

UNION PACIFIC SYSTEM

OREGON-WASHINGTON RAILROAD & NAVIGATION COMPANY

Oregon Division

EMPLOYEES' TIME-TABLE



To Take Effect Sunday, September 20, 1931

at 12:01 A. M. Pacific Time

For the government and information of employes only, and not intended for the use of the public.
The right is reserved to vary from this time-table at pleasure.

CONDENSED TIME-TABLE

WESTWARD											EASTWARD														
SECOND CLASS			FIRST CLASS								Distance from Huntington	Time Table No. 1 Sept. 20, 1931	Distance from Portland	FIRST CLASS								SECOND CLASS			
691	251	255	563	561	79	75	11	17	5	19				20	18	12	6	76	80	562	564	260	256	252	692
Time Freight	Time Freight	Time Freight	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Time Freight	Time Freight	Time Freight	Time Freight			
Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily			
		1:30AM								7:05PM	6:05PM	3:05AM	0.0	HUNTINGTON	389.5	A 11:30PM	A 9:25AM					A 10:45AM	A 9:00PM		
		9:00AM								10:20PM	9:05PM	6:35AM	99.5	LA GRANDE	290.0	7:45PM	6:20AM					11:00PM	4:00AM		
										12:55AM	11:45PM	9:40AM	173.8	PENDLETON	215.7	4:40PM	3:25AM								
		6:00PM			12:01AM								177.5	RIETH	212.0										
	10:25PM									9:45PM			400.3	SPOKANE	367.5		A 7:00AM							A 12:30AM	
	2:55AM									11:15PM	12:10AM		296.4	AYER	263.6		4:15AM							4:00PM	
	7:45AM									1:50AM	1:40AM		243.1	WALLULA	210.3		3:05AM							12:01PM	
	1:00PM									A 1:20AM	A 2:50AM	A 2:30AM	215.8	UMATILLA	183.0			2:00AM					9:00AM	10:30AM	
	8:00PM	1:45AM								5:05AM	3:45AM	1:30PM	305.3	THE DALLES	84.2	12:40PM	11:45PM							2:15AM	
										11:15PM	11:15AM	4:15PM	389.5	PORTLAND	0.0	9:40AM	9:30PM					A 5:45PM	A 6:15AM		
	7:30PM	A 5:00AM	A 8:15AM										394.3	ALBINA	1.6									9:30PM	A 7:35AM
	12:30AM									2:30AM	1:58PM		480.6	CENTRALIA	91.1								2:50PM	9:55AM	12:05AM
	5:00AM									5:00AM	3:29PM		534.6	TACOMA	145.1								1:17PM	12:40AM	8:40PM
	A 6:45AM												569.6	ARGO	180.1										6:25PM
										A 6:30AM	A 4:45PM		572.7	SEATTLE	183.2								12:01PM	11:15PM	
													(572.7)												
																Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily
(11.15)	(30.35)	(30.45)	(7.15)	(5.30)	(1.19)	(3.35)	(4.45)	(12.30)	(12.05)	(13.10)	.....Thru Time.....			(13.50)	(11.55)	(5.00)	(12.55)	(3.10)	(1.15)	(6.44)	(7.00)	(25.45)	(31.00)	(27.0)	(13.10)
15.9	12.1	12.8	25.3	33.3	31.9	21.0	38.8	31.2	32.2	29.6	.....Average Speed per Hour.....			28.2	33.5	36.9	30.2	25.5	33.6	33.0	26.2	8.4	8.5	13.7	13.6

W. H. GUILD, Superintendent **Portland, Oregon**

A. BUCKLEY, Assistant Superintendent **Portland, Oregon**

J. F. CORBETT, Assistant Superintendent **La Grande, Oregon**

MILEAGE

OREGON DIVISION	
Main Line.....	619.09
Branches.....	508.72
Total.....	1127.81
WASHINGTON DIVISION	
Main Line.....	183.64
Branches.....	740.25
Total.....	923.89
GRAND TOTAL	
Main Line.....	802.73
Branches.....	1248.97
Total.....	2051.70

First and Second Subdivisions and Branches

- T. A. MCKINSTRY,**
CHIEF TRAIN DISPATCHER, La Grande, Oregon.
- J. C. MCFARLAND,** TRAIN DISPATCHER..... La Grande, Oregon.
- J. B. McLAUGHLIN,** TRAIN DISPATCHER..... La Grande, Oregon.
- L. L. GRAUL,** TRAIN DISPATCHER..... La Grande, Oregon.
- A. McALLISTER,** TRAIN DISPATCHER..... La Grande, Oregon.

Third, Fourth and Fifth Subdivisions and Branches

- H. L. BUCHANAN,**
CHIEF TRAIN DISPATCHER, Portland, Oregon.
- E. M. RINGER,** TRAIN DISPATCHER..... Portland, Oregon.
- H. M. TURNER,** TRAIN DISPATCHER..... Portland, Oregon.
- C. E. SHEPPARD,** TRAIN DISPATCHER..... Portland, Oregon.
- W. A. MILNER,** TRAIN DISPATCHER..... Portland, Oregon.
- W. W. SMITH,** TRAIN DISPATCHER..... Portland, Oregon.

TIME PER MILE	MILES PER HOUR	TIME PER MILE	MILES PER HOUR
51"	70.6	1' 25"	42.3
52"	69.2	1' 30"	40
53"	67.9	1' 40"	36
54"	66.6	1' 45"	34.3
55"	65.4	1' 50"	32.7
56"	64.2	2'	30
57"	63.1	2' 10"	27.6
58"	62	2' 15"	26.6
59"	61	2' 20"	25.7
1'	60	2' 30"	24
1' 1"	59	2' 40"	22.5
1' 2"	58	2' 45"	21.8
1' 3"	57.1	2' 50"	21.2
1' 4"	56.2	3'	20
1' 5"	55.3	3' 9"	19
1' 6"	54.5	3' 20"	18
1' 7"	53.7	3' 31"	17
1' 8"	52.9	3' 45"	16
1' 9"	52.1	4'	15
1' 10"	51.4	5'	12
1' 12"	50	6'	10
1' 15"	48	7' 30"	8
1' 20"	45	10'	6

J. P. O'BRIEN,
GENERAL MANAGER.

F. N. FINCH,
GENERAL SUPERINTENDENT.

G. L. WHIPPLE,
GENERAL SUPERINTENDENT TRANSPORTATION.

WESTWARD

FIRST SUBDIVISION

EASTWARD

Length of train in feet and location of water tank, hooking points, turning points, scales and telephones.	SECOND CLASS		FIRST CLASS			Distance from Huntington	Time-Table No. 1 Sept. 20, 1931	Distance from Portland	FIRST CLASS			SECOND CLASS	
	257	255	17	5	19				18	6	20	256	260
	Time Freight	Time Freight	Passenger	Passenger	Passenger				Passenger	Passenger	Passenger	Time Freight	Time Freight
	Daily	Daily	Daily	Daily	Daily								
WFTYOP	1.30PM	1.30AM	7.05PM	6.05PM	3.05AM	0.0	DN-R HUNTINGTON Hu	389.5	A 9.25AM	A10.55AM	A11.30PM	A 2.00PM	A10.45AM
3,712 P	1.45	1.50	7.14	6.14	f 3.15	4.8	D LIME By	384.7	9.13	f10.42	f11.16	1.45	10.20
3,749 P	2.00	2.05	7.19	6.19	3.22	8.6	JETT	380.9	9.07	10.33	11.08	1.15	10.00
3,711 WP	2.15	2.15	7.25	6.24	3.29	12.2	WEATHERBY	377.3	9.01	10.25	10.58	12.45	9.40
3,712 P	2.30	2.30	7.33	6.32	3.38	17.1	NELSON	372.4	8.52	10.15	10.48	12.15PM	9.20
WB 3,707 WTP EB 3,708	2.50	2.50	7.40	6.38	f 3.45	20.6	D DURKEE Du	368.9	8.45	f10.07	f10.41	11.50AM	9.05
3,712 P	3.00	3.00	7.47	6.44	3.52	24.2	LEONARD	365.3	8.38	10.00	10.34	11.30	8.47
3,712 P	3.15	3.15	7.56	6.52	4.00	27.7	UNITY	361.8	8.31	9.53	10.27	11.05	8.31
3,716 (W.M.P. 4) P	3.25	3.25	8.04	7.00	4.08	30.8	HINDMAN	358.7	8.24	9.47	10.20	10.45	7.45
WB 3,726 WFTYOP EB 3,719	3.40	3.40	8.14	7.09	f 4.16	34.0	DN PLEASANT VALLEY Vy	355.5	8.17	9.40	f10.13	10.30	7.15
3,904 YP	3.50	3.50	8.21	7.16	4.23	37.6	ENCINA	351.9	8.10	9.33	10.05	10.05	7.00
3,840 P	4.10	4.10	8.28	7.24	4.30	41.9	QUARTZ	347.6	8.01	9.25	9.56	9.45	6.30
WB 3,821 WFTYOP EB 3,823	4.40	4.30 4.40	8.40	7.37	4.40	47.7	DN BAKER Be	341.8	7.51	9.15	9.45	9.15 9.00	6.00
3,729 P	5.00	5.00	8.47	7.44	4.48	52.2	WING	337.3	7.39	9.03	9.35	8.30	5.45
3,324 P	5.15	5.15	f 8.55	7.51	f 4.57	58.1	D HAINES Kb	331.4	7.32	f 8.56	f 9.25	8.00	5.15 4.57
3,696 P	5.30	5.25	9.01	7.57	5.05	62.8	HUTCHINSON	326.7	7.26	8.48	9.15	7.26	3.50
WB 4,047 WFTYOP EB 3,710	5.45	5.35	f 9.08	8.02	f 5.12	67.4	DN NORTH POWDER Hd	322.1	7.20	f 8.41	f 9.08	6.50	3.00
3,706 P	5.55	5.45	9.13	8.06	5.17	70.4	LUN	319.1	7.16	8.33	8.55	6.35	2.30
3,719 P	6.10	5.55	9.19	8.12	5.23	74.1	SAGO	315.4	7.10	8.27	8.48	6.15	1.50
WB 3,708 WFTYOP EB 3,733	6.20	6.05	9.25	8.17	f 5.30	76.9	DN TELOCASET Wk	312.6	7.05	8.22	f 8.43	6.05	1.30
4,029 P	6.30	6.15	9.31	8.23	5.38	80.9	CROOKS	308.6	6.56	8.13	8.35	5.38	1.00
3,714 P	6.42	6.25	9.36	8.28	5.43	84.2	PYLE	305.3	6.48	8.05	8.28	5.15	12.30AM
3,504 WYP	6.52	6.42	9.42	8.34	f 5.50	87.1	DN UNION JCT. Un	302.4	6.42	7.57	8.13	5.00	11.59PM
3,817 P	7.02	6.58	f 9.47	8.39	f 5.59	90.7	HOT LAKE	298.8	6.36	7.48	8.05	4.40	11.35
3,713 P	7.12	7.08	9.53	8.45	6.07	94.5	LONETREE	295.0	6.30	7.40	7.55	4.25	11.20
WFTYOP	A 7.30PM	A 7.30AM	A10.05PM	A 8.55PM	A 6.20AM	99.5	DN-R LA GRANDE Dispr Q Ra	290.0	6.20AM	7.30AM	7.45PM	4.00AM	11.00PM

W. B.—Westward Siding. (6.00) (6.00) (3.00) (3.50) (3.15) Thru Time (3.05) (3.25) (3.45) (10.00) (11.45)
 E. B.—Eastward Siding. 16.6 16.6 33.2 35.1 30.6 Average Speed per Hour 32.3 29.1 26.5 9.9 8.5

Westward trains are superior to trains of the same class in the opposite direction.—See Rule 72.

