

LIST OF SURGEONS

Dr. T. C. Brandon, Chief Surgeon..... Anchorage
Dr. Harold Sogn, Surgeon..... Anchorage
Dr. J. H. Shelton, Surgeon..... Seward
Dr. J. A. Sutherland, Surgeon..... Fairbanks
Dr. P. B. Haagland, Surgeon..... Fairbanks

HOSPITALS

General Hospital..... Anchorage
Emergency Hospital..... Seward
Emergency Hospital..... Fairbanks

MILEAGE

Main Line

Seward to Fairbanks..... 470.3
Whittier to Portage..... 12.4
Total Main Line..... 482.7

Branches

Matanuska to Sutton..... 18.9
Moose Creek to Premier..... 3.8
Sutton to Jonesville..... 2.9
Eska Jct. to Eska..... 0.5
Healy to Suntrana..... 4.4
Total Branches..... 30.5
TOTAL..... 513.2

J. L. AXE
Trainmaster

J. T. FARSDAHL
Trainmaster

E. W. BARNETT
J. F. WALLACE
H. NUHSE
Road Foremen of Engines

E. T. WYSE
Chief Dispatcher

F. H. McCULLEY
Train Rules Examiner

Train Dispatchers
F. W. BELGARD
J. D. SHAW
C. V. BROWN
Wm. C. DAVIDSON
H. A. SHIELDS

Department of the Interior

THE ALASKA RAILROAD

TIME TABLE No. 45

To be used in conjunction with
Special Instruction Book No. 2.

In Effect at 12:01 A. M. Standard
or 150th Meridian Time.

Sunday, June 22, 1947

For the Government of Employees only.

J. T. CUNNINGHAM
Superintendent of
Operations.

J. P. JOHNSON
General Manager.

SOUTHWARD

SEWARD SUB-DIVISION

Capacity of sidings in car lengths, location of scales, fuel, water, turning and telephone stations (See Rule 6-A)		SECOND CLASS			FIRST CLASS		Distance from Anchorage	Time Table No. 45 JUNE 22, 1947		
		25	27	23	1	3		STATIONS		
		Daily	Daily	Daily	Tuesday Wednesday Thursday	Daily Except Sunday				
Yard	BCKPT WXYZ	L 10.00PM	L 10.15AM	L 7.30AM	L 2.30PM	L 9.20AM	0.0	DNR	ANCHORAGE	YD PA
54	P	10.15	10.30	7.45	f 2.41	f 9.31	5.0		CAMPBELL	
						f 9.37	8.3		TURNAGAIN	
50	P	10.37	10.50	8.07	f 2.57	f 9.46	13.7		POTTER	
24	PW	²⁶ 10.58	11.11	8.28	f ²⁴ 3.17	f 10.06	20.8		RAINBOW	
46	P	11.11	11.24	8.41	f ⁴ 3.28	f 10.16	25.6		INDIAN	
35	PWY	11.32PM	² 11.47AM	8.59	f 3.42	f 10.30	32.6		BIRD	
40	P	12.05AM	12.10PM	9.22	s ²⁸ 4.00	f 10.46	39.5		GIRDWOOD	
10	PW	12.18	12.23	9.35	f 4.10	f 10.56	43.8		KERN	
80	CJPWXY	s 1.00	s 1.15	A 9.50AM	s 4.25	A ² 11.10AM	50.1	DR	PORTAGE	PG
Spur	20* P	1.28	1.43		f 4.40		58.5		SPENCER	
40	PWXY	s 2.21	s ²⁸ 2.36		f 4.56		63.3	D	TUNNEL	TN
26	PW	s 3.02	s 3.17		f 5.17		69.4		GRANDVIEW	
40	PWY	s 3.20	s 3.35		f 5.30		74.3		HUNTER	
43	P	3.34	3.49		f ²⁶ 5.42		80.5		JOHNSON	
4	P	3.52	4.07		s 5.51		85.0		MOOSE PASS	
28	PW	4.12	4.27		f 6.05		91.0		LAWING	
		4.22	4.37		f 6.13		94.1		LAKEVIEW	
21	P	4.28	²⁶ 4.43		f 6.17		95.9		PRIMROSE	
34	P	s 4.50	s 5.05		f 6.31		102.3		DIVIDE	
38	P	5.10	5.25		f 6.46		107.4		WOODROW	
Yard	BCKP WXY	A 5.30AM	A 5.45PM		A 7.00PM		114.3	DNR	SEWARD	SP
		Daily	Daily	Daily	Tuesday Wednesday Thursday	Daily Except Sunday			[114.3]	
		7.30 15.24	7.30 15.24	2.20 21.47	4.30 25.40	1.50 27.33			.....Time Over Sub-division.....	
									.....Average Speed per Hour.....	

SOUTHWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

LOCATION OF WATER TANKS BETWEEN STATIONS

M. P. 21.6, M.P. 47.9, M.P. 50.5, M.P. 71.0, M.P. 81.0, M.P. 84.5.

ADDITIONAL STOPS ON SIGNAL

No. 1.

West Construction Spur, M.P. 62.8.

LOCATION OF INDUSTRY AND OTHER TRACKS

M. P.		Car Capacity
2.0	Fort Raymond Siding.....	19
48.0	*Spur.....	20
55.5	*Gravel Pit Spur.....	50
62.8	West Construction Co. Spur....	22
81.0	*Rock Spit Spur.....	10
84.5	*Ditcher Spur.....	10
104.5	*Ditcher Spur.....	2

*Switches removed during winter months.

