COMPANY SURGEONS

*Dr. Abbott Skinner, Chief Medical Officer....St. Paul, Minn.
*Dr. Hugo F. Schroeckenstein
Asst. to the Chief Medical Officer .....St. Paul, Minn.
*Dr. F. K. Remington .....Seattle, Wash.
Dr. Chester A. Regan .....Seattle, Wash.
Dr. Roy F. West .....Seattle, Wash.
*Dr. L. W. Varley.....Everett, Wash.
*Dr. Chas. E. Conner .....Cashmere, Wash.
*Dr. Thomas B. Dodgson .....Stanwood, Wash.
*Dr. MacKenzie Morrison .....Vancouver, B. C.
*Dr. R. W. Powers .....Burlington, Wash.
*Dr. D. H. Boettner .....Bellingham, Wash.
*Dr. Samuel E. Adams .....Tacoma, Wash.
Dr. Albert Ehrlich .....Tacoma, Wash.
Dr. G. F. Parks .....Centralia, Wash.
Dr. Henry M. Wiswall .....Vancouver, Wash.
*Dr. Arthur L. Ludwick .....Wenatchee, Wash.
*Dr. Wayne B. Zook.....Wenatchee, Wash.
*Dr. W. A. Bartlett.....Klamath Falls, Ore.
*Dr. J. A. Rogers.....Klamath Falls, Ore.
*Dr. C. J. Rademacher.....Bend, Ore.
*Dr. A. O. Meier.....Bieber, Cal.

*Designates also Examining Surgeon.

OPHTHALMOLOGIST
(Eye Doctors)

Dr. C. K. Miller .....Wenatchee, Wash.
Dr. William R. Seibold .....Everett, Wash.
Dr. Robert C. Laughlin .....Seattle, Wash.

D. L. LAMBERT, Asst. Superintendent.
T. N. HEMMESCH, Asst. Superintendent.
V. W. BICE, Asst. Superintendent.
E. KHATAIN, Chief Dispatcher.
S. H. SNELL, Chief Dispatcher.
T. G. KOTNOUR, Master Mechanic.
D. K. JAEB, Asst. Master Mechanic.
E. H. NELSON, Trainmaster.
A. W. FOOTE, Trainmaster.
J. M. McFARLAND, Trainmaster.
D. D. DAHL, Trainmaster.
C. A. KEIL, Trainmaster.
G. W. McELHINNEY, Traveling Engineer.
R. L. BUSHAW, Traveling Engineer.
G. T. RASMUSON, Terminal Manager.
M. G. WHITSELL, Asst. Terminal Manager.

GREAT NORTHERN RAILWAY COMPANY

CASCADE DIVISION

TIME TABLE 6

EFFECTIVE 2:00 A. M.

PACIFIC STANDARD TIME

Sunday, October 26, 1969

J. W. WICKS, Superintendent.

W. L. SMITH, Asst. Vice President-General Manager.

H. J. SURLES,
General Superintendent Transportation.

Printed in U.S.A.

COMPANY SURGEONS

*Dr. Abbott Skinner, Chief Medical Officer	St. Paul, Minn.
*Dr. Hugo F. Schroeckenstein Asst. to the Chief Medical Officer	St. Paul, Minn.
*Dr. F. K. Remington	Seattle, Wash.
Dr. Chester A. Regan	Seattle, Wash.
Dr. Roy F. West	Seattle, Wash.
*Dr. I. W. Varley	Everett, Wash.
*Dr. Chas. E. Conner	Cashmere, Wash.
*Dr. Thomas B. Dodgson	Stanwood, Wash.
*Dr. MacKenzie Morrison	Vancouver, B. C.
*Dr. R. W. Powers	Burlington, Wash.
*Dr. D. H. Boettner	Bellingham, Wash.
*Dr. Samuel E. Adams	Tacoma, Wash.
Dr. Albert Ehrlich	Tacoma, Wash.
Dr. G. F. Parks	Centralia, Wash.
Dr. Henry M. Wiswall	Vancouver, Wash.
*Dr. Arthur L. Ludwick	Wenatchee, Wash.
*Dr. Wayne B. Zook	Wenatchee, Wash.
*Dr. W. A. Bartlett	Klamath Falls, Ore.
*Dr. J. A. Rogers	Klamath Falls, Ore.
*Dr. C. J. Rademacher	Bend, Ore.
*Dr. A. O. Meier	Bieber, Cal.

*Designates also Examining Surgeon.

OPHTHALMOLOGIST
(Eye Doctors)

Dr. C. K. Miller	Wenatchee, Wash.
Dr. William R. Seibold	Everett, Wash.
Dr. Robert C. Laughlin	Seattle, Wash.

D. L. LAMBERT, Asst. Superintendent.
T. N. HEMMESCH, Asst. Superintendent.
V. W. BICE, Asst. Superintendent.
E. KHATAIN, Chief Dispatcher.
S. H. SNELL, Chief Dispatcher.
T. G. KOTNOUR, Master Mechanic.
D. K. JAEB, Asst. Master Mechanic.
E. H. NELSON, Trainmaster.
A. W. FOOTE, Trainmaster.
J. M. McFARLAND, Trainmaster.
D. D. DAHL, Trainmaster.
C. A. KEIL, Trainmaster.
G. W. McELHINNEY, Traveling Engineer.
R. L. BUSHAW, Traveling Engineer.
G. T. RASMUSON, Terminal Manager.
M. G. WHITSELL, Asst. Terminal Manager.

GREAT NORTHERN RAILWAY COMPANY

CASCADE DIVISION

TIME TABLE 6

EFFECTIVE 2:00 A. M.

PACIFIC STANDARD TIME

Sunday, October 26, 1969

J. W. WICKS, Superintendent.

W. L. SMITH, Asst. Vice President-General Manager.

H. J. SURLES,
General Superintendent Transportation.

Printed in U.S.A.

Station Numbers	Car Capacity: Sidings	Car Capacity: Other Tracks	First Class 27 Daily	First Class 359 Daily	First Class 31 Daily	First Class 5 TOFC Daily Ex. Sun.	Distance from Wenatchee	Time Table No. 6 Effective October 26, 1969 STATIONS	Telegraph Calls	Distance from Seattle	SIGNS	First Class 32 Daily	First Class 360 Daily	First Class 28 Daily
02045		2692	6.40Pm		3.20Am	12.45Am	0.00	WENATCHEE (CTC)	WC	154.46	BCFJKP QRTWYZ	A 7.10Pm		A 2.05Am
								11.00						
02056	172	408					11.00	CASHMERE	OM	143.46	OPQW	6.40		1.45
								7.76						
02064		137					18.76	PESHASTIN	PN	135.70	OP			
								3.28						
02067	147	18					22.04	LEAVENWORTH		132.42	PQ			
								13.54						
02081	206	12					35.58	WINTON		118.88	P			
								6.57						
02087	135						42.15	MERRITT		112.31	PQTW			
								7.01						
02094	220						49.16	BERNE		105.30	P			
								9.00						
02103	184	11					58.16	SCENIC		96.30	PQ			
								12.76						
02116	174	182	8.40		5.26	2.42	70.92	SKYKOMISH	KY	83.54	BCFKP QTW	4.57		12.05Am
								3.82						
02120		138					74.74	GROTTO		79.72	P			
								3.81						
02124	200	19					78.55	BARING		75.91	P			
								14.74						
02139	198	560					93.29	GOLD BAR		61.17	P			
								12.88						
02152	228	137					106.17	MONROE	RO	48.29	BJOPQR			
								7.00						
02158		78					113.17	SNOHOMISH	SH	41.29	JOPR			
								5.58						
02164		117					118.75	LOWELL JCT.		35.71	JPY			
								1.54						
02165	205	117		3.32Pm			120.29	P. A. JCT.		34.17	JPY		A 4.24Pm	
								1.37						
02168		847	9.44 9.55	s 3.38	6.30 6.40	s 4.01	121.66	EVERETT	JN	32.80	CPQWY	s 3.58	s 4.21	11.10 10.50
								0.81						
02169		94					122.47	EVERETT JCT.		31.99	JPY			
								2 Main Tracks 3.75						
02172		92					126.22	MUKILTEO		28.24	APX			
								10.82						
02182		104	10.20	s 4.01	7.07	4.25	137.04	EDMONDS (CTC)	DR	17.42	CPQ	3.31	4.00	10.31
								Dbl. Track 10.26						
02193		207	10.37	4.16	7.22	4.45	147.30	BALLARD (ABS)		7.16	APY	3.15	3.45	10.15
								2.20						
02195		1691	10.42	4.20	7.27	A 5.00Am	149.50	INTERBAY	RB	4.96	BCFIKP QRTWYZ	3.12	3.42	10.12
								3.83						
							153.33	Track NO. PORTAL (ABS)		1.13	CIQY			
								0.97						
BETWEEN NORTH PORTAL AND SOUTH PORTAL INTERLOCKING RULES AND KING STREET PASSENGER STATION TUNNEL RULES GOVERN														
							154.30	Double SO. PORTAL		0.16	IY			
								0.16						
02200		1102	A 11.00Pm	A 4.35Pm	A 7.45Am		154.46	SEATTLE	UD	0.00	BCKPQ RYZ	3.00Pm	3.30Pm	10.00Pm
			4.20 34.5	1.03 32.5	4.25 35.0	4.15 35.2		Time Over Subdivision Average Speed Per Hour				4.10 37.1	.54 37.9	4.05 37.8

Eastward trains are superior to westward trains of the same class except on DOUBLE TRACK or in CTC TERRITORY.

CONDITIONAL FLAG STOPS

Nos. 27 and 28 stop at any station between Wenatchee and Winton, also Monroe and Snohomish to pick up or discharge revenue passengers from or to points Havre and east where Nos. 27 and 28 are scheduled to stop.

Eastward First Class Trains will stop at Edmonds to Pick-Up Revenue Passengers.

Westward First Class Trains except No. 5 will stop at Edmonds to Discharge Revenue Passengers.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 5 THROUGH 12.