WESTWARD

SECOND SUBDIVISION

EASTWARD

Length of sidings in feet and location of water tank, telegraph office, telegraph station, telegraph and telephon	SECOND CLASS				FIRST CLASS				Distance from Huntington	Time-Table No. 1 Sept. 20, 1931	Distance from Portland	FIRST CLASS				SECOND CLASS		
		257	255		17	79	5	19				18	80	6	20	260	256	
		Time Freight	Time Freight		Passenger	Passenger	Passenger	Passenger				Passenger	Passenger	Passenger	Passenger	Time Freight	Time Freight	
		Daily	Daily		Daily	Daily	Daily	Daily										
WFTYOP		10.30 ^{PM}	9.00 ^{AM}		10.20 ^{PM}		9.05 ^{PM}	6.35 ^{AM}	99.5	DN-R LA GRANDE	290.0	A 6.05 ^{AM}		A 7.20 ^{AM}	A 7.30 ^{PM}		A 9.00 ^{PM}	A 10.20 ^{PM}
3,707 P		10.50	9.30		10.30		9.13	6.45	103.6	4.1 PERRY	285.9	5.53		7.05	7.20		8.45	10.00
WB 3,694 EB 3,694 WYP		11.05	9.50		10.40		9.20	6.55	107.5	3.9 D HILGARD	282.0	5.45		6.55	7.13		8.30	9.45
3,691 P		11.20	10.10		10.52		9.29	7.08	111.2	3.7 GLOVER	278.3	5.36		6.46	7.05		8.20	9.29
3,715 P		11.30	10.25		10.59		9.36	7.17	113.5	2.3 MOTANIC	276.0	5.30		6.41	6.59		8.02	9.10
3,985 (W.M.P. 276.1) P		11.45	10.40		11.05		9.43	7.25	115.6	2.1 BODIE	273.9	5.25		6.36	6.54		7.50	9.02
		11.50	10.50		11.10		9.47	7.30	117.5	1.9 EAST END DOUBLE TRACK	272.0	5.22		6.32	6.51		7.40	8.54
C 3,703 WFYP		11.59 ^{PM}	11.00		11.15		9.50	7.35	118.4	0.9 DN KAMELA	271.1	5.20		6.30	6.49		7.30	8.45
		12.15 ^{AM}	11.10		11.20		9.56	7.41	121.3	2.9 WEST END DOUBLE TRACK	268.2	5.11		6.21	6.38		6.50	8.15
WB 3,317 EB 3,708 WP		12.30	11.30		11.25		10.02	7.50	124.5	3.2 DN MEACHAM	265.0	5.05		6.15	6.30		6.30	8.05
3,703 P		12.45	11.50 ^{AM}		11.33		10.11	8.00	128.8	4.3 PORTER	260.7	4.53		6.05	6.16		5.50	7.40
4,386 WP		1.00	12.07 ^{PM}		11.40		10.18	8.09	132.0	3.2 HURON	257.5	4.44		5.57	6.07		5.30	7.25
4,483 WP		1.10	12.20		11.46		10.23	8.15	135.7	3.7 CAMP	253.8	4.37		5.49	5.58		5.10	7.15
3,731 FP		1.17	12.30		11.51		10.27	8.19	137.9	2.2 NORTH FORK	251.6	4.32		5.45	5.53		4.50	7.10
WB 3,734 EB 3,718 WYP		1.30	12.45		11.56 ^{PM}		10.33	8.26	141.3	3.4 DN DUNCAN	248.2	4.26		5.40	5.45		4.20	7.00
3,713 P		1.40	1.00		12.01 ^{AM}		10.38	8.31	144.2	2.9 SLOAN	245.3	4.21		5.34	5.39		4.00	6.45
3,697 P		1.50	1.15		12.06		10.43	8.36	147.3	3.1 CONWAY	242.2	4.15		5.28	5.32		3.40	6.35
5,271 P		1.58	1.30		12.10		10.48	8.41	150.0	2.7 BONIFER	239.5	4.10		5.22	5.26		3.20	6.25
WB 3,718 EB 4,397 WYP		2.07	1.45		12.15		10.53	8.46	152.4	2.4 D GIBBON	237.1	4.05		5.16	5.20		3.00	6.15
4,900 P		2.15	2.00		12.19		10.57	8.51	155.0	2.6 TUMIA	234.5	4.01		5.11	5.15		2.30	6.05
3,695 P		2.25	2.15		12.23		11.00	8.56	157.4	2.4 THORN HOLLOW	232.1	3.58		5.06	5.10		2.15	6.00
4,908 P		2.32	2.25		12.27		11.04	9.01	160.0	2.6 HOMLY	229.5	3.54		5.02	5.06		1.50	5.52
3,700 WP		2.42	2.35		12.31		11.07	9.05	162.4	2.4 CAYUSE	227.1	3.48		4.58	5.02		1.35	5.45
3,713 P		2.50	2.45		12.35		11.11	9.10	164.8	2.4 MINTHORN	224.7	3.43		4.54	4.58		1.20	5.40
3,719 P		3.02	3.05		12.40		11.17	9.17	168.6	3.8 MISSION	220.9	3.36		4.48	4.53		1.05	5.30
4,334 P		3.10	3.15		12.44		11.20	9.22	170.8	2.2 MUNRA	218.7	3.32		4.44	4.49		12.50	5.25
3,522 WYOP		3.25	3.30		12.55	12.01 ^{AM}	11.30	9.35	173.8	3.0 DN PENDLETON	215.7	s 3.25	A 4.10 ^{AM}	s 4.35	s 4.40		12.35	5.15
WFTP		A 3.45 ^{AM}	A 4.00 ^{PM}		A 1.10 ^{AM}	A 12.08 ^{AM}	A 11.52 ^{PM}	A 9.50 ^{AM}	177.5	3.7 DN-R RIETH	212.0	3.15 ^{AM}	3.58 ^{AM}	4.12 ^{AM}	4.20 ^{PM}		12.05 ^{PM}	5.00 ^{PM}
										(78.0)		Daily	Daily	Daily	Daily	Daily	Daily	

W. B.—Westward siding.
E. B.—Eastward siding.
C.—Center siding.

(8.15) (7.00)
14.8 11.1

(2.50) (0.07) (2.47) (3.15)
27.5 31.7 28.0 24.0

..... Thru Time.....
..... Average Speed per Hour.....

(2.50) (0.12) (3.08) (3.10)
27.5 17.7 24.9 24.7

(8.55) (5.20)
8.7 14.6

Westward trains are superior to trains of the same class in the opposite direction.—See Rule 72.
For movement of Washington Division trains between junction and passenger station at Pendleton, see Special Rule 98 (S).

3.10E 7B-E
E.30E 3.30E

W. B.—Westward siding.
E. B.—Eastward siding.

Westward trains are superior to trains of the same class in the opposite direction.

WESTWARD

THIRD SUBDIVISION

EASTWARD

Length of sidings in feet and location of water, fuel, iron, telegraph, tele-phones, etc.	SECOND CLASS				FIRST CLASS				Distance from Huntington	Time-Table No. 1 Sept. 20, 1931				Distance from Portland	FIRST CLASS				SECOND CLASS							
	251		255		19		79			17		5			6		80		20		18		252		260	
	Time Freight	Time Freight	Time Freight	Time Freight	Passenger	Passenger	Passenger	Passenger		Passenger	Passenger	Passenger	Passenger		Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Time Freight	Time Freight	Time Freight	Time Freight
WFTP			6:00PM		9:57AM	12:08AM	1:10AM	12:01AM	177.5	DN-R RIETH N	212.0	A 4:05AM	A 3:58AM	A 4:10PM	A 3:15AM											
4,699 P			6:10		10:04	12:15	1:16	12:06	181.1	BARNHART	208.4	3:57	3:49	4:00	3:05										11:30AM	
4,727 P			6:20		10:11	12:22	1:23	12:12	186.0	CAMPBELL	203.5	3:48	3:40	3:53	2:57										10:30	
650									187.8	YOAKUM	201.7															
4,716 P			6:30		10:18	12:29	1:30	12:20	190.9	NOLIN	198.6	f 3:40	3:32	3:44	2:47										10:18	
4,698 WP			6:43		f 10:29	f 12:38	1:40	12:29	197.4	ECHO HI	192.1	f 3:30	f 3:23	f 3:33	2:37										9:50	
4,706 P			6:50		f 10:35	f 12:44	1:45	12:34	200.7	STANFIELD Nd	188.8	f 3:24	f 3:18	f 3:27	2:31										9:40	
P			6:59		10:42	12:51	1:52	12:40	205.3	DN HINKLE Uk	184.2	3:18	3:13	3:20	2:25										9:30	
383									205.3	DN HINKLE Uk	193.5														9:30	
4,703 P									205.7	HINKLE SIDING	193.1															
WFTYP		1:00PM			f 1:01	2:15			209.3	D HERMISTON Mn	189.5		f 3:05		2:15										9:15	
3,110 P		1:12			A 1:20AM	2:30			215.8	DN-R UMATILLA Ca	183.0		2:55AM		2:05										8:00AM	
3,200 P		1:22				2:45			220.0	BAILEY	178.8				1:50										9:00AM	
3,200 P		1:34				2:51			223.2	D IRRIGON	175.6				1:40										7:45	
4,980 WFYP		1:50				3:01			226.9	JUDSON	171.9				1:35										7:34	
						3:10			223.9	DN MESSNER Fo	165.6				1:30										7:20	
4,930 P			7:07						208.7	WESTLAND	180.8	3:10		3:15												
4,901 WP			7:18						213.6	MUNLEY	175.9	3:01		3:07												
4,905 P			7:30						219.4	CLARKE	170.1	2:49		2:58												
4,980 WFYP		1:50	7:45						223.9	DN MESSNER Fo	165.6	2:40		2:50	1:22										7:00	
650		1:55	7:52						225.7	BOARDMAN Bd	163.8	f 2:30		2:47	1:20										6:54	
4,900 P		2:00	7:58						227.5	PETERS	162.0	2:26		2:44	1:18										6:48	
4,904 P		2:10	8:06						231.4	CASTLE	158.1	2:20		2:38	1:14										6:34	
5,190 P		2:30	8:20						237.2	BOULDER	152.3	2:13		2:30	1:08										6:15	
824 TP		2:45	8:30						241.2	N HEPNER JCT. Wi	148.3	2:07		2:23	1:03										6:02	
5,001 P		2:50	8:35						242.7	WILLOWS	146.8	2:04		2:20	1:01										5:56	
4,924 P		3:10	8:50						247.1	SILICA	142.4	1:58		2:14	12:56										5:42	
WB 6,296 WTP EB 5,906		3:30	9:05						251.7	DN ARLINGTON Mx	137.8	1:50		2:06	12:49										5:25	
4,940 P		3:45	9:20						255.4	GILMORE	134.1	1:33		2:00	12:44										5:00	
4,946 WP		4:00	9:35						259.9	BLALOCK	129.6	1:25		1:54	12:39										4:45	
4,917 P		4:14	9:50						263.9	RAMSAY	125.6	1:20		1:48	12:36										4:30	
4,892 P		4:25	10:00						266.3	N QUINTON Qn	123.2	1:17		1:45	12:33										4:20	
5,000 P		4:40	10:15						270.6	HOOK	118.9	1:12		1:39	12:27										4:07	
4,947 P		4:56	10:35						274.6	GOFF	114.9	1:07		1:33	12:23										3:50	
5,185 WP		5:06	10:56						277.4	DAY	112.1	1:04		1:29	12:20										3:40	
5,000 P		5:16	11:05						280.1	RUFUS	109.4	1:01		1:25	12:17										3:30	
4,926 P		5:26	11:14						282.7	GRANT	106.8	12:58		1:21	12:14										3:20	
6,656 YP		5:40	11:24						285.6	DN BIGGS Bx	103.9	12:50		1:14	12:10										3:10	
752 WP		5:48	11:30						287.7	D AINSWORTH Vo	101.8	12:46		1:10	12:07										3:04	
2,750		5:56	11:35						289.2	MILLER	100.3	12:43		1:07	12:05										3:00	
2,625		6:14	11:45						293.1	CELILO	96.4	12:39		1:01	12:01AM										2:50	
									293.5	TUMWATER	96.0															
P		6:18	11:53PM						294.3	OREGON TRUNK JCT.	95.2	12:37		12:59	11:59PM										2:45	
Spur									296.0	DILLON	93.5															
3,678		6:35	12:05AM						297.8	DUNE	91.7	12:33		12:54	11:55										2:35	
									300.9	BIG EDDY	88.6															
Spur		6:45	12:15						301.8	SEUFERT	87.7	12:28		12:48	11:50										2:25	
WFTOP		A 6:55PM	A 12:25AM						305.3	DN-R THE DALLES Dk-Wb	84.2	12:20AM		12:40PM	11:45PM										2:15AM	

W. B.—Westward Siding. E. B.—Eastward Siding. (5.55) (6.25) (3.18) (1.12) (3.40) (3.34) (3.45) (1.03) (3.30) (3.30) (5.45) (2.30)
 16.7 19.9 34.1 31.9 34.9 35.8 32.6 27.8 36.5 36.5 17.2 15.3
 Average Speed per Hour..... Thru Time.....
 Westward trains are superior to trains of the same class in the opposite direction.—See Rule 72.

FOURTH SUBDIVISION

Length of sidings in feet and location of water, fuel, interlocking plants, turning and scales and tele-phones.	WESTWARD				FIRST CLASS					EASTWARD								
	SECOND CLASS				FIRST CLASS					SECOND CLASS								
	251 Time Freight Daily	978 Way Freight Daily Except Sunday	692 Time Freight Daily	255 Time Freight Daily	562 Passenger Daily	19 Passenger Daily	17 Passenger Daily	5 Passenger Daily	564 Passenger Daily	20 Passenger Daily	561 Passenger Daily	18 Passenger Daily	6 Passenger Daily	563 Passenger Daily	977 Way Freight Daily Except Sunday	691 Time Freight Daily	252 Time Freight Daily	
WFTOP	8:00PM			1:45AM			1:30PM	5:05AM	3:45AM	305.3	DN-R THE DALLES Dk-Wb	84.2	A12:30PM	A11:40PM	A12:15AM		A 1:30AM	
P	8:20			2:01			1:36	5:11	3:50	307.8	CRATES	81.7	12:23	11:33	12:08AM		1:11	
3,309 P	8:40			2:23			1:44	5:19	3:58	313.4	ROWENA	76.1	12:14	11:23	11:57PM		12:57	
3,165 P	8:54			2:35			1:50	5:25	4:04	317.0	CHATFIELD	72.5	12:06	11:18	11:50		12:49	
3,250 P	9:06			2:50			1:56	5:31	4:00	320.3	D MOSIER H	69.2	12:01PM	11:13	11:45		12:41	
WB 3,629 EB 5,350 WP	9:27			3:10			2:10	4:40	4:20	326.3	DN HOOD RIVER KI	63.2	11:50AM	11:05	11:35		12:25	
4,040 P	9:42			3:25			2:16	5:48	4:28	330.4	MENO	59.1	11:42	10:58	11:28		12:11	
3,255 P	9:48			3:30			2:19	5:50	4:30	332.0	SONNY	57.5	11:39	10:56	11:26		12:07AM	
4,900 P	10:10			3:45			2:28	5:57	4:38	336.6	LINDSEY	52.9	11:31	10:49	11:19		11:56PM	
5,110 WP	10:44			3:58			2:34	6:03	4:43	339.8	WYETH	49.7	11:25	10:44	11:14		11:50	
4,900 P	11:09			4:10			2:39	6:08	4:48	342.7	FARLEY	46.8	11:20	10:39	11:09		11:43	
4,900 FP	11:35PM			4:25			2:46	6:14	4:55	346.6	CASCADE LOCKS	42.9	11:13	10:33	11:03		11:35	
WB 3,537 EB 3,246 WTP	12:13AM			4:45			2:54	6:21	5:02	350.8	D BONNEVILLE Mu	38.7	11:03	10:26	10:56		11:23	
Spur										353.7	WARRENDALE	35.8						
3,315 P	12:45			5:09			3:02	6:28	5:09	355.4	DODSON	34.1	11:04	10:19	10:49		11:14	
3,108 P	1:05			5:20			3:07	6:32	5:13	358.1	ONEONTA	31.4	11:04	10:15	10:45		11:09	
										359.9	MULTNOMAH FALLS	29.6						
3,479 OP	1:45			5:38			3:16	6:40	5:20	363.2	D BRIDAL VEIL Ju	26.3	11:03	10:09	10:39		11:00	
										365.6	LATOURELL	23.9						
4,900 P	2:15			5:50			3:23	6:46	5:26	367.1	ROOSTER ROCK	22.4	11:03	10:04	10:34		10:53	
1,040										369.1	CORBETT	20.4						
3,050 P	2:40			6:00			3:28	6:51	5:31	370.4	TAYLOR	19.1	10:23	10:00	10:30		10:47	
5,979 WTP	3:10			6:15			3:33	6:57	5:36	373.9	DN TROUTDALE Sn	15.6	10:16	9:56	10:26		10:40	
2,700 P							3:39	7:02	5:40	376.3	FAIRVIEW Fa	13.2	11:00	9:52	10:22			
2,720 P							3:53	7:13	5:49	381.8	CLARNIE	7.7	11:00	9:46	10:16			
1,560 P							4:00	7:20	5:55	385.1	GRAHAM	4.4	9:53	9:42	10:12			
1,058							4:05	7:25	6:00	387.6	BRUN	1.9	9:47	9:37	10:07			
3,215 P	3:40			6:35						378.9	HEMLOCK	17.0					10:12	
347										381.7	WARD	14.2						
3,315 P	4:00			7:00						383.6	FIR	12.3					10:02	
311										385.6	ADAMSBORO	10.3						
3,402	4:20			7:25						389.1	KENTON	6.8					9:50	
1,415 YP	4:30			7:42						390.3	PENINSULA JCT.	5.6					9:45	
IP		12:15PM	6:55AM		5:22PM					5:42AM	291.5	DN NORTH PORTLAND JCT. ED	6.8					
1,415 YP		12:23	7:03		5:25					5:47	390.3	PENINSULA JCT.	5.6					
1,415 YP	4:30	12:23	7:03	7:42	5:25	VIA GRAHAM				5:47	390.3	PENINSULA JCT.	5.6					
P	4:40	12:35	7:15	7:55	5:29	VIA GRAHAM				5:51	391.8	ST. JOHNS JCT.	4.1					
P	4:50	12:45	7:25	8:05	5:32	VIA GRAHAM				5:55	393.0	MILLROAD	2.9					
WFTYOP	A 5:00AM	A 12:55PM	A 7:35AM	A 8:15AM						5:55	393.0	DN-R ALBINA B	1.6					
					5:36					6:05	394.4	HARDING ST.	1.5					
IP										5:40	388.9	EAST PORTLAND	0.6	9:43	11:18	10:33	10:03	11:18
IP										5:45PM	389.2	UNITED RY. CROSSING	0.3					12:04
										A 5:45PM	389.5	DN-R PORTLAND Dispr. X P-So-Ve	0.0	9:40AM	11:15AM	9:30PM	10:00PM	11:15PM
												(84.2)						