SEWARD SUB-DIVISION

NORTHWARD

Capacity of sidings in car lengths, location of scales, fuel, water, turning and telephone stations (See Rule 6-A)		Time Table No. 45 JUNE 22, 1947		Distance from Seward	FIRST CLASS			SECOND CLASS			
					2	4		28	24	26	
					Wednesday Thursday Friday	Daily Except Sunday		Daily	Daily	Daily	
Yard	BCKPT WXYZ	DNR	ANCHORAGE	YD PA	114.3	A 1.00PM	A 4.25PM		A 6.00PM	A 4.15PM	A 12.05AM
54	P		CAMPBELL 5.0 8.3		109.3	f 12.47	f 4.15		5.43	4.04	11.46PM
			TURNAGAIN 5.4		106.0		f 4.09				
50	P		POTTER 7.1		100.6	f 12.31	f 3.59		5.16	3.38	11.19
24	PW		RAINBOW 4.8		98.5	f 12.11	f 3.39		4.55	¹ 3.17	²⁵ 10.58
46	P		INDIAN 7.0		88.7	f 12.01PM	f ¹ 3.28		4.42	2.58	10.38
35	PWY		BIRD 6.9		81.7	f ²⁷ 11.47AM	f 3.10		4.23	2.39	10.19
40	P		GIRDWOOD 4.3		74.8	s 11.32	f 2.54		¹ 4.00	2.16	9.56
10	PW		KERN 6.3		70.5	f 11.22	f 2.43		3.42	2.00	9.40
80	CJPWXY	DR	PORTAGE 8.4	PG	64.2	s ³ 11.10	L 2.30PM		s 3.25	L 1.40PM	s 9.20
Spur	20* P		SPENCER 4.8		55.8	f 10.49			2.59		8.53
40	PWXY	D	TUNNEL 6.1	TN	51.0	f 10.37			s ²⁷ 2.36		s 8.30
26	PW		GRANDVIEW 4.9		44.9	f 10.16			s 1.36		s 7.31
40	PWY		HUNTER 6.2		40.0	s 10.03			s 12.10PM		s 6.05
43	P		JOHNSON 4.5		33.8	f 9.48			11.46AM		¹ 5.42
4	P		MOOSE PASS 6.0		29.3	s 9.39			11.31		5.18
28	PW		LAWING 8.1		23.3	f 9.25			11.12		4.59
			LAKEVIEW 1.8		20.2	f 9.17			11.02		4.49
21	P		PRIMROSE 6.4		18.4	f 9.13			10.57		²⁷ 4.43
34	P		DIVIDE 5.1		12.0	f 8.58			s 10.35		s 4.20
38	P		WOODROW 6.9		6.9	f 8.43			9.08		2.53
Yard	BCKPT WXY	DNR	SEWARD	SP	0.0	L 8.30AM			L 8.45AM		L 2.30PM
		[114.3]				Wednesday Thursday Friday	Daily Except Sunday		Daily	Daily	Daily
		.....Time Over Sub-division.....				4.30	1.55		9.15	2.35	9.35
		.....Average Speed per Hour.....				25.40	26.14		12.36	19.39	11.78

SOUTHWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

LOCATION OF WATER TANKS BETWEEN STATIONS

M. P. 21.6, M.P. 47.9, M.P. 50.5, M.P. 71.0, M.P. 81.0,
M.P. 84.5.

ADDITIONAL STOPS ON SIGNAL

No. 2.
West Construction Spur, M.P. 62.8.

LOCATION OF INDUSTRY AND OTHER TRACKS

M. P.		Car Capacity
2.0	Fort Raymond Siding.....	19
48.0	*Spur.....	20
55.5	*Gravel Pit Spur.....	50
62.8	West Construction Co. Spur....	22
81.0	*Rock Spit Spur.....	10
84.5	*Ditcher Spur.....	10
104.5	*Ditcher Spur.....	2

*Switches removed during winter months.

SOUTHWARD

ANCHORAGE SUB-DIVISION

Capacity of sidings in car lengths, location of scales, fuel, water, turning and telephone stations (See Rule 6-A)	SECOND CLASS			FIRST CLASS		Distance from Curry	Time Table No. 45				
		27	21	25			5	7	JUNE 22, 1947		
		Daily	Daily Except Sunday	Daily			Tuesday Thursday Saturday	Sunday	STATIONS		
Yard BCKP WXY	L 8.00PM		L 9.00AM		L 5.00PM	L 3.30PM	0.0	DNR	CURRY	CU	
	8.19		9.19		f 5.12	f 3.42	5.9		LANE		
40 P	8.39		9.39		f 5.25	f 3.55	12.3		CHASE		
33 P	9.03		10.03		s ²⁶ 5.43	s 4.13	21.8		TALKEETNA		
	9.17		10.17		f 5.53	f 4.23	27.2		FISH LAKE		
Spur 8 P	9.32		10.32		f ⁸ 6.02	f ²⁶ 4.32	33.2		SUNSHINE		
36 PW	9.55		10.55		f 6.14	f 4.44	39.2		MONTANA		
36 P	10.13		11.29 ⁶		f 6.26	f 4.56	46.2		CASWELL		
Spur 26 P	10.33		11.49AM		f 6.40	f 5.10	54.6		KASHWITNA		
36 CPWXY	s 11.13		s 1.10PM		s 6.56	s 5.26	62.8		WILLOW		
	11.27		1.24		f 7.05	f 5.35	67.8		NANCY		
36 P	11.44PM		1.41 ²⁶		f 7.15	f 5.45	73.6		HOUSTON		
Spur 11 P	12.04AM		2.01		f 7.29	f 5.59	82.0		PITTMAN		
50 P	12.21		s 2.27		s 7.44	f 6.14	88.7	D	WASILLA	WA	
48 JPWXY	s ²⁸ 12.50	L 3.50PM	s 2.57		s 8.08	s 6.38	97.8	DR	MATANUSKA	JN	
40 P	1.15	4.15	3.29 ⁸		f 8.25	f 6.55	107.3		EKLUTNA		
51 PW	1.28	4.28	3.44		f 8.36	f 7.06	112.2		BIRCHWOOD		
16 P	1.56	4.56	4.12		f 9.00	f 7.30	121.9		EAGLE RIVER		
98 PX	2.18	5.17	4.34		f 9.17	f 7.47	129.4		WHITNEY		
X					f 9.22	f 7.52	131.5		FORT RICHARDSON		
Yard BCKPT WXYZ	A 2.35AM	A 5.30PM	A 4.50PM		A 9.30PM	A 8.00PM	134.2	DNR	ANCHORAGE	YD PA	
	Daily	Daily Except Sunday	Daily		Tuesday Thursday Saturday	Sunday					
	6.35 20.38	1.40 21.84	7.50 17.13		4.30 29.82	4.30 29.82					

SOUTHWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

ADDITIONAL STOPS ON SIGNAL

No. 25.
Austin M.P. 168.8.