SOUTHWARD — SECOND SUBDIVISION — NORTHWARD 3

Station Numbers	Car Capacity: Sidings	Car Capacity: Other Tracks	SOUTHWARD FIRST CLASS 105 C. N. 2 Daily	101 C. N. 6 Daily	359 Daily	Distance from Vancouver	Time Table No. 6 Effective October 26, 1969 STATIONS		Telegraph Calls	Distance from Everett Junction	SIGNS	NORTHWARD FIRST CLASS 102 C. N. 5 Daily	106 C. N. 1 Daily	360 Daily
15181		871	8.00Pm	5.00Pm	12.40Pm	0.00	(G. N.-C. N.-Station) VANCOUVER		DI VN	122.35	BCFKPQ RTWYZ	A 7.30Am	A11.15Am	A 7.15Pm
BETWEEN VANCOUVER AND VANCOUVER JCT. CANADIAN NATIONAL RY. TIME TABLE & SPECIAL INSTRUCTIONS WILL GOVERN														
15130			8.02Pm	5.02Pm	12.42Pm	0.70	0.70 VANCOUVER JCT.		...	121.65	JRY	A 7.16Am	A10.58Am	A 7.09Pm
15126			8.03	5.03	12.43	1.26	0.56 C. N. JCT.	ABS	...	121.09	AJPY	7.15	10.57	7.08
15125			8.06	5.06	12.45	2.73	1.47 STILL CREEK	ABS	...	119.62	APY	7.13	10.55	7.06
15133			8.09	5.09	12.47	4.83	Double Track 2.10 WILLINGDON JCT.	ABS	...	117.52	IJPY	7.10	10.52	7.03
15118			8.15	5.15	12.53	9.69	Double Track 4.86 BURNABY	ABS	...	112.66	P	7.05	10.47	6.57
15114	54	401	8.27	5.27	s 1.01	11.63	1.94 NEW WESTMINSTER	CTC	MN	110.72	CKPQRTYZ	7.02	10.44	s 6.54
15110			A 8.35Pm	A 5.35Pm		13.52	1.89 FRASER RIVER JCT.	CTC	...	108.83	IJP	6.49Am	10.29Am	
15109	60	23				14.94	1.42 BROWNSVILLE	CTC	...	107.41	P			
15106					1.12	17.51	2.57 TOWNSEND	CTC	...	104.84	P			
15106	44	46			1.19	23.99	6.48 COLEBROOK	CTC	...	98.36	P			6.33
15091	55	10			s 1.28	32.73	8.74 WHITE ROCK, B. C.	CTC	WR	89.62	CPY			s 6.24
15088	47	61			s 1.41	35.87	3.14 BLAINE, WN.	ABS	BN	86.48	CPY			s 6.16
15075	57	79			1.54	48.97	13.10 FERNDALE	ABS	FD	73.38	OP			6.00
15057		320			s 2.11	58.00	9.03 BELLINGHAM	ABS	HM	64.35	BFKOP QTWYZ			s 5.49
15062	85	82			2.17	61.17	3.17 SOUTH BELLINGHAM	ABS	...	61.18	PY			5.41
15058	59				2.31	70.79	9.62 SAMISH	ABS	...	51.56	P			5.27
15049	91	8			2.35	74.59	3.80 BOW	ABS	...	47.76	P			5.22
15042	75	342			2.42	81.98	7.39 BURLINGTON	ABS	....	40.37	BFJM PTWY			5.14
15039					s 2.48	84.50	2.52 M.V.B. STATION	ABS	NR	37.85	CPQY			s 5.11
15038	100	168			2.50	85.95	1.45 MT. VERNON	ABS	....	36.40	PY			5.04
15025	101	94			f 3.02	98.38	12.43 STANWOOD	ABS	B	23.97	OP			f 4.53
15016	107	14			3.11	108.01	9.63 ENGLISH	ABS	...	14.34	P			4.44
15012					3.14	111.66	3.65 KRUSE JCT.	ABS	...	10.69	JP			4.39
15009	47	85			3.18	115.07	3.41 MARYSVILLE	ABS	....	7.28	P			4.36
15008					A 3.23Pm	117.75	2.68 DELTA JCT.	ABS	WY	4.60	CLJPQTY			4.31Pm
15010	70	62				118.78	1.03 LONG SIDING	ABS	...	3.57	PY			
02168		847				121.54	2.76 EVERETT	ABS	JN	0.81	CPQWY			
02169		94				122.35	0.81 EVERETT JCT.	ABS	...	0.00	JPY			
			.35	.35	2.43		Time Over Subdivision					.41	.46	2.44
			23.2	23.2	43.3		Average Speed Per Hour					19.8	17.6	43.1

SOUTHWARD — THIRD SUBDIVISION — NORTHWARD

Station Numbers	Car Capacity: Sidings	Car Capacity: Other Tracks	SOUTHWARD FIRST CLASS 359 Daily	Distance from Delta Jct.	Time Table No. 6 Effective October 26, 1969 STATIONS		Telegraph Calls	SIGNS	NORTHWARD FIRST CLASS 360 Daily
15008			3.23Pm	0.00	DELTA JCT.	ABS	WY	CLJPQTY	A 4.31Pm
15004			A 3.27Pm	1.73	1.73 G. N. JCT.	ABS	.....	JPY	4.29Pm
BETWEEN G.N. JCT. AND SEALINE JCT. NORTHERN PACIFIC RY. TIME TABLE AND RULES WILL GOVERN									
15003			3.30Pm	2.78	1.05 SEALINE JCT.		.....	JPY	A 4.26Pm
02165			A 3.32Pm	3.66	0.88 P. A. JCT.		.....	JMPY	4.24Pm
			.09		Time Over Subdivision				.07
			24.4		Average Speed Per Hour				31.6

Northward trains are superior to southward trains of the same class on Second and Third Subdivisions except on DOUBLE TRACK or in CTC TERRITORY.

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 5 THROUGH 12.

FOURTH SUBDIVISION

WESTWARD — EASTWARD

Time Table No. 6
Effective October 26, 1969

Station Numbers	Car Capacity: Siding	Car Capacity: Other Tracks	SECOND CLASS 159 Daily	SECOND CLASS 157 Daily	SECOND CLASS 155 Daily	SECOND CLASS 153 Daily	Distance from Bend	STATIONS	Telegraph Calls	Distance from Bieber	SIGNS	SECOND CLASS 152 Daily	SECOND CLASS 154 Daily	SECOND CLASS 156 Daily	SECOND CLASS 158 Daily
14152	Yard	.....	5.30Pm	.....	5.30Am	.....	.....	.....BEND.....	D	233.54	BCFKPQ RTWYZ	A 7.44Am	.....	.....	A 11.25Pm
BETWEEN BEND DEPOT AND THIRD STREET, TRAINS WILL BE GOVERNED BY OREGON TRUNK RAILWAY, TIME TABLE AND RULES.															
14154	87	76	5.34	.....	5.34	.....	2.81	2.81 .....BEND YARD.....	.....	230.73	PY	7.41	.....	.....	11.22
14165	168	15	5.52	.....	5.52	.....	13.11	10.30 .....LAVA.....	.....	220.43	P	7.28	.....	.....	11.09
14183	153	23	6.16	.....	6.16	.....	32.00	18.89 .....LAPINE.....	.....	201.54	P	7.05	.....	.....	10.46
14203	152	8	6.41	.....	152 6.41	.....	51.71	19.71 .....CRESCENT.....	.....	181.83	P	155 6.41	.....	.....	10.21
14220	105	80	A 7.05Pm	.....	A 7.05Am	.....	68.58	16.87 .....CHEMULT.....	MU	164.96	JKOPRTYQ	6.19Am	.....	.....	10.00Pm
BETWEEN CHEMULT AND BIEBER LINE JCT., TRAINS WILL BE GOVERNED BY SOUTHERN PACIFIC RY. TIME TABLE AND RULES.															
.....	.....	.....	.....	.....	.....	.....	144.05	75.47 .....BIEBER LINE JCT.....	.....	89.49	J	.....	.....	.....	.....
14296	Yard	981	.....	4.00Pm	.....	3.00Am	145.01	0.96 .....SOUTH KLAMATH.....	K	88.53	BCFKP QRTWYZ	.....	A 3.50Pm	A 8.50Pm	.....
14311	67	63	.....	4.17	.....	3.17	159.11	14.10 .....MERRILL.....	MR	74.43	OP	.....	3.33	8.33	.....
14320	97	142	.....	4.29	.....	3.29	168.53	9.42 .....MALIN.....	MA	65.01	OP	.....	3.21	8.21	.....
14327	85	39	.....	4.38	.....	3.38	175.68	7.15 .....STRONGHOLD.....	.....	57.86	PA	.....	3.12	8.12	.....
14340	97	12	.....	4.54	.....	3.54	188.35	12.67 .....MAMMOTH.....	.....	45.19	P	.....	2.56	7.56	.....
14350	131	14	.....	5.06	.....	4.06	198.64	10.29 .....KEPHART.....	.....	34.90	P	.....	2.44	7.44	.....
14362	97	0	.....	5.21	.....	4.21	210.53	11.89 .....SCARFACE.....	.....	23.01	P	.....	2.29	7.29	.....
14374	132	111	.....	5.36	.....	4.36	222.29	11.76 .....LOOKOUT.....	.....	11.25	PW	.....	2.14	7.14	.....
14385	Yard	.....	.....	A 5.50Pm	.....	A 4.50Am	233.54	11.25 .....BIEBER.....	B	.....	BCKP QRTWY	.....	2.00Pm	7.00Pm	.....

Eastward trains are superior to westward trains of the same class.

FIFTH SUBDIVISION

WESTWARD — EASTWARD

Time Table No. 6
Effective October 26, 1969

Station Numbers	Capacity of Tracks	Distance from Concrete	STATIONS	Telegraph Calls	Distance from Anacortes	SIGNS
66328	232	0.00	.....CONCRETE.....	BA	44.28	O
66326	87	1.16	1.16 ....GRASSMERE....	.....	43.12	.....
66322	42	6.44	5.28 .....BIRDSVIEW.....	.....	37.84	.....
66317	30	11.63	5.19 .....HAMILTON.....	.....	32.65	.....
66305	67	23.32	11.69 .SEDRO-WOOLLEY.	SW	20.96	OU
15042	417	28.08	4.76 ...BURLINGTON....	.....	16.20	BFJM PTWY
66207	16	34.99	6.91 .....WHITNEY.....	.....	9.29	.....
66210	24	38.34	3.35 ....WHITMARSH....	.....	5.94	J
66212	32	40.48	2.14 .....FIDALGO.....	.....	3.80	.....
66216	391	44.28	3.80 ....ANACORTES....	AC	0.00	OQ

SEE ADDITIONAL SPECIAL INSTRUCTIONS PAGES 5 THROUGH 12.

