

# OREGON-WASHINGTON RAILROAD & NAVIGATION Co.

FIRST DIVISION

## EMPLOYEES' TIME TABLE

To Take Effect Sunday, February 8, 1914

12:01 A. M. "Pacific Time."

For the Government and Information of Employees only, and not intended for the use of the public.  
The Company reserves the right to vary from this Time Table at pleasure.

J. P. O'BRIEN,  
*Vice President and General Manager.*

M. J. BUCKLEY,  
*General Superintendent.*

CONDENSED TIME TABLE—Huntington-Spokane-Portland

WESTWARD.										DISTANCE FROM PORTLAND	STATIONS	DISTANCE FROM HUNTINGTON	EASTWARD.																														
Second Class					First Class								First Class					Second Class																									
255					17								1					5					9																				
Fast Freight					Ore. & Wash. Limited					Portland Local					Portland & Puget Sound Express					Fast Mail																							
Daily.					Daily.					Daily.					Daily.					Daily.																							
					AM	L				AM	L				PM	L				PM	L				398.8	HUNTINGTON	0.0	PM	A				AM	A				PM	A				1.30
																									299.4	LA GRANDE	99.2																3.45 AM
																									225.2	PENDLETON	173.4						PM	A									6.00
																									183.1	UMATILLA	215.5																2.15 PM
																									84.8	THE DALLES	303.8																4.35 AM
																									0.0	PORTLAND	398.8																
																										ALBINA																10.00 PM L	
																										Through Time																39.30	
																										Average Speed per Hour																10.2	





**WESTWARD.**

**EASTWARD.**

WTOFP	Second Class		First Class					DISTANCES FROM PORTLAND.
	255	23	17	1	5	11	9	
	Fast Freight	Way Freight	Oregon and Washington Limited	Portland Local	Portland and Puget Sound Express	Spokane Portland Passenger	Fast Mail	
	Daily	Daily	Daily	Daily	Daily	Daily	Daily	
	PM 1.00	AM 6.00	PM 4.25	PM 2.15	AM 8.35	AM 7.40	AM 4.25	84.8
2710 P	1.15	6.15	4.30	2.20	8.40	7.45	4.30	82.0
8860 P	1.45	6.45	4.42	2.34	8.51	7.56	4.39	76.4
4870 WP	2.30	7.25	4.55	2.50	9.05	8.12	4.50	69.3
8250 WP	3.05	8.00	5.08	3.05	9.18	8.25	5.00	63.3
4000 P	3.30	8.35	5.18	3.15	9.28	8.35	5.07	58.8
8260 P	3.40	8.45	5.20	3.18	9.30	8.38	5.09	57.5
1860 P	3.50	9.00	5.24	3.24	9.35	8.42	5.13	55.4
8190 P	4.00	9.20	5.29	3.30	9.41	8.47	5.17	52.9
2980 TWP	4.15	9.48	5.34	3.38	9.48	8.54	5.23	49.7
2740 P	4.45	10.45	5.46	3.54	10.03	9.10	5.36	42.9
6500 WP	5.05	11.13	5.54	4.04	10.12	9.20	5.46	38.7
2310 P	5.24	11.55	6.03	4.15	10.21	9.31	5.54	34.0
8280 P	5.45	PM 12.10	6.08	4.22	10.28	9.38	5.58	31.2
2970 OWP	6.15	12.35	6.15	4.33	10.39	9.52	6.06	26.3
2080 P	6.35	12.55	6.23	4.42	10.47	10.02	6.13	22.4
2700 P	6.45	1.10	6.29	4.52	10.54	10.12	6.18	19.1
2700 WP	7.00	1.30	6.35	5.00	11.02	10.22	6.24	15.6
2700 P	PM 7.00	PM 1.30	6.39	5.06	11.07	10.30	6.28	13.2
2700 P	Via Kenton See Page 10	Via Kenton See Page 10	6.48	5.20	11.19	10.39	6.38	7.8
2200 P			6.55	5.30	11.26	10.45	6.45	4.4
IP			7.05	5.40	11.35	10.55	6.55	0.6
P			7.15	5.45	11.40	11.00	7.00	0.0
WOTFYP	9.40	3.15						1.6
	PM A	PM A						
	Daily	Daily	Daily	Daily	Daily	Daily	Daily	
	8.40	9.15	2.50	8.30	3.05	8.20	2.85	
	9.8	9.2	80.0	24.2	27.8	28.1	82.6	

**Time Table No. 6**  
February 8, 1914

**STATIONS**

DNR THE DALLES	2.8	
CRATES	5.6	
ROWENA	7.1	
MOSIER	6.0	
HOOD RIVER	4.5	
MENOMINEE	1.3	
SONNY	2.1	
VIENTO	2.5	
LINDSEY	3.2	
WYETH	6.8	
CASCADE LOCKS	4.2	
BONNEVILLE	4.7	
DODSON'S	2.8	
ONEONTA	4.9	
BRIDAL VEIL	3.9	
ROOSTER ROCK	3.3	
TAYLOR	3.5	
TROUTDALE	2.4	
FAIRVIEW	5.4	
CLARNIE	3.4	
GRAHAM	3.8	
EAST PORTLAND	0.6	
PORTLAND	1.6	
ALBINA	84.8	