Nos. 5 and 7.
Montana Creek, M.P. 211.0.
Willow Creek, M.P. 187.1.
Austin M.P. 168.8.

LOCATION OF INDUSTRY AND OTHER TRACKS

M. P.	Car Capacity
117.1	Air Depot Spur..... 100
117.5	Gravel Pit Spur..... 25
118.7	Fort Richardson Spur..... 100
119.4	Army Spur..... 100
138.9	*Ditcher Spur..... 2
142.0	Rock Spur..... 22
147.5	*Crane Spur..... 6
246.8	*Rock Pit Siding..... 10

*Switches removed during winter months.

ANCHORAGE SUB-DIVISION

NORTHWARD

Capacity of sidings in car lengths, location of scales, fuel, water, turning and telephone stations (See Rule 6-A)	Time Table No. 45 JUNE 22, 1947		Distance from Seward	FIRST CLASS			SECOND CLASS		
				6	8		22	26	28
				Monday Wednesday Friday	Saturday		Daily Except Sunday	Daily	Daily
Yard BCKP WXY	DNR	CURRY CU	248.5	A 1.00PM	A 7.00PM		A 6.45PM	A 6.30AM	
		LANE	242.6	f 12.45	f 6.49		6.25	6.07	
40 P		CHASE	236.2	f 12.30	f 6.37		6.06	5.48	
33 P		TALKEETNA	226.7	s 12.13	s 6.21		s 5.43	5.25	
		FISH LAKE	221.3	f 12.01PM	f 6.11		4.47	5.11	
Spur 8 P		SUNSHINE	215.3	f 11.52AM	f 6.02		4.32	4.56	
36 PW		MONTANA	209.3	f 11.41	f 5.41		4.08	4.38	
36 P		CASWELL	202.3	f 11.29	f 5.29		3.40	4.10	
Spur 26 P		KASHWITNA	193.9	f 11.14	f 5.14		3.20	3.50	
36 CPWXY		WILLOW	185.7	s 11.00	s 5.00		s 3.00	s 3.30	
		NANCY	180.7	f 10.47	f 4.47		1.55	2.44	
36 P		HOUSTON	174.9	f 10.37	f 4.37		1.41	2.27	
Spur 11 P		PITTMAN	166.5	f 10.23	f 4.23		1.12	2.07	
50 P	D	WASILLA WA	159.8	s 10.11	f 4.11		s 12.55PM	1.50	
48 JPWXY	DR	MATANUSKA JN	150.7	s 9.48	s 3.48	A 10.40AM	s 11.40AM	s 12.50	
40 P		EKLUTNA	141.2	f 9.29	f 3.29	10.16	10.59	12.14	
51 PW		BIRCHWOOD	136.3	f 9.18	f 3.18	10.03	10.46	12.01AM	
16 P		EAGLE RIVER	126.6	f 8.59	f 2.59	9.40	10.23	11.38PM	
98 PX		WHITNEY	119.1	f 8.43	f 2.43	9.18	9.55	11.10	
X		FORT RICHARDSON	117.0	f 8.38	f 2.38				
Yard BCKPT WXYZ	DNR	ANCHORAGE YD PA	114.3	L 8.30AM	L 2.30PM	L 9.00AM	L 9.30AM	L 10.45PM	
		[134.2]		Monday Wednesday Friday	Saturday	Daily Except Sunday	Daily	Daily	
		..... Time over Sub-division.....		4.30	4.30	1.40	9.15	7.45
		..... Average Speed per Hour.....		29.82	29.82	21.84	14.51	17.29

SOUTHWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

ADDITIONAL STOPS ON SIGNAL

No. 26.
Austin M.P. 168.8.

Nos. 6 and 8.
Austin, M.P. 168.8.
Willow Creek, M.P. 187.1.
Montana Creek, M.P. 211.0.

LOCATION OF INDUSTRY AND OTHER TRACKS

M. P.	Car Capacity
117.1	Air Depot Spur..... 100
117.5	Gravel Pit Spur..... 25
118.7	Fort Richardson Spur..... 100
119.4	Army Spur..... 100
138.9	*Ditcher Spur..... 2
142.0	Rock Spur..... 22
147.5	*Crane Spur..... 6
246.8	*Rock Pit Siding..... 10

*Switches removed during winter months.

SOUTHWARD

HEALY SUB-DIVISION

Capacity of sidings in car lengths, location of scales, fuel, water, turning and telephone stations (See Rule 6-A)	SECOND CLASS				FIRST CLASS			Distance from Healy	Time Table No. 45		
	25		27		9		5		JUNE 22, 1947		
	Daily		Daily		Monday Wednesday Friday		Tuesday Thursday Saturday		STATIONS		
Yard BCJKP WXYZ	L 8.30PM	L 9.00AM	L 1.10PM	L 12.30PM	0.0	DNR	HEALY	HX			
17 P	8.42	9.12	f 1.19	f 12.39	2.4		GARNER				
24 P	8.55	9.25	f 1.27	f 12.47	4.9		MOODY				
60 PXY	9.15	9.45	s 1.45	s 1.05	10.2	D	McKINLEY PARK	MK			
PW	9.30	10.00	f 1.54	f 1.14	14.4		LAGOON				
41 P	9.35	10.05	f 1.58	f 1.18	16.4		YANERT				
36 P	9.56	10.26	f 2.13	f 1.33	23.7		CARLO				
38 PXY	10.19	10.58 ¹⁰	f 2.28	f 1.48	31.4		WINDY				
45 PW	10.51	11.25	s 2.43 ²⁸	s 2.03	38.6		CANTWELL				
48 P	11.11PM	11.45AM	s 2.59	s 2.19 ²⁸	45.6		SUMMIT				
47 CPWXY	s 12.01AM	s 12.35PM	s 3.20 ⁶	s 2.40	53.8	DNR	BROAD PASS	BR			
50 P	12.26 ³⁶	12.56 ²⁸	f 3.35	f 2.55	61.0		COLORADO				
50 PW	12.57	1.27	f 3.53	f 3.13	69.4		HONOLULU				
60 P	s 1.30	s 2.23 ⁶	f 4.11	f 3.31	76.7		HURRICANE				
50 PY	2.00	2.56 ¹²	f 4.30	f 3.50	84.3		CHULITNA				
40 PW	2.19	3.12	f 4.43	f 4.03	89.7		CANYON				
41 P	2.35	3.28	f 4.54	f 4.14	94.9		GOLD CREEK				
Spur 2* P	2.50	3.43	f 5.07	f 4.27	99.8		SHERMAN				
Yard BCKP WXY	A 3.15AM	A 4.10PM	A 5.30PM	A 4.50PM	109.6	DNR	CURRY	CU			
	Daily	Daily	Monday Wednesday Friday	Tuesday Thursday Saturday			[109.6]				
	6.45 16.24	7.10 15.29	4.20 25.29	4.20 25.29			.....Time Over Sub-division.....				
							.....Average Speed per Hour.....				

SOUTHWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

ADDITIONAL STOPS ON SIGNAL

Nos. 5 and 9.
Section House, M.P. 333.5.

LOCATION OF INDUSTRY AND OTHER TRACKS

M. P.		Car Capacity
284.4	Ditcher Spur.....	8
350.2	Crane Spur.....	1
350.6	*Ditcher Spur.....	6

*Switches removed during winter months.

HEALY SUB-DIVISION

NORTHWARD

Capacity of sidings in car lengths, location of scales, fuel, water, turning and telephone stations (See Rule 6-A)	Time Table No. 45 JUNE 22, 1947		Distance from Seward	FIRST CLASS			SECOND CLASS			
				10	6	12	28	26		
	STATIONS	Tuesday Thursday		Monday Wednesday Friday	Sunday	Daily	Daily			
Yard BCKP WXYZ	DNR	HEALY HX 2.4	358.1	A 12.20PM	A 5.30PM	A 6.20PM	A 5.10PM	A 4.50AM		
17 P		GARNER 2.5	355.7	f 12.11	f 5.21	f 6.11	4.58	4.38		
24 P		MOODY 5.3	353.2	f 12.03PM	f 5.13	f 6.03	4.45	4.25		
60 PXY	D	McKINLEY PARK MK 4.2	347.9	s 11.45AM	s 4.55	s 5.45	4.20	4.05		
	PW	LAGOON 2.0	343.7	f 11.32	f 4.42	f 5.32	3.51	3.37		
41 P		YANERT 7.3	341.7	f 11.28	f 4.38	f 5.28	3.46	3.32		
36 P		CARLO 7.7	334.4	f 11.13	f 4.23	f 5.13	3.28	3.14		
33 PXY		WINDY 7.2	326.7	f 10.58 ²⁷	f 4.08	f 4.58	3.05	2.51		
45 PW		CANTWELL 7.0	319.5	s 10.43	s 3.53	s 4.43	2.43 ⁹	2.29		
48 P		SUMMIT 8.2	312.5	s 10.29	s 3.39	s 4.29	2.19 ⁵	1.50		
47 CPWXY	DNR	BROAD PASS BR 7.2	304.3	s 10.10	s 3.20 ⁹	s 4.10	s 1.50	s 1.25		
50 P		COLORADO 8.4	297.1	f 9.50	f 3.00	f 3.50	12.56 ²⁷	12.26AM ²⁵		
50 PW		HONOLULU 7.3	288.7	f 9.30	f 2.40	f 3.30	12.21PM	11.51PM		
60 P		HURRICANE 7.6	281.4	f 9.13	f 2.23 ²⁷	f 3.13	s 11.49AM	s 11.19		
50 PY		CHULITNA 5.4	273.8	f 8.56	f 2.06	f 2.56 ²⁷	11.04	10.34		
40 PW		CANYON 5.2	268.4	f 8.44	f 1.54	f 2.44	10.32	10.02		
41 P		GOLD CREEK 4.9	263.2	f 8.32	f 1.42	f 2.32	10.07	9.37		
Spur 2* P		SHERMAN 9.8	258.3	f 8.20	f 1.30	f 2.20	9.54	9.24		
Yard BCKP WXYZ	DNR	CURRY CU	248.5	L 8.00AM	L 1.10PM	L 2.00PM	L 9.30AM	L 9.00PM		
		[109.6]		Tuesday Thursday	Monday Wednesday Friday	Sunday	Daily	Daily		
		..... Time over Sub-division		4.20	4.20	4.20	7.40	7.50		
		..... Average Speed per Hour		25.29	25.29	25.29	14.28	13.99		

SOUTHWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

ADDITIONAL STOPS ON SIGNAL

Nos. 6, 10 and 12.
Section House, M.P. 333.5.

LOCATION OF INDUSTRY AND OTHER TRACKS

M. P.	Car Capacity
284.4	Ditcher Spur..... 8
350.2	Crane Spur..... 1
350.6	*Ditcher Spur..... 6

*Switches removed during winter months.

SOUTHWARD

NENANA SUB-DIVISION

Capacity of sidings in car lengths, location of scales, fuel, water, turning and telephone stations (See Rule 6-A)	SECOND CLASS				FIRST CLASS			Distance from Fairbanks	Time Table No. 45 JUNE 22, 1947		
		27	25		9	5			STATIONS		
		Daily	Daily		Monday Wednesday Friday	Tuesday Thursday Saturday					
Yard BCKP WXYZ		L 10.00PM	L 10.30AM		L 8.50AM	L 8.30AM	0.0	DNR	FAIRBANKS	FA	
Spur 4 X		10.12	10.42		f 8.58	f 8.38	3.2		COLLEGE		
12 P		10.17	10.47		f 9.01	f 8.41	4.7		ESTER		
15 P		10.25	10.55		f 9.06	f 8.46	7.3		HAPPY		
Spur 10		10.46	11.16		f 9.20	f 9.00	14.1		DOME		
Spur 8		11.04	11.34		f 9.32	f 9.12	19.5		SAULICH		
PWX		s 11.16	s 11.46AM		f 9.40	f 9.20	22.6		CACHE		
33 P		11.41PM	12.11PM		f 9.57	f 9.37	30.8		STANDARD		
34 P		12.05AM	12.35		f 10.13	f 9.53	38.7		DUNBAR		
16 P		12.40	1.10		f 10.36	f 10.16	49.9		BERG		
27 P		²⁸ 12.55	²⁶ 1.30		f 10.45	f 10.25	54.9		NORTH NENANA		
50 CPWXY		s 2.20	s ¹⁰ 2.30		s 11.00	s 10.40	58.6	D	NENANA	NA	
26 P		2.47	2.57		f ²⁶ 11.18	f ²⁶ 10.58	69.0		JULIUS		
50 P		3.08	3.18		f 11.32	f 11.12	76.1		CLEAR		
50		3.26	3.36		f 11.44	f 11.24	83.1		REX		
22 PWX		s 3.50	s 4.00		f 11.55AM	f 11.35	89.1		BROWNE		
21 P		4.19	4.29		f 12.14PM	f 11.54AM	99.1		FERRY		
14		4.42	4.52		f 12.29	f 12.09PM	107.0		LIGNITE		
Yard BCJKP WXYZ		A 5.00AM	A 5.10PM		A 12.40PM	A 12.20PM	112.2	DNR	HEALY	HX	
		Daily	Daily		Monday Wednesday Friday	Tuesday Thursday Saturday			[112.2]		
		7.00 16.03	6.40 16.83		3.50 29.27	3.50 29.27			.....Time Over Sub-division.....	
									.....Average Speed per Hour.....	

SOUTHWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

ADDITIONAL STOPS ON SIGNAL

Nos. 5 and 9.
 Logging Siding, M.P. 449.2.
 Section House, M.P. 394.8.
 B.J.L. Camp, M.P. 393.0.
 Road House, M.P. 362.8.

LOCATION OF INDUSTRY AND OTHER TRACKS

M. P.		Car Capacity
386.2	Wood Spur.....	3
395.0	Gravel Pit Spur.....	40
449.2	Logging Siding.....	10
467.4	Spur.....	6

*Switches removed during winter months.

NENANA SUB-DIVISION

NORTHWARD

Capacity of sidings in car lengths, location of scales, fuel, water, turning and telephone stations (See Rule 6-A)	Time Table No. 45			Distance from Seward	FIRST CLASS			SECOND CLASS			
	JUNE 22, 1947				10	6	12	26	28		
	STATIONS				Tuesday Thursday	Monday Wednesday Friday	Sunday	Daily	Daily		
Yard BCKP WXYZ	DNR	FAIRBANKS	FA	470.3	A 4.40PM	A 9.30PM	A 10.40PM	A 4.25PM	A 3.50AM		
		3.2									
Spur 4 X		COLLEGE		467.1	f 4.31	f 9.21	f 10.31	4.11	3.36		
		1.5									
12 P		ESTER		465.6	f 4.27	f 9.17	f 10.27	4.05	3.30		
		2.6									
15 P		HAPPY		463.0	f 4.22	f 9.12	f 10.22	3.57	3.22		
		6.8									
Spur 10		DOME		456.2	f 4.08	f 8.58	f 10.08	3.36	3.01		
		5.4									
Spur 8		SAULICH		450.8	f 3.56	f 8.46	f 9.56	3.18	2.43		
		3.1									
	PWX	CACHE		447.7	f 3.47	f 8.37	f 9.47	s 3.07	s 2.32		
		8.2									
33 P		STANDARD		439.5	f 3.30	f 8.20	f 9.30	2.42	2.07		
		7.9									
34 P		DUNBAR		431.6	f 3.14	f 8.04	f 9.14	2.18	1.43		
		11.2									
15 P		BERG		420.4	f 2.51	f 7.41	f 8.51	1.45	1.10		
		5.0									
27 P		NORTH NENANA		415.4	f 2.41	f 7.31	f 8.41	f 1.30 ²⁵	12.55AM ²⁷		
		3.7									
50 CPWXY	D	NENANA	NA	411.7	s 2.30 ²⁵	s 7.20	s 8.30	s 12.15PM	s 11.40PM		
		10.4									
25 P		JULIUS		401.3	f 2.08	f 6.58	f 8.08	11.18AM ⁵⁻⁹	10.58		
		7.1									
50 P		CLEAR		394.2	f 1.54	f 6.44	f 7.54	10.30	10.37		
		7.0									
50		REX		387.2	f 1.42	f 6.32	f 7.42	10.12	10.19		
		6.0									
22 PWX		BROWNE		381.2	f 1.31	f 6.21	f 7.31	s 9.55	s 10.04		
		10.0									
21 P		FERRY		371.2	f 1.14	f 6.04	f 7.14	9.29	9.39		
		7.9									
14		LIGNITE		363.3	f 12.59	f 5.49	f 6.59	9.05	9.15		
		5.2									
Yard BCJKP WXYZ	DNR	HEALY	HX	358.1	L 12.50PM	L 5.40PM	L 6.50PM	L 8.50AM	L 9.00PM		
		[112.2]									
					Tuesday Thursday	Monday Wednesday Friday	Sunday	Daily	Daily		
					3.50 29.27	3.50 29.27	3.50 29.27	7.35 14.79	6.50 16.42		

SOUTHWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

ADDITIONAL STOPS ON SIGNAL

Nos. 6, 10 and 12.
 Roadhouse, M.P. 362.8.
 B.J.L. Camp, M.P. 393.0.
 Section House, M.P. 394.8.
 Logging Siding, M.P. 449.2.

LOCATION OF INDUSTRY AND OTHER TRACKS

M. P.		Car Capacity
386.2	Wood Spur.....	3
395.0	Gravel Pit Spur.....	40
449.2	Logging Siding.....	10
467.4	Spur.....	6

*Switches removed during winter months.