(9.00)	(0.40)	(0.40)	(6.30)	(0.23)	(2.45)	(2.30)	(2.25)	(0.33)	.....	.....	(2.50)	(0.20)	(2.10)	(2.15)	(0.23)	(0.30)	(0.30)	(4.00)
9.9	7.8	7.8	13.7	17.7	30.6	33.7	34.8	12.4	.....	.....	29.7	21.6	38.8	37.4	17.7	10.4	10.4	22.2

Westward trains are superior to trains of the same class in the opposite direction.—See Rule 72.

Between Peninsula Jct. and St. Johns Jct. trains will be governed by train staff rules 409 (A) to 409 (S) inclusive. Trains and engines will be governed by Northern Pacific Terminal Company's rules and regulations while in their yard at Portland.

EASTWARD

FIFTH SUBDIVISION

WESTWARD

Length of sidings in feet and location of water, fuel, ice, stock, plants, telegraph stations, etc.	SECOND CLASS				FIRST CLASS				Distance from Seattle	Time-Table No. 1 Sept. 20, 1931	Distance from Portland	FIRST CLASS				SECOND CLASS	
	978	692	564	34	562	38	563	37				561	33	691	977		
	Way Freight	Time Freight	Passenger	CMSt.P&P Passenger (16)	Passenger	CMSt.P&P Passenger (15)	Passenger	CMSt.P&P Passenger (15)				Passenger	CMSt.P&P Passenger (16)	Time Freight	Way Freight		
	Daily Except Sunday	Daily	Daily	Daily	Daily	Daily	Daily										
			11-15PM	9-45PM	12-01PM	8-15AM	0.0	183.2	DN-R SEATTLE	Ow	183.2	A 6-30AM	A 8-00AM	A 4-45PM	A 9-15PM		
							1.9	181.3	G. N. CROSSING		181.3						
							1.9	181.3	N. P. CROSSING		181.3						
WFTYOP		6-25PM	11-24	A 9-54PM	12-10	A 8-24AM	3.1	180.1	DN-R ARGO	G	180.1	6-20	7-51AM	4-36	9-06PM	A 6-45AM	
									C.M.St.P.&P.&P.C.CROSSING								
1,334		6-45PM	11-34PM		12-20PM		9.4	173.8	DN-R BLACK RIVER	Bi	173.8	6-00AM		4-23PM		6-25AM	

BETWEEN TACOMA JCT. AND BLACK RIVER, TRAINS WILL BE GOVERNED BY TIME-TABLE RULES AND REGULATIONS OF CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC R. R. CO.

		8-20PM		12-16AM		1-02PM		35.7	DN TACOMA JCT.	Jn	147.5	5-11AM		3-39PM			5-15AM
		8-30PM		12-19AM		1-05PM		36.4	DN RESERVATION	Rn	146.8	5-06AM		3-34PM			5-10AM
								36.5	N. P. CROSSING		146.7						
								36.7	N. P. CROSSING		146.5						
								36.7	N. P. CROSSING		146.5						
								36.8	N. P. CROSSING		146.4						
								38.0	N. P. CROSSING		145.2						

BETWEEN VANCOUVER AND RESERVATION, TRAINS WILL BE GOVERNED BY TIME-TABLE, RULES AND REGULATIONS OF NORTHERN PACIFIC RY.
 BETWEEN NORTH PORTLAND JCT. AND VANCOUVER, TRAINS WILL BE GOVERNED BY TIME-TABLE, RULES AND REGULATIONS OF SPOKANE, PORTLAND & SEATTLE RY.

IP		12-15PM	6-55AM		5-42AM		5-22PM	176.4	NORTH PORTLAND JCT.		6.8	11-38PM		11-35AM			8-00PM	A 6-50AM
1,418	YP							177.6	PENINSULA JCT.		5.6							
	P							179.1	ST. JOHNS JCT.		4.1							
	P							180.3	MILLROAD		2.9							
	P	A 12-55PM	A 7-35AM					181.6	ALBINA		1.6						7-30PM	6-20AM
	IP							181.7	HARDING ST.		1.5							
	IP							182.6	EAST PORTLAND		0.6							
	IP							182.9	UNITED RY. CROSSING		0.3							
	IP							183.2	PORTLAND		0.0	11-15PM		11-15AM				

(0.40) (13.10) (7.00) (0.00) (5.44) (0.00) Thru Time (7.15) (0.00) (5.30) (0.00) (11.15) (0.80)
 7.8 13.6 26.2 26.7 32.0 20.7 Average Speed per Hour 25.7 20.7 33.3 20.7 5.9 10.0

Westward trains are superior to trains of the same class in the opposite direction.—See Rule 72.
 Time shown between Portland and North Portland Jct. is for information only. Trains will be governed by North Subdivision time-table between Portland and North Portland Jct.

WESTWARD GRAY'S HARBOR BRANCH EASTWARD **WESTWARD TONO BRANCH EASTWARD**

Length of sidings in feet and location of water, fuel, interlocking plants, turning stations, scales and telephones.	SECOND CLASS		FIRST CLASS								Length of sidings in feet and location of water, fuel, interlocking plants, turning stations, scales and telephones.	
		463 C.M.S. P & P Fast Frt.		987 Mixed	Distance from Centralia	Time-Table No. 1 Sept. 20, 1931	Distance from Hoquiam	988 Mixed	986 Passenger	462 C.M.S. P & P Fast Frt.		Distance from Tono
		Daily Except Monday		Daily		STATIONS						
	WFTYOP			3:00AM	0.0	DN-R CENTRALIA Cn 2.4	57.5	11:25PM	1:45AM			2,179 WFOP

BETWEEN BLAKESLEE JUNCTION AND CENTRALIA, TRAINS WILL BE GOVERNED BY TIME-TABLE, RULES AND REGULATIONS OF NORTHERN PACIFIC RY.

IP				3:15AM	2.4	BLAKESLEE JUNCTION	55.1	10:55PM	1:30AM		
					2.4	N. P. CROSSING	55.1				
					2.4	C. M. ST. P. & P. CROSSING	55.1				
1,359 P				3:21	5.0	GALVIN	52.5	10:45	1:23		
2,285 P	2:43AM			3:35	12.2	R HELSING JUNCTION	45.3	10:30	1:05	A 8:00PM	
2,680 WP	2:55			3:45	13.7	N INDEPENDENCE Nd	43.8	10:25	1:00	7:52	
1,129 P	3:10			3:55	18.3	BALCH	39.2	10:10	12:44	7:40	
Spur					20.2	SPRUCETON	37.3				
2,718 P	3:25			4:03	22.2	CEDARVILLE	35.3	10:03	12:36	7:30	
2,687 P	3:35			4:11	26.3	LANKNER	31.2	9:55	12:26	7:20	
Spur					28.2	BALLAST	29.3				
738	3:42			4:16	28.9	RONY	28.6	9:48	12:20	7:15	
2,353 P	3:48			4:21	30.8	SAGINAW	26.7	9:45	12:15	7:10	
I					30.5	SCHAFFER BROS. CROSSING	26.0				
Spur WP	3:55			4:26	32.5	SOUTH ELMA	25.0	9:40	12:10	7:05	
1,747 P	4:05			4:36	36.0	FULLER	21.5	9:30	12:02AM	6:50	
2,744 110	4:30			4:50	42.3	D SOUTH MONTESANO Mo	15.2	9:15	11:50PM	6:30	
					42.3	D SOUTH MONTESANO Mo	15.2				
					43.8	MONTESANO	16.7				
2,744 132	4:30			4:50	42.3	D SOUTH MONTESANO Mo	15.2	9:15	11:50	6:30	
1,523 141 P	4:36			4:53	43.8	MELBOURNE	13.7	9:05	11:45	6:14	
217					45.3	TINGLE	12.2				
1,751 P	4:45			4:59	46.7	PREACHER'S SLOUGH	10.8	8:55	11:35	5:50	
1,294					48.8	BLUE SLOUGH	8.7				
6,107 WFTYOP	5:00			5:10	51.2	D-R COSMOPOLIS Ce	6.3	8:40	11:25	5:35	
					53.3	N. P. CROSSING	4.2				
4,135 WIYOP	5:15AM			5:25AM	53.9	DN-R ABERDEEN Sa	3.6	8:30PM	11:15PM	5:20PM	

BETWEEN ABERDEEN AND HOQUIAM, TRAINS WILL BE GOVERNED BY TIME-TABLE, RULES AND REGULATIONS OF NORTHERN PACIFIC RY.

WFTYOP	A 5:45AM			A 6:00AM	57.5	DN-R HOQUIAM Ho	0.0	8:15PM	11:00PM		5:00PM
						(57.5)		Daily Except Sunday	Sunday		Daily Except Sunday
	(3.02) 14.9			(3.00) 19.2				(3.10) 18.1	(2.45) 21.0		(3.00) 16.1

Time shown at Hoquiam and Centralia is for information only. At Hoquiam and Centralia trains will be governed by time-tables, rules and regulations of Northern Pacific Ry.
Eastward trains are superior to trains of the same class in the opposite direction.—See Rule 72.

BETWEEN WABASH AND CENTRALIA TRAINS WILL BE GOVERNED BY TIME-TABLE, RULES AND REGULATIONS OF NORTHERN PACIFIC RY.

WFTYOP		8.0	DN-R CENTRALIA Cn	0.0
			(8.0)	

Eastward trains are superior to trains of the same class in the opposite direction.—See Rule 72.

WESTWARD PRIMO BRANCH EASTWARD

Length of sidings in feet and location of water, fuel, interlocking plants, turning stations, scales and telephones.										Length of sidings in feet and location of water, fuel, interlocking plants, turning stations, scales and telephones.
				Distance from Primo	Time-Table No. 1 Sept. 20, 1931	Distance from Cosmopolis				
					STATIONS					
	1,750		0.0		VESTA	15.9				
5,400		1.4		PRIMO	14.5					
Spur		3.8		SALMON	12.1					
Spur		4.3		MIDSON	11.6					
Spur		5.5		TARLTON	10.4					
Spur		7.9		LYLE SPUR	8.0					
Spur		8.0		OLSON SPUR	7.9					
Spur		8.6		ARCTIC	7.3					
1,002 (W.N.P. 4.5)		10.7		BRIDGES	5.2					
6,107 WIYOP		15.9		D-R COSMOPOLIS Ce	0.0					
				(15.9)						

Eastward trains are superior to trains of the same class in the opposite direction.—See Rule 72.

WESTWARD OLYMPIA BRANCH EASTWARD

Length of sidings in feet and location of water, fuel, interlocking plants, turning stations, scales and telephones.										Length of sidings in feet and location of water, fuel, interlocking plants, turning stations, scales and telephones.
				Distance from Chambers Prairie	Time-Table No. 1 Sept. 20, 1931	Distance from Olympia				
					STATIONS					
	YP			2:30PM	0.0	DN-R CHAMBERS PRAIRIE Mn	7.4	A 2:05PM		
Spur				1.8	KNAUER	5.6				
				7.3	N. P. CROSSING	5.5				
WFYP			A 2:55PM	7.4	D-R OLYMPIA On	0.0	1:40PM			
					(7.4)		Daily Except Sunday			

(0.25) Thru Time (0.25)
 17.8 Average Speed per Hour 17.8

Eastward trains are superior to trains of the same class in the opposite direction.—See Rule 72.

