bridges at Bear and Sheep Creeks, Tsaina River, and Steward Creek. All of this work was connected with the defense effort. The regular work of the Commission had to continue, and in 1943 it reported maintenance of 2158 miles of road, 139 miles of tramway, 304 miles of sled road, 500 miles of permanent trail, and 224 miles of temporary flagged trail.[13]

Problems in Homer

Alaskans continued to petition the Commission for assistance. Rainhardt Bredt of Homer, a homesteader attempting to make a living farming, recently had signed a contract with the Army to supply Fort Richardson with 425 tons of produce during the 1943 season. His homestead was located six miles out of town, and there was no road. Bredt realized that because of the demands of war, the Commission was "practically powerless to help us. Nevertheless, I wish to state my request for a road which I feel should go through as it is a direct aid in this war." Bredt assured the Commission that the road would be easy to build, with only a few minor side cuts and no fills. In addition, the road would serve twenty-four homesteads, comprising more than half the en-

tire cultivated land of Homer. Bredt, for example, farmed sixty acres of potatoes, forty acres of carrots and fifteen acres of rutabagas, while his nearest neighbor cultivated thirty acres. The road alone was not enough, however, because Bredt had to transport his produce to the dock on the Homer Spit for shipment to Anchorage. Unfortunately, the Homer Spit road had washed out last fall, but in a show of self-reliance Homer citizens had practically rebuilt the road, and also constructed a dock. Obviously, this demonstrated that the residents of Homer were serious about farming.[14]

Complaint That Commission Not Helpful

Bredt complained to Governor Gruening that the Commission rendered no help. First he had been told that there was not enough equipment in Homer to do the job. That was not true, since there was an Allis Chalmer D7, two graders, and several trucks in town. Superintendent M. C. Edmunds then told Bredt that the Commission did not have the manpower to run the equipment. Bredt pointed out that the homesteaders, all qualified to operate the machinery, would gladly donate their time if they could use this equipment to build the road. Finally, Edmunds stated that the Commission just did not have enough money for such a project. Bredt was clearly frustrated, because he felt that Edmunds was just "beating around the bush." In the meantime, the equipment sat idle for six months of the year, and during the remainder Commission personnel operated it only eight hours a day. "What about the other sixteen hours?," Bredt asked. "Cannot this machinery be put to work two shifts?" Bredt concluded by stating that "I said my say, as I had a right to, and I sincerely wish you [Governor Gruening] would look into this matter."[14]

Agricultural Roads Near Homer

Superintendent Edmunds heard about the complaint from Chief

Engineer Taylor. He stated that it would be easy to construct a graded road to the Bredt homestead, "but to build a road over which he could haul over 400 tons of vegetables to market during a wet fall would require much additional surfacing" on the new road and also on the old road to which it would connect. In Edmunds' estimation, Bredt, a young man in his mid-twenties, belonged to a group of individuals who had located at Homer during the last ten years, and "some of them have big ideas, they feel they can set the world on fire and show oldtimers how to do things on a large scale. Edmunds, presumably, was one of these sourdoughs, and he visibly resented the cheechakos. Usually, however, "these people last a year or so," he observed, and then, "after having made a failure of their original plans, they leave the country and are not heard of again." Bredt should not be "bragging about his farming exploits," Edmunds advised, because while it was true that he had plowed some land last summer, "a large part of his crop which he hauled to the Spit had to be thrown into the sea on account of freezing."[15]

Edmunds Responds to Criticism

Edmunds refuted the assertion that there were a large number of competent dozer and truck drivers at Homer. In fact, he had been unable to recruit even one man for a road project at Red Mountain. Bredt himself was "not much of an operator," Edmunds observed, for last winter he had been unable to start a tractor although he had tinkered with it for months. It took a Commission mechanic half an hour to get the machine going. No doubt, the superintendent was annoyed at Bredt's complaints, and doubted the man's competency as a farmer. Rather than spending money on building a road to his homestead, however, Edmunds insisted the limited funds be used to maintain the road connection some four and one half miles to the dock at the end of the Homer Spit. It was a necessary chore because area residents needed the dock and the road. The problem was that high tides washed over the Spit depositing timbers and rubbish, and particularly washing out the road where it joined the mainland at Mud Bay. Ideally, the Commission should build

a pile bridge across the spit which would withstand high tides and storms and solve the wash-out problems at Mud Bay. Funds had never been available to do that, so the Commission had muddled along by building timber and brush dykes which frequently had to be repaired.[16]