STATION NUMBERS.	First Class					Second Class	
	6	2	18	12	10	24	256
	Salt Lake Express	Pendleton Local	Oregon and Washington Limited	Portland Spokane Passenger	Portland and Puget Sound Express	Way Freight	Eastern Fast Freight
	Daily	Daily	Daily	Daily	Daily	Daily	Daily
A 85	AM 3.05	AM 11.15	PM 12.45	PM 7.20	PM 9.40	PM 4.00	AM 4.00
A 82	3.00	11.10	12.40	7.15	9.35	3.50	3.40
A 76	2.49	10.56	12.29	7.02	9.25	3.25	3.20
A 69	2.36	10.40	12.15	6.45	9.12	2.50	3.00
A 63	2.22	10.25	12.01	6.30	9.00	1.55	2.40
A 59	2.14	10.14	11.52	6.20	8.50	1.25	2.20
A 58	2.12	10.11	11.50	6.17	8.47	1.15	2.12
A 55	2.08	10.04	11.45	6.13	8.43	1.05	1.55
A 53	2.04	9.57	11.40	6.08	8.38	12.50	1.45
A 50	1.58	9.48	11.34	6.01	8.33	12.30	1.35
A 43	1.46	9.30	11.21	5.46	8.20	11.50	1.15
A 39	1.36	9.20	11.13	5.35	8.12	11.13	12.55
A 34	1.29	9.11	11.06	5.24	8.04	10.21	12.40
A 31	1.25	9.06	11.02	5.19	8.00	10.05	12.30
A 26	1.18	8.54	10.54	5.08	7.52	9.52	12.15
A 22	1.12	8.44	10.47	5.00	7.47	9.25	12.01
A 19	1.07	8.36	10.40	4.52	7.42	9.05	11.45
A 16	1.02	8.28	10.35	4.42	7.37	8.45	11.30
A 13	12.58	8.23	10.30	4.35	7.32	8.45	11.30
A 8	12.50	8.12	10.20	4.23	7.24	Via Kenton See Page 10	Via Kenton See Page 10
A 4	12.44	8.05	10.14	4.15	7.18		
A 1	12.33	7.53	10.03	4.03	7.05		
A 0	12.30	7.50	10.00	4.00	7.00		
A 2	AM 12.30	AM 7.50	AM 10.00	PM 4.00	PM 7.00		
	Daily	Daily	Daily	Daily	Daily	Daily	Daily
	2.85	3.25	2.45	3.20	2.40	9.00	6.00
	82.6	24.9	80.8	25.5	31.7	9.4	14.2

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

- Trains 1, 2, 11 and 12 will stop at Corbetts.
- Trains 1 and 2 will stop on flag at Montavilla, Latourelle, Multnomah Falls, Warrendale and Ruthton.
- Train 11 will stop at any station to let off passengers from Fourth Division.
- Train 5 will stop at any station to let off passengers from Fourth Division and East of Pendleton.
- Trains-11 and 12 will stop on flag at Latourelle, Warrendale and Ruthton.

FIRST DISTRICT—Portland and North Portland Jct.

SECOND DISTRICT—Tidewater and Seattle

**WESTWARD.**

Second Class					First Class.											DISTANCE FROM PORTLAND	Time Table No. 6 February 8, 1914		STATION NUMBERS	
Length of Passing Tracks in Cars	255	23	975	977	691	563	135	133	131	129	569	511	127	125	123		561	121		STATIONS
	Fast Freight	Way Freight	Way Freight	Way Freight	Fast Freight	Owl	C. M. & St. P. 15	C. M. & St. P. 18	C. M. & St. P. 42	C. M. & St. P. 103	Portland and Puget Sound Express	Shasta Limited	C. M. & St. P. 17	C. M. & St. P. 16	C. M. & St. P. 46		Local	C. M. & St. P. 101		
	Daily.	Daily.	Daily Ex. Mon.	Daily Ex. Sun.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.		Daily.	Daily.		
P						PM L 11.15	PM L 8.15	PM L 7.30	PM L 6.10	PM L 4.20	AM L 11.45	AM L 11.30	AM L 11.20	AM L 10.15	AM L 8.00	AM L 7.30	AM L 7.20	178.9	D 179	
WFTP			AM L 4.30		PM L 7.00	11.25	8.27 PM A	7.42 PM A	6.22 PM A	4.32 PM A	11.55	11.40	11.32 AM A	10.27 AM A	8.12 AM A	7.40	7.32 AM A	175.6	D 176	
75 P			4.35		7.04	11.26					11.56	11.41				7.41		175.1	D 175	
35 IP			4.50 AM A		7.20 PM A	11.35 PM A					12.05 PM A	11.50 AM A				7.50 AM A		169.4	D 169	

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

		AM L 6.35		PM L 9.00							AM L 12.29							AM L 8.38	143.1	TACOMA JCT. 1.1	D 142
I		6.45 AM A		9.10 PM A							12.33 AM A							8.43 AM A	142.0	TIDEWATER	D 142

BETWEEN VANCOUVER AND TIDEWATER, TRAINS WILL BE GOVERNED BY TIME TABLES, RULES AND REGULATIONS OF NORTHERN PACIFIC RY. CO.

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

P				PM L 2.00	AM L 7.30						AM L 6.10							PM L 1.33	6.8	NORTH PORTLAND JCT. 1.2	D 7	
P	PM L 8.25	PM L 2.40		2.02	7.40						6.16							1.38	5.6	PENINSULA JCT. 2.5	AA 6	
P	8.35	2.50		2.25	7.50						6.20							1.42	4.1	ST. JOHNS JCT. 2.5	AA 4	
P	9.40 PM A	3.15 PM A		2.45 PM A	8.00 AM A						6.30							1.50	1.6	DNR ALBINA 1.0	A 2	
IP																			0.6	EAST PORTLAND .6	A 1	
P											6.45 AM A							2.00 PM A	0.0	DNR PORTLAND	A 0	
	Daily.	Daily.	Daily Ex. Mon.	Daily Ex. Mon.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	Daily.	178.9		
	1.15	.35	2.15	.45	13.00						7.30	.12	.12	.12	.12	.12	.12	6.30	.12	Time over District		
	8.0	8.0	15.1	7.0	13.4						28.8	16.5	16.5	16.5	16.5	16.5	16.5	26.5	30.0	Average Speed per Hour		

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

**FIRST DISTRICT—Portland and North Portland Jct.  
SECOND DISTRICT—Tidewater and Seattle**

**EASTWARD.**

DISTANCE FROM PORTLAND	Time Table No. 6 February 8, 1914		STATIONS	STATION NUMBERS.	First Class.											Second Class.					Length of passing tracks into clear and location of water, fuel and turning stations.	
					120	122	124	126	562	130	128	134	132	570	512	564	692	978	976	24		256
					C. M. & St. P. 16	C. M. & St. P. 41	C. M. & St. P. 17	C. M. & St. P. 102	Local	C. M. & St. P. 45	C. M. & St. P. 18	C. M. & St. P. 104	C. M. & St. P. 15	Portland and Puget Sound Express	Shasta Limited	Owl	Fast Freight	Way Freight	Way Freight	Way Freight		Fast Freight
				Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily		
178.9	DR	SEATTLE	D 179	AM A 10.00	AM A 10.15	AM A 11.10	PM A 2.05	PM A 3.15	PM A 6.50	PM A 7.15	PM A 7.25	PM A 8.00	PM A 8.30	PM A 9.00	AM A 6.15						P WFL	
175.6	DNR	ARGO	D 176	AM A 9.48	AM A 10.03	AM A 10.58	PM A 1.53	PM A 3.03	PM A 6.35	PM A 7.01	PM A 7.11	PM A 7.48	PM A 8.18	PM A 8.48	AM A 6.03						P 3000	
175.1		GEORGETOWN	D 175					f 3.02					f 8.17	f 8.47	f 6.02						P 1470	
169.4	DNR	BLACK RIVER Nor. Pac. Crossing	D 169					PM A 2.50					PM A 8.05	PM A 8.35	AM A 5.50						P	