2 (R). Time Inspectors are located as shown below:

The Ball Railroad Time Service	Chicago, Ill
R. V. Owens, General Supervisor of Time Service	Omaha
Baker.....	Palmer Bros
LaGrande.....	Siegrist & Co
LaGrande.....	J. H. Peare and Son
Pendleton.....	Herb Green
The Dalles.....	Norman E. Potter
Portland.....	Saxton Jewelry Co.
Portland.....	N. L. Nielson
Portland.....	W. L. Young
Centralia.....	C. R. Ahern
Tacoma.....	S. Grimstead
Seattle.....	Weisfield & Goldberg
Heppner.....	J. O. Peterson
Hoquiam.....	F. W. Straub
Aberdeen.....	S. J. Stieglitz
Olympia.....	Talbot Bros., Inc.

3 (R). Standard clocks are located as shown below:

Huntington.....	Round House
Huntington.....	Yard Telegraph Office
Huntington.....	Depot Telegraph Office
Pleasant Valley.....	Telegraph Office
Baker.....	Telegraph Office
Telocaset.....	Telegraph Office
LaGrande.....	Dispatcher's Office
LaGrande.....	Depot Telegraph Office
LaGrande.....	Yard Office
Kamela.....	Telegraph Office
Pendleton.....	Telegraph Office
Rieth.....	Telegraph Office
Rieth.....	Enginemen's Register Room
Umatilla.....	Telegraph Office
Umatilla.....	Enginemen's Register Room
Arlington.....	Telegraph Office
Biggs.....	Telegraph Office
The Dalles.....	"DK" Telegraph Office
The Dalles.....	"WH" Telegraph Office
Portland (Joint).....	N. P. T. Co. Telegraph Office
Portland.....	Dispatcher's Office
Albina.....	Yard Telegraph Office
Albina.....	Enginemen's Register Room
Centralia (Joint).....	N. P. Ry. Telegraph Office
Argo.....	Yard Office
Seattle (Joint).....	Union Station Telegraph Office
Joseph.....	Telegraph Office
Heppner.....	Telegraph Office
Bend (Joint).....	O. T. Ry. Telegraph Office
Hoquiam (Joint).....	N. P. Ry. Telegraph Office
Aberdeen.....	Telegraph Office
Cosmopolis.....	Telegraph Office
Olympia.....	Telegraph Office

9 (R). Lights will not be kept burning at night in train order signals on branch lines when operators are not on duty, and trains will be governed by the day indication.

10 (h). At night, a yellow light on a dwarf signal, on a "call-on" signal, or, on a "short-arm" signal, of an interlocking plant, indicates "proceed at slow speed."

17 (C). When rules require headlight to be displayed, electric headlights on road engines must be dimmed under conditions outlined below, except in foggy or stormy weather or when other conditions make it inadvisable:

- In yards where yard engines are employed and at stations where switching is being done;
 - At meeting points, until the train to be met is clear of the main track;
 - When standing;
 - On two or more tracks when approaching trains running in opposite direction.
- These instructions do not supersede or modify those contained in Rules 17 and D-17.

SPECIAL RULES

27 (A). In block signal limits, trains will not be required to stop for a switch light not burning at night, when it can be seen that the switch is in proper position.

28 (R). ADDITIONAL FLAG STOPS TO DISCHARGE REVENUE PASSENGERS.

TRAIN	STOPS	PASSENGERS FROM
17	Heppner Jct.	Irrigon.
17	Any station	Cheyenne or points east or south thereof.
19	Any station	Cheyenne or points east or south thereof.
5	Any station	East of Huntington in sleeping cars.
6	Any station	West of Pendleton.
19	Any station	East of Stanfield.
6	Any station	Shaniko, Condon or Heppner Branches.
6	Bridal Veil, on Saturday and Sunday	Any station.
6	Multnomah Falls, on Saturday	Any station.

ADDITIONAL FLAG STOPS FOR REVENUE PASSENGERS, MAIL AND EXPRESS.

TRAIN	STOPS	TO AND FROM
19	Corbett	Any station.
19	Latourell	Any station.
19	Multnomah Falls	Any station.
19	Warrendale	Any station.
20	Corbett	Any station.
20	Latourell	Any station.
20	Multnomah Falls	Any station.
20	Warrendale	Any station.
986	Tingle	Any station.
987	Tingle	Any station.
988	Tingle	Any station.

Note.—No. 6 will stop on flag at any station to load and unload express.
 Nos. 17 and 18 will stop on flag at any station between Portland and Umatilla for revenue passengers to and from Washington Division.
 No. 19 will stop at Blalock and Rufus to load and unload mail and express.
 No. 19 will stop on flag at Boardman daily except Sunday to load and unload mail and express.
 No. 20 will stop on flag at mail crane at Wyeth to load and unload bulky or fragile parcel post, when necessary.
 Nos. 19 and 20 will stop on flag at Celilo, Miller and Big Eddy for mail.

83 (E). Train registers will not be used by train or engine men as a means of identifying extra trains.

83 (R). Clearance card (Form 2643) must be received as follows:

- At Pendleton, by all first class trains;
- At Black River, by all westward trains;
- At Centralia, by all westward Grays Harbor Branch trains originating at Blakeslee Junction;
- At Centralia, by all eastward Tono Branch trains originating at Wabash;
- At Independence, by all westward C. M. St. P. & P. trains originating at Helsing Junction;
- At North Jet., by all eastward Oregon Trunk trains originating at South Jet.;
- At North Jet., by all O. W. R. & N. trains.

Northern Pacific clearance card A (Form 1357A) must be received as follows:

- At Reservation, by all eastward second class and extra trains passing through Tacoma;
 - At Northern Pacific Fifteenth Street telegraph office, by all eastward second class and extra trains originating at Tacoma.
- Trains are not required to receive clearance card (Form 2643), as per Rule 83 (A) as follows:
- At Joseph, all first and second class trains, when no operator on duty;
 - At Argo, all westward C. M. St. P. & P. passenger trains;
 - At Tono, all westward trains;
 - At Primo, all westward trains;
 - At North Portland Jct., all westward trains;
 - At Albina, all Fifth Subdivision trains.

83 (S). Trains must ascertain whether all superior trains due have left as follows:
 At Northern Pacific Fifteenth Street telegraph office, Tacoma, all eastward second class and extra trains originating at Tacoma;

At Reservation, all eastward second class and extra trains passing through Tacoma.

Trains are not required to ascertain whether all trains due, which are superior, or of the same class, have arrived or left, as per Rule 83, as follows:

At Peninsula Jct., all westward trains and engines, but may proceed Peninsula Jct. to St. Johns Jct. on receipt of staff;

At St. Johns Jct., all westward trains and engines, but may proceed St. Johns Jct. to Albina or Portland on clear staff station semaphore at St. Johns Jct., being governed by Rule 152 (S);

At Argo, all westward C. M. St. P. & P. passenger trains, but may proceed Argo to Seattle on clear interlocking signal indication at Argo, running with current of traffic being governed by Rule 152 (S).

Trains will register by registering ticket (Form 2642) as follows:

- At Rieth, Nos. 17, 18, 79 and 80;
- At Black River, all first class trains and Nos. 691 and 692 or manifest extras.

Trains registering exceptions:

- At Albina, only trains which originate or terminate at that point will register;
- At Argo, only trains which originate or terminate in O. W. R. & N. yard at that point will register;
- At Wabash, Tono Branch trains originating or terminating at that point will register in O. W. R. & N. train register located in N. P. telegraph office, Centralia;
- At Blakeslee Junction, Grays Harbor Branch trains originating or terminating at that point will register in O. W. R. & N. train register located in N. P. telegraph office, Centralia;
- At North Portland Jct., Fifth Subdivision trains originating or terminating at that point will register in O. W. R. & N. train register located in S. P. & S. telegraph office, Vancouver.

83 (T). To enable compliance with Rule 83 at end of double track, conductors and enginemen of trains moving between East End Double Track and West End Double Track must fully identify trains between these stations. Trains displaying signals between East End Double Track and West End Double Track will whistle as per Rule 14 (k).

To enable westward trains originating at The Dalles to comply with Rule 83 when passing from double to single track at Crates, train register at The Dalles will also serve as train register for Crates, and conductors and enginemen must identify eastward trains which are superior or of the same class between The Dalles and Crates. Trains displaying signals between The Dalles and Crates will whistle as per Rule 14 (k).

To enable eastward trains originating at Seattle to comply with Rule 83 when passing from double to single track at Argo, train register at Seattle will also serve as train register for Argo, and conductors and enginemen must identify westward trains which are superior or of the same class between Seattle and Argo. Trains displaying signals between Seattle and Argo will whistle as per Rule 14 (k).

83 (U). Movement of westward C. M. St. P. & P. trains or engines from Junction Switch at Helsing Junction to Independence station will be governed by Home Block signal 125. If this signal fails to change to proceed position when junction switch is opened, Grays Harbor Branch main track must not be occupied until protected as required by Rule 509 against eastward trains and Rule 99 against westward trains on Grays Harbor Branch. Movement of westward O. W. R. & N. trains or engines on Grays Harbor Branch main track from Junction Switch at Helsing Junction to Independence station will be governed by Home Block signal 127. When a train or engine is stopped by this signal Rule 509 will govern. Trains and engines moving eastward from Independence will be governed by Home Block signal 132 located just east of that point, complying with Block Signal Rules.

83 (V). Movement of westward Primo Branch trains or engines from Junction Switch, Cosmopolis, to Cosmopolis station, will be governed by Home Block signal 499. If this signal fails to change to proceed position when junction switch is opened, Grays Harbor Branch main track must not be occupied until protected as required by Rule 509 against eastward trains and Rule 99 against westward trains on Grays Harbor Branch. Trains and engines moving eastward from Cosmopolis will be governed by Home Block signal 508 located just east of that point, and westward Grays Harbor Branch trains and engines will be governed by Home Block signal 501, located just west of Blue Slough, complying with Block Signal Rules.

84 (B). Rule 84 (A) is changed to read as follows:
 On freight trains approaching sidings, if everything is all right, conductors will, if practicable, signal enginemen to proceed. This will be answered by 14 (b).

OREGON DIVISION

90 (R). When necessary to take siding at the following point, trains will use the tracks specified, unless otherwise instructed:
Hood River—All westward trains, use siding No. 2 (south of main track);
 Eastward passenger, mail, and express trains, use cross-over from main track to siding No. 1 (north of main track);
 Eastward freight trains, use siding No. 1 (north of main track).

93 (R). Yard limits are established, and defined by yard limit signs, at the following stations:

Huntington	Ainsworth	Imbler	Mikkalo	Madras
Durkee	The Dalles	Alicel	Barnett	Paxton
Leonard	Hood River	Island City	Rock Creek	Gateway
Hindman	Troutdale	Pilot Rock	Shutler	South Jct.
Pleasant Valley	Kenton	Sparks	Shaniko	North Jct.
Encina	Peninsula Jct.	Heppner	Wilcox	Maupin
Baker	Albina	Lexington	Kent	Aberdeen
Telocaset	East Portland	Jordan	Bourbon	Cosmopolis
Union Jct.	Portland	Ione	Grass Valley	Preachers
LaGrande	North Portland Jct.	McNab	Erskine	Slough
Hilgard	Tacoma	Morgan	Moro	Montesano
Glover	Black River	Morsil	DeMoss	South
Kamela	Argo	Cecil	Nish	Montesano
Meacham	Seattle	Ewing	Hay Canyon	Independence
Huron	Joseph	Rhea	Sandon	Helsing Jct.
North Fork	Enterprise	Heppner Jct.	Klondike	Primo
Duncan	Lostine	(Heppner Branch only)	Wasco	Bridges
Gibbon	Wallowa	Condon	Thornberry	Olympia
Rieth-Pendleton	Wade	Gwendolen	Biggs	Chambers
Hermiston	Minam	Speece	(Shaniko Branch only)	
Umatilla	Looking Glass	Clem		
Messner	Elgin			
Arlington				

93 (S). Within yard limits at Kamela trains and engines must keep to the right, except that they may move against the current of traffic, without being preceded by a flagman, when not on the time of a first-class train.

Within yard limits at The Dalles, trains and engines must keep to the right, except that they may move against the current of traffic between Tie Plant switch at east end of yard and crossover west of passenger station, without being preceded by a flagman, when not on the time of a first-class train.

On parallel tracks between Portland and East Portland or Harding St., and between switch 750 feet west of Millroad and St. Johns Jct., trains and engines must keep to the right, except that yard engines may move against the current of traffic between East Portland and Harding Street and between switch 750 feet west of Millroad and St. Johns Jct. without being preceded by a flagman, when not on the time of a first-class train.

Within yard limits at Argo-Seattle, trains and engines must keep to the right.

93 (T). In the absence of previous instructions trains heading in at east end of The Dalles yard will use telephone located at cross-over to secure instructions as to which track is to be used.

98 (R). The Washington State Law governing movement of trains over railroad crossings at grade is as follows:

"Trains shall stop at railroad crossings:— All railroads and street railroads, operating in this State shall cause their trains and cars to come to a full stop at a distance not greater than five hundred (500) feet before crossing the tracks of another railroad crossing at grade, excepting at crossings where there are established signal towers and signal men, interlocking plants or gates."

After stop has been made for railroad crossings at grade engine man will sound proceed signal as per Rule 14 (b) before proceeding.

98 (S). JUNCTIONS AND RAILROAD CROSSINGS.

Locations	Railroad Crossed or Junction with	Trains Which Have Precedence	How Governed
Pendleton.	Washington Division.		Westward movements from Washington Division may be made on Oregon Division between junction and depot without protecting against first class trains, provided Home Block Signal 2165 changes to "proceed" position after junction switch is opened. When Home Block Signal 2165 fails to so change, Oregon Division main track must not be occupied until flagman has been sent in each direction on that track a sufficient distance to insure full protection.

SPECIAL RULES EASTWARD

98 (S). Continued.