Roads to be Built

Nevertheless, the Commission started to construct a road to Bredt's homestead located on the high bench at Homer. When harvest time came, however, Bredt's crop was a failure and he had nothing to haul over the Commission-built road which, incidentally, also served other homesteaders. Bredt and his brother then left Homer and gave up their homsesteads. The Commission had not finished the road clear to his homestead after his 1943 crop failure.[17]

Citizens of Homer Still Dissatisfied

Numerous protests about road conditions during the winter months in the Homer area continued and came to Taylor's attention. Mrs. R. W. Edens was dissatisfied that the Commission was unable to keep the Homer Heights road plowed during the winter. Residents needed the road to get to town, and so did the school bus. Patsy Myhill and Margaret M. Richardson had attempted to talk with Taylor about the lack of snow removal on a visit by the Chief Engineer to the area. Unfortunately, Taylor had only been able to spare a few minutes with the two women, and the talk had infuriated both. They left the brief meeting with the feeling "that to expect any help from you" had been just wishful thinking. Taylor's opinion that it required a rotary snowblower, costing approximately $14,000 to keep the roads open was plainly erroneous. All he needed to do was to hire a competent dozer operator. Carl Sholin, the Commission road boss in Homer, knew little about operating a dozer. Consequently, "the hill folks were isolated for the rest of the winter. It is unfair to a community to make 60 people suffer "because one man was inexperienced. Every winter since 1939-1940 the snow

had been removed satisfactorily by experienced dozer operators - except the last season. The Homer area finally attracted families, both women claimed, they would not stay "unless we have hopes for a solution to the problem of roads." The whole community keenly felt the loss of a single family, and within the past year six families had moved out because of inadequate transportation facilities. "Alaska homestead life," they stated, "has enough hardships connected with it without adding the unnecessary hardship that isolation brings." Residents needed roads to get children to school, obtain medical aid, conduct business, receive mail, attend church, and maintain social contacts. Perhaps men smiled at the term "social contact," but even the Army had recognized that need, and "in Anchorage, social life is so important that roads are kept open to the roadhouses." Both women demanded that Taylor consider the community's "needs fairly and give our problems unbiased consideration. None of us feel that this has been done up to this time." For that reason, the little community of Homer Heights had banded together in a united effort to obtain results.[18]

Chief Engineer Taylor Sympathetic

Taylor was sympathetic and diplomatic. Complaints such as these were not new to him. Residents from all sections of Alaska always asked, in fact demanded as a right, many more projects and services than the Commission's slender resources could supply. He told the residents that while some snow removal had been performed in the past on some roads, it was impossible to assure "that your roads will be kept open continuously during the winter...." The Commission had never been able to provide continuous winter maintenance on all of its roads. "In fact," he stated, "such maintenance has been limited to heavily traveled roads in thickly settled areas around large towns." He promised, however, to do all humanly possible to satisfy the requests with the funds and equipment available.[19]

Sholin To Be Replaced

Taylor discussed the situation with Superintendent Edmunds, and advised him to replace Carl Sholin as dozer operator because a "unanimity of opinion" regarded his skills as insufficient. In reality, however, these people desired additional Commission resources channeled into Homer, and there just were not any, and that was not Sholin's fault. Edmunds thereupon arranged to have the dozer work double shift to get the roads plowed out as soon as possible after a storm. He also agreed to replace Sholin with a thoroughly competent operator. Edmunds then hired Robert W. Kranich, the school bus contractor, to keep the roads open. So far, so well.[20]