BETWEEN TACOMA JUNCTION AND BLACK RIVER, TRAINS WILL BE GOVERNED BY TIME TABLE, RULES AND REGULATIONS OF CHICAGO, MILWAUKEE & ST. PAUL RY. CO.

143.1	Automatic Block	TACOMA JCT.	D 143					PM A 1.51					PM A 7.14	PM A 7.51	AM A 5.01						AM A 5.11	PM A 6.10
142.0		TIDEWATER	D 142					PM A 1.45					PM A 7.10	PM A 7.46	AM A 4.52						AM A 4.50	PM A 6.00

BETWEEN VANCOUVER AND TIDEWATER, TRAINS WILL BE GOVERNED BY TIME TABLE, RULES AND REGULATIONS OF NORTHERN PACIFIC RY. CO.

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

6.8	Staff Auto System Block	NORTH PORTLAND JCT.	D 7					AM A 8.50					PM A 2.05	PM A 3.20	PM A 11.20						PM A 8.15	AM A 3.55
5.6		PENINSULA JCT.	AA 6					8.47					2.02	3.17	11.17						7.58	3.35
4.1		ST. JOHNS JCT.	AA 4					8.43					1.58	3.13	11.13						7.45	3.20
1.6	Automatic Block	DNR ALBINA	A 2					f 8.35					f 1.50	3.05	f 11.05						7.30	3.00
0.6		EAST PORTLAND	A 1																		PM L 7.00	AM L 10.00
0.0		PORTLAND	A 0					AM A 8.30					PM A 1.45	PM A 3.00	PM A 11.00							
		178.9		Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily						Daily	Daily Ex. Sun.
		Time over District		.12	.12	.12	.12	6.45	.15	.14	.14	.12	6.45	6.00	7.15						11.15	.50
		Average Speed per Hour		16.5	16.5	16.5	16.5	26.5	16.2	16.0	16.0	16.5	26.5	30.0	24.6						16.0	5.0

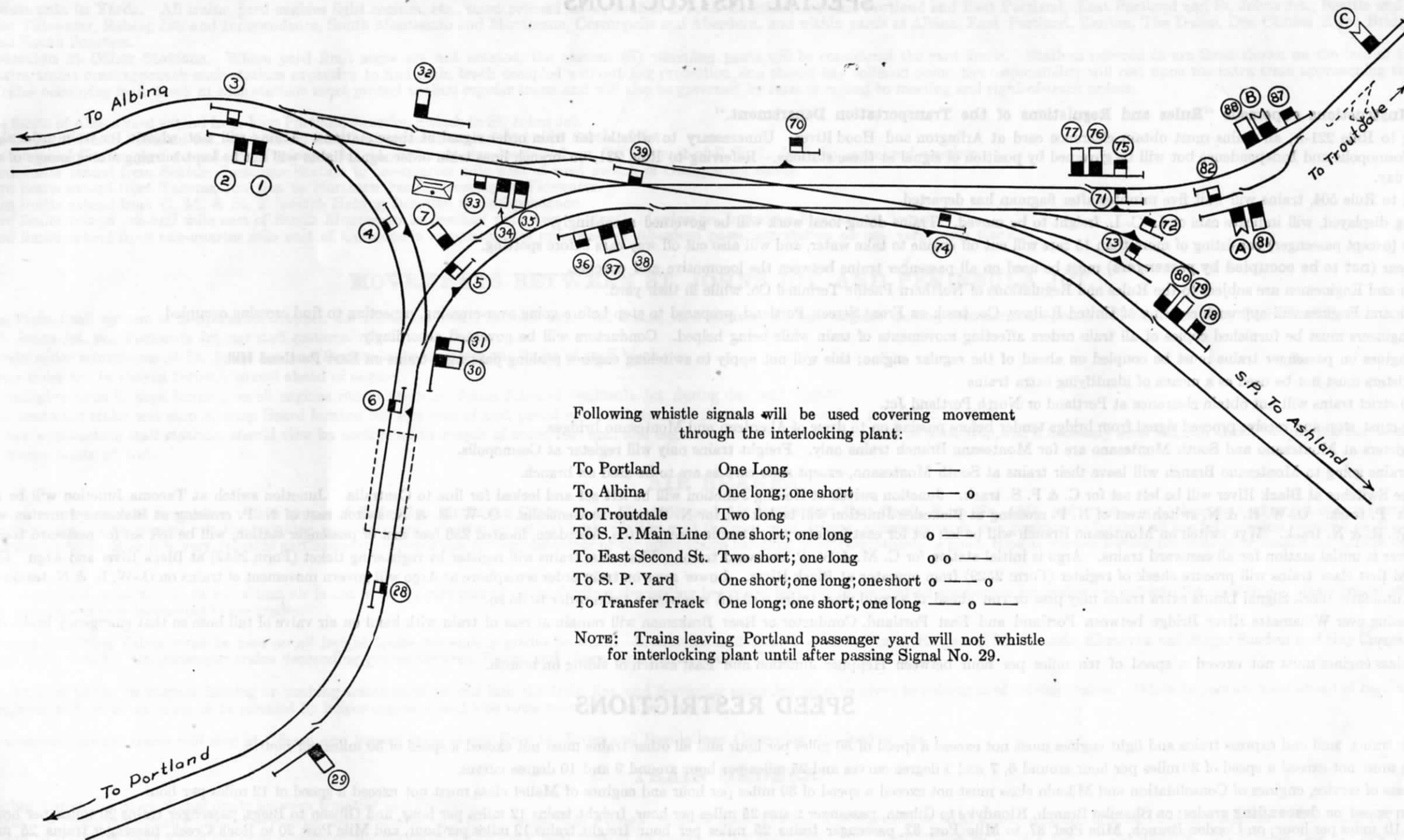
Westward Trains are superior to Trains of the same class in the opposite direction.—See Rule 72.