Locations	Railroad Crossed or Junction with	Trains Which Have Precedence	How Governed
Rieth.	Third Sub-division.		If a train is approaching on Third Subdivision main track, a train from Pilot Rock Branch will not open the switch to, nor obstruct, the Third Sub-division main track until the approaching train has stopped.
Umatilla. (M.P. 183.9)	Washington Division.		Oregon Division trains will stop clear of the junction switch connecting east leg of wye and Washington Division main track, until it has been ascertained whether all Washington Division trains due which are superior or of the same class have arrived or left. If a train is seen approaching in either direction on the Washington Division main track, switch must not be opened or Washington Division main track occupied until approaching train has stopped or passed.
East Portland.	S. P.		Interlocking Plant.
Portland (Front St.)	United Ry.	O. W. R. & N.	All trains and engines must approach prepared to stop before passing over crossing, expecting to find crossing occupied.
East Portland (East 2nd St. and Hawthorne Ave.)	P. E. P.	O. W. R. & N.	All trains and engines stop before crossing.
East Portland (East 2nd St. between East Salmon and East Madison Sts.)	S. P. & S.	O. W. R. & N.	All trains and engines stop before crossing.
East Portland (East 2nd St. and Morrison St.)	P. E. P.	O. W. R. & N.	All trains and engines stop before crossing.
Albina (Larabee and Delay Sts.)	P. E. P.	P. E. P.	All trains and engines stop before crossing.
Albina (Greeley St.)	P. E. P.	O. W. R. & N.	Gate. All trains and engines stop before crossing.
Peninsula Jct.	Seattle Line.		Train Staff System.
North Portland Jct.	S. P. & S.		Interlocking Plant.
Blakeslee Junction.	C.M.St.P.&P.-N. P.		Interlocking Plant.
Schafer Bros. Crossing.	Schafer Bros. Logging Ry.	O. W. R. & N.	Cabin Interlocking Plant.
Cosmopolis (Tail of Wye)	G. H. L. & P.		All trains and engines stop before crossing.
South Aberdeen (Boone St.)	G. H. L. & P.		All trains and engines stop before crossing.
South Aberdeen (Donovan Mill)	N. P.	N. P.	All trains and engines stop before crossing.
Olympia (Jefferson and 7th Sts.)	N. P.	O. W. R. & N.	All trains and engines stop before crossing.

98 (S). Continued.

Locations	Railroad Crossed or Junction with	Trains Which Have Precedence	How Governed
Olympia (Jefferson and 4th Sts.)	O. P. C.		All trains and engines stop before crossing.
Tacoma (11th St.)	City Ry.	O. W. R. & N.	All trains and engines stop before crossing.
Tacoma (St. Paul Ave.)	City Ry.	O. W. R. & N.	All trains and engines stop before crossing.
Tacoma (Fir Door Spur)	N. P.	N. P.	All trains and engines stop before crossing.
Tacoma (Dempsey Mill Spur)	N. P.	N. P.	All trains and engines stop before crossing.
Tacoma Yard	N. P.	N. P.	Cabin Interlocking Plant.
Reservation.	N. P.		Interlocking Plant.
Black River.	C.M.St.P.&P.-P. C.		Interlocking Plant.
Argo.	N. P.-C.M. St. P. & P.-P. C.		Interlocking Plant.
Seattle (8th Ave., South)	City Ry.		All trains and engines stop before crossing.
Seattle (Spokane and 5th Aves.)	N. P.		All trains and engines stop before crossing.
Seattle (East Marginal Way)	City Ry.		All trains and engines stop before crossing.
Seattle (Spokane and Whatcom Aves.)	N. P.		All trains and engines stop before crossing.
Seattle (Whatcom Ave. and Holgate St.)	N. P.		All trains and engines stop before crossing.
Seattle (Whatcom Ave. and Massachusetts St.)	N. P.		All trains and engines stop before crossing.
Seattle (Railroad Ave. and Atlantic St.)	N. P.		All trains and engines stop before crossing.

98 (T). When pulling into a siding, rear end of train must be clear of main track, when practicable, before train is stopped.

Trainmen and engine men will be held responsible for striking cars on sidings or for damage done in making emergency stop to avoid striking cars. If view is obstructed, brakeman must be sent ahead.

As an additional protection, when cars are set out on siding where dispatcher cannot be notified so that train order may be immediately put out covering, one torpedo must be placed at each end of siding a sufficient distance to permit train heading in to stop. (See Transportation Department Rule 825.)

These instructions will not apply on the Shaniko, Condon and Heppner Branches.

98 (U). All trains and engines will stop at stop boards and not proceed onto draw span of bridge between Montesano and South Montesano until they have called for, received and acknowledged proceed signal from bridge operator, and in addition will be governed by position of derail switch located 128 feet east and derail switch located 195 feet west of trestle leading to drawbridge. Between the hours of 5:30 P.M. and 8:30 A.M. drawbridge span will be left open for river traffic and derail switches will be set in derail position. If necessary for train or engine to use drawbridge between these hours, engine man will sound one long, one short and one long (— o —) blasts of engine whistle to call bridge operator on duty, and if bridge operator does not respond promptly person in charge of train or engine will send a member of train or engine crew to bridge operator's house to notify him that bridge is to be used.

98 (V). All trains and engines will stop at stop boards and not proceed onto draw span of bridge at Tacoma until they have called for, received and acknowledged proceed signal from bridge tender.

101 (H). Trains will be handled with caution where sand is blowing, when weather is foggy or stormy and at points where there is liability of track being obstructed, losing time if necessary to insure safety.

SPECIAL RULES

D-102 (A). If a train is parted or is doubling from any cause and the front portion passes any switch of a cross-over, siding or other route via which it would be possible for another train or engine to enter, it must not move against the current of traffic in returning to the rear portion, unless a flagman is protecting the return movement at any and all such switches, or unless the return movement has been authorized and protected by dispatcher.

103 (A). Cars must not be handled ahead of engine between stations, except in work train service, or, when necessary to take them to or from a spur. When this is done, it must be for no greater distance than necessary, and the movement must be at slow speed, with air brakes cut in and operative on cars ahead of the engine.

In switching with an engine equipped with foot boards, when there are no cars ahead of the engine, a yardman, or trainman (and not more than one) must ride on leading foot board of engine in direction the engine is moving, on either yard or main tracks, except as follows:

- (a) In lead switching where the movement is not over a crossing and the switches to be passed over can be plainly seen to be properly lined;
- (b) When moving over crossings which would not require flag protection if cars were being shoved ahead of engine;
- (c) When making long movements from one section of yard to another section of yard involving movement over main line tracks;
- (d) While actually engaged in switching.

Employees are prohibited from riding on engines or cars as follows:

- (a) On engine foot board between engine and cars when cars are being pushed or pulled, except when necessary to make cut between engine and first car;
- (b) On leading foot board while coupling engine to cars;
- (c) On engine pilots;
- (d) On deadwood, drawbars, brake beams, journal boxes, or brake wheels;
- (e) On ends of cars containing loads which may shift.

103 (B). Engines must not be run under any coal mine tipple, nor over hopper tracks at coal chutes, and air must be working on all cars before starting to put up coal.

103 (C). A trainman, when one available, must ride rear of tank of a road engine backing up without cars while switching at stations or moving in yards.

104 (F). Spring switches are indicated by a letter "S" on switch target, and trains moving against the current of traffic must stop and examine the switch points before passing over them.

After a train or engine has started through a spring switch, the switch must be set by hand for tracks over which movement is being made before a reverse movement is made, or before backing to take up slack.

104 (R). Switches will be set normally:

- At East End Double Track (M. P. 272.0),—for westward trains (spring switch);
- At West End Double Track (M. P. 268.2),—for eastward trains (spring switch);
- At Meacham,—for Casey Mill Track, when cars are left on siding;
- At Hinkle, junction switch,—for line via Munley;
- At Umatilla,—for Washington Division main track extending through west crossover at road crossing to west end No. 1 track west of depot;
- At Umatilla, east switch No. 1 track—for Oregon Division main track to Hinkle;
- At Messner, junction switch,—for line via Munley;
- At Crates,—for eastward trains (spring switch);
- At Troutdale, junction switch,—for line via Graham;
- At Millroad, westbound main track switch,—for Albina freight yard;
- At Tacoma Jct., junction switch,—for C. M. St. P. & P. track;
- At Reservation, junction switch,—for O. W. R. & N. main track;
- At Joseph, main track switch east leg of wye,—for wye;
- At Joseph, switch at stem of wye,—for east leg of wye;
- At Enterprise, west switch of cross-over between main track and house track,—for house track;
- At Moro,—for house track, which will be used as main track;
- At Aberdeen, double track switch (250 feet east of depot),—for eastward trains;
- At South Montezano, wye switch on Montezano Branch,—for east leg of wye;
- At Helsing Jct., junction switch,—for O. W. R. & N. main track.

152 (R). THE SPEED SHOWN BELOW MUST NOT BE EXCEEDED:
(The speed shown under heading of "Psgr." includes mail and express trains, and under heading of "Frts." includes mixed trains and light engines with or without caboose.)

Location	Maximum Speed Miles Per Hour		Remarks
	Psg.	Frts.	
At any point.	60	40	
At any point.	50	40	With Mikado class engines with 63-inch drivers.

152 (R).—Continued.

Location	Maximum Speed Miles Per Hour		Remarks
	Psg.	Frts.	
At any point.	45	40	With Mikado class engines with 57-inch drivers.
At any point.	50	40	With 2-10-2 class engines.
At any point.	40	40	With Consolidation class engines.
At any point.	40	40	With Mallet engines.
At any point.	35	35	Light engines.
At any point.	20	20	Engines backing up.
At any point.		25	When handling steam derrick.
At any point.	52		Motor M-98.
At any point.		20	Trains handling logs unless cars are staked and wired in accordance with A. R. A. rules.
At any point.	35		With C. M. St. P. & P. Class L engines.
At any point.	35		With C. M. St. P. & P. Class K 1 engines, equipped with swing motion trucks.
At any point.	25		With C. M. St. P. & P. Class K 1 engines, equipped with rigid trucks.
At any point.	35		With C. M. St. P. & P. freight engines with single trucks when handling or helping passenger trains.
Through truss bridges.		6	Trains handling logs unless cars are staked and wired in accordance with A. R. A. rules.
Within yard limits at stations on First, Second, Third and Fourth subdivisions.	40	25	Speed must be as much slower as conditions may require.
Within yard limits at stations on Fifth subdivision and all branch lines.	30	15	Speed must be as much slower as conditions may require.
On sidings.	15	15	
Interlocking plants.	15	15	
Railroad crossings at grade.	15	15	
On 5 and 6 degree curves.	40	30	
On 7 and 8 degree curves.	35	25	
On curves of 7 degrees and over.	25	20	With 2-10-2 class engines.
On 9 and 10 degree curves.	30	20	
Over Spring Switches.	15	15	When using turnouts.
Over Spring Switches.	20	20	When not using turnouts, but where switch points will be caused to oscillate under such movement.
Over Spring Switches.	20	20	When not using turnout, but when movement is over facing point switch.
High line track and connections thereto at Lime.		10	
Leonard to Durkee.		25	Descending grade.
Pleasant Valley to Leonard.	30	20	Descending grade.
Pleasant Valley to Leonard.		15	Trains with all ore, wheat or gravel descending grade.
Between Pleasant Valley and Quartz.	50	25	Descending grade.

152 (R).—Continued.

Location	Maximum Speed Miles Per Hour		Remarks
	Psg.	Frts.	
Baker.	15	15	Over street crossings within city limits.
Telocaset to Union Jct.	45	25	Descending grade.
Between Hilgard and Huron.	30	20	Descending grade.
Between Hilgard and Huron.		15	Trains with all ore, wheat or gravel, descending grades.
Huron to Duncan.		25	When Retaining Valves in use.
Pendleton.	6	6	Westward, over East Court street.
Pendleton.	6	6	Over Main street.
Pendleton.	15	15	Over other street crossings within city limits.
Echo.	20	20	Over first road crossing east and west of depot.
Hermiston.	15	15	Over road crossing east end of depot.
Hermiston, on house track west of McNaught warehouse.		6	With Mallet and 2-10-2 engines.
Echo, mill spur and wool warehouse.		6	With Mallet and 2-10-2 engines.
Umatilla, wye.	10	10	
Messner, from east yard limit board on line via Munley, to junction.	15	15	Westward trains.
The Dalles.	12	12	Over street crossings.
Between Eagle Creek and Mile Post 42.5.	35	25	
Between Kenton and Troutdale.	45	35	
Tunnel between Peninsula Jct. and St. Johns Jct.	40	30	
East Portland Hill.	20		With helper on rear of train.
East Portland.		8	Entering East Portland interlocking plant from Second Street, No. 10 lead, S. P. Yard or back track.
East Portland.	6	6	Over frogs and crossings east end of Willamette River Bridge with 7000 class engines.
Portland.	10	10	Over street crossings.
Between Joseph and M.P. 55.	40	25	
Between M.P. 55 and Elgin.	30	18	
Between Elgin and LaGrande.	50	30	
Pilot Rock Branch.	25	18	
Pilot Rock Branch.	10	10	With Switch Engines 4900 class.
Heppner Branch.	30	25	
Heppner Branch, between M.P. 23 and Heppner Jct.	35	35	

(Continued on page 14.)

OREGON DIVISION
152 (R).—Continued.

Location	Maximum Speed Miles Per Hour		Remarks
	Psg.	Frt.	
Condon Branch.	25	20	
Between Speece and Mikkalo.		15	On descending grades.
Between Barnett and Rock Creek.		15	On descending grades.
Between Arlington and M.P. 16.4.	20	20	
Between M.P. 18.6 and Mikkalo.	20	20	
Between M.P. 32.6 and Condon.	20	20	
Shaniko Branch.	30	25	
Between Shaniko and M.P. 39.	30	20	
Between M.P. 33 and Moro.	30	20	On descending grade.
Between Hay Canyon and Sandon.	30	20	On descending grade.
Between Wasco and Thornberry.	30	20	On descending grade.
Between Thornberry and Biggs.	20	10	On descending grade.
Between Metolius and Madras.	25	25	Over Willow Creek Viaduct.
Between M.P. 99.6 and Metolius.	15	15	
Between M.P. 88.7 and M.P. 99.6, Bend Branch.	20	20	O. T. Engines Nos. 500 to 507 and 525. G. N. Engines Nos. 3350 to 3371, inc.
Between South Jct. and M. P. 83.7.	15	15	
Between Metolius and Paxton.	40	30	
Between Paxton and Gateway.	25		
Between Paxton and South Jct.	30	25	
Between North Jct. and Ainsworth.	35	30	
Between Hoquiam and Centralia.	40	35	
Aberdeen.	20	20	Within city limits.
Aberdeen.	10	10	Over street crossings.
Cosmopolis.	20	15	Within city limits.
Cosmopolis.		8	With logs within city limits.
Blue Slough.		6	On Rollways.
Primo Branch.	25	20	
Tono Branch.	35	25	
Olympia Branch.	35	25	

Note.—No. 6 leaving Portland on Saturday will slow down at Bridal Veil and Cascade Locks to unload newspapers.