Private Contractor Only Partly Successful

In February 1944, Kranich reported troubles. He had been unable to keep the road open during all of January because the whole month "was one continuous snowstorm with plenty of wind thrown in. The hill roads drifted level full with three to five feet of snow and a large part of our road work to the dock completely washed away." School bus service had to be discontinued temporarily, and even the school closed during the last week of the month because "the storms were so severe that it was impossible to go even on foot." Edmunds felt vindicated, for the critics had claimed that "it was comparatively simple for some competent man to keep the roads open for traffic." Kranich was such a man, the community had agreed. Now it seemed that the Commission's contention that it would be very difficult and expensive to do this work was justified. Edmunds noted that no further complaints had been received. Apparently, the residents of Homer Heights realized how difficult the work really was. "It is very easy to criticize and find fault with government agencies," he concluded, but more often than not "government men are not really at fault as we cannot do impossible things.... especially when funds and equipment are limited."[21] Taylor had handled the criticism well. He had cooperated with resident wishes

and engaged a competent man to keep the roads open. A severe winter had shown the residents that human determination and skills were no match for nature's forces.

Seward Chamber Petitions

In the meantime, the Seward Chamber of Commerce petitioned the Commission to build a road from Homer to Cooper's Landing. This was not a new idea, for as early as 1938, Kenai Peninsula residents had appealed to the Commission to at least survey a future highway from the Seward-Kenai road, ending at Russian River, down through the best agricultural areas and terminate at Homer. Locating and marking such a route would encourage settlers to follow it and homestead adjoining lands, thus transforming the whole route "into a beehive of activity. The people would start making their home knowing that by the time they were ready for business the highway would no doubt be well under construction." Don Carlos Brownell, the mayor of Seward, had strongly supported the petition. Brownell was an Alaska booster, and as such exaggerated conditions. He claimed "that there are hundreds of people intending to locate farms on the Peninsula,"... and "all the towns, especially Seward, are receiving increasing demands for information as to advisability of coming now." The reply always was to wait until the land had become more accessible through roads. Despite these warnings, however, "families are coming in by the dozen," some locating in Homer as well as the various other Kenai Peninsula towns "there to wait until a survey of a road will enable them to locate on land eventually connected by roads to markets." Brownell reminded the Commission that Kenai Peninsula residents had sent a petition with many signatures to Juneau, asking for the immediate start of construction of such a road. This time, however, fearing that the request would not be granted at once, they only asked that a permanent survey be started immediately. Nothing had come of it. In receipt of the 1944 petition, Taylor told the citizens that "our experience in obtaining appropriations for road work during the past two years has been

that neither the Bureau of the Budget nor the Congress is willing to approve funds for road work in Alaska except that directly connected with Army activities in the Territory." He assured the petitioners, however, that the Commission had included the road project in its postwar construction program. In June 1945, Hawley Sterling, the Assistant Chief Engineer, finally made a reconnaissance of the proposed road from Kenai Lake to Homer. Sterling estimated that a total of approximately 108 miles of main road would have to be built, with another 22 miles of branch roads. If approved and funded, Sterling believed that the road could be built rapidly because work could start simultaneously from a dozen points, if necessary. Power barges could land heavy equipment at any point along the Cook Inlet, and though this would necessitate the construction of spur roads, these would be required in any event for gravel hauling. In 1946, the Commission finally put three survey parties to work on the Kenai Peninsula.[22]

Commission Moves Property

In the meantime, following the abandonment of the Copper River and Northwestern Railway, and the construction of the Glenn Highway, the Alaska Road Commission moved its shops and warehouses from Chitina to a point on the Glenn Highway near its junction with the Richardson Highway. Since electricity was unavailable, the Commission built its own electrical plant on a site set aside by executive order and informally given the name Glennallen. Following the Commission move from Chitina, a number of employees built residences in the vicinity. By the end of 1943, they desired to obtain electricity for home use from the Commission plant. The Commission supported these requests, not only to improve living conditions of the employees but also to avoid fire hazards that had to be expected where the employees used gasoline or coal oil for lighting. In December 1943, Secretary Ickes granted the request to have Commission employees at Glennallen hooked up to the electrical plant. They were to be charged at the rate of ten cents per kilowatt hour, with a minimum charge of one dollar per

month for each meter. The fees were to be deducted quarterly from employee paychecks.[23] Although a minor matter, the administrators of the Alaska Road Commission were very careful in obtaining permission from the Secretary of the Interior before furnishing the service requested. They well remembered the trouble the maintenance and use of the telephone lines along the Richardson Highway had caused a few years earlier. There was to be no repetition of such a situation.