ALL SUBDIVISIONS

1. **SPEED RESTRICTIONS GENERAL.**

The following speed limits apply to trains and engines operating under the conditions outlined, unless rules or conditions require a further reduction.

50 MPH—Diesel engines light or with caboose only.

40 MPH—Trains handling loaded ore cars in series 80000 thru 95039, also Northern Pacific series 77800 to 78900. Helper engines must be cut in ahead of these cars in trains. These cars not to be handled in trains No. 82, No. 83 or No. 97.

35 MPH—Trains or engines on main routes, actuating the points of spring switches; trains or engines thru No. 20 turnouts at following locations.

Both siding switches at:

Leavenworth	Berne	Bow
Winton	Goldbar	Samish
Merritt	Stanwood	So. Bellingham

East siding switch at Cashmere, Scenic and Skykomish.

West siding switch at P.A. Jct.

South siding switch at Mt. Vernon.

Wenatchee, #1 switch East lead and #2 crossover switch.

Interbay, yard lead at 28rd Ave. overhead bridge.

30 MPH—On Main lines, when handling following equipment in trains not in actual service but on own wheels, derricks, cranes, pile drivers, Jordan spreaders, shovels, wedge plows, scale test car, and air dump cars X-2000 thru X-2096, X-7000 thru X-7049 when such cars are loaded with ore or gravel.

25 MPH—Trains handling logs on flat cars except cars equipped with permanent steel side stakes; trains or engines moving in facing point direction at spring switches without facing point lock; trains or engines thru No. 15 turnouts at following locations.

Both siding switches at Baring and Monroe, East and West crossover switch West end of yard Wenatchee, and West siding switch at Cashmere, Scenic and Skykomish.

20 MPH—Trains handling the following equipment on Branch Lines or on 6 degree or sharper curves of Main Lines, scale test cars, air dump cars X-2000 thru X-2096, X-7000 thru X-7049 when such cars are loaded with ore or gravel.

15 MPH—Trains handling the following equipment on Branch Lines or on 6 degree or sharper curves of Main Lines, derricks, cranes, pile drivers, Jordan spreaders, shovels and wedge plows.

Trains or engines moving thru interlockings against the current of traffic on double track; trains or engines thru all other turnouts, except at ends of double track, and turnouts shown previously in this item.

1(a). Rule 240 W of the Consolidated Code of Operating Rules is modified to permit handling Great Northern cars 60276 through 60279, 61500 through 61524 and 61000 through 61009 in passenger trains at passenger train speeds.

2. **MOVEMENT OF ENGINES DEAD IN TRAINS.**

Engine 2350 must be handled on rear of freight or mixed trains. Diesel engines 1 through 195 are not equipped with alignment control couplers and when in tow in freight or mixed trains must be handled singly, not in groups and not less than 5 cars or more than 15 cars from the road engine. Other diesel units when in tow dead in trains should not be in groups of more than 5 units, such units may be handled next to road engines. Engines 550 through 599 must have coupler alignment control lock blocks in "Down" position when such units are used in multiple operation.

When towing diesel engines dead in trains, the following speeds must not be exceeded.

MAXIMUM SPEED	ENGINE NUMBER
50 MPH	1 through 195.
79 MPH	320 thru 333, 350 thru 375, 400 thru 432, 500 thru 512, 679, 680, 2350, 2500 thru 2544.
65 MPH	All other diesel engine units.

3. **Except at points where it is necessary to classify trains, open cars loaded with poles, piling, lumber, timber, pipe, or other lading which might shift, should be placed as close as possible to the head end of train, but not next to engine, caboose, occupied outfit car, passenger car or another unprotected car containing commodities which might be subject to damage. Loaded trailer-on-flat cars are not included in this category. In double track territory, trains handling such cars must use extreme care to avoid slack running in or out when passing or being passed by other trains. In single track territory, trains handling such cars must be at stop when on siding or other track to meet or be passed by other trains, except when have more cars than siding will hold, it is permissible for such trains to pull by each other at reduced speed.**

Loaded dump cars should not be handled on double track after dark, but if necessary to do so, close watch must be maintained by members of the crew, and if a car dumps its load, train must be stopped at once and protection provided as prescribed by the rules.

Great Northern tie flats in series X-4800 to X-4975 and X-4410, whether loaded or empty, must be handled on rear of train.

3(a). Trains handling flat cars loaded with logs except cars with permanent steel side stakes will not exceed 10 MPH passing over through-truss bridges, or through tunnels. Thorough inspection of all cars of logs in train must be made at appropriate locations when train is stopped for meeting trains and other purposes, making certain train and lading are in safe condition before proceeding. Extra stops enroute will be made for this purpose when in the judgment of the conductor it is necessary. Members of the crew must maintain a watch for logs that may have rolled off cars and if a track is fouled, take prompt action to protect trains.

On double track, conductors must notify train dispatcher when logs are to be handled and the log train must be at stop when being passed by other trains, except when both trains are handling logs, either one should be at stop until the other train pulls by, whether on siding or double track.

On single track, trains handling logs must be at stop when meeting or being passed by other trains, except when there are more cars than siding will hold, it is permissible for log train to pull by other train at reduced speed.

In double track territory, logs must be secured to cars by chains or cables.

4. **Brakemen with less than one year of experience should not be used as flagman except in emergency, and then Superintendent will be notified by wire.**

5. Rule 14 of the Consolidated Code of Operating Rules is modified by the following instructions on trackage of the Great Northern Railway Company:

In the absence of a red signal two miles beyond a yellow-red flag, train or engine must STOP and not proceed until a proceed signal given with a yellow flag or a yellow light is received, or verbal permission is received.

6. **Trains departing from stations, either from siding or main track in trailing point movement actuating points of spring switches, a member of crew must observe indication of governing signal in opposite direction after rear end of train has passed thru switch to ascertain if switch points return to normal position. If this signal indicates Stop and no immediate train movement or other cause is evident report the fact to Superintendent from first available point of communication.**

During and immediately following snow storms or violent wind storms, spring switches must be operated by hand and relined to normal position before heading out through switch in trailing point movement, actuating switch points, to insure switch is in proper operating condition.

7. **Facing point locks on hand operated switches are indicated by a six inch yellow stripe painted on target staff. Be positive locking device is restored to normal position after using. A running switch must not be made thru this type switch.**

8. Regarding Rule 2 of the Consolidated Code of Operating Rules. The approved type wrist watches are Elgin, B. W. Raymond model, 13/0 size, 23 jewels; Ball Official Standard 1604B, 13/0 Ligne, 21 jewels; Bulova Accutron Railroad model; Hamilton 505 RR electric model and Bulova model 23J.

9. **The following Rules of the Uniform Code of Operating Rules apply in Canada:**

ENGINE WHISTLE SIGNALS

Rule 14. (k-a) o o — Answer to 15k

Rule 98. Unless protected by block or interlocking signals, trains and engines must approach the end of two or more tracks, junctions, railway crossings at grade and drawbridges, at restricted speed.

Unless otherwise specified in special instructions, the speed of any train or engine must not exceed thirty-five miles per hour at interlocked railway crossings at grade until the entire movement has passed the crossing.

Unless otherwise specified in special instructions, the speed of any train or engine must not exceed twenty-five miles per hour at interlocked drawbridges until the entire movement has passed the drawbridge.

Trains or engines must stop at the stop signs at non-interlocked railway crossings at grade and at non-interlocked drawbridges and not proceed until the proper signal has been given for that purpose.

Rule 99 outside ABS territory, when a train is moving under circumstances in which it may be overtaken by another train, lighted fusees must be dropped off at proper intervals and such other action taken as may be necessary to ensure full protection.

When a train stops under circumstances in which it may be overtaken by another train, a flagman must immediately go back a sufficient distance to ensure full protection:

In daytime, if there is no down grade toward train within one mile of its rear and there is a clear view of its rear of 2000 yards from an approaching train .....at least 1000 yards:

At other times and places, if there is no down grade toward train within one mile of its rear .....at least 1500 yards;

If there is a down grade toward train within one mile of its rear .....at least 2000 yards.

The flagman must, after going back a sufficient distance from train to ensure full protection, take up a position where there will be an unobstructed view of him from an approaching train of, if possible, 500 yards, first placing torpedoes not more than 100 nor less than 50 yards apart to cause two explosions at least 200 yards beyond such position. If necessary to go beyond the required distance, he will leave the torpedoes at the required distance as an indication of the location of his train, but must, under such conditions, also place torpedoes at the point at which an approaching train is flagged. Torpedoes so placed must not be removed.

The front of a train must be protected in the same manner when necessary.

Within ABS territory, when a train stops under circumstances in which it may be overtaken by another train, with the protection of at least two block signals to the rear, protection against following trains will have been afforded when flagman has taken up a position on the ground at a point from which stop signals can be plainly seen by an approaching train from a distance of at least 800 yards from the train being protected. When necessary to protect against trains moving in the opposite direction, flag protection provided for outside ABS territory must be provided, except that on single track where there are at least two block signals to the front governing opposing trains, protection will have been afforded a standing train when flagman has taken up a position on the ground at a point from which stop signals can be plainly seen by an approaching train from a distance of at least 800 yards from the train being protected.

Both outside and within ABS territory, when a train stops under circumstances in which it may be overtaken by another train, the engineman will immediately signal the flagman to protect the rear. When ready to proceed he will recall the flagman.

After taking up position at the distance required, flagman must remain at that point until recalled or relieved and safety of the train will permit. Flagman must always on the approach of a train display stop signals.

If recalled before another train arrives, he must leave a fusee burning red at the point from which he returned, and while returning to his train, a fusee burning red must be placed at such points or times as may be necessary to ensure full protection. A fusee burning red must be left at the point from which the train moves.

When curvature, weather or other conditions require, or when snow plows or flangers may be running, extra precaution must be taken.

Flagmen must each be equipped for daytime with:

A red flag on a staff,
At least eight torpedoes and
Seven red fusees; and

For nighttime and when weather or other conditions obscure day signals,

A white light,
A supply of matches,
At least eight torpedoes and
Seven red fusees.

A train should not stop between stations at a place where the view from following trains is obstructed if it can be avoided.

Conductors and enginemen are responsible for the protection of their trains.