Note.—To permit exchange of U. S. Mail, No. 6 will not exceed speed of 12 miles per hour passing station platform at Troutdale.

Note.—Figures on stake at beginning of curve indicate degree of curve.

- 152 (S). All trains and engines must be under control through sidings, interlocking plants and yard limits. Under control means to be able to stop within one-half the distance track is seen to be clear.
- 201 (R). Unless otherwise directed, between Troutdale and Portland or Albina all freight trains will run via Kenton and all passenger trains will run via Graham.
- 221 (R). Trains will be governed by indication of train order signal and will not sound whistle signal as required by Rule 221(A) as follows:
- Pendleton —all first class trains;
 - Arlington —all trains;
 - Hood River —all trains;
 - Independence —all trains;
 - Cosmopolis —all trains;
 - Aberdeen —all eastward trains.

509 (E). Relative to Rule 509 (B), except in yard limits, flagman must be sent ahead at night, even though the next signal in advance is in plain view and the track can be seen to be clear.

SPECIAL RULES

509 (F). When a train is stopped by a block signal, on double track when ready to proceed on the main track and on single track when the flagman is not to be sent ahead as per Rule 509 (B), two long sounds of the engine whistle 14 (5) must be given before the train proceeds.

509 (G). On single track, when a light engine or a motor train with only one trainman, is stopped by a block signal under conditions making it necessary to send a flagman ahead to comply with Rule 509 (A) or 509 (E), after placing one torpedo one-fourth mile from rear of train, it may proceed at a slow speed, not exceeding six miles an hour, expecting to find a train in the block, broken rail, obstruction, or switch not properly set, without sending a flagman ahead.

509 (H). When a train is stopped by a block signal at a meeting or passing point on single track under conditions making it necessary to send a flagman ahead to comply with Rule 509 (A) or 509 (E), if the engineman of the train which is stopped is verbally informed by a trainman of the train on the siding that his train has more cars than the siding will hold, the train which is to use the main track may proceed at slow speed not exceeding six miles an hour to the next signal, expecting to find a train in the block, broken rail, obstruction, or switch not properly set, without sending a flagman ahead.

509 (R). When a home block signal displays stop indication due to switch being set to permit train to enter siding and, engineman of train to take siding can see that switch is properly set for his train, such train may proceed into siding with caution without stopping for home block signal, upon receiving proper signal from trainman or switch tender.

509 (S). Junction switch at Troutdale is electrically controlled from the depot by the Operator. Upper arm of Signal 157, located just east of junction switch, governs westward movement on The Dalles-Portland line and lower arm governs westward movement from The Dalles-Portland line to Kenton line. Clear indication of Signal 156 will authorize eastward trains from Kenton line to proceed to telegraph office without protecting against first class trains. Sanders on engines must be kept closed while passing over this switch.

525. If a Home Block Signal fails to indicate "stop" or a Distant Block Signal fails to indicate "caution" when a block is entered, a member of the crew must be left at the signal; the train dispatcher must be notified from the first available point of communication and report must be sent to the Superintendent by wire. The employe left at the signal must stop and notify all trains moving in the direction governed by that signal and must remain there until relieved by an employe of the Signal Department or by instructions from the proper officer.

525 (A). If a Home Block Signal fails to indicate "stop," or a Distant Block Signal fails to indicate "caution" when a light engine, or a motor train with only one trainman, enters a block, the train dispatcher must be notified from the first available point of communication, and report must be sent to the Superintendent by wire.

663 (R). Interlocking plant, Schafer Bros. Crossing: Signal will automatically change from "stop" to "proceed" upon approach of train provided crossing is not occupied. Should signal fail to so change and crossing is not occupied, a member of the crew will examine derails and if found in non-derailing position, and no one in interlocking station, train may proceed through plant under flag protection at speed not exceeding six miles per hour.

674 (R). To indicate the route to be used through interlocking plants, the following engine and motor whistle signals will be used at East Portland: (The signals prescribed are illustrated by "o" for short sounds; "—" for longer sounds.)

For Portland	—	—
For Albina	—	o
For Graham	—	—
For S. P. Main Line	o	—
For East Second St.	o	o
For S. P. Yard	o	o
For Transfer Track	—	o
For East Side Freight Terminal	o	o

713 (A). A member of the crew must be stationed on the rear end in position to give or receive necessary signals when meeting trains on double track or when meeting trains on sidings. At stations where there is an agent or operator on duty, to be on the rear end when passing depot and at blind sidings to be on rear end when passing station board, except that when the train has an observation or special car, he must be on front platform of the rear car or on platform of the car next ahead. On passenger trains, the vestibule door must be open so that hot boxes or other defects may be detected.

720 (R). Passengers will not be carried on freight trains, except persons in charge of special freight, employes with annual passes, or employes with trip passes when traveling on company business, between stations at which the train stops.

802 (A). At stations, when one or more cars are being switched or pushed over a road crossing not protected by watchman or employe assigned as such, a member of the crew must precede the movement and act as crossing watchman. He should not get on the leading end of car until it has passed over the crossing. When a train is parted to clear a public crossing, or is standing near such crossing, a trainman must act as crossing watchman when a train or engine is approaching on a siding or main track. Where a crossing watchman is on duty, trainman must not give signal for highway traffic to come ahead.

802 (R). At 15th St., Tacoma, all trains and engines must stop and a member of the crew must be sent ahead to act as crossing watchman.

820 (R). Allowance for empty and underloaded cars as indicated below must be reported as required by Instruction 24 on Form 1216 "Conductor's Car and Tonnage Report."

TERRITORY	For each empty or loaded car weighing less than 40,000 lbs. (including light weight of car)	For each empty or loaded car weighing between 40,000 and 50,000 lbs. (including light weight of car)
Huntington and Rieth	3000 lbs.	
Umatilla to Hinkle	3000 "	
Bonneville to Cascade Locks	3000 "	
East Portland to Graham	3000 "	
Vader to Napavine	3000 "	
Centralia to Napavine	3000 "	
Rondowa to Joseph	3000 "	
Rondowa to Elgin	3000 "	
Rieth and Pilot Rock	3000 "	
Arlington to Condon	3000 "	
Biggs to Shaniko	3000 "	
North Jct. to Bend	3000 "	
Primo to Cosmopolis	3000 "	
Hoquiam to Cosmopolis	3000 "	
All other	6000 "	3000 lbs.

826 (R). When employes, passengers, or others are injured, call the nearest Railroad Surgeon. If the persons injured are not employes, they should be sent to their homes or placed in charge of Local Relief Authorities, after immediate necessary attention has been given by the Railroad Surgeon.

When necessary to call Surgeons, other than those regularly employed by the Railroad, it should be with the distinct understanding that their services will not be required after arrival of the Railroad Surgeon. Railroad Surgeons are located as shown below:

NAME	TITLE	PLACE	TERRITORY
Donald H. Jessop	Chief Surgeon	Portland, Ore.	Portland.
C. L. Booth	Assistant Surgeon	Portland, Ore.	Portland.
Ralph M. Dodson	Assistant Surgeon	Portland, Ore.	Portland.
J. C. Ghormley	Assistant Surgeon	Portland, Ore.	East Portland south of Sullivan's Gulch.
Carl H. Bastron	Assistant Surgeon	Portland, Ore.	East Portland north of Sullivan's Gulch.
Richard N. Jacobs	Assistant Surgeon	Portland, Ore.	East Portland north of Sullivan's Gulch.
Harry M. Bouvy	Specialist	Portland, Ore.	Portland.
J. B. Flynn	Specialist	Portland, Ore.	Portland.
R. M. Fouch	District Surgeon	Huntington, Ore.	Baker to Huntington.
C. G. Patterson	District Surgeon	Baker, Ore.	La Grande to Huntington.
John B. Gregory	District Surgeon	Wallowa, Ore.	Elgin to Enterprise.
Chas. A. Ault	District Surgeon	Enterprise, Ore.	Elgin to Enterprise.
C. S. Moore	District Surgeon	La Grande, Ore.	Pendleton to Baker —La Grande to Elgin.
W. K. Ross	District Surgeon	La Grande, Ore.	Pendleton to Baker —La Grande to Elgin.
Bouvy & Wilkes	Specialists	La Grande, Ore.	La Grande.
H. J. Kavanaugh	District Surgeon	Pendleton, Ore.	Arlington to La Grande.
J. P. Brennan	District Surgeon	Pendleton, Ore.	Umatilla to Pendleton.
Alexander Reid	District Surgeon	Umatilla, Ore.	Umatilla to Stanfield.
A. D. McMurdo	District Surgeon	Heppner, Ore.	Heppner Jct. to Heppner.
J. V. Wilhelm	District Surgeon	Arlington, Ore.	The Dalles to Umatilla and Arlington to Condon.

(Continued on page 15.)

NAME	TITLE	PLACE	TERRITORY
W. J. Miller	District Surgeon	Condon, Ore.	Arlington to Condon.
C. L. Poley	District Surgeon	Grass Valley, Ore.	Biggs to Shaniko.
J. C. Vandervort	District Surgeon	Bend, Ore.	Ainsworth to Bend.
Reuter, Thompson, Coberth, Griffith & Taylor	District Surgeons	The Dalles, Ore.	Hood River to Umatilla.
French & Young	Specialists	The Dalles, Ore.	Hood River to Umatilla.
H. L. Dumble	District Surgeon	Hood River, Ore.	Portland to The Dalles.
J. B. Blair	District Surgeon	Vancouver, Wash.	Albina to Kalama.
W. R. Scott	District Surgeon	Centralia, Wash.	Winlock to Tenino, Centralia to South Elma and Tono Branch.
I. R. Watkins	District Surgeon	Aberdeen, Wash.	Cosmopolis to Aberdeen.
H. C. Watkins	District Surgeon	Hoquiam, Wash.	Centralia to Hoquiam.
W. L. Bridgford	District Surgeon	Olympia, Wash.	Chambers Prairie to Olympia.
C. P. Gammon	District Surgeon	Tacoma, Wash.	Tenino to Auburn.
F. R. Underwood	District Surgeon	Seattle, Wash.	Tacoma to Seattle.
S. M. Samuels	Specialist	Seattle, Wash.	Portland to Seattle.

865 (A). Trainmen, enginemen, yardmen, agents, and other employes who in any way handle or care for explosives and other dangerous articles must familiarize themselves with the regulations and instructions governing the handling of them.

Conductors must notify enginemen of the presence and location in the train of cars containing explosives and of loaded placarded tank cars before leaving the initial station or station where such cars are picked up.

Cars placarded "Explosives" must be placed in through freight trains near the middle of the train and must be not nearer than the 16th car from the engine, electric locomotive, or motor car, nor the 11th car from the caboose, if the length of train will permit.

Cars placarded "Explosives" may be placed in local freight, local pick-up, and local set-out trains not nearer than the second car from the engine, electric locomotive, or motor car, or caboose when placing them near the middle of the train would require additional switching at way stations.

Cars placarded "Explosives" must not be placed in through or local trains next to cars placarded "Inflammable" or "Corrosive Liquid," nor next to empty or loaded tank cars, wooden frame flat or gondola cars, nor next to carloads of pipe, lumber, poles, iron, steel, or similar articles liable to shift and break through end of placarded car; nor next to cars containing lighted heaters, stoves or lanterns.

Placarded tank cars must not be placed in trains next to cars placarded "Explosives" nor next to cars containing lighted heaters, stoves or lanterns, and when practicable must be placed not nearer than the sixth car from the engine, electric locomotive or motor car, or caboose, nor next to gondola or flat cars with lading such as logs, lumber, rails or pipe that is likely to shift.

Empty tank cars must not be moved from stations unless dome cover and all outlets have been replaced and wrenched tight, shipping tags and cards removed from car, and "Inflammable" placards removed or replaced by "Dangerous Empty" placards.

When placards become detached in transit, conductor must see that they are replaced upon arrival at the next terminal, if in through trains, or at first station stop if in local freight trains.

865 (B). Cars designated below must be handled in rear of train, and next to caboose in the order named:

- Drover cars,
- Cars with emergency drawbars,
- Outfit cars,
- Emigrant movables,
- All wooden underframe cars,
- Any car tagged with Form 4725 reading, "Handle only at rear end of train,"
- Scale test cars.

Drover cars, occupied or unoccupied, must be placed in trains next ahead of caboose.

Trains containing drover cars must not be pushed by an engine at the rear. If it becomes necessary, in an emergency, to clear main track by use of an engine at rear of the train, the drover cars must first be vacated.

When a helper engine is used, it must be cut in ahead of drover cars. Switching must not be done with drover cars, except in handling to or from trains.

SPECIAL RULES

865 (B).—Continued.

Live stock must be handled in head end of train when practicable, and stock cars loaded with scrap, boards, engine wood, long rods, bolts, or any commodity which might work out of openings in sides or ends of car, must not be moved until these openings are properly slatted.

Freight cars with bad order draw bars may be handled in trains under the following conditions:

- (a) When not containing live stock or perishables, may be chained up in train and handled to first available side track where must be set out to be repaired.
- (b) When containing live stock or perishables, may be chained up in train and handled to first repair point.
- (c) When containing any commodity or empty, may be handled behind the caboose to destination or to first terminal, provided the good draw bar can be coupled to the caboose and in addition is secured by chain, and has air and hand brakes operative. On ascending grades a trainman must ride the car.

A red flag by day or a red light by night must be displayed on the rear of any car handled behind caboose.

877 (A). Employes must not go out on exterior of cab of, nor hang out from gangway or steps of, a moving engine for any purpose. When this is necessary, the engine must be stopped.

888 (A). While passing through cities, towns and yards, there must be no failure to keep sharp lookout ahead on both sides of the engine. Firemen must do this in preference to other duties, except that they must keep the fire in such condition that there will be no loss of efficiency of the engine.