Plans For Postwar Projects

By late 1943, the Alaska Road Commission had prepared a list of projects for a postwar construction program. It had selected those which would be most heavily used immediately after completion rather than offering a complete list of all projects the Commission and others had recommended from time to time during the last twenty years. The Commission believed that homesteaders would expand the farming area, and that many tourists would visit Alaska to satisfy curiosities awakened by the wide publicity the North had received during the war. The Commission, furthermore, was convinced that any postwar road program for Alaska would be of military interest. The Second World War conclusively had shown Alaska's strategic military importance. The Commission also pointed out that former estimates for the same projects had been far too low in light of recent experiences which had shown that a road, 24 foot in width, would cost between $20,000 to $25,000 per mile to construct. The total cost for the fourteeen projects came to $16,070,000, most to be completed by the third year and the remainder by the sixth year. The fourteen projects and their price tab follow:

Kenai Lake to Homer,	$2,500,000;
Skagway to Dyea,	$ 200,000;
Farm Roads Wasilla area,	$1,200,000;
Iliamna Lake to Lake Clark,	$ 150,000;
Cantwell to Valdez Creek,	$1,000,000;
Valdez Creek to Richardson Highway	$2,000,000;

Cantwell to McKinley Park Station,	$ 600,000;
Farm Roads Homer Area,	$1,000,000;
Farm Roads, Fairbanks Area,	$ 800,000;
Fairbanks to Chena Hot Springs,	$1,620,000;
Mine Roads Seward Peninsula,	$1,000,000;
Eagle to Forty Mile to Tanacross,	$2,300,000;
Chitina to McCarthy,	$2,200,000;
Leila Lake to Richardson Highway via McLaren River	$2,500,000.[24]

A Modest Program

It was a modest program, and only time would reveal whether or not Congress would appropriate the necessary monies. For the last year of the war, 1945, Congress appropriated $2,250,000 to the Commission, another $152,500 came from the Alaska Fund, while the Territory contributed a mere $81,892. The years 1941 to 1945 can perhaps be best summarized by stating that the Alaska Road Commission used its entire Congressional appropriation to maintain the central Territorial highway system. In the 1944, work season, the funds had been insufficient for even the barest maintenance because of the very heavy military traffic on the Richardson, Glenn, and Steese Highways. In fact, the Commission had been forced to request a deficiency appropriation only. The Commission had used the modest, and unfortunately declining Territorial appropriations for maintaining roads in the outlying districts, which for the most part, served mining communities. All of these secondary roads were in poor condition at the end of the war. In fact, some had deteriorated so badly that they required complete reconstruction. G. H. Skinner, the Chief Clerk of the Alaska Road Commission, put the situation best when he stated that maintenance and rehabilitation on the secondary road system could not begin until the Commission either received "large appropriations or traffic on the central system falls off sufficiently to enable us to divert funds now employed on the maintenance of those roads.[25] At that point, nobody could predict what the postwar years would bring.

FOOTNOTES

1. Gruening to Emerson, September 28, 1940, R.G. 407, Records of the Adjutant General's Office, 611 Alaska 1-1-45, N.A.

2. General DeWitt memorandum to the Adjutant General, "Construction of Roads in Alaska," October 18, 1940, War Plans Division Memorandum to the Chief of Staff "Construction of Roads in Alaska," November 7, 1940, Stimson to Ickes, November 12, 1940, R.G. 407, Records of the Adjutant General's Office, 611 Alaska 1-1-45, N.A.

3. Alaska Road Commission, Annual Report, 1940, pp. 1, 6-7.

4. Alaska Road Commission, Annual Report, 1941, pp. 1, 6-7; Adjutant General to Commanding General, Western Defense Command, October 8, 1941, DeWitt to the Adjutant General, October 8, 1941, Acting Assistant Chief of Staff Memorandum to the Chief of Staff, "Improvement of Richardson Highway," October 28, 1941, Stimson to Ickes, November 3, 1941, R.G. 407, Records of the Adjutant General's Office, 611 Alaska 1-1-45, N.A.