Rule 40. (a) Before undertaking any work which may render the main track unsafe for movement at normal speed, or if rendered unsafe from any cause, trackmen, bridgemen, or other employees must provide protection by sending out a flagman with flagman's signals in each direction at least 2000 yards from the defective or working point.

(b) After going out the required distance, flagman must take up a position where there will be a clear view of him from an approaching train of, if possible, 500 yards, first placing torpedoes not more than 100 nor less than 50 yards apart to cause two explosions at least 200 yards beyond such position.

(c) Flagman must not return until recalled or relieved.

(d) If necessary to go beyond the required distance, flagman will leave the torpedoes at the required distance, but under such conditions must also place torpedoes at the point at which an approaching train is flagged.

(e) On the approach of a train flagman must display stop signals, using lighted fusees at night or in obscure weather.

(f) Trains stopped by a flagman will be governed by his instructions, and on reaching the defective or working point will there be governed by instructions of the foreman in charge.

(g) Flagmen must each be equipped for daytime with:

A red flag on a staff,
At least eight torpedoes and
Seven red fusees; and

For nighttime and when weather or other conditions obscure day signals,

A red light,
A white light,
A supply of matches,
At least eight torpedoes and
Seven red fusees.

Rule 43. When the nature of the defect does not require stop to be made, and after speed restriction has been placed by train order and the foreman so advised, Rule 40 may be modified as follows:

(a) By day place a yellow flag and, in addition, by night a yellow light at least 2000 yards in each direction from the de-

fective point to the right of the track as seen from an approaching train, also:
(b) By day place a green flag and, in addition, by night a green light in each direction immediately beyond the defective point.
(c) Trains must reduce speed to comply with requirements of the train order, and must not increase speed until the entire train has passed the green signal.
(d) When weather or other conditions obscure day signals night signals must be used in addition.

Rule 45. In providing protection each main track must be regarded as a track upon which trains may run in either direction. Where two main tracks are on the same roadbed, flags and lights required to be placed to the right of the track as seen from an approaching train under Rule 43 must be placed to the outside of the track affected and not between the two main tracks.

Rule 46. When flags or lights are placed as set forth in Rules 43 and 45 they will be mounted on staffs and elevated so there will be an unobstructed view of them from an approaching train.

Rule 47. Where the use of torpedoes is required, duplicates should be placed on the opposite rail to explode simultaneously.

Rule 48. Torpedoes must not be placed near stations nor on public crossings at grade.

Rule 49. A sign bearing figures indicating permissible speeds, or the word SLOW, placed at the side of the track will indicate a permanent slow order; its location and speeds permitted will be specified in the time table or special instructions.

10. At the locations listed below there are spring switches with a spring switch light on a separate mast. When this light displays a lunar aspect it means the spring switch is in normal operating condition. When this light displays a red aspect Consolidated Code Rule 104(H) applies. The spring switch light when displaying a lunar aspect is not to be confused with the lunar aspect as shown in Consolidated Code Rule 240N.

Stanwood both siding switches; Mt. Vernon south siding switch; Bow both siding switches; Samish both siding switches; South Bellingham both siding switches; End of double track M.P. 4.0 west end Interbay yard; Interbay yard lead at 23rd Avenue overhead bridge; End of double track M.P. 5.4 east end Interbay yard; Ballard between M.P. 7 and 8; East end of double track M.P. 27.

11. **FREIGHT TRAIN OPERATIONS ON GRADES**

2.2% Grade

Road locomotives must not exceed a total of 14,400 rated horsepower and consist of not more than 6 units. When necessary, in order to transfer power and road locomotive consists of more than 6 units, all trailing units in excess of 6 units must be isolated and considered as part of trail tonnage.

Helper locomotive must not exceed a total of 10,000 rated horsepower and consist of not more than 5 units. Helper will be cut into train with proper division of tonnage. (Road locomotive and helper locomotive each trails its proportionate tonnage).

The following maximum tonnages must not be exceeded:

Single Train:
Eastbound: Limit 85 cars or 3,800 tons.
Westbound: Limit 90 cars or 4,000 tons.

Helper Train:
Eastbound: Limit 110 cars or 5,700 tons.
Westbound: Limit 125 cars or 6,500 tons.

1.6% Grade

Road locomotive must not exceed a total of 14,400 rated horsepower and consist of not more than 6 units.

Maximum trail tonnage single train must not exceed 5,500 tons.

1.0% Grade

Road locomotive must not exceed a total of 14,400 rated horsepower and consist of not more than 6 units.

Maximum trail tonnage must not exceed 9,000 tons.

When radio controlled units are used in a train, the slave units must be placed in train approximately two-thirds back from the head end of the train. Train tonnage will be limited by number of cars which may be handled over the various districts, and tonnage rating of the locomotive units used.

12. **AIR BRAKE TESTS**

In making Terminal Air Brake tests on passenger trains, will be governed by Rule 11(c) of Rules & Instructions Governing Operation, Inspection and Maintenance of Air Brake and Air Signal Equipment Handling Locomotives, Dynamic Braking, Train Handling General Rules which reads as follows:

When making terminal air tests the signal to apply or release brakes on passenger or freight trains will be given by radio or hand signals. On passenger trains before or after the air test has been completed, an air signal will be given from the last car and then determine that the signal was received on the locomotive.

Accordingly, hand signals or radio instructions will be used in performance of terminal air brake tests for passenger trains. Communicating whistle signal 16(m) may be used for the final release only on completion of test.

FIRST SUBDIVISION

(Main Line)

1. **MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**

Between	Passenger	Freight
Wenatchee and Seattle	79 MPH	60 MPH

2. **SPEED RESTRICTIONS.**

Seattle, thru turnouts South Portal	10 MPH
Seattle, over public crossings	20 MPH
Snohomish Jct., NP Ry movements between home signals	20 MPH
Monroe, CMStP&P RR movements between home signals of controlled switch from siding to CMStP&P trackage	20 MPH
Cascade Tunnel No. 15, Eastward trains handling more than 75 cars	17 MPH
Eastward passenger trains from the West Portal to Refuge Bay No. 4 1.0 mile west of East Portal	40 MPH

3. **TRAIN REGISTER EXCEPTIONS.**

Monroe, register only for CMStP&P RR trains.

Snohomish, register only for NP Ry trains and eastward NP Ry trains register by ticket.

Interbay, register only for freight trains.

4. **CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).** Within CTC district Rule 83(B) does not apply except at Wenatchee, and running orders are not required.

5. **East switch Berne to west switch Scenic.**

Signal transmission line carries 13,200 volts.

All wires must be considered energized unless a clearance has been obtained from the Train Dispatcher.

Telegraph and telephone wires are not located along right-of-way. Never attempt to connect field telephone apparatus to any wires located along right-of-way in this zone.

6. **Scenic and Berne, two rail clamps provided for emergency use. When necessary to set out bad order car on siding see clamps are properly secured and blocked to rail on low end of car. Crew picking up car see clamps removed and replaced in a box provided for that purpose.**

7. **Double track extends between Seattle and MP 15.87 Edmonds except between MP 4.0 Interbay and MP 5.4 Interbay and automatic interlocking Ballard.**

Westward track is signalled for traffic in both directions between MP 5.4 Interbay and MP 15.87 Edmonds.

Two main tracks known as No. 1 main (water side) and No. 2 main (bank side) extend between Everett Jct. and MP 28 Mukilteo and between MP 27 Mukilteo and MP 17.49 Edmonds.

8. **INTERBAY, when an eastward movement is to be made from yard lead to main track, trainmen shall operate push button "R" at signal 4.8. If no conflicting movement is being made on main track and spring switch is in proper operating condition, signal 4.8 will indicate proceed after a time interval of three minutes. After push button "R" is operated a white light will be displayed if operation is effective.**

9. **SEATTLE, KING STREET PASSENGER STATION TUNNEL RULES.**

King Street Passenger Station Tunnel Rules shall consist of

Great Northern Block and Interlocking Rules as set forth in the Consolidated Code of Operating Rules, supplemented by the following special instructions, and will govern train and engine movements between North Portal and South Portal.

A positive block is maintained in both directions between these stations. Trains and engines may make a forward or backward movement within these limits without flag protection, observing governing signal indications.

No train or engine will make a complete through movement between North Portal and South Portal against the current of traffic, or pass the governing home signal at the immediate entrance to the tunnel on either track displaying a "Stop" indication, except on the authority of a "Tunnel Card" properly completed by operator in charge and OK'd by the operator at opposite station. When this governing home signal indicates "Stop", trains and engines, after stopping, must proceed at restricted speed to the next signal and be governed by its indication.

Tunnel Cards shall be used as required: Form 26 for train and engine movements from North Portal to South Portal, and Form 26-A for train and engine movements from South Portal to North Portal.

"Tunnel Card" does not dispense with the observance of or compliance with the indications of southward home signals at the South end of the tunnel governing entrance to the South Portal Interlocking or the northward home signals governing entrance to the North Portal Interlocking.

At South Portal, trains and engines may enter the tunnel on either track for short switching movements if required. If the governing home signal at the immediate entrance to the tunnel displays a Stop-indication, a Tunnel Card must first be secured. The maximum permissible speeds between North Portal and South Portal for all trains and engines are: 20 MPH moving with the current of traffic, and 10 MPH moving against the current of traffic.

Operating directions are: "North" from south end of King Street Station through South Portal to North Portal, and "South" from North Portal through South Portal to south end of King Street Station.

When a train or engine is stopped by Stop-indication of dwarf signal located between northward and southward main tracks, south end of King Street Station governing northward train and engine movements on southward main track (Tunnel track 4), operator must be informed of desire to make the northward movement on southward main track (Tunnel track 4) by four operations of the push button located on top of the signal.

10. **Seattle, train, yard and engine movements between GN freight yard and 5th Avenue tracks will be made via NP and UP main track Oregon Street connection and their time-tables and Special Instructions will govern.**

11. **CROSSOVERS ON DOUBLE TRACK.**

Facing Point.	Trailing Point.
MP 15, Standard Oil spur 8 miles west of Edmonds.	MP 14.1, 8.4 miles west of Edmonds.

CROSSOVERS ON TWO MAIN TRACKS.

	MP 24.29 between Edmonds and Mukilteo.
MP 28.5 west end Mukilteo.	MP 29.21 east end Mukilteo.
	MP 31.33, 1 mile west of Everett Jct.
	MP 30.6, 1½ miles west of Everett Jct.