898 (A). Enginemen will give two long and two short sounds of engine or motor whistle when approaching a train which is stopped on opposite track on double track, and when approaching a train which is on a siding on single or double track.

On double track special care must be taken to sound warning signals, and particularly when trains or engines are approaching highway crossings from opposite directions at the same time.

Work trains unloading ballast on double track, must stop when a train is passing on the opposite track.

899. Employes must inform themselves as to the location of all structures or obstructions where clearances are close, and must exercise care to avoid injury therefrom to themselves or others.

900 (R). Trainmen must not ride on the side of cars or engines while moving in trains on Bend and Shaniko Branches as there are a number of places on these branches where clearance is impaired by narrow cuts.

AIR BRAKES.

1014 (R). Engines in freight or mixed train service will carry 90 pounds brake pipe pressure on descending grades between Huron and LaGrande and between Encina and Leonard.

Passenger, freight and mixed trains will carry 90 pounds brake pipe pressure on Shaniko and Condon Branches and passenger and mixed trains will carry 90 pounds brake pipe pressure on Bend branch.

1044 (R). Road train brake test as prescribed in Rule 1044 (A) of Operating Rules governing Air Brakes effective December 1, 1925, must be made on all freight trains before descending grade between Encina and Leonard, Encina and Baker, Telocaset and Lun, Telocaset and Union Jct., Kamela and Hilgard, and between Kamela and Duncan, and this test will also be made at intermediate points on these grades by single engine trains ascending the grade and by all trains descending grade, whenever engine is changed, cars picked up or set out, air hose parted, angle cock turned, or train has been standing for 30 minutes or more.

This test will also be made on all freight and mixed trains before descending grade on Condon Branch between Barnett and Rock Creek and on Shaniko Branch between Biggs and Klondike, and this test will also be made at intermediate points on these grades either ascending or descending, whenever engine is changed, cars picked up or set out, air hose parted, angle cock turned or train has been standing for 30 minutes or more.

1048 (B). On freight and passenger trains when undesired quick or emergency action of brakes has occurred on service reduction, thereafter, before starting service reductions, enginemen will place brake valves in release position for two seconds then in running position for one second then in service position for the reduction. This to insure all triple valves being in release position at the time service reduction starts thereby tending to avoid quick action of the brakes when making service reduction.

1066 (C). Locomotive and tender on engines helping or pushing trains will be operated in conjunction with the air brake.

1050 (R). Helper engine on passenger train will be coupled ahead of train engine. Handling helper engines on freight trains, two Mikado or one 2-10-2 class engine will be handled as one Mallet; and one Consolidation class engine the same as one Mikado engine.

Helper engine on freight train between Duncan and LaGrande, Durkee and Baker and Union Jct. and North Powder must be cut in on rear of train as close ahead of caboose as conditions permit but always ahead of outfit cars and cars carded "Handle on Rear", except that from North Powder to Telocaset helper engine may be placed ahead of engine or cut into head end of train.

Cars picked up on road which conductor considers weak must be handled the same as though carded "Handle on Rear."

Whenever three engines are used on freight train, the second Mallet must be cut in just ahead of tonnage rating of third engine, and third engine placed ahead of caboose or ahead of outfit car or cars carded "Handle on Rear," except that when one of the three engines is a Mikado class engine, it must be used as rear engine.

1051 (R). Running test as prescribed in Rules 1051 and 1051 (A) of Operating Rules governing Air Brakes effective December 1, 1925, will be made before descending grades as follows:

- First Subdivision, eastward and westward trains at Encina and Telocaset;
- Second Subdivision, eastward and westward trains at Kamela;
- Fourth Subdivision, westward trains at Mile Post 6 east of Graham;
- Condon Branch, westward trains at Speece, Mikkalo and Shutler;
- Shaniko Branch, westward trains at Kent, Mile Post 34, Klondike and Wasco, and eastward trains at Sandon and Mile Post 35;
- Bend Branch, westward trains at Mile Post 100.

1057 (R). A trainman must be stationed on rear of train with hand on air valve of tail hose ready to apply emergency brake if it becomes necessary at the following points:

- Between Montesano and South Montesano—on passenger trains backing up.

1059 (R). Westward freight and mixed trains must stop and trainmen will inspect and adjust piston travel at Barnett, Grass Valley, Thornberry and Madras.

1060 (B). Trainmen must know condition of hand brakes on freight cars that have air brakes cut out.

1066 (B). Freight trains consisting of more than twenty-five cars will cutoff engine to take fuel, water or sand when stop must be made on descending grade, or where there is more than one engine on the train. Trains under similar conditions will also cut off way cars before making spot.

1077 (R). Retaining valves will be used on descending grades as follows: All retaining valves must be used on passenger, mail and express trains, descending grades between Pleasant Valley and Leonard, and between Huron and Hilgard.

Freight trains descending grades between Encina and Leonard, and between Hilgard and Huron must use one operative retaining valve for each fifty tons of train but in no case less than one-half of all retaining valves in train. If engineman finds it difficult to hold train or to recharge train, he will request train crew to turn up additional retaining valves necessary to insure safe control of train, stopping train if necessary.

Between Telocaset and Union Junction, and between Huron and Duncan, trains averaging not to exceed fifty gross tons per car may be handled without the use of retaining valves when handled by engines equipped with two air compressors which are operative. Responsibility for the use of retaining valves rests primarily with the engineman and he will direct as to their use. However, retaining valves must be used if in the judgment of conductor their use is necessary. On trains averaging to exceed fifty gross tons per car or trains handled by engines having one air compressor, one-half of all retaining valves will be used.

Retaining valves used shall be consecutively from head end of train. At Union Jct. and Hilgard freight trains must reduce speed, and stop if necessary, to enable trainmen to handle retaining valves.

Condon Branch, on all trains Mile Post 35 to Mikkalo, Barnett to Rock Creek and Mile Post 2 to Arlington, all retaining valves to be used.

Shaniko Branch, on passenger trains Thornberry to Biggs, and on freight or mixed trains Mile Post 33 to Moro, Klondike to Biggs and Sandon to Hay Canyon, all retaining valves to be used.

On Bend Branch, freight and mixed trains on descending grades between M. P. 100 and South Jct. trains averaging not to exceed 50 gross tons per car may be handled without use of retaining valves. Responsibility for use of retaining valves rests primarily with engineman and he will direct as to their use. However retaining valves must be used, if in the judgment of the conductor, their use is necessary. On trains averaging in excess of 50 gross tons per car, one-half of the retaining valves will be used consecutively from the head end of the train.

1079 (R). In addition to making inspection of train as often as practicable as per Rule 824, freight trains must stop and remain standing ten minutes to allow wheels to cool at the following points:

- Hindman—Eastward;
- Leonard—Eastward;
- Glover—Eastward;
- Meacham—Westward;
- Huron—Westward.

OREGON DIVISION

AUTOMATIC TRAIN CONTROL RULES COVERING AUTOMATIC TRAIN CONTROL OPERATION BETWEEN PORTLAND AND THE DALLES VIA GRAHAM

Automatic Train Control Rules

Definition

302. AUTOMATIC TRAIN CONTROL: A method of mechanically controlling train movements, independent of the engineman, should it become necessary.

302 (A). CAB INDICATOR:
Green indicates proceed.
Red indicates stop or reduce speed.

Enginemen and Trainmen

302 (B). Automatic train control cab indicators supplement automatic block signals in governing the use of blocks, and do not supersede the superiority of trains, nor dispense with the observance of rules governing the use of automatic block or interlocking signals or other signals whenever and wherever they may be required, except to the extent specifically authorized in Special Rule 302(G).

302 (C). The normal indication of automatic train control cab indicator is "Proceed."

302 (D). When the cab indicator shows red, engineman will acknowledge with acknowledging valve, and if speed is in excess of twenty (20) miles an hour, must immediately reduce speed to less than twenty (20) miles an hour.

302 (E). When cab indicator changes from green to red after having passed home block signal in "proceed" position, engineman must immediately reduce speed to six (6) miles an hour and not exceed that speed to the next signal in advance, expecting to find a train in the block, broken rail, obstruction, or switch not properly set.

302 (F). If cab indicator changes from green to red when within view of a distant block signal in advance, or after passing a distant block signal indicating "proceed", engineman will proceed at such speed below twenty (20) miles an hour as will enable him to stop before reaching the next home block signal in advance.

302 (G). When the speed of a train is restricted by automatic train control, or train is proceeding after having been stopped by automatic home block signal or automatic train control, if the cab indicator changes from red to green, the train may resume normal speed after engine has moved one train length beyond the point where the cab indicator changed from red to green.

302 (H). Within automatic train control territory, when moving over a track which is not equipped with automatic train control circuits, the train or engine must be kept below a speed of twenty (20) miles an hour.

When an engine is running backward, or is pushing cars, it must proceed at a speed less than twenty (20) miles an hour, to avoid an automatic brake application.

302 (I). Trains entering automatic train control territory at Troutdale failing to receive green or red indication after passing off of cut-in circuit will pull down on the cut-out switch for thirty seconds and observe if black hand on duplex gauge starts downward. If cab indicator does not show a red indication or black hand on duplex gauge does not start downward when cut-out switch is down, automatic train control equipment on engine is inoperative and should be cut out. Train control must not be cut out until after consulting with train dispatcher.

302 (J). An engineman of a train entering a block as provided for by these rules, will be held responsible in case of accident caused by overtaking a preceding train. This does not relieve enginemen and trainmen from protecting their trains as required by the rules.

302 (K). When engines are double-headed in train control territory between The Dalles, Portland and Albina, non-train control engine must be placed behind the train control engine.

302 (L). If the indications of the cab indicator and the automatic block signal do not correspond, engineman must promptly report the fact to the train dispatcher from the first available point of communication, giving signal and engine number.

SPECIAL RULES

302 (M). Automatic train control equipment on an engine is locked or sealed in out-in position. In case train control equipment of the engine fails, or track circuits become inoperative, pneumatic portion may be cut out. This will not be done until advising with train dispatcher.

302 (N). At the first available telephone booth or telegraph office, engineer will consult with dispatcher to ascertain if dispatcher has knowledge as to trouble with train control circuit or track being blocked and if dispatcher has no knowledge as to track being blocked train may continue from that point at normal speed, being governed by automatic block signals.

302 (O). If after proceeding, cab indicator for a distance of five miles displays green indication continuously, engineer will cut in pneumatic equipment.

302 (P). When train dispatcher has knowledge that train control power has failed he will so advise train and enginemen by train order; engineman will then cut out train control pneumatically. When cab indicator shows green, indicating that power is restored, engineman will then cut in train control pneumatically, and notify trainmen at first opportunity.

302 (Q). Double-header cut-out cock on engines equipped with automatic train control must not be manipulated in order to forestall an automatic train control application.

302 (R). Station baggagemen at The Dalles Passenger Depot on engines run through The Dalles will unlock and cut out pneumatic portion of automatic train control equipment on eastward engines, and will cut in and lock pneumatic portion of automatic train control equipment on westward engines. After the equipment has been cut in, engineman will pull down on cut out switch in cab, and allow an automatic brake application. Enginemen will be held responsible for proper cutting in and cutting out of train control equipment at all times.

GENERAL TRAIN CONTROL RULES

302 (S). Train control wires are located on top cross arm of automatic block signal pole line between Portland and The Dalles and carry a current of 2300 volts. This current would be fatal to anyone coming in contact with it, and these wires must not be touched by persons or portable telephone and telegraph poles, nor by any other rods, tools or wires, etc., nor struck by booms of steam derricks, locomotive cranes, pile drivers, ditchers, etc.

De-energizing Line

302 (T). When employes are to perform any work where they are liable to come in contact with wires, or when necessary to perform work around or near train control wires with any machinery or appliances, which are liable to come in contact with them, train dispatcher must be notified. Train dispatcher will then notify signal maintainer and before such work is started, signal maintainer must de-energize the portion of line where work is to be performed. Person in charge must not start such work until he has received written instructions from the signal maintainer that he has de-energized the line.

Re-energizing Line

302 (U). The signal maintainer, after de-energizing line as above, must not re-energize the line until he has received written statement from the person in charge of the work that no more work will be performed where employes, machinery or appliances are liable to come in contact with train control wires. Signal maintainer, after re-energizing line, will so advise train dispatcher.

Trouble on Wires

302 (V). All employes are to report to the train dispatcher, as soon as possible, any unusual appearances or conditions of any of the wires or their supports, including collection of sleet on wires, so that any needed attention may be given without delay.

In case high voltage train control wires come in contact with, or are liable to come in contact with, cars or structures, have line de-energized by communicating with train dispatcher or any operator and a signal maintainer, pull wires clear of cars or structures, with pole or any other non-conductor device, and use Pyrene extinguisher if available to extinguish fire.

Employes are reminded that any wire or wires may become crossed with the high voltage wires and great care must be exercised to avoid coming in contact with any wires whatsoever which might cause a hazard.

The circuits are located between Portland and Troutdale with power feeding line at Mile Post 6 and between Troutdale and The Dalles with power feeding line at Hood River.

Operator at Hood River can have circuits between Troutdale and The Dalles de-energized. Towerman at East Portland can have circuits between Portland and Troutdale de-energized.

TRAIN STAFF SYSTEM GOVERNING MOVEMENT OF TRAINS BETWEEN ST. JOHNS JUNCTION AND PENINSULA JUNCTION

409 (A). St. Johns Jct. and Peninsula Jct. are staff stations.

409 (B). Advance staff signal on North Portland line is located 2000 feet from east portal of tunnel.

Advance staff signal on Kenton line is located 2000 feet from east portal of tunnel.

Advance staff signal on Albina-Portland line is located 2050 feet west of St. Johns Jct. staff station.

409 (C). The possession of a staff is authority for a train or engine to proceed regardless of opposing trains or engines, providing the semaphore signal at staff station indicates "proceed." Normal indication of semaphore signal at staff station is "stop."