5. Alaska Road Commission, Annual Report, 1942, p. 1.

6. Martin to Hewes, December 10, 1941, MacDonald to Hewes, December 3, 1941, Cogan to Commandant, Thirteenth Naval District, September 27, 1941, R.G. 30, Alaska Road Commission, box 65508, Federal Records Center, Seattle, Washington.

7. A. A. Berle, Jr., Memorandum "Alaska Highway," January 31, 1942, J. D. Hickerson to Berle, Confidential Memorandum, "Alaska Highway," January 31, 1942, R.G. 407, Records of the Adjutant General's Office, 611 Alaska 1-1-45, N.A.

8. Lyman L. Woodman, "Building The Alaska Highway: A Sage of the Northland," The Northern Engineer, Vol. 8, No.2, Summer 1976, pp. 11-15.

9. David A. Remley, Crooked Road: The Story of the Alaska Highway (New York: McGraw-Hill Book Company, 1976), pp. 235-237; J. D. Hickerson to Berle, Confidential Memorandum, "Alaska Highway," January 31, 1942, R.G. 407, Records of the Adjutant General's Office, 611 Alaska 1-1-5, N.A.

10. King to Marshall, February 5, 1942, Eubick to Assistant Chief of Staff, February , 1942, Stewart to Riggs, February 20, 1942, Riggs to Stimson, February 24, 1942, Eisenhower to Marshall, March 9, 1942, Stimson to Riggs, March 13, 1942, Gruening to Ickes, February 27, 1942, Ickes to Stimson, February 27, 1942. Stimson to Ickes, March 4, 1942, R.G. 407, Records of the Adjutant General's Office, 611 Alaska 1-1-45, N.A.

11. Woodman, "Building the Alaska Highway," pp. 17-25; Theodore A. Huntley and R. E. Royall, Construction of the Alaska Highway (Washington, D.C.: Government Printing Office, 1945), p. 96, P - 2985.

12. Naske, An Interpretative History, pp. 57-58.

13. Alaska Road Commission, Annual Report, 1943, pp. 1, 6-7.

14. Bredt to Gruening, April 13, 1943, R.G. 30, Alaska Road Commission, box 65479, Federal Records Center, Seattle, Washington.

15. Edmunds to Taylor, May 8, 1943, R.G. 30, Alaska Road Commission box 65479, Federal Records Center, Seattle, Washington.

16. Ibid.

17. Edmonds to Taylor, August 28, 1947, R.G. 30, Alaska Road Commission, box 65479, Federal Records Center, Seattle, Washington.

18. Elden to Taylor, June 28, 1943, Myhill to Taylor, June 28, 1943, Richardson to Taylor, June 30, 1943, Elliott to Taylor, June 28, 1943, R.G. 30, Alaska Road Commission, box 65479, Federal Records Center, Seattle, Washington.

19. Taylor to Zettle, July 5, 1943, Taylor to Richardson, July 7, 1943, Taylor to Myhill, July 10, 1943, R.G. 30, Alaska Road Commission, box 65479, Federal Records Center, Seattle, Washington.

20. Edmunds to Taylor, September 17, 1943, R.G. 30, Alaska Road Commission, box 65479, Federal Records Center, Seattle, Washington.

21. Kranich to Edmunds, February 6, 1944, Edmunds to Sterling, February 12, 1944, R.G. 30, Alaska Road Commission, box 65479, Federal Records Center, Seattle, Washington.

22. Petition of Kenai Peninsula residents to Alaska Road Commission, December, 1938, Brownell to Taylor, December 22, 1938, Taylor to Seward Chamber of Commerce, April 21, 1944, Sterling "Memorandum for files on Kenai-Lake-Homer Reconnaissance, July 25, 1945, R.G. 30, Alaska Road Commission, box 65479, February Records Center, Seattle, Washington; Alaska Road Commission, Annual Report, 1946, p. 7.