12. Swing brakeman on eastward trains will get off at west switch Scenic and on westward trains will get off at east switch Berne and will inspect train as it pulls by slowly. If anything is found wrong, key controller located on signal mast can be used to actuate the dragging equipment light and engineer will stop the train and not move until he receives proper signal from the trainman. When crew consist does not include a swing brakeman, the head brakeman will make this inspection. When crew consist does not include a fireman or swing brakeman, the rear brakeman will arrange to be on engine and get off to make this inspection.

Special Red slide fence light is placed 1350 feet from the West Portal of Cascade tunnel, Scenic, to give indication for Westward trains when necessary. This signal will not show light unless there is slide-fence operation between West Portal of the tunnel and East siding switch.

If this signal shows Red indication, trains must stop and not pass until they send flagman ahead to see whether or not main track is blocked by slide, and make report promptly of the condition.

13. **MANUAL INTERLOCKINGS.**
Ballard, Br. 4.....Salmon Bay drawbridge.

14. **MANUAL INTERLOCKINGS WITH DUAL CONTROL SWITCHES.**
North Portal-South Portal ....King Street Tunnel and terminal tracks.
Interbay .....The three (3) crossovers from the Northern Pacific Railway to and including the switch to U.S. Navy Pier 91—MP. 3.3.
End of double track MP 4.0.
Roundhouse spur MP 4.9.
End of double track MP 5.4.

15. **AUTOMATIC INTERLOCKINGS.**
Ballard, between MP 7 and 8.....Automatic interlocking with spring switches. Instructions posted on interlocking signal masts. When a train or engine is stopped by a stop indication a member of crew must call dispatcher before operating time release.

Spring switch at east end of single track near MP 8 Ballard equipped with electric lock, which is normally unlocked.

When eastward track east of this point must be taken out of service and westward track is to be used as single track, spring switch must be reversed by hand and locked with electric lock. If dispatcher then authorizes a movement to or from the eastward track, electric lock must be released and switch lined by hand for this movement, after which switch must again be lined for westward track and locked with electric lock.

16. **INSTRUCTIONS GOVERNING OPERATION OF TRAINS SKYKOMISH TO WENATCHEE.**

When necessary to make a backup movement on ascending mountain grade sufficient hand brakes must be set on rear end to hold up the slack; then when ready to proceed ahead, hand brakes must be released starting from the rear car first and working toward the head end of train so the slack will run out gradually and avoid break-in-two.

Diesel engines operated on freight trains thru Cascade tunnel will be governed as follows:

Hot engine alarms are set at 195 degrees and should the hot engine alarm sound, isolate the unit if temperature exceeds 205 degrees. Place the unit back on the line after water temperature is reduced to normal and check has been made of water level in engine cooling water tanks. Should the water level fall below minimum level shut engine down.

If, for any reason, eastward trains stop in tunnel, members of crew on both head end and rear end of train must communicate with each other on telephone located in each bay of the tunnel and have a thorough understanding with entire crew whether train will be backed out of tunnel or doubled out to Berne. If backed out to Scenic, train must be stopped before passing east siding switch and not back down main track unless protected by flagman, or backing in siding, it must be known siding is clear. In making these moves definite understanding must be had with all members of the crew as to what is to be done to avoid accident.

Crew of eastward or westward trains stopped in Cascade tunnel must communicate by telephone, located in each bay of tunnel, with dispatcher to have tunnel ventilating fans operating and tunnel closure door at Berne closed during time train is standing.

In case of emergency, a train in the tunnel may make a forward or backward movement to Scenic or Berne without flag protection and may pass signals indicating stop and proceed at restricted speed without stopping except signal 1700.3 and 1700.4. Train or Engine crew will contact dispatcher by tunnel phone to advise the movement they are to make.

Great Northern Block and Interlocking Rules as set forth in the Consolidated Code of Operating Rules, supplemented by the following special instructions, and will govern train and engine movements between North Portal and South Portal.

A positive block is maintained in both directions between these stations. Trains and engines may make a forward or backward movement within these limits without flag protection, observing governing signal indications.

No train or engine will make a complete through movement between North Portal and South Portal against the current of traffic, or pass the governing home signal at the immediate entrance to the tunnel on either track displaying a "Stop" indication, except on the authority of a "Tunnel Card" properly completed by operator in charge and OK'd by the operator at opposite station. When this governing home signal indicates "Stop", trains and engines, after stopping, must proceed at restricted speed to the next signal and be governed by its indication.

Tunnel Cards shall be used as required: Form 26 for train and engine movements from North Portal to South Portal, and Form 26-A for train and engine movements from South Portal to North Portal.

"Tunnel Card" does not dispense with the observance of or compliance with the indications of southward home signals at the South end of the tunnel governing entrance to the South Portal Interlocking or the northward home signals governing entrance to the North Portal Interlocking.

At South Portal, trains and engines may enter the tunnel on either track for short switching movements if required. If the governing home signal at the immediate entrance to the tunnel displays a Stop-indication, a Tunnel Card must first be secured. The maximum permissible speeds between North Portal and South Portal for all trains and engines are: 20 MPH moving with the current of traffic, and 10 MPH moving against the current of traffic.

Operating directions are: "North" from south end of King Street Station through South Portal to North Portal, and "South" from North Portal through South Portal to south end of King Street Station.

When a train or engine is stopped by Stop-indication of dwarf signal located between northward and southward main tracks, south end of King Street Station governing northward train and engine movements on southward main track (Tunnel track 4), operator must be informed of desire to make the northward movement on southward main track (Tunnel track 4) by four operations of the push button located on top of the signal.

10. **Seattle, train, yard and engine movements between GN freight yard and 5th Avenue tracks will be made via NP and UP main track Oregon Street connection and their time-tables and Special Instructions will govern.**

11. **CROSSOVERS ON DOUBLE TRACK.**

Facing Point.	Trailing Point.
MP 15, Standard Oil spur 3 miles west of Edmonds.	MP 14.1, 3.4 miles west of Edmonds.

CROSSOVERS ON TWO MAIN TRACKS.

	MP 24.29 between Edmonds and Mukilteo.
MP 28.5 west end Mukilteo.	MP 29.21 east end Mukilteo.
	MP 31.33, 1 mile west of Everett Jct.
	MP 30.6, 1½ miles west of Everett Jct.

12. Swing brakeman on eastward trains will get off at west switch Scenic and on westward trains will get off at east switch Berne and will inspect train as it pulls by slowly. If anything is found wrong, key controller located on signal mast can be used to actuate the dragging equipment light and engineer will stop the train and not move until he receives proper signal from the trainman. When crew consist does not include a swing brakeman, the head brakeman will make this inspection. When crew consist does not include a fireman or swing brakeman, the rear brakeman will arrange to be on engine and get off to make this inspection.

Special Red slide fence light is placed 1350 feet from the West Portal of Cascade tunnel, Scenic, to give indication for Westward trains when necessary. This signal will not show light unless there is slide-fence operation between West Portal of the tunnel and East siding switch.

If this signal shows Red indication, trains must stop and not pass until they send flagman ahead to see whether or not main track is blocked by slide, and make report promptly of the condition.

13. **MANUAL INTERLOCKINGS.**
Ballard, Br. 4.....Salmon Bay drawbridge.

14. **MANUAL INTERLOCKINGS WITH DUAL CONTROL SWITCHES.**
North Portal-South Portal ....King Street Tunnel and terminal tracks.
Interbay .....The three (3) crossovers from the Northern Pacific Railway to and including the switch to U.S. Navy Pier 91—MP. 3.3.
End of double track MP 4.0.
Roundhouse spur MP 4.9.
End of double track MP 5.4.

15. **AUTOMATIC INTERLOCKINGS.**
Ballard, between MP 7 and 8.....Automatic interlocking with spring switches. Instructions posted on interlocking signal masts. When a train or engine is stopped by a stop indication a member of crew must call dispatcher before operating time release.

Spring switch at east end of single track near MP 8 Ballard equipped with electric lock, which is normally unlocked.

When eastward track east of this point must be taken out of service and westward track is to be used as single track, spring switch must be reversed by hand and locked with electric lock. If dispatcher then authorizes a movement to or from the eastward track, electric lock must be released and switch lined by hand for this movement, after which switch must again be lined for westward track and locked with electric lock.

16. **INSTRUCTIONS GOVERNING OPERATION OF TRAINS SKYKOMISH TO WENATCHEE.**

When necessary to make a backup movement on ascending mountain grade sufficient hand brakes must be set on rear end to hold up the slack; then when ready to proceed ahead, hand brakes must be released starting from the rear car first and working toward the head end of train so the slack will run out gradually and avoid break-in-two.

Diesel engines operated on freight trains thru Cascade tunnel will be governed as follows:

Hot engine alarms are set at 195 degrees and should the hot engine alarm sound, isolate the unit if temperature exceeds 205 degrees. Place the unit back on the line after water temperature is reduced to normal and check has been made of water level in engine cooling water tanks. Should the water level fall below minimum level shut engine down.

If, for any reason, eastward trains stop in tunnel, members of crew on both head end and rear end of train must communicate with each other on telephone located in each bay of the tunnel and have a thorough understanding with entire crew whether train will be backed out of tunnel or doubled out to Berne. If backed out to Scenic, train must be stopped before passing east siding switch and not back down main track unless protected by flagman, or backing in siding, it must be known siding is clear. In making these moves definite understanding must be had with all members of the crew as to what is to be done to avoid accident.

Crew of eastward or westward trains stopped in Cascade tunnel must communicate by telephone, located in each bay of tunnel, with dispatcher to have tunnel ventilating fans operating and tunnel closure door at Berne closed during time train is standing.

In case of emergency, a train in the tunnel may make a forward or backward movement to Scenic or Berne without flag protection and may pass signals indicating stop and proceed at restricted speed without stopping except signal 1700.3 and 1700.4. Train or Engine crew will contact dispatcher by tunnel phone to advise the movement they are to make.

Westward trains encountering signal 1706.1 inside West Portal displaying stop indication must not pass West Portal until it is known track is clear to east switch Scenic.

At Scenic, two white lights flashing alternately mounted in a vertical position on a bracket attached to the power pole just east of east switch on south side of main track to indicate ventilating system functioning. Eastward trains must not pass Scenic unless alternate flashing white lights are operating unless directed by dispatcher to do so.