# EAST PORTLAND INTERLOCKING PLANT



Following whistle signals will be used covering movement through the interlocking plant:

To Portland	One Long	—
To Albina	One long; one short	— o
To Troutdale	Two long	— —
To S. P. Main Line	One short; one long	o —
To East Second St.	Two short; one long	o o —
To S. P. Yard	One short; one long; one short	o — o
To Transfer Track	One long; one short; one long	— o —

NOTE: Trains leaving Portland passenger yard will not whistle for interlocking plant until after passing Signal No. 29.

This plant will govern the movement of trains between Front Street, Portland, and the junction switches on the Albina Line at East Portland, junction switch on the O.-W. R. & N. Line at Union Avenue and Signals 78, 79 and 80 on the Southern Pacific tracks at East Portland.

- Signal No. 29 will govern the movement of trains from Front Street, Portland, to Signals 30 and 31.
- Signal 30 will govern the movement of trains to Albina.
- Signal 31 will govern the movement of trains to Signals 36, 37 and 38.
- Signal 38 will govern the movement of trains to Signal 81.
- Signal 37 will govern the movement of trains to Southern Pacific main line.
- Signal 36 will govern the movement of trains to East 2nd Street and to S. P. side tracks leading off eastbound S. P. main line.
- Signal 7 will govern the movement of trains over the Willamette River Bridge to Front Street, Portland.
- Signal 77 will govern the movement of trains to Signal 7.
- Signal 76 will govern the movement of trains to Signal 32.
- Signal 75 will govern all switching movements not covered by Signals 76 and 77.
- Signal 88 will govern the movement of trains to Signals 75, 76 and 77.
- Signal 87 will govern the movement of trains on to Eastward O.-W. R. & N. track against current of traffic to Signal 71.
- Dwarf Signals 3, 4, 5, 6, 28, 39, 70, 71, 72, 73, 74 and 82 will govern the movement of trains against the current of traffic and switching movements.

- Signal 1 will govern the movement of trains to Signals 33, 34 and 35.
- Signal 2 will govern the movement of trains over the Willamette River Bridge to Front Street, Portland.
- Signal 32 will govern the movement of trains to Albina.
- Signal 35 will govern the movement of trains to the S. P. main line.
- Signal 34 will govern the movement of trains to Signal 81.
- Signal 33 will govern the movement of trains against the current of traffic and switching movements.
- Signal 80 will govern the movement of trains to Signal 32.
- Signal 79 will govern the movement of trains to Signal 7.
- Signal 78 will govern all switching movements not covered by Signals 79 and 80.
- Signal 81 will govern the movement of trains out through junction switch to Troutdale.
- Signal "A" is a distant signal giving the indication for the eastbound automatic signal at the junction switch at Union Avenue.
- Signal "B" is a distant signal that indicates the position of Signal 77 in advance.
- Signal "C" located 2000 feet east of Union Avenue is a distant signal indicating the position of Signal 88.

## SPECIAL INSTRUCTIONS

- No. 1. **Special Instructions supersede "Rules and Regulations of the Transportation Department."**
- No. 2. Referring to Rule 221-A, all trains must obtain clearance card at Arlington and Hood River. Unnecessary to whistle for train order signal at these stations. Trains will not whistle for train order signal at Aberdeen, Cosmopolis and Independence but will be governed by position of signal at these stations. Referring to Rule 221, on branch lines train order signal lights will not be kept burning after passage of regular trains for the day.
- No. 3. Referring to Rule 504, trains will wait five minutes after flagman has departed.
- No. 4. White flag displayed, will indicate cars or L. C. L. freight to be moved. Trains doing local work will be governed accordingly.
- No. 5. All trains (except passenger) consisting of more than 15 cars will cut off engine to take water, and will also cut off way cars before spotting.
- No. 6. A buffer car (**not to be occupied by passengers**) must be used on all passenger trains between the locomotive and coaches.
- No. 7. Trainmen and Enginemen are subject to the Rules and Regulations of Northern Pacific Terminal Co. while in their yard.
- No. 8. All Trains and Engines will approach crossing of United Railway Co. track on Front Street, Portland, prepared to stop before going over crossing, expecting to find crossing occupied.
- No. 9. Helper engineers must be furnished copies of all train orders affecting movements of train while being helped. Conductors will be governed accordingly.
- No. 10. Helper engines on passenger trains must be coupled on ahead of the regular engine; this will not apply to switching engines pushing passenger trains on East Portland Hill.
- No. 11. Train registers must not be used as a means of identifying extra trains.
- No. 12. Second District trains will not obtain clearance at Portland or North Portland Jct.
- No. 13. All trains must stop and receive proceed signal from bridge tender before passing on to draw of Aberdeen and Montesano bridges.
- No. 14. Train registers at Montesano and South Montesano are for Montesano Branch trains only. Freight trains only will register at Cosmopolis.
- No. 15. Freight trains going to Montesano Branch will leave their trains at South Montesano, except such cars as are to be used on branch.
- No. 16. Main Line Switches at Black River will be left set for C. & P. S. track. Junction switch at Helsing Junction will be left set and locked for line to Centralia. Junction switch at Tacoma Junction will be left set for C. M. & St. P. track. O.-W. R. & N. switch west of N. P. crossing at Blakeslee Junction will be left set for N. P. track to Centralia. O.-W. R. & N. switch east of N. P. crossing at Blakeslee Junction will be left set for O.-W. R. & N. track. Wye switch on Montesano Branch will be left set for east leg of wye. Double track switch, Aberdeen, located 250 feet east of passenger station, will be left set for eastward trains.
- No. 17. Black River is initial station for all eastward trains. Argo is initial station for C. M. & St. P. eastward trains. First class trains will register by registering ticket (Form 2642) at Black River and Argo. O.-W. R. & N. eastward first class trains will procure check of register (Form 2529) from operator at Black River. Lower arms on train order semaphore at Argo will govern movement of trains on O.-W. R. & N. tracks.
- No. 18. Within Automatic Block Signal Limits extra trains may pass or run ahead of second class trains without receiving a train order to do so.
- No. 19. When passing over Willamette River Bridge between Portland and East Portland, Conductor or Rear Brakeman will remain at rear of train with hand on air valve of tail hose so that emergency brake can be applied if necessary.
- No. 20. Mikado class engines must not exceed a speed of ten miles per hour between Heppner Junction and East switch of siding on branch.