23. Sterling to Alaska Road Commission, July 17, 1943, Skinner to Division of Territories and Island Possessions, October 27, 1943, Sterling to Steward, October 27, 1943, Thoron to Ickes, November 29, 1943, Hampton to Alaska Road Commission, December 4, 1943, R.G. 30, Alaska Road Commission, box 65410, Federal

24. Sterling to Division of Territories and Island Possessions, October 22, 1943, R.G. 126, Classified Files, 9-1-55, N.A.

25. Alaska Road Commission, Annual Report, 1945, p. 1; Skinner to Williams, May 25, 1945, R.G. 30, Alaska Road Commission, box 65432, Federal Records Center, Seattle, Washington.

CHAPTER SIXTEEN

THE FUROR OVER HOUSE REPORT NO. 1705

On July 3, 1945, Congress passed House Resolution 255, directing a subcommittee of the Committee on Roads to inspect the Alaska Highway and its feeder roads, to determine why the highway was constructed, its cost, the manner in which federal funds were expended on the project and its collateral facilities, and to also determine the present and future value of the highway to the United States and Alaska. In conformance with the House Resolution, the subcommittee consisted of Representatives J. W. Robinson (Utah), chairman; W. M. Whitington (Mississippi); Jennings Randolph (West Virginia); Hugh Peterson (Georgia); Jesse P. Wolcott (Michigan); Paul Cunningham (Iowa); and J. Glenn Beal (Maryland). All members of the subcommittee, except Representatives Whittington and Wolcott, spent the greater part of August 1945 in Canada and Alaska, making an on-the-ground inspection of the Alaska Highway, its feeder roads, and the collateral facilities constructed under military supervision to serve the highway and to be served by it.[1]

Subcommittee Members Travel in Alaska

Subcommittee members traveled by automobile over the entire Alaska Highway except the 98 mile section between Whitehorse, Yukon Territory, and the junction of the Alaska Highway with the Haines lateral highway. Subcommittee members inspected this route from the air at low altitude. In addition to covering the 1,479 miles of the Alaska Highway, the members also drove over 575 miles of the connecting road system in Alaska. At each stop, the Representatives inspected highway maintenance and service facilities as well as the many airports along the way. They collected information on the problems of supplying the air route, the nature and condition of the telephone and telegraph system paralleling the highway; and the pipeline distribution system supplying airports between Watson Lake, British Columbia, and Fairbanks with aviation and motor gasoline and diesel and fuel oil. They also sponsored meetings in various cities and

settlements in Canada and Alaska where they listened to comments and discussed highway problems. Subcommittee members also obtained information on the agreement between the United States and Canada on the construction and maintenance of the highway, and collected and analyzed cost data on the construction of the Alaska Highway. In numerous appendixes, the subcommittee members pulled together all of the relevant historical data on the origins and construction of the Alaska Highway, much of it called from War Department and Public Road Administration files. It was a truly comprehensive undertaking.[2]

Subcommittee Members Learn About Alaska Highway

Subcommittee members learned that, under the provision of the original exchange of notes between the United States and Canada, those portions of the Alaska Highway and the Haines lateral road located in Canada would become integral parts of the Canadian highway system on April 1, 1946. On that date, Canada agreed to assume maintenance of these roads within its boundaries. The portion of the Alaska Highway located within the Territory already had become an integral part of the Alaska road system. The subcommittee members learned that these highways were to be opened for civilian use during the summer of 1946. The subcommittee members then turned their attention to the maintenance of both highways located in Alaska. Subcommittee members observed that "it would be incorrect to say that the committee was impressed favorably with the manner in which the Alaska Road Commission handles its assignment for maintenance and new construction." After carefully surveying work performed by the Commission in maintaining, repairing, and undertaking new construction on the Richardson Highway between Valdez and Gulkana, "especially in the vicinity of Keystone Canyon, left the Committee with the impression that the government is not receiving adequate value for funds appropriated by the Congress for work to be done under the supervision of the Alaska Road Commission ." Committee members particularly criticized the "inadequate engineering knowledge...exhibited by officials of