Ventilating fans and tunnel door located at the East Portal of Cascade Tunnel No. 15, Westward signal 1700.3 located 65 feet east of tunnel door, and Eastward signal 1700.4 located 100 feet west of tunnel door. When a train or engine is stopped by either of these signals, in addition to the usual observance of Rules, contact by phone to dispatcher must be made and great care must be taken before proceeding to see that the tunnel door is not closed, or in a partially open position.

In the event ventilating door, Cascade tunnel, is closed, denying movement, crew must first contact dispatcher who will take **proper action. A hand-hoist at the East portal is provided for hand operation of the door in event of power failure. In any** event be guided by instructions of dispatcher who has remote control of door operation. Further, see instructions relative to operation of hand hoist mounted adjacent to tunnel door.

Four Scott Air Packs have been placed in each bay of Tunnel 15. Whenever one of these air packs are used, advise the Superintendent by wire the number of the air pack used so that it can be recharged at once.

Eastbound freight train enginemen handling helper engines thru Cascade tunnel will operate in throttle 8 position and head engineer will control speed of train. Helper engine will reduce to throttle 6 at Bay 4.

All 85 foot or longer cars, loaded or empty, should be placed on rear of trains for movement over the 2.2% grade. These cars should not be near head end of train when descending steep grades in dynamic braking.

Conductors of trains using helper engine will determine the location of the helper engine in the train on each trip. Helper engine may shove against caboose in either direction with the following exceptions:

Do not shove against passenger equipment, 85 foot or longer cars or wooden underframe equipment.

Air must be cut in on all helper engines and engine must not be cut off while train is in motion.

17. Rules 251, 252, 253 and 254 are in effect on double track between Edmonds and Interbay. Running orders are not required for movements with the current of traffic.

18. **The following signals are located to the left of the track which they govern:**

Signals governing westward movements on No. 2 main track. Everett Jct. to MP 17.49 Edmonds.

Signals governing eastward movements on No. 1 main track MP 17.49 Edmonds to Everett Jct.

Signals governing eastward movements on westward track between MP 5.4 Interbay and MP 15.87 Edmonds.

Skykomish and Scenic, eastward governing signal for main track at east switch of siding.
westward governing signal for siding at west switch of siding.

Berne, westward governing signal for siding at west switch of siding.

Merritt, eastward governing signal for siding at east switch of siding.

19. McKinnon Spur, 2.48 miles west of Monroe, main track switch not equipped with electric lock, Rule 268(A) applies.

20. **Switching light key controller located on signal mast at west switch of siding Berne and on bungalow at east switch of siding Scenic. Two white lights, normally dark, with signs reading "Sw. Lt." are located 2000 and 5000 feet west of west switch Berne also 2000 and 5000 feet east of east switch Scenic. To operate switching lights, trainman should insert switch key in controller and turn fully clockwise to light the lights, then turn key to center position to extinguish lights.**

These lights are to be used as an aid in switching when radio or hand signals cannot be used. Light should be turned on for movement in one direction, turned off to stop, again turned on to reverse direction. Prior arrangements must be made between crew members before using these switching lights.

21. At Wenatchee, engine whistle must not be sounded except to prevent an accident not otherwise avoidable.

22. At Seattle, between Bay Street and Blanchard Street, engine whistle must not be sounded except to prevent an accident not otherwise avoidable.

SECOND SUBDIVISION

(Vancouver Line)

1. **MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**

Between	Passenger	Freight
Everett Jct. and Vancouver	79 MPH	60 MPH

2. **SPEED RESTRICTIONS.**

Everett, over street crossings	**25 MPH**
South Bellingham, NP Ry. Crossing	**20 MPH**
Bellingham, over street crossings	**10 MPH**
Bellingham, over CMStP&P RR Crossings	**20 MPH**
New Westminster, Fraser River Bridge	**10 MPH**
Over Front St. Crossing	**10 MPH**
New Westminster, over Brunette Street and Braid Street Crossings	25 MPH
Vancouver, over Pender, Union, Cordova Streets, Burrard Inlet, CPR Crossing, Powell St.	8 MPH

3. **TRAIN REGISTER EXCEPTIONS.**
Vancouver, Vancouver Jct., register located in train order office at Vancouver. Arrival of First Class trains on register at Vancouver will cover their arrival at Vancouver Jct.
New Westminster, all trains register by ticket.

4. **CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).**
At Everett Jct., Delta Jct., Brownsville and Townsend, Rule 83(B) does not apply.
G.N. clearance received at Vancouver will clear trains at Vancouver Jct.
Canadian National northward trains may enter CTC limits at the north end of Fraser River Bridge when the governing signal indicates proceed, obtaining clearance Form A at New Westminster station.

5. **RESTRICTED CLEARANCES.**
The following overhead wires crossing our track do not have standard clearance of 27 ft. from top of rail:

Delta, south wye switch	**25'**
Marysville, industry track	**28'**
Stanwood, house track and industry track	**24'**
Fir, English Lumber Co. spur 1.8 miles south	**25'**
Mt. Vernon, Union Oil Co. spur	**25' 10"**
Burlington, Carnation Milk Co. spur	**25' 6"**
Vancouver, Hastings St. viaduct	**19' 8"**

High voltage electric wires at Stillcreek and Vancouver, B. C. will not clear man on top of cars. Train and engine men must keep off top of cars and engines while passing under these wires except in emergency and then use extreme caution. Clearance from top of rail as follows:

Powell St.—Vancouver, B. C. BI Line	**20' 5"**
Main St., Vancouver, B. C.	**19' 6"**
Renfrew St.—Stillcreek	**21' 0"**

New Westminster, retaining wall Front Street crossing in front of penitentiary will not clear man on side of car or engine.

6. **Bellingham, northward freight trains leave train south of Pine Street near old Bloedel-Donovan Mill site, bring their set-out to yard and move pick-up back to train. Southward freight trains leave train north of "F" Street crossing. When necessary to take siding at Bellingham, crossing at "C" and "F" Street will have to be cut. Under no circumstances will any crossing be blocked for more than five minutes.**

7. **Blaine-White Rock, trains will not pass International Border without permission of Customs and Immigration Inspectors.**

8. Still Creek, northward trains having wait or meet orders to fulfill at this point, or when governing signal indicates "stop", train

will stand south of Renfrew Street Crossing until through movement can be made to clear Grandview Highway, 13th Avenue to avoid circuit operating signals at this crossing.

9. **Vancouver, Canadian National Railway operate jointly with GN Ry over Great Northern tracks between Water Front and connection with GN main track north of CN Jct.; also between north leg of wye from main track switch and connection with Canadian National Railway in the Great Northern South Yard, all of which is located within yard limits of Vancouver. Telephones for City and train dispatcher are located in booth near Great Northern main track connection. There is also a City Telephone and train register in yard office near G.N. Dock. Movements in both directions over the Burrard Inlet Line must be recorded in train register. Before movement is made over Burrard Inlet Line in either direction between CN waterfront yard and BI Jct. or Glen yard, yard foreman or engineer will communicate with the yard office near G.N. Dock to ascertain if it is safe to proceed; air brakes must be cut in and operative on all engines and cars; the engine must be on the leading end of the cars at all times in making this movement.**

10. The Canadian Transport Commission, General Order O-7, forbids the handling of freight cars in main line passnger trains unless equipped with air brakes, communicating signals, steel or steel tired wheels, and trucks designed for use in passenger train service.

11. CROSSOVERS ON DOUBLE TRACK.
Trailing point.
MP 152.4—1.4 miles south of Still Creek. Dominion Bridge Co. spur.
MP 151.76—At Willingdon Jct.
MP 151.3—2.5 miles south of Still Creek. Vancouver Steel Co. spur.
MP 147.8—1 mile north of Burnaby.

12. **MANUAL INTERLOCKINGS.**
Marysville, 1.25 miles south of.....drawbridge 11.
0.50 miles south of.....drawbridge 12.
Fraser River Jct. .....drawbridge and junction with CN and BCE Rys.
Marysville, drawbridge 12, when interlocking signals display stop indication, bridge operator or signal maintainer must be called to check bridge equipment before trains are permitted to proceed over bridge.
Instructions for operating dual controlled derails are posted at home signals.
Following instructions will govern operation over Fraser River Bridge:
Southward Great Northern Trains and Engines approaching Fraser River Bridge Signal 4 short blasts of whistle for line up from Bridge to Southward Great Northern Main track.
Explosion of one torpedo indicates stop. No steam or electric locomotive, or train operated by steam, electricity, or other power, no hand or push car or speeder shall cross the bridge in either direction at speeds greater than 10 miles an hour on approaching Absolute Signals and move between Absolute Signals at speed not exceeding 10 miles an hour.
No train shall move forward against a stop signal (red indication or no indication) unless the engineman has been handed a clearance form provided by the Department of Public Works by the Bridge Superintendent or a person authorized by him to do so. No hand flag or lamp signal or verbal instructions are to be accepted as a clearance to cross the bridge.
All entering signals to Fraser River Interlocking are under full control of bridge operator.
The stop indication of Northward and Southward leaving Signals Fraser River Bridge govern entrance to CTC territory on Great Northern main tracks and are jointly controlled by bridge operator and CTC control operator New Westminster, B. C. station.

13. **MANUAL INTERLOCKINGS WITH DUAL CONTROL SWITCHES.**
Delta Jct. .....Drawbridge 10 and NP Ry crossing.
These switches are electrically controlled by operator at Delta Jct.
Whistle signals for routes:
Main track .....1 long.
From North to Delta Yard .....1 long, 1 short.
From South to Delta Yard.....2 long, 1 short.
From Delta Yard to North.....2 long.
From Delta Yard to South .....3 long, 1 short.
From NP Ry connection to North.....1 long, 1 short, 1 long.
From North to NP Ry connection.....1 long, 1 short, 2 long.
Sapperton Jct. .....The switch at the north leg of wye and the switch at the south entrance to new yard.
Willingdon Jct. .....The three (3) crossover switches from the Canadian National at MP 151.76.
New Westminster.....South and North siding switches.
These switches are electrically controlled by the operator at New Westminster.

14. **AUTOMATIC INTERLOCKINGS.**
Still Creek .....End of double track.
C. N. Jct.
To obtain proceed indication on signal to enter main track, trainmen shall operate switch key controller located on signal mast.
A positive block is maintained in both directions between the southward interlocking signal, C.N. Junction, and the northward interlocking signal, Still Creek. When a train or engine is stopped by a stop indication of these signals it will be governed by Rule 509.
Between Still Creek and C.N. Junction extra trains will be governed with respect to opposing extra trains by signal indication; this does not modify the provisions of Rule 93.