SOUTHWARD
WHITTIER SUB-DIVISION
NORTHWARD

Capacity of sidings in car lengths, location of scales, fuel, water, turning and telephone stations (See Rule 6-A)	SECOND CLASS		FIRST CLASS	Distance from Portage	Time Table No. 45 JUNE 22, 1947			Distance from Whittier	FIRST CLASS	SECOND CLASS	
		23	3				4		24		
		Daily	Daily Except Sunday			STATIONS	Daily Except Sunday		Daily		
80 CJPWXY	L 10.10AM	L 11.10AM	0.0	DR	PORTAGE 5.3	PG	12.4	A 2.30PM	A 1.20PM		
50 P	10.23	f 11.21	5.3		MORAINÉ 7.1	MN	7.1	f 2.17	1.06		
Yard BCKP WXY	A 10.45AM	A 11.40AM	12.4	DR	WHITTIER	WR	0.0	L 2.00PM	L 12.45PM		
	Daily	Daily Except Sunday			[12.4]			Daily Except Sunday	Daily		
	0.35 21.26	0.30 24.80			.....Time Over Sub-division..... .....Average Speed per Hour.....			0.30 24.80	0.35 21.26	

SOUTHWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

SOUTHWARD
SUTTON SUB-DIVISION
NORTHWARD

Capacity of sidings in car lengths, location of scales, fuel, water, turning and telephone stations (See Rule 6-A)	SECOND CLASS		FIRST CLASS	Distance from Sutton	Time Table No. 45 JUNE 22, 1947			Distance from Matanuska	FIRST CLASS	SECOND CLASS	
		21					22				
		Daily Except Sunday				STATIONS	Daily Except Sunday				
35 JPXY	L 2.30PM		0.0		SUTTON 5.7		18.9		A 12.30PM		
25 JPWX	s 2.45		5.7		MOOSE CREEK 6.7		13.2		s 12.10PM		
51 PX	s 3.30		12.4	D	PALMER 6.5	PR	6.5		s 11.30AM		
48 JPWXY	A 3.45PM		18.9	DR	MATANUSKA	JN	0.0		L 10.50AM		
	Daily Except Sunday				[18.9]				Daily Except Sunday		
	1.15 15.14				.....Time Over Sub-division..... .....Average Speed per Hour.....				1.40 11.34	

SOUTHWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

Except No. 22 is Superior to No. 21.

ADDITIONAL STOPS ON SIGNAL
LOCATION OF INDUSTRY AND OTHER TRACKS

M. P.		Car Capacity
5.7	Ketchikan Spruce Mills Spur....	18
8.3	Ditcher Spur.....	2
9.8	Ditcher Spur.....	2

SOUTHWARD
JONESVILLE BRANCH
NORTHWARD

Capacity of sidings in car lengths, location of scales, fuel, water, turning and telephone stations (See Rule 6-A)	SECOND CLASS		FIRST CLASS	Distance from Jonesville	Time Table No. 45 JUNE 22, 1947		Distance from Sutton	FIRST CLASS	SECOND CLASS		
	21					STATIONS			22		
	Daily Except Sunday								Daily Except Sunday		
40 PX	L 1.15PM			0.0	JONESVILLE	2.9		A 1.00PM			
JX				0.5	0.5 ESKA JCT.	2.4					
35 JPXY	A 1.35PM			2.9	2.4 SUTTON	0.0		L12.40PM			
	Daily Except Sunday				[2.9]			Daily Except Sunday			
	0.20 8.70				.....Time Over Sub-division..... .....Average Speed per Hour.....			0.20 8.70		

SOUTHWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

Except No. 22 is Superior to No. 21.

SOUTHWARD
ESKA BRANCH
NORTHWARD

Capacity of sidings in car lengths, location of scales, fuel, water, turning and telephone stations (See Rule 6-A)	SECOND CLASS		FIRST CLASS	Distance from Eska	Time Table No. 45 JUNE 22, 1947		Distance from Eska Jct.	FIRST CLASS	SECOND CLASS		
						STATIONS					
25 CPXW				0.0	ESKA	0.5					
JX				0.5	0.5 ESKA JCT.	0.0					
					[0.5]						
					.....Time Over Sub-division..... .....Average Speed per Hour.....					

SOUTHWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

SOUTHWARD		MOOSE CREEK BRANCH				NORTHWARD	
Capacity of sidings in car lengths, location of scales, fuel, water, turning and telephone stations (See Rule 6-A)	SECOND CLASS	FIRST CLASS	Distance from Premier	Time Table No. 45	Distance from Moose Creek	FIRST CLASS	SECOND CLASS
				JUNE 22, 1947			
				STATIONS			
				PREMIER		3.8	
				MOOSE CREEK		0.0	
35			0.0				
25 JPWX			3.8				
				[3.8]			
				.....Time Over Sub-division..... .....Average Speed per Hour.....			

SOUTHWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

LOCATION OF INDUSTRY AND OTHER TRACKS

M. P. 0.2 Siding..... Car Capacity 23

SOUTHWARD		SUNTRANA BRANCH				NORTHWARD	
Capacity of sidings in car lengths, location of scales, fuel, water, turning and telephone stations (See Rule 6-A)	SECOND CLASS	FIRST CLASS	Distance from Suntrana	Time Table No. 45	Distance from Healy	FIRST CLASS	SECOND CLASS
				JUNE 22, 1947			
				STATIONS			
				SUNTRANA		4.4	
				DNR HEALY HX		0.0	
60 PX			0.0				
75 BCJKP WXYZ			4.4				
				[4.4]			
				.....Time Over Sub-division..... .....Average Speed per Hour.....			

SOUTHWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

LOCATION OF INDUSTRY AND OTHER TRACKS

M. P. 3.8 Siding..... Car Capacity 23

SPECIAL INSTRUCTIONS

Watch Inspectors

R. S. Brown.....Anchorage
A. Brown.....Fairbanks

Yards

First Class trains will approach yard limits and pass through yards at restricted speed.

Clearances

All Whittier Sub-division trains must obtain a clearance before leaving Portage or Whittier.

All trains must obtain a clearance before leaving Broad Pass, when operator is on duty.

Except as provided above rule 83-B will not apply at initial stations which are not telegraph stations or at telegraph stations except when operator is on duty.

Junction Switches

Switch at Portage set and locked for Seward Sub-division.
Switch at Matanuska set and locked for Anchorage Sub-division.
Switch at Moose Creek set and locked for Sutton Sub-division.
Switch at Sutton set and locked for passing track Sutton.
Switch at Eska Junction set and locked for Jonesville-Sutton line.
Switch at Healy set and locked for Nenana Sub-division.