## SPEED RESTRICTIONS

- No. 21. Passenger trains, mail and express trains and light engines must not exceed a speed of 50 miles per hour and all other trains must not exceed a speed of 30 miles per hour.
- No. 22. All trains must not exceed a speed of 30 miles per hour around 6, 7 and 8 degree curves and 25 miles per hour around 9 and 10 degree curves.
- No. 23. In any class of service, engines of Consolidation and Mikado class must not exceed a speed of 30 miles per hour and engines of Mallet class must not exceed a speed of 12 miles per hour.
- No. 24. **Maximum speed on descending grades:** on Shaniko Branch, Klondyke to Gibson, passenger trains 25 miles per hour, freight trains 12 miles per hour, and Gibson to Biggs, passenger trains 20 miles per hour and freight trains 10 miles per hour; on Condon Branch, Mile Post 37 to Mile Post 32, passenger trains 25 miles per hour, freight trains 12 miles per hour, and Mile Post 20 to Rock Creek, passenger trains 25 miles per hour and freight trains 12 miles per hour.
- No. 25. Passenger trains must not exceed a speed of 20 miles per hour on East Portland Hill when helper engine is used on rear of train, and must cut off such helper just east of Sandy Road crossing, except in cases of unusually heavy trains. Helper engineers will not work more steam than is absolutely necessary.
- No. 26. Passenger trains must not exceed a speed of 30 miles per hour and freight trains 20 miles per hour between Eagle Creek and Mile Post 44.
- No. 27. Westward trains will not exceed a speed of 15 miles per hour through turnout at either end of gauntlet track over Des Chutes River Bridge.
- No. 28. Eastward trains will not exceed a speed of 15 miles per hour through turnout onto eastward track at Crates.
- No. 29. When sand is blowing, engineers will run with great care and under control where they cannot see track is clear. The same precautions must be observed in passing points where there is a liability of track being obstructed by falling rock or land slides.
- No. 30. Slow boards and caution signals will be erected one-fourth mile from the point which they are intended to cover. Permanent slow boards are erected as follows: First District—Tunnel No. 2, Tunnel No. 3; Second District—Mile Post 44, Grays Harbor Branch.
- No. 31. Westward trains will stop before crossing Sandy Road, between M. P. 5 and 6.
- No. 32. Trains handling logs will not exceed a speed of 15 miles per hour at any point.

## YARDS.

No. 33. **Movements in Yards.** All trains, yard engines light engines, etc., must proceed under control in both directions between Portland and East Portland, East Portland and St. Johns Jct., Seattle and Argo, Tacoma Jct. and Tidewater, Helsing Jct. and Independence, South Montesano and Montesano, Cosmopolis and Aberdeen, and within yards at Albina, East Portland, Kenton, The Dalles, Des Chutes River Bridge, Biggs, Umatilla and South Junction.

**Protection at Other Stations.** Where yard limit signs are not erected, the station (S) whistling posts will be considered the yard limits. Stations referred to are those shown on the face of time table schedule. Extra trains must approach such stations expecting to find main track occupied without flag protection, and should any collision occur, the responsibility will rest upon the extra train approaching the station. Trains occupying main track at such stations must protect against regular trains and will also be governed by rules in regard to meeting and right-of-track orders.

The limits of Albina yard extend from East Portland Junction Switch to St. Johns Jct.

The limits of North Portland Jct. yard extend from east portal of tunnel to North Portland Jct.

The limits of Kenton yard extend from Peninsula Jct. to yard limit sign located about 500 feet east of P. R. L. & P. Ry. overhead crossing.

Yard limits extend from Seattle Passenger Station to one-quarter mile west of west switch of Georgetown siding.

Yard limits extend from Tacoma Junction to Northern Pacific crossing at Tidewater.

Yard limits extend from C. M. & St. P. switch Helsing Junction to Independence.

Yard limits extend one-half mile east of South Montesano to one-half mile west of South Montesano, including Montesano Branch.

Yard limits extend from one-quarter mile east of Cosmopolis to one-quarter mile west of Aberdeen passenger station on eastward main track.

## MOVEMENTS BETWEEN ST. JOHNS JCT. AND PENINSULA JCT.

No. 34. The Train Staff System is in operation between St. Johns Jct. and Peninsula Jct. All trains, yard engines and light engines moving between these points will be governed by Train Staff System Rules.

St. Johns Jct. and Peninsula Jct. are staff stations.

Train order semaphores at St. Johns Jct. and Peninsula Jct. indicate the limits of staff block.

Cars must not be shoved through tunnel ahead of engine.

Headlights must be kept burning on all engines run between St. Johns Jct. and Peninsula Jct. during day and night.

All westward trains will stop at Stop Board located 500 feet east of east portal of tunnel, and not proceed until securing possession of staff.

When approaching staff stations, should view be obstructed by reason of snow, fog, etc., and engineer is doubtful as to location, he must stop, and if necessary send flagman ahead to note position of signals and establish whereabouts of train.

## AIR BRAKES.

No. 35. Trainmen must provide themselves with a supply of **Defective Air Brake Cards**, Form No. 4365, and **Air Brake Cut-Out Card**, Form No. 4366, and must apply them to brakes cut out or found defective while in their charge. As a general rule the trainman who discovers defective or cut out brakes is aware of the nature of defects, consequently is in a position to furnish all the information required on the tags and should be particular to do so as it is very valuable and necessary information for car inspectors or for other trains handling such cars; otherwise much time is wasted testing for trouble or reason for brakes being defective or cut out.

No. 36. Trainmen must be particular to know that air is cut in on all cars picked up, and before descending heavy grades must know that all good-order air brakes are cut into the train line. Hand brakes must be used on non-air and cut-out cars descending heavy grades.