15. **SEMI-AUTOMATIC INTERLOCKINGS.**
New Westminster, 0.88 miles south CPR crossing.....Crossover to Waterfront track.
Both switches of crossover are lined by operation of main track switch.
New Westminster, 0.38 miles south .....Fraser Mill Spur. CPR crossing.
Normal position of gates is stop for Great Northern.
Vancouver .....CPR crossing at Burrard Inlet.
Normal position of gates is stop for Great Northern.
GN trains or engines shall stop clear of Powell Street until gates are opened and the way is clear for movement across CPR tracks to avoid blocking traffic on Powell Street. Crossing signals governing traffic on Powell Street are manually controlled by handle of electric gate lock.
Great Northern train and engine movements over the semi-automatic interlocking at the CPR crossing at Burrard Inlet, Vancouver, B.C. is governed by manually operated gates on both sides of the CPR tracks, electrically locked under control of CPR Centralized Traffic Control operators at Port Coquitlem, B.C.
Authority to release the gate lock must be obtained from the CP Railway control operators at Port Coquitlem. CP Railway telephone is attached to side of bungalow about one hundred (100) feet east of crossing.

16. **RAILROAD CROSSINGS PROTECTED BY GATES.**
Burlington .....Fifth Subdivision crossing.
Normal position is for Second Subdivision.
South Bellingham, 1.14 miles north of.....NP Ry crossing.
Normal position is for Great Northern.
Bellingham .....CMStP&P RR crossings.
1 at Army Street, 1 at Commercial Street, 2 at Pine Street.
Normal position is for Great Northern.

17. **New Westminster, radio call is CJN 253, Vancouver, CJN 282, and station name must not be used.**

18. **Canadian National train and engine movements between Tilbury Island and Townsend must receive authority from train dispatcher or control operator, New Westminster before making move from Dow Chemical Spur to Townsend. At Brownsville**

C.N. train and engine movements must receive authority from train dispatcher before fouling or entering controlled siding through cross-over switches between interchange track and siding. Northward C.N. train and engine movements entering Brownsville Siding must notify control operator when clear of controlled siding and switch is properly relined for siding.

19. There is no superiority of trains between C.N. Jct. and Vancouver Jct. That portion of Consolidated Code Rule 98 reading "Within yard limits the main track may be used, clearing first class trains when due to leave the last station where time is shown" does not apply between these points. Within these limits first class trains must move at reduced speed.

    Before occupying main track between these points on the time of delayed first class trains, extra trains and engines must obtain permission from operator Vancouver or train dispatcher, in order to avoid delay to first class trains. In addition switch indicators must be operated in accordance with Rule 240-T.

20. Intalco Spur, gate located west of headblock of tail of wye switch. Normal position of gate is in open position. When train or engine occupies this spur, gate should be locked across track. While gate is secured across track, other trains or engines must not enter this spur.

21. Consolidated Code Rules 251, 252, 253 and 254 are in effect on the double track between Still Creek and Burnaby. Running orders are not required for movements with the current of traffic.

22. Canadian National southward freight trains originating Vancouver are required to key out at C.N. Jct. prior to departure. They are also required to call the G.N. control operator at New Westminster from the telephone booth at C.N. Jct. and be governed by his instructions.

    Great Northern southward freight trains are required to contact G.N. control operator at New Westminster prior to leaving Vancouver and be governed by his instructions.

    Canadian National northward and southward trains, after picking up or setting out in the CN-CPR exchange yard, may re-enter CTC limits at Sapperton Jct. when the governing signal indicates proceed. Before leaving the exchange yard Canadian National trains must contact the control operator at New Westminster via telephone or radio and be governed by his instructions to avoid blocking King Edward Street in case there is delay in entering CTC at Sapperton Jct.

23. Canadian National suothward train and engine movements will be authorized to enter the main track at Willingdon Jct. after they have received:
    A. Clearance form A from the operator at the New Second Narrows Bridge.
    B. Proceed indication from the governing signal.

THIRD SUBDIVISION

1. **MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**

Between	
Bridge 10 Delta Jct. and overhead bridge 200 feet south of interlocked switch Delta Jct.	15 MPH
Overhead bridge 200 feet south of interlocked switch Delta Jct. and G.N. Jct.	40 MPH
Through No. 11 turnouts at G.N. Jct. and Sealine Jct.	15 MPH
Sealine Jct. and NP Ry Crossing	30 MPH
From NP Ry Crossing through switches P.A. Jct.	15 MPH

2. **CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).**
   At P.A. Jct. and Delta Jct. Rule 83(B) does not apply.

3. **MANUAL INTERLOCKINGS WITH DUAL CONTROL SWITCHES.**
   Delta Jct. ..... Drawbridge 10 and NP Ry crossing.

4. NP Ry crossing 300 feet north of P.A. Jct., crossing gates electrically locked. Normal position of gates "Stop" for NP Ry., Northward interlocking signals and southward approach signal P.A. Jct. are operated in conjunction with gates and when these signals do not indicate proceed Rule 98A must be complied with.

FOURTH SUBDIVISION
(Main Line)

1. **MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**

Between	Freight
Bend and Bieber	49 MPH
Bend and Bieber—When using Manual Block	60 MPH

2. **TRAIN REGISTER EXCEPTIONS.**
   Chemult, all trains register by ticket.

3. **AUTOMATIC INTERLOCKINGS.**
   Stronghold, 0.41 miles east of ..... S. P. Ry. crossing

4. **MANUAL BLOCK SYSTEM.**
   When notified by train order, a Manual Block System will be in effect on this division between the stations designated in the train order and during the time designated in the train order.

   Maximum permissible speed for trains is 60 MPH when the Manual Block System is in effect.

   Trains must comply with all other speed restrictions required by rule, special instructions or bulletins, and observe speed signs.

   A train must not enter into a block when the Manual Block System is in effect unless Clearance Form A is received, properly filled out, including information relative to the condition of the block whether (clear) or (occupied).

   Permission may be given to make a visual check of the arrival of an opposing train, the following will be inserted on the line containing the 97(A) information:

   "After (train) arrives at (station) block clear to (station)."

   A wire failure clearance cannot be accepted when Manual Block operation is in effect.

   When the Manual Block System is in effect and the block is occupied, proceed in accordance with the instructions as contained in the train orders.

   Speed signs governing movements when Manual Block System Rules are in effect are white numerals on a black background and are located in the top position on the post.

   Speed signs governing movements when Manual Block System Rules are not in effect are black numerals on a white background and are in the bottom position on the post.

5. Klamath Falls, draw bridge over Lake Ewauna.
   Trains and engines must stop before crossing draw span and be governed by indication of the color light type signal. Yellow light indicates that draw span is in safe position for rail traffic. Red light indicates that draw span is not in safe position for rail traffic. If the red light is displayed or in the absence of a light when draw span appears to be in proper position for rail traffic, movement may be made at restricted speed when preceded by a flagman across drawbridge.

6. **FORM "A" CLEARANCE.**
   All westward trains are required to have a Form A Clearance before leaving South Klamath.

FIFTH SUBDIVISION

1. **MAXIMUM PERMISSIBLE SPEED FOR TRAINS.**

Between	
Anacortes and Concrete	50 MPH

2. **SPEED RESTRICTIONS.**

Bridge 12, Whitney	10 MPH

3. **CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B)**
   Burlington, Fifth Subdivision trains must secure clearance.

4. **MANUAL INTERLOCKINGS.**
   Whitney, one mile west of ..... Drawbridge 12

5. Unless otherwise instructed, protection against following trains, as required by Consolidated Code Rule 99, is not necessary on:
   Fifth Subdivision between Anacortes and Concrete.

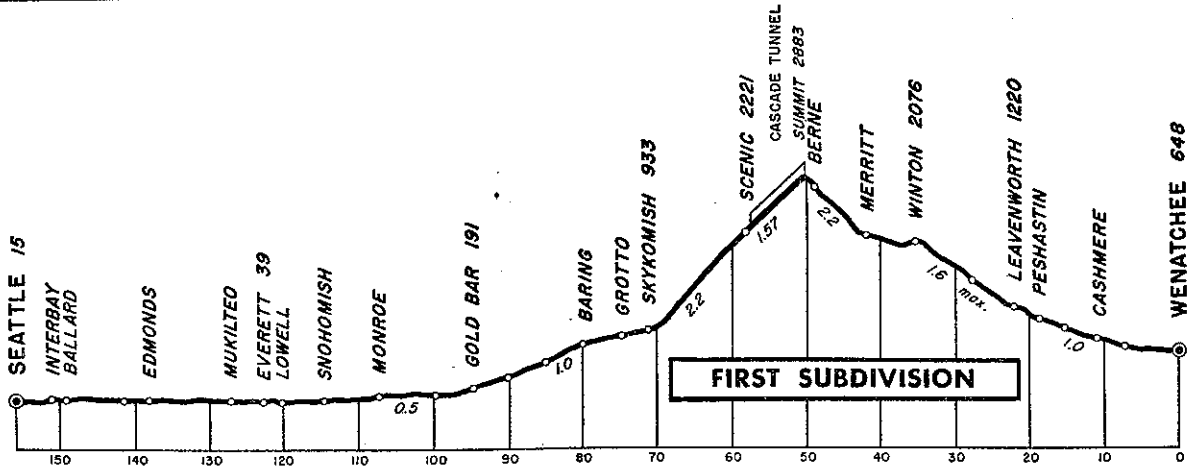
   Form Z train order is not required on this subdivision. One train must not be permitted to follow another train until both trains have been instructed by train order to protect to the rear as prescribed by Rule 99.