Location of Overhead Structures

M.P.	Description	Over	North of
Seward Sub-Division			
11.3	Tunnel	.....	Woodrow
48.2	Tunnel	.....	Grandview
50.7	Overhead Crossing	R. R. Track.....	Grandview
51.9	Tunnel	.....	Tunnel
52.1	Tunnel	.....	Tunnel
52.3	Tunnel	.....	Tunnel
52.4	Tunnel	.....	Tunnel
52.5	Tunnel	.....	Tunnel
52.7	Tunnel	.....	Tunnel
54.3	Bridge	Placer River.....	Tunnel
76.5	Snowshed	.....	Girdwood
Whittier Sub-Division			
3.8	Tunnel	.....	Whittier
6.3	Tunnel	.....	Whittier
Anchorage Sub-Division			
148.3	Bridge	Matanuska River.....	Eklutna
227.2	Bridge	Talkeetna River.....	Talkeetna
Healy Sub-Division			
264.1	Bridge	Susitna River.....	Gold Creek
266.7	Bridge	Indian River.....	Gold Creek
269.2	Bridge	Indian River.....	Canyon
269.9	Bridge	Indian River.....	Canyon
287.7	Bridge	Honolulu Creek.....	Hurricane
353.6	Tunnel	.....	Moody
356.2	Tunnel	.....	Garner
Nenana Sub-Division			
370.7	Bridge	Nenana River.....	Lignite
413.7	Bridge	Tanana River.....	Nenana
467.9	Bridge	Noyes Slough.....	College

Train and Air Inspection

No train will run more than sixty (60) miles without stop being made for inspection of train.

Rear-end brake test between terminals must be made on all except first-class and extra passenger trains by trainmen, immediately prior to leaving the following stations:

Divide Grandview Hurricane Broad Pass

Running test must be made on all passenger trains immediately after leaving all initial and inspection stations and before leaving the following stations:

Divide Grandview Hurricane Broad Pass

Brakeman will station himself on last car at retaining valve and if air escapes from it while brakes are releasing he will give engineman a proceed signal; if no air escapes train must be brought to a stop and cause of failure of brakes to operate ascertained and remedied.

A terminal brake test must be made immediately before leaving Eska, Jonesville or Premier, and where a poor holding brake is found and cannot be remedied, it must be cut out and hand brake used on that car, care being taken to avoid overheating and flattening the wheels.

When making back-up movement of trains, running test of air-brakes must be made from rear of train.

Retainers

On all trains descending grades between the following stations, retainers must be turned up on all loaded cars and coaches. When train consists of loads and empties, sufficient retainers must be turned up on empty cars to properly control train.

Woodrow and Snow River Bridge No. 14.5.

Hunter and Placer River Bridge No. 54.3.

On all trains descending grade between Eska and Sutton, between Jonesville and Sutton, and between Premier and Moose Creek, all retainers must be turned up.

Retainers must be turned down commencing at rear of train.

On cars equipped with double pressure retaining valves, the handles must be turned to high pressure position (handles diagonal) on heavily loaded cars, and to low pressure position (handles horizontal) on empty cars and light or merchandise loads.

Retainers will be used at other points and under other conditions where in judgment of the engine and train crew it is deemed necessary.

Retainers must be turned down at the end of the district where the use of retainers are specified, stop being made for that purpose if necessary and train must not be run to a station beyond the end of district or other stopping place before turning retainers down.

An engine equipped with a large pump does not justify the failure to comply with these rules. Without retainers the engineer does not have proper control of the train. All trainmen and enginemen are cautioned that the rules relative to retainers must be fully complied with.

Conductors will be responsible for the proper handling of retainers by brakemen.

Engines in all classes of service will carry 70 pounds air brake pipe pressure except between points where retainers are used, engineers will regulate double pressure feed valve to maintain 90 pounds air brake pipe pressure.

SPECIAL INSTRUCTIONS

SPEED RESTRICTIONS

Speed of Passenger Trains Must Not Exceed 35 Miles Per Hour

Speed of Freight and Mixed Trains Must Not Exceed 30 Miles Per Hour

Speed of Trains or Engines Running Backward Must Not Exceed 20 Miles Per Hour

Trains with freight equipment fulfilling first class schedules will not exceed maximum speed allowed freight trains.

Trains will not exceed the speed in miles per hour shown below:

Between	Pas- senger	Freight	Run'g Back- ward
All Sub-Divisions and Branches			
Through Crossover and Turnouts...	8	8	8
On all Curves of 10 degrees and over	20	20	15
Seward Sub-Division			
Woodrow and M.P. 15.0.....	25	20	15
M.P. 26.0 and M.P. 26.5.....	20	15	10
M.P. 32.0 and M.P. 32.6.....	20	15	10
Hunter and M.P. 47.5.....	30	25	15
M.P. 47.5 and M.P. 48.8.....	15	15	10
M.P. 48.8 and Tunnel.....	20	15	10
M.P. 51.8 and M.P. 53.5.....	12	12	10
M.P. 70.3 and M.P. 70.6.....	20	15	10
M.P. 71.2 and M.P. 71.6.....	10	10	10
Curve at M.P. 72.3.....	20	20	15
Curve at M.P. 72.7.....	20	20	15
Girdwood and M.P. 81.0.....	30	25	15
Curve at M.P. 85.5.....	20	20	15
M.P. 91.0 and Potter.....	25	25	15
M.P. 103.0 and M.P. 104.0.....	20	20	15
Curve at M.P. 110.0.....	20	15	15
Whittier Sub-Division			
Whittier and Moraine.....	25	20	15
Anchorage Sub-Division			
M.P. 127.2 and M.P. 127.5.....	20	20	15
M.P. 131.0 and M.P. 131.5.....	20	20	15
Curve at M.P. 154.0.....	20	20	15
Healy Sub-Division			
M.P. 269.0 and M.P. 270.0.....	20	15	10
M.P. 274.4 and M.P. 278.3.....	25	20	15
Curve at South End Hurricane Gulch Bridge No. 284.2.....	10	10	10
Over Hurricane Gulch Bridge No. 284.2.....	10	10	10
M.P. 287.0 and M.P. 288.5.....	20	20	15
M.P. 327.0 and M.P. 328.0.....	20	20	15
M.P. 331.5 and M.P. 334.0.....	25	20	15
M.P. 339.8 and M.P. 344.1, except..	25	20	15
Curve M.P. 341.0.....	15	15	10