No. 37. Pressure Retaining Valves must be used on all freight trains descending grades between: Montavilla and East Portland; Nigger Ridge and McDonalds; Klondyke and Biggs; Sandon and Hay Canyon Junction; Condon and Rock Creek. On passenger trains descending grades between Wasco and Biggs, Condon and Rock Creek.

No. 38. The braking power on engines helping or pushing trains must be cut into the train line and particular attention must be given to cutting in of driving brakes. When helpers are used ahead of regular engine the regular engineer will set air on train to be released by helper engineer, and vice versa when this helper cuts off.

No. 39. All westward freight trains will stop at Gibson and inspect train as per Rule 16, Rules and Regulations Governing Air Brakes, etc.

## TRAIN ORDERS.

No. 40. Within Automatic Block Signal limits between Umatilla and Portland:

Form "19" train order may be issued to restrict the superiority of a train, except that Form 31 must be used (1) when orders are delivered at a non-telegraph or closed telegraph station. (See Rule 217). (2) When necessary to restrict a train which has been cleared or the engine of which has passed train order signal. (See Rule 219). (3) When issuing an order Form "G", example 3. (4) When giving any train right over all trains.

(5) When reducing a time order where necessary that dispatcher have signature of superior trains before completing order to an inferior train. Operator will fill out clearance, designating thereon numbers of all orders, (Forms 19 and 31), repeat to Dispatcher train and order numbers as they appear on clearance and obtain O. K. with time and Superintendent's initials, writing same before delivery in blank space. Operator will retain carbon copy of clearance.

Dispatcher must write train and order numbers in his train order book as transmitted by operator from clearance, and must designate time clearance was made O. K., not transmitting O. K. unless operator repeats numbers of all orders to be delivered to the train to which clearance is addressed.

When "19" order restricting superiority is issued at station where superiority is restricted, train must be stopped by operator before delivery of order.

Conductor's and Engineer's attention is called to the importance of approaching at a moderate rate of speed telegraph offices where orders are to be received. Also to the necessity of carefully checking clearance to ascertain positively that clearance is properly addressed and that orders received are those called for by clearance.



# RATING OF LOCOMOTIVES IN TONS OF 2000 POUNDS

CLASSIFICATION	ENGINE NUMBERS	SHERMAN and BEND						BIGGS and SHANIKO						ARLINGTON and CONDON				HEPPNER JCT. and HEPPNER			CENTRALIA and HOQUIAM				CENTRALIA and TONO										
		EASTWARD			WESTWARD			EASTWARD			WESTWARD			EASTWARD		WESTWARD		EASTWARD		WESTWARD		EASTWARD	WESTWARD												
		Sherman to North Jct.	North Jct. to South Jct.	South Jct. to Madras	Madras to Redmond	Redmond to Bend	Terrebonne to Calver	Biggs to Gibson	Gibson to Sandon	Sandon to Grass Valley	Grass Valley to Shaniko	Shaniko to Grass Valley	Grass Valley to Moro	Hay Canyon to Sandon	Arlington to Eddy	Eddy to Rock Creek	Rock Creek to Condon	Condon to Rock Creek	Rock Creek to Arlington	Heppner Jct. to Jone	Jone to Lexington	Lexington to Heppner	Hoquiam to So. Aberdeen	So. Aberdeen to Centralia	Centralia to So. Aberdeen	So. Aberdeen to Hoquiam	Centralia to Tono	Tono to Centralia							
E-57	51	57 to 60, 62, 64						370	465	220	360	400	575	75	170	165	205	510	220	160	145	290	75	600	320	505	390	370	390	780	1000	390	855	MAX	
E-63	54	65 to 70						365	460	215	350	395	570	70	170	155	195	460	210	145	135	260	65	550	290	455	350	335	355	705	905	355	775	MAX	
E-63	55	71 to 73																																	
E-64	68	80 to 87						510	635	305	490	560	780	90	210	210	260	615	295	200	235	350	114	750	375	610	470	445	470	965	1220	470	1034	MAX	
T-55	71	112 to 119																																	
A-81	106	88 to 102						690	865	410	660	715	1060	110	285	275	350	815	370	255	305	381	125	980	455	810	625	590	620	1240	1595	620	1360	MAX	
M-57	91	103 to 111						520	650	310	500	565	800	95	225	215	270	645	310	200	245	360	146	800	593	640	490	465	470	965	1220	470	1034	MAX	
T-63	92	130 to 135						535	670	315	510	645	825	115	230	250	285	670	350	220	258	385	150	950	610	665	510	485	510	1020	1310	510	1120	MAX	
M-55	108	c. s. 10						680	845	415	650	735	1030	140	285	265	330	780	380	260	295	455	171	960	625	790	610	570	600	1200	1548	600	1315	MAX	
T-63	113	136 to 147						690	865	415	660	745	1060	145	290	275	330	815	400	260	305	470	180	980	775	810	625	590	624	1260	1620	624	1340	MAX	
C-51	117	160 to 164						770	955	470	740	885	1170	173	320	300	374	910	500	300	364	530	195	1075	870	910	700	665	700	1405	1800	700	1540	MAX	
T-57	119	170 to 173						830	1035	485	785	905	1270	180	335	325	405	960	485	340	385	560	208	1210	953	965	740	705	740	1485	1905	740	1630	MAX	
T-64	139	179 to 184																																	
P-77	123	190 to 193						835	1050	505	800	935	1300	180	360	335	420	1020	495	320	385	590	200	1185	1015	965	740	705	740	1485	1905	740	1630	MAX	
P-77	138	194 to 197																																	
P-77	145	198 to 200																																	
T-57	125	174 to 178						890	1100	540	850	965	1345	190	365	365	440	1030	500	360	420	590	240	1250	1015	1015	785	745	710	1425	1835	710	1720	MAX	
P-77	170	208 to 209						1140	1405	685	1100	1220	1750	205	450	435	580	1290	615	425	506	760	250	1595	1390	1330	1030	950	1010	2020	2595	1010	2218	MAX	
T-69	159	250 to 262						990	1245	615	980	1053	1520	190	410	395	500	1175	535	370	445	617	226	1465	1200	1170	900	855	900	1800	2310	900	1975	MAX	
T-63	160	300 to 305						1080	1340	650	1035	1170	1640	200	416	425	535	1240	585	400	490	695	252	1530	1315	1195	920	870	915	1830	2350	915	2010	MAX	
C-55	143	327 to 329						990	1245	615	980	1100	1520	205	444	430	545	1275	550	420	445	675	267	1530	1315	1170	900	855	900	1800	2310	900	1975	MAX	
C-57	176	330 to 338						1200	1505	745	1170	1120	1720	220	465	460	585	1305	625	435	480	755	275	1625	1400	1300	1000	950	1020	2041	2625	1020	2220	MAX	
C-57	163	344																																	
C-57	169	339 to 343																																	
C-57	181	345 to 349																																	
C-57	187	350 to 388						1305	1615	800	1255	1430	1980	275	520	500	650	1460	700	480	555	870	335	1820	1495	1495	1150	1090	1150	2300	2950	1150	2520	MAX	
MK-57	205	500 to 565						1445	1815	895	1385	1550	2215	305	600	580	720	1635	770	530	665	940	365	2020	1630	1660	1285	1205	1270	2535	3255	1270	2780	MAX	
MC-57	394	700 to 702						2870	3550	1760	2760	3220	4355	500	1180	1145	1420	3200	1540	1055	1250	1967	588	4000	3395	3290	2530	2400	2530	5070	6500	2530	5555	MAX	