409 (D). Advance staff signals will indicate whether or not staff is ready for delivery. Normal indication of these signals is "stop." Approaching advance staff signals engineers will call for signal indication by sounding four short blasts of whistle (Rule 14-j). When signal is changed from "stop" to "proceed," engineer will acknowledge same by sounding two short blasts of whistle (Rule 14-g) and may then proceed, obtaining staff at staff station. Trains or engines must not pass an advance staff signal or staff station semaphore indicating "stop," except by train order authority as provided in Special Rule 409 (R).

409 (E). Advance staff signal west of St. Johns Jct. will govern movement of trains and engines approaching St. Johns Jct. from the west on right-hand parallel track, and dwarf signal will govern on left-hand parallel track when authorized movements against current of traffic are made approaching St. Johns Jct.

409 (F). Approaching Peninsula Jct. staff station from Barnes via "Wye 2" trains and engines will stop at established stop board and will not pass stop board until staff has been obtained from staff signalman at Peninsula Jct. and staff station semaphore is changed to indicate "proceed."

409 (G). Engines approaching St. Johns Jct. staff station from St. Johns industrial lead will stop at established stop board and not pass stop board for movement to Albina until proceed signal is received from signalman at St. Johns Jct. staff station. For movement to Peninsula Jct. Special Rule 409 (C) will govern, but engines must not pass stop board until staff has been obtained from staff signalman.

409 (H). Trains or engines on siding at St. Johns Jct. or Peninsula Jct. will not occupy or foul main track within staff limits until staff has been obtained.

409 (I). Delivery of the staff to the engineman will be either by staff crane, hand of block signalman, or the conductor or head brakeman of his own train, and engineman must not accept delivery of the staff from any other person. Signalman will not deliver staff to any other than these employes.

409 (J). When the staff has been obtained by the engineman he will announce the fact by sounding one short, one long and one short blast of the whistle (o — o).

409 (K). Signalmen will remain in view until the rear car has passed and will give proceed signal to trainmen to indicate that staff has been delivered to engineman.

409 (L). Engineman must either hand the staff to the signalman or throw it on the ground immediately in front of the staff station. A staff must not be transferred from one train or engine to another, but must be delivered to the signalman who will place it in the staff machine before delivery to another train or engine and must know that all of the train or cars clear the block before he inserts staff in the instrument.

409 (M). When two or more engines are coupled, the engineman of the leading engine will handle the staff but the engineman of the other engine or engines must know that engineman of leading engine has the staff before proceeding.

409 (N). In case a train parts or it is necessary to double, the staff must be retained by the engineman until rear portion of train is moving out of block.

409 (O). In case of delay to a train the staff must be surrendered upon request of signalman, which will cancel authority to proceed.

409 (P). Cars will not be shoved through the tunnel ahead of engine, except business cars equipped with headlight.

409 (Q). Headlights will be kept burning on all engines while between St. Johns Jct. and Peninsula Jct. both day and night.

409 (R). In case of failure of staff apparatus, trains and engines will be moved by 31 form of train order through the tunnel until apparatus has been repaired. This order must be given jointly to conductor and engineman of the train and signalmen at both ends of the block. Before issuing train orders substituting staff system, train dispatcher must ascertain that block is clear. In such event, a train order takes the place of the staff.

409 (S). If a train is held by staff signal to exceed ten minutes, the conductor must ascertain the cause.

RATING OF ENGINES IN FREIGHT SERVICE IN TONS OF 2000 POUNDS

Total weight of train exclusive of engine and tender, which the different classes of engines will haul in each direction between stations named, under favorable weather conditions. A deduction of ten per cent may be made for time freight trains. Between stations for which no rating is shown maximum will apply.

CLASSIFICATION	ENGINE NUMBERS	LA GRANDE-UMATILLA-MESSNER									HUNTINGTON-LA GRANDE											
		WESTWARD			EASTWARD						WESTWARD					EASTWARD						
		LaGrande to Hilgard	Hilgard to Kamela	Kamela to Umatilla Messner	Umatilla to Hinkle	Messner to Rieth	Rieth to Gibbon	Gibbon to North Fork	North Fork to Kamela	Kamela to LaGrande	Huntington to Durkee	Durkee to Pleasant Valley	Pleasant Valley to Encina	Encina to Lun	Lun to Telocaset	Telocaset to LaGrande	LaGrande to Union Jet.	Union Jet. to Telocaset	Telocaset to Baker	Baker to Quarts	Quarts to Encina	Encina to Huntington
MC. 57 26-41 4648D 30	3620 to 3629 3803-3804-3805	3850	1600	6000	3850	6000	3850	3850	1500	6000	3850	1500	2100	6000	3850	6000	6000	2100	6000	4000	2100	6000
MC. 57 26-41 4648DB 30	3637-3664	4000	1500	6000	4000	6000	4000	4000	1500	6000	4000	1500	2100	6000	4000	6000	6000	2100	6000	4000	2100	6000
TTT. 63 29-30 9008 30	5400 to 5414	2350	1045	5000	2420	4000	2350	2350	1045	5000	2350	1045	1485	3900	2350	5000	5000	1485	5000	3000	1485	5000
MK. 63 26 9118D 30	2166-2167	1825	725	3600	1825	2850	1585	1585	725	3600	1825	725	1100	3500	1825	3500	3500	1100	3300	1900	1100	3500
MK. 57 23-30 907 30	2100 to 2165 Except S.D.B. Eng.	1700	700	3500	1700	2750	1510	1510	700	3500	1725	700	1000	3500	1725	3500	3300	1000	2900	1800	1000	3500
MK. 57 23-30 9078DB 30	2103, 2138, 2147, 2149, 2151, 2152, 2154	1700	700	3500	2000	3000	1510	1510	700	3500	1725	700	1000	3500	1725	3500	3300	1000	3300	1800	1000	3500
MK. 63 26 9118B 30	2168 to 2171	1950	775	3600	1950	3000	1600	1600	775	3600	1950	775	1250	3500	1950	3500	3500	1250	3450	2000	1250	3500
C. 57 22 187 30	730 to 768	1265	560	3000	1265	2200	1195	1195	560	3000	1265	560	815	3000	1265	3000	3000	815	2200	1500	815	3000
P. 77 25 1678 30	3218 to 3225	1190	525	2700	1190	2200	1090	1090	525	2700	1190	525	760	2570	1190	2700	2700	760	2200	1400	760	2700
P. 77 26 1708 30	3226 to 3227	1190	525	2700	1190	2200	1090	1090	525	2700	1190	525	760	2570	1190	2700	2700	760	2200	1400	760	2700
T. 63 22 160 30	1755 to 1760	1070	475	2700	1070	2000	970	920	475	2700	1070	475	690	2460	1070	2700	2700	690	2000	1300	690	2700
T. 69 22 169 30	1742 to 1754	980	440	2700	980	2000	900	850	440	2700	980	440	640	2240	980	2700	2700	640	2000	1300	640	2700
P. 77 22 149 30	3201 to 3217	975	400	2700	975	2000	900	850	440	2700	960	440	640	2050	960	2700	2700	640	2000	1200	640	2700

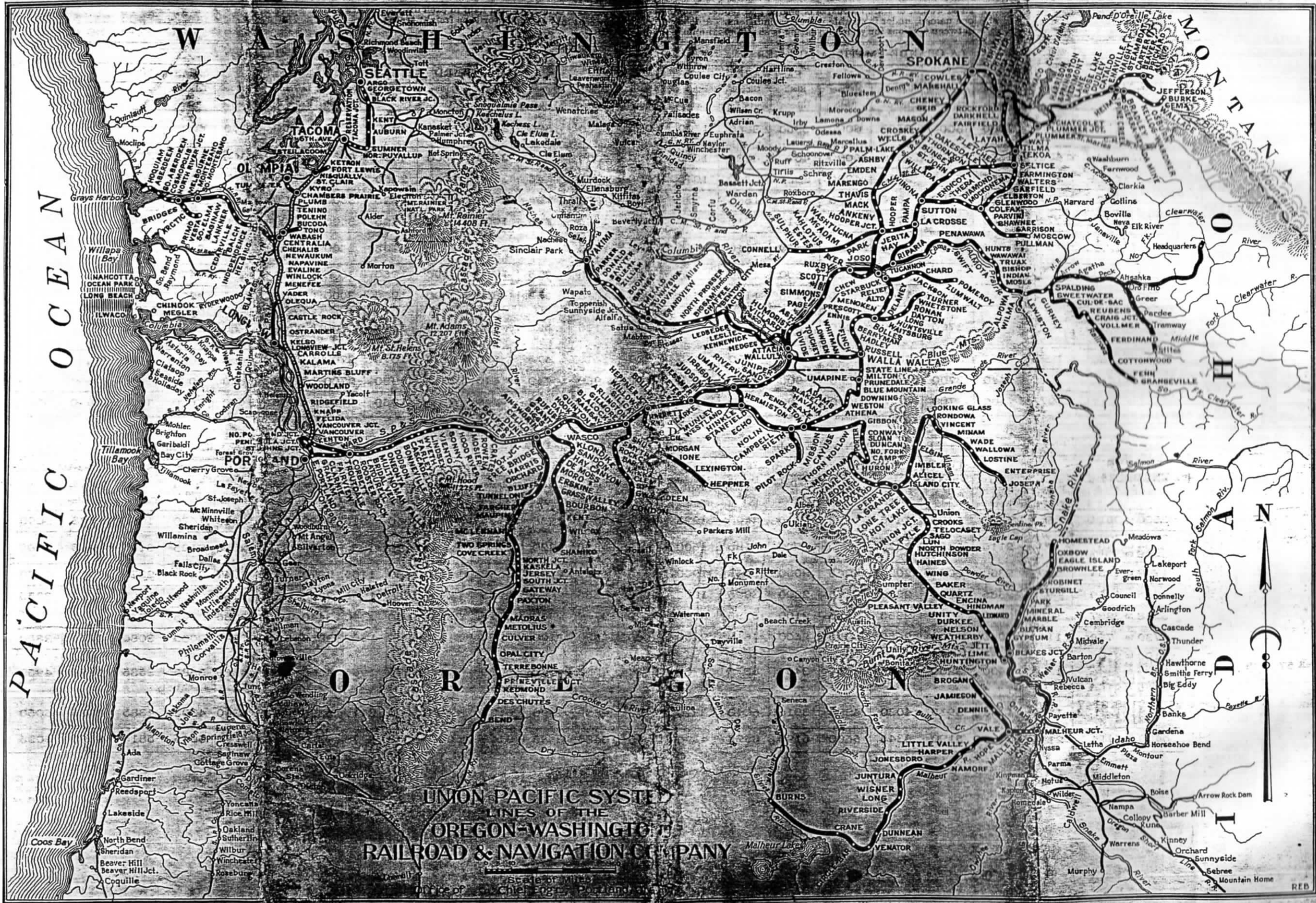
TYPE OF ENGINE	ENGINE NUMBERS	PORTLAND AND THE DALLES									THE DALLES and UMATILLA				PORTLAND AND SEATTLE									
		EASTWARD					WESTWARD				EASTWARD		WESTWARD		WESTWARD					EASTWARD				
		Portland to Troutdale via Graham	Albina to Bonneville via Kanton	Bonneville to Cascade Locks	Cascade Locks to Sonny	Sonny to The Dalles	The Dalles to Dodson	Dodson to Albina via Kenton	Troutdale to Portland via Graham	The Dalles to Seufert	Seufert to Umatilla	Umatilla to Arlington	Arlington to The Dalles	Albina to Vader	Vader to Winlock	Winlock to Napavine	Napavine to Centralia	Centralia to Tenino	Tenino to Tacoma	Tacoma to Argo	Argo to Centralia	Centralia to Napavine	Napavine to Albina	
A 81 20 106 28 1078	3500 to 3514	625	1660	1400	1445	1595	1400	2500	1295	1390	1645	1735	2115	1730	1060	815	2090	1670	2010	1670	1670	685	2090	
P 77 22 1201 28 1201	3200 to 3203 3204 to 3207 3208 to 3217	795	2115	1800	1825	2040	1800	3185	1600	1730	1200	2220	2700	2200	1190	1035	2665	2125	2515	2125	2125	875	2665	
T 69 22 189 28 1919	1742 to 1754	890	2360	2000	2025	2265	2000	3555	1900	2010	2330	2460	3035	2460	1480	1155	2970	2375	2847	2375	2375	975	2970	
T 63 22 160 28 1608	1755 to 1760	975	2585	2000	2225	2475	2000	3895	1900	2200	2555	2690	3285	2690	1560	1265	3255	2600	3130	2600	1070	3255		
P 77 25 1678 28 1678	3218 to 3227	1030	2730	2100	2365	2625	2100	3185	2000	2320	2700	2850	3275	2845	1550	1340	3440	2745	3085	2745	1130	3440		
C 57 22 187 30 1908	730 to 768	1160	3060	2600	2660	2940	2600	4610	2400	2650	3030	3200	3900	3185	1860	1500	3850	3085	3740	3080	1265	3850		
MK 57 23-30 9078 30	2100 to 2102 2103 to 2137 2138 to 2146 2148, 2150, 2153 2155 to 2165	1340	3600	3200	3300	4000	3400	5375	2700	3050	4000	4000	5000	3710	2175	1965	4500	3585	4360	3585	1650	4950		
MK 57 23-30 9078DB 30	2103, 2138, 2147, 2149, 2151, 2152, 2154	1660	4420	3915	4030	4285	3915	6540	3310	3725	4890	4890	6120	4530	2670	2415	5520	4385	5310	4385	4385	2035	6050	
TTT 63 29-30 9008 30 1018DB	5400 to 5414	2195	5860	5190	5345	5680	5190	8675	4390	4940	6485	6485	8115	6005	3535	2975	7320	5815	7040	5815	5815	2690	8025	

EXAMPLE: Consolidation engine having 57 inch drivers, cylinders 22 inch diameter and 30 inch stroke, and weighing 187,000 pounds on drivers:

C.57 22-30 187

EXPLANATION

- "P" - Pacific
- "T" - Ten Wheel
- "C" - Consolidation
- "MK" - Mikado
- "MC" - Mallet Compound
- "T-T" - Ten-Two



PACIFIC OCEAN

UNION PACIFIC SYSTEM
LINES OF THE
OREGON-WASHINGTON
RAILROAD & NAVIGATION COMPANY

Scale of Miles
Office of Chief Engineer, Portland, Ore.



REB