Between	Pas- senger	Freight	Run'g Back- ward
Curve at each end of Riley Creek Bridge No. 347.4.....	15	15	10
Over Riley Creek Bridge No. 347.4..	10	10	10
McKinley Park and Healy, except:..	15	15	10
Over fill at M.P. 348.7.....	15	15	10
Around Shoo-Fly M.P. 350.2.....	10	10	10
Over Bridge No. 350.3.....	10	10	10
Over Bridge No. 351.4.....	10	10	10
Around Shoo-Fly M.P. 352.8.....	5	5	5
M.P. 353.4 and M.P. 353.6.....	5	5	5
M.P. 354.5 and M.P. 354.7.....	5	5	5
Around Shoo-Fly M.P. 354.7.....	5	5	5
Through Tunnel No. 356.2.....	10	10	10
Over fill at M.P. 356.3.....	10	10	8
M.P. 357.0 and M.P. 357.2.....	5	5	5
Curve M.P. 357.4.....	10	10	8
M.P. 357.5 and M.P. 357.6.....	5	5	5
Curve M.P. 357.7.....	10	10	8
Nenana Sub-Division			
Curve at each end of Tanana River Bridge No. 413.7.....	20	15	10
Sutton Sub-Division			
Matanuska and Sutton.....	30	25	20
Moose Creek Branch			
Moose Creek and Premier.....	8	8	8
Jonesville and Eska Branches			
Sutton, Jonesville and Eska.....	10	10	10
Suntrana Branch			
Healy and Suntrana.....	20	20	15

All trains approach with caution and run carefully at all places where snow and mud slides and rocks are liable to come down.

During the period April 1 to June 15, of each year, account of track thawing resulting in soft track conditions, as well as uneven and rough track which cannot be properly taken care of owing to thawing conditions, particular care must be taken in the operation of all trains to insure safe operation in order that derailments will not result account of rough track conditions. On tangents it is the tendency of the engine to lurch and cause spread track and on curves with soft shoulders of roadbed, curves may be thrown out of line.

Passenger trains will not attempt to observe time table schedules in running time and time lost by any train account rough track conditions will not be regained.

Speed restrictions, slow orders and track bulletin must be fully observed.

The speed of all trains must be so controlled before crossing bridges enumerated below that no air application will have to be made when train is upon these bridges except in emergency cases:

Bridge 48.3.....	Hillside Bridge
Bridge 284.2.....	Hurricane Gulch Bridge
Bridge 347.4.....	Riley Creek Bridge
Bridge 413.7.....	Tanana River Bridge

SPECIAL INSTRUCTIONS

Speed Restrictions—Concluded

The maximum speed of trains handling equipment indicated below will be as follows:

Equipment	M. P. H.
Wrecking crane No. 55 except over bridges.....	18
Wrecking crane No. 55 over bridges.....	10
Pile Driver No. 6.....	25
Steam shovels on wheels, ditchers, cranes, etc..	18
Rotary snow plows.....	20
Rotary snow plow No. 3 over bridges.....	15
Trains having dead engines in tow must observe the following speed restrictions:	
With rods down or disconnected.....	15
With rods up and connected.....	20

Engines 300 Class, 0-6-0 type will not exceed speed of 20 M.P.H.

Where a lower speed is specified at certain points, the lower speed must not be exceeded.

Motor cars of four and six wheel type will not exceed speed shown below:

On curves.....	25
On straight track.....	40

Tonnage Rating Reduction Account Weather

Unless otherwise instructed, the following reductions from locomotive ratings will be made for weather conditions:

	Per Cent
30 or more above 0.....	None
29 to 20 above 0.....	10
19 to 10 above 0.....	20
9 to 0 above 0.....	30
1 to 10 below 0.....	35
11 to 20 below 0.....	40
21 to 30 below 0.....	45
31 to 60 below 0.....	50

SPEED TABLE

Speed per Hour	1 Mile in Min. Sec.	Speed per Hour	1 Mile in Min. Sec.	Speed per Hour	1 Mile in Min. Sec.
6	10	20	3	29	2.4
8	7.30	21	2.51	30	2.0
10	6	22	2.43	31	1.56
12	5	23	2.36	32	1.52
15	4	24	2.30	33	1.49
16	3.45	25	2.24	34	1.45
17	3.31	26	2.18	35	1.42
18	3.20	27	2.13	40	1.30
19	3.9	28	2.8		

RATING OF LOCOMOTIVES IN TONS

Northward	500 Class	550 Class	600 Class	700-800 Class	900 Class	1000 Class
Seward to Divide.....	551	480	372	630	504	535
Divide to Hunter.....	1268	1004	855	1450	1160	1260
Hunter to Grandview.....	616	517	417	705	564	590
Grandview to Potter.....	1964	1643	1322	2245	1796	2410
Whittier to Portage.....	1570	1265	960	1758	1474	1550
Potter to Canyon.....	1268	1004	855	1450	1160	1150
Canyon to Honolulu.....	717	602	487	820	656	678
Honolulu to Colorado.....	787	652	537	900	720	678
Colorado to Summit.....	1268	1004	855	1450	1160	1150
Summit to Healy.....	2065	1810	1860	2650	2170	1760
Healy to Nenana.....	2625	2200	1777	3000	2400	1955
Nenana to North Nenana.....	1268	1004	855	1450	1160	1430
North Nenana to Fairbanks.....	2257	1887	1518	2580	2064	1810
Matanuska to Sutton.....	1268	1004	855	1450	1160	1150
Sutton to Jonesville.....	115	105	92	132	105	105
Southward						
Fairbanks to Happy.....	1268	1004	855	1450	1160	1150
Happy to North Nenana.....	2257	1887	1518	2580	2064	1910
North Nenana to Honolulu.....	1268	1004	855	1450	1160	1150
Honolulu to Hurricane.....	848	710	572	970	776	790
Hurricane to Matanuska.....	1268	1004	855	1450	1160	1430
Sutton to Anchorage.....	2625	2200	1777	3000	2400	2150
Anchorage to Portage.....	1636	1370	1102	1870	1496	1470
Portage to Whittier.....	1729	1420	1111	2056	1729	1710
Portage to Grandview.....	494	414	332	565	452	535
Grandview to Primrose.....	1268	1004	855	1450	1160	1810
Primrose to Seward.....	551	480	372	630	504	535