These ratings include the total weight of train, exclusive of engine and tender, which the different classes of locomotives will haul in each direction between the stations shown.

Between stations for which no rating is shown, maximum will apply.

### CLASS.

- "E" — Eight Wheelers.
- "A" — Atlantic Type.
- "P" — Pacific Type.
- "T" — Ten Wheeler.
- "M" — Moguls.
- "C" — Consolidation Engines.
- "TW" — Twelve Wheelers.
- "S" — Switch.
- "MK" — Mikado.
- "MC" — Mallet Compound.

**EXAMPLE:**—Consolidation engine having 57 inch drivers, Cylinders 22 inch diameter and 30 inch stroke, and weighing 187,000 pounds on Drivers:

$$C-57 \frac{22}{30} 187$$

LIST OF SURGEONS.

NAME	LOCATION	DISTRICT	NAME	LOCATION	DISTRICT
DR. K. A. J. MACKENZIE, Chief Surgeon.	PORTLAND, Corbett Bldg. } TELEPHONES: HOME A1267	O-W. R. & N. Co., System.	DR. WOOD & SAMUELS, Oculist and Aurist.	SEATTLE, Cobb Bldg. MAIN 2205	Portland-Seattle.
DR. F. M. TAYLOR, Asst. Surgeon	PORTLAND, Corbett Bldg. } PACIFIC	O-W. R. & N. Co., System.	DR. WM. P. O'ROURKE, Assistant Surgeon.	SEATTLE (Georgetown).	Argo.
DR. DONALD H. JESSOP, Asst. Surgeon.	PORTLAND, Corbett Bldg. } MAIN 267.	O-W. R. & N. Co., System.	DR. F. D. MERRITT, District Surgeon.	AUBURN.	Seattle-Tacoma.
DR. W. H. NORTON, Asst. Surgeon.	PORTLAND, Corbett Bldg.	O-W. R. & N. Co., System.	DR. CHAS. JAMES, District Surgeon.	TACOMA, 304 Berlin Bldg.	Auburn-Tenino.
DR. GEO. AINSLIE, Chief Oculist.	PORTLAND, Oregonian Bldg.	O-W. R. & N. Co., System.	DR. CHAS. E. ROBSON, District Surgeon.	TENINO.	Tacoma-Centralia.
DRS. DICKSON, COGHLAN AND DAVIS, Nose & Throat.	PORTLAND, Selling Bldg.	O-W. R. & N. Co., System.	DR. DAVID LIVINGSTONE, District Surgeon.	CENTRALIA.	{ Tenino-Winlock.
DR. A. M. WEBSTER	PORTLAND, 1050 1/2 Hawthorne Ave.	E. Portland, South of Sullivan's Gulch.	DR. R. H. CAMPBELL.	VADER.	{ Centralia-So. Elma.
DR. C. HOLCOMB, District Surgeon.	ALBINA.	Albina to The Dalles and Vancouver	DR. C. P. FRYER, District Surgeon.	CASTLE ROCK.	{ Centralia-Tono.
DR. J. F. WATT, District Surgeon.	HOOD RIVER.	Portland to The Dalles.	DR. C. W. BAYLES, District Surgeon.	KELSO.	Winlock-Castle Rock.
DR. J. M. LOWE, District Surgeon.	THE DALLES.	Hood River to Umatilla.	DR. LUTHER M. SIMMS, District Surgeon.	KALAMA.	Winlock-Kelso.
DR. THOMPSON COBERTH.	THE DALLES.	Hood River to Umatilla.	DR. J. T. GUERIN, District Surgeon.	VANCOUVER.	Castle Rock-Kalama.
DR. B. FERRELL, District Surgeon.	BEND.	Bend Branch.	DR. HANNIBAL BLAIR, District Surgeon.	ELMA.	Kelso-Vancouver.
DR. C. L. POLEY, District Surgeon.	MORO.	Biggs to Shaniko.	DR. EDMUND A. SIZER, District Surgeon.	COSMOPOLIS.	Kalama-Albina.
DR. M. B. TAYLOR, District Surgeon.	GRASS VALLEY.	Biggs to Shaniko.	DR. I. R. WATKINS, District Surgeon.	ABERDEEN.	} Grays Harbor and North River Branches.
DR. O. P. LOW, District Surgeon.	ARLINGTON.	Arlington to Condon.	DR. R. F. HUNTER.	HOQUIAM.	
DR. MILLER WILHELM, District Surgeon.	CONDON.	Condon to Arlington.	DR. J. H. FITZ.	MONTESANO.	
DR. H. T. ALLISTON, District Surgeon.	HEPPNER.	Heppner Branch.			
DR. MONTGOMERY RUSSELL, Division Surgeon.	SEATTLE, 620 Leary Bldg. } MAIN 99	Portland-Seattle.			
DR. F. R. UNDERWOOD, Assistant Surgeon.	SEATTLE, 620 Leary Bldg. }	Portland-Seattle.			

AMBULANCE AT PORTLAND IS LOCATED AT RED CROSS AMBULANCE CO., 391 DAVIS ST., TELEPHONES, MAIN 78 AND A 1211.

STANDARD CLOCKS.