BUSINESS TRACKS NOT SHOWN AS STATIONS ON TIME TABLE

	Name	Location	Capacity Cars	Switch Opens
	First Subdivision			
02053	Monitor	3 62 miles east of Cashmere	135	Both
02061	Dryden	3.13 miles east of Peshastin	102	Both
02066	Old Leavenworth	0.53 mile east of Leavenworth	67	East
02144	Sultan	5.43 miles west of Goldbar	16	East
02154	McKinnon Spur	2.49 miles west of Monroe	4	East
02185	Standard Oil Co's Trks	2.23 miles west of Edmonds	81	Both
02186	Richmond Beach	3.61 miles west of Edmonds	123	Both
	Second Subdivision			
15125	O'Keefe Brewery Spur	0.79 mile south of Still Creek	33	North
15124	Dominion Bridge Co. Spur	1.42 miles south of Still Creek	65	South
15122	Commercial Steel	1.95 miles south of Still Creek	3	South
15121	Atlas Iron & Metals	2.29 miles south of Still Creek	8	South
15120	Northern Asbestos Spur	2.73 miles north of Burnaby	10	North
15119	Continental Can Co. Spur	0.78 mile north of Burnaby	55	Both
15108	Delta-Alaska Terminal	0.84 miles south of Brownsville	Yard	North
15106	Tilbury Island	4.1 miles west of Townsend	Yard	North
15105	B. C. Peat Products Industry	0.41 miles south of Townsend	11	Both
15104	Industrial Peat Co., Ltd.	4.05 miles north of Colebrook	29	Both
15081	Intalco Spur	5.84 miles north of Ferndale	Yard	Both
15080	Custer	5.51 miles north of Ferndale	49	Both
15069	Noranda	4.16 miles south of Ferndale	11	South
15046	Belleville Pit Tracks	4.28 miles north of Burlington	102	North
15032	Fir	5.32 miles south of Mt. Vernon	36	Both
15031	English Lumber Co.	6.72 miles south of Mt. Vernon	2	South
15020	Silvana	5.57 miles south of Stanwood	20	Both
15011	Tulalip Army Wye	0.27 mile south of Kruse Jct.	50	North / South
	Fourth Subdivision			
14190	Beal	6.37 miles west of Lapine	27	West
14300	Henley	3.43 miles west of So. Klam	25	Both
14303	Dehlinger	6.61 miles west of So. Klam	24	Both
14312	Stonebridge	1.77 miles west of Merrill	28	Both
14316	Adams Point	5.37 miles west of Merrill	46	Both
14325	Dalton	4.65 miles west of Malin	60	Both
14332	Hannchen	4.71 miles west of Stronghold	21	West
14333	Kandra	5.41 miles west of Stronghold	42	Both
14346	Tionesta	6.05 miles west of Mammoth	39	Both
14359	Hollenbeck	3.38 miles east of Scarface	44	Both
	Fifth Subdivision			
66308	Cokedale Spur	3.11 miles east of Sedro-Wolley	5	West
66203	Hanson Peterson Avon Spur	2.64 miles west of Burlington	10	West
66320	Supreme Cedar Prods.	1.39 miles west of Birdsview	7	East

SPEED TABLE

Time Per Mile Min.	Sec.	Miles Per Hour	Time Per Mile Min.	Sec.	Miles Per Hour
	46	78.3	1	18	46.2
	47	76.6	1	20	45.0
	48	75.0	1	22	43.9
	49	73.5	1	24	42.9
	50	72.0	1	26	41.9
	51	70.6	1	28	40.9
	52	69.2	1	30	40.0
	53	67.9	1	33	38.7
	54	66.7	1	36	37.5
	55	65.5	1	39	36.4
	56	64.3	1	42	35.3
	57	63.2	1	45	34.3
	58	62.1	1	50	32.7
	59	61.0	1	55	31.3
1	—	60.0	2	—	30.0
1	1	59.0	2	10	27.7
1	2	58.1	2	20	25.7
1	3	57.1	2	30	24.0
1	4	56.3	2	40	22.5
1	5	55.4	3	—	20.0
1	6	54.5	3	30	17.1
1	7	53.7	4	—	15.0
1	8	52.9	5	—	12.0
1	9	52.2	6	—	10.0
1	10	51.4	7	—	8.6
1	12	50.0	8	—	7.5
1	14	48.6	9	—	6.7
1	16	47.4	10	—	6.0



RULING GRADE—EASTWARD 1.0% SKYKOMISH to SCENIC 2.2%—SCENIC to BERNE 1.57%
WESTWARD 1.6% MERRITT to BERNE 2.2%

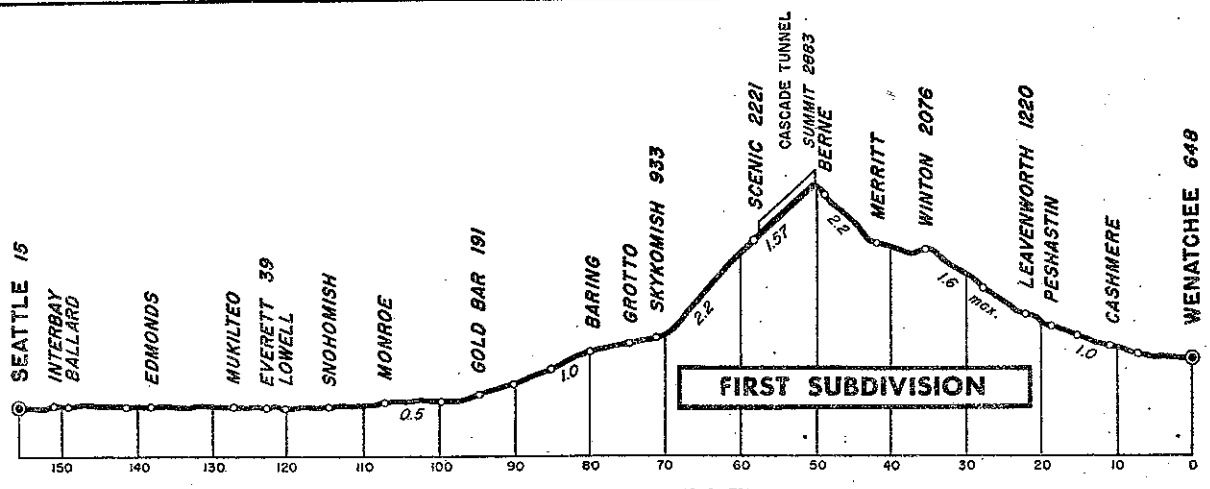
CASCADE DIVISION 1956

BUSINESS TRACKS NOT SHOWN AS STATIONS ON TIME TABLE

	Name	Location	Capacity Cars	Switch Opens
	First Subdivision			
02053	Monitor	3 62 miles east of Cashmere	135	Both
02061	Dryden	3.13 miles east of Peshastin	102	Both
02066	Old Leavenworth	0.53 mile east of Leavenworth	67	East
02144	Sultan	5.43 miles west of Goldbar	16	East
02154	McKinnon Spur	2.49 miles west of Monroe	4	East
02185	Standard Oil Co's Trks	2.23 miles west of Edmonds	81	Both
02186	Richmond Beach	3.61 miles west of Edmonds	123	Both
	Second Subdivision			
15125	O'Keefe Brewery Spur	0.79 mile south of Still Creek	33	North
15124	Dominion Bridge Co. Spur	1.42 miles south of Still Creek	65	South
15122	Commercial Steel	1.95 miles south of Still Creek	3	South
15121	Atlas Iron & Metals	2.29 miles south of Still Creek	8	South
15120	Northern Asbestos Spur	2.73 miles north of Burnaby	10	North
15119	Continental Can Co. Spur	0.78 mile north of Burnaby	55	Both
15108	Delta-Alaska Terminal	0.84 miles south of Brownsville	Yard	North
15106	Tilbury Island	4.1 miles west of Townsend	Yard	North
15105	B. C. Peat Products Industry	0.41 miles south of Townsend	11	Both
15104	Industrial Peat Co., Ltd.	4.05 miles north of Colebrook	29	Both
15081	Intalco Spur	5.84 miles north of Ferndale	Yard	Both
15080	Custer	5.51 miles north of Ferndale	49	Both
15069	Norands	4.16 miles south of Ferndale	11	South
15046	Belleville Pit Tracks	4.28 miles north of Burlington	102	North
15032	Fir	5.32 miles south of Mt. Vernon	36	Both
15031	English Lumber Co.	6.72 miles south of Mt. Vernon	2	South
15020	Silvana	5.57 miles south of Stanwood	20	Both
15011	Tulalip Army Wye	0.27 mile south of Kruse Jct.	50	North / South
	Fourth Subdivision			
14190	Beal	6.37 miles west of Lapine	27	West
14300	Henley	3.43 miles west of So. Klam	25	Both
14303	Dehlinger	6.61 miles west of So. Klam	24	Both
14312	Stonebridge	1.77 miles west of Merrill	28	Both
14316	Adams Point	5.37 miles west of Merrill	46	Both
14325	Dalton	4.65 miles west of Malin	60	Both
14332	Hannchen	4.71 miles west of Stronghold	21	West
14333	Kandra	5.41 miles west of Stronghold	42	Both
14346	Tionesta	6.05 miles west of Mammoth	39	Both
14359	Hollenbeck	3.38 miles east of Scarface	44	Both
	Fifth Subdivision			
66308	Cokedale Spur	3.11 miles east of Sedro-Wolley	5	West
66203	Hanson Peterson Avon Spur	2.64 miles west of Burlington	10	West
66320	Supreme Cedar Prods	1.39 miles west of Birdsview	7	East

SPEED TABLE

Time Per Mile Min.	Sec.	Miles Per Hour	Time Per Mile Min.	Sec.	Miles Per Hour
	46	78.3	1	18	46.2
	47	76.6	1	20	45.0
	48	75.0	1	22	43.9
	49	73.5	1	24	42.9
	50	72.0	1	26	41.9
	51	70.6	1	28	40.9
	52	69.2	1	30	40.0
	53	67.9	1	33	38.7
	54	66.7	1	36	37.5
	55	65.5	1	39	36.4
	56	64.3	1	42	35.3
	57	63.2	1	45	34.3
	58	62.1	1	50	32.7
	59	61.0	1	55	31.3
1	—	60.0	2	—	30.0
1	1	59.0	2	10	27.7
1	2	58.1	2	20	25.7
1	3	57.1	2	30	24.0
1	4	56.3	2	40	22.5
1	5	55.4	3	—	20.0
1	6	54.5	3	30	17.1
1	7	53.7	4	—	15.0
1	8	52.9	5	—	12.0
1	9	52.2	6	—	10.0
1	10	51.4	7	—	8.6
1	12	50.0	8	—	7.5
1	14	48.6	9	—	6.7
1	16	47.4	10	—	6.0



RULING GRADE—EASTWARD 1.0% SKYKOMISH to SCENIC 2.2%—SCENIC to BERNE 1.57%
WESTWARD 1.6% MERRITT to BERNE 2.2%

CASCADE DIVISION 1956