LOCATION	TELEGRAPH OFFICE
PORTLAND	DISPATCHER'S "
ALBINA,	DISPATCHER'S "
THE DALLES,	DISPATCHER'S "
SHANIKO,	TELEGRAPH "
UMATILLA,	TELEGRAPH "
CENTRALIA	DISPATCHER'S "
SEATTLE,	TELEGRAPH "
COSMOPOLIS,	TELEGRAPH "
ABERDEEN	TELEGRAPH "
HOQUIAM	TELEGRAPH "

LICENSED WATCH INSPECTORS.

WEBB C. BALL, General Time Inspector,	SAN FRANCISCO
A. & C. FELDENHEIMER, Local Watch Inspectors,	PORTLAND
F. FRIEDLANDER,	PORTLAND
H. A. BELDING,	PORTLAND
H. H. HEIDE,	ALBINA
D. LINDQUIST,	THE DALLES
HOUGHTON & HUNTER,	SEATTLE
ANDREWS JEWELRY CO.,	TACOMA
BEN SALIK,	CENTRALIA
O. BORG,	HEPPNER
H. F. SHANKS,	ARLINGTON
F. W. STRAUB,	HOQUIAM

B. E. PALMER, Superintendent, - - - Portland.

F. L. COYKENDALL, Assistant Superintendent, - - - Portland.

W. H. GUILD, Assistant Superintendent, - - - "

M. B. BAYER, Trainmaster - - - Tacoma.

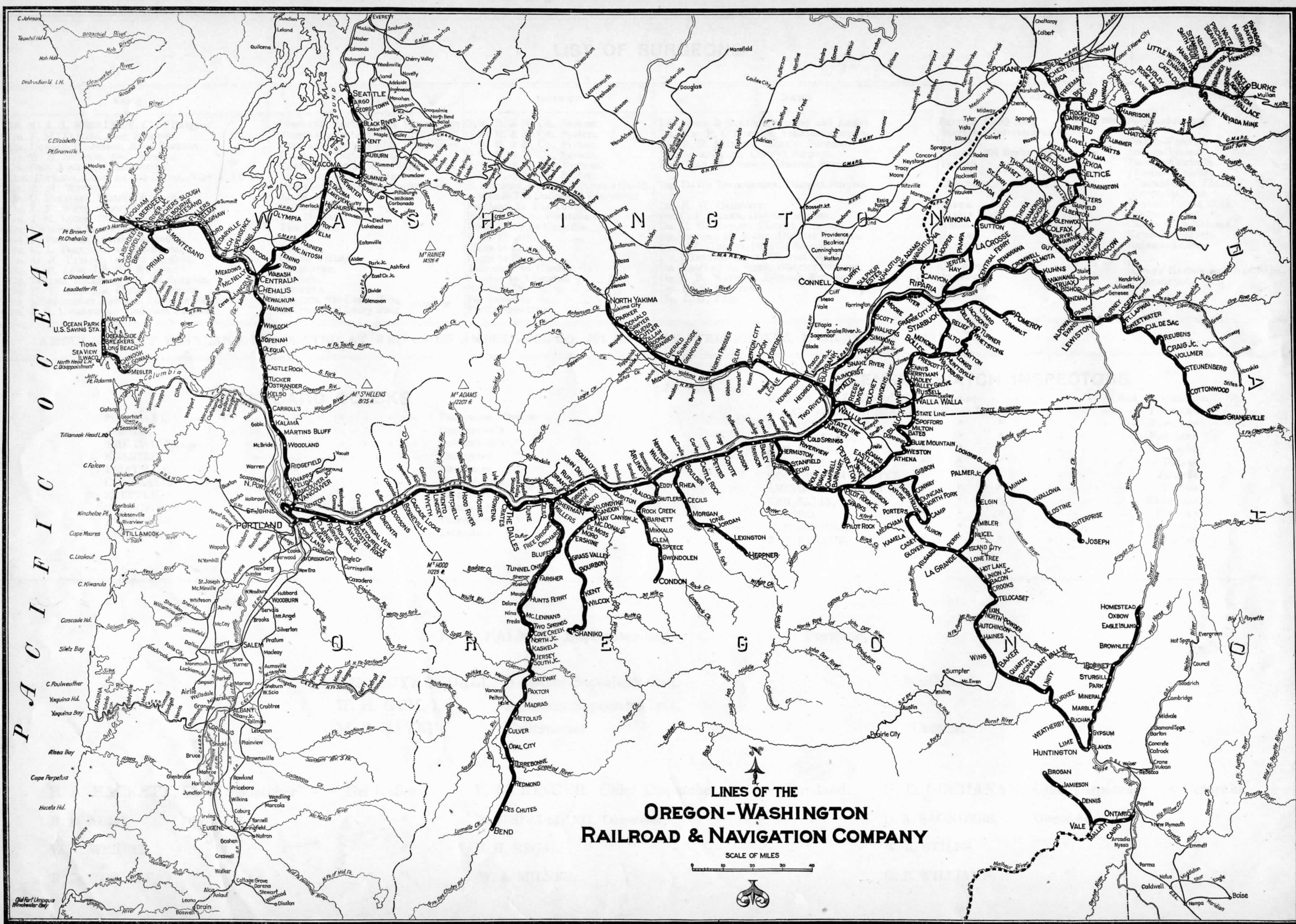
E. A. HACKETT, Chief Dispatcher - The Dalles.	E. M. RINGER, Chief Dispatcher - - Portland.	H. L. BUCHANAN, Chief Dispatcher - Centralia.
H. D. AULD, Dispatcher, - - - " "	F. F. SPAULDING, Dispatcher, - - - "	D. A. SAUNDERS, Dispatcher, - - - "
W. T. WRIGHT, " - - - " "	J. H. REGAL, " - - - "	W. A. STILES, " - - - "
R. C. WESCOTT, " - - - " "	W. A. MILNER, " - - - "	G. B. WILLIAMS, " - - - "

# OREGON-WASHINGTON RAILROAD & NAVIGATION CO.

## EMPEROR TIME TABLE



RAILROAD & NAVIGATION COMPANY  
OREGON-WASHINGTON  
LINES OF THE



LINE OF THE  
**OREGON-WASHINGTON  
RAILROAD & NAVIGATION COMPANY**

SCALE OF MILES

