

Spokane, Portland & Seattle Railway Co.
Oregon Trunk Railway
Oregon Electric Railway
United Railways Co.
Gales Creek & Wilson River R. R. Co.

Special Instructions No. 4

In Effect 12:01 A. M. Pacific Time

Saturday, January 8, 1944

**These instructions govern Current Time Table.
Read carefully and be positive that you have
the Current Time Table, also copy of Current
Special Instructions.**

**E. H. SHOWALTER,
Superintendent**

**T. F. DIXON,
Vice President and General Manager**

TERMINALS SUB-DIVISION

1. All transfers operating between Lake Yard and Portland, in either direction, without cabooses, between sunset and sunrise, or when weather conditions obscure vision, will display red lantern on rear end of the rear car in transfer.

2. **At Portland**—Between end of double track at 10th Avenue and Union Depot, trains and engines will be governed by signals from switch tenders. Westward trains and engines must not pass clearance point at end of double track until proceed signal from switch tender is received.

Eastward trains from S. P. & S. Ry. yard will use westward main track from 15th Avenue to 17th Avenue under protection of flagman, thence through cross-over to eastward main track. 17th Avenue cross-over is not protected by automatic signal.

Trains from S. P. & S. Ry. yards must not occupy westward main track while waiting for outbound passenger trains on the eastward main track to pass.

S. P. & S. Ry. yard crews and engines in charge of hostlers will not enter upon the track of the Northern Pacific Terminal Company in the vicinity of 10th Avenue without first getting a signal from the N. P. T. Co. switch tender, and in no case will S. P. & S. Ry. employes handle the switch to the connection between the S. P. & S. Ry. and the N. P. T. Co., unless the switch tender should be absent, and then only when it can be plainly seen that there are no N. P. T. Co. engines or trains moving in the vicinity of the connecting track switch.

All freight trains entering S. P. & S. Ry. yard, will, unless specifically advised to the contrary, head in on 21st Avenue lead, stop east of 14th Avenue and call for track. Trains handling passenger equipment only will head in at 14th Avenue unless otherwise advised.

Yard crews when switching over the S. P. Co. track at East First and Main Streets, Portland, must, before leaving the crossing, assure themselves that signals have cleared for the S. P. Co. tracks so that S. P. Co. trains will not be delayed due to failure of these signals to clear. Employes handling the switch lock lever must be positive that it is in proper position when they have completed their work in that vicinity. When the lever is placed in normal position and door of the box closed, the signals on the S. P. Co. will clear. If for any reason, after lever has been restored to normal position the signals on the S. P. Co. tracks fail to clear, the train dispatcher must be notified immediately.

On N. P. T. Co. trackage, trains and engines using tracks 1 to 10 inclusive must run at restricted speed when passing a train receiving or discharging passengers and must not cross under "High Shed" at passenger station without receiving proceed signal from the Station Master or his Assistant. In making this movement with yard engines, a member of the crew (and not more than one) must ride on leading footboard of the engine and when the cars are being pushed must ride on front of leading car in direction engine is moving. A flagman must precede the movement of yard engines over crossing in front of the baggage room unless a proceed signal is given by the Station Master, Baggage Master, or their Assistants. Interlocking at south end of freight and passenger yards governs movement of all trains entering or leaving N. P. T. Co. Yards.

When the Home Signal is at "Stop" the following signals will be used to call for desired route:

For Albina ——— .
 For Troutdale ——— —
 For SP Main Line . ———
 For SP Yard . ——— .
 For E. 2nd St. . . ———
 For SPS to E. Side . . ———

When the Home Signal is at "Proceed" the whistle must not be sounded. When conditions are favorable use hand or lantern signals for route desired, omitting whistle signals.

At Portland—Fire lanes have been established over railroad crossings at 9th Street and Front Avenue and 14th Street and Front Avenue. Fire warning signals consisting of an electric siren and red flashing lamps located at these crossings will be operated only when fire fighting apparatus is going to a fire along the water front. In such cases, the siren will be sounded 2 to 3 minutes before the apparatus reaches the crossing and immediate action must be taken by trains and engines to clear the crossing in order there be no delay in fire apparatus reaching scene of fire.

3. **At Willbridge**—Whistle signal, 1 long, 1 short and 1 long blast (——— . ———) will be sounded for route to Astoria line.

4. **Engine Restrictions**—G. N. Engines Classes Q-2 and 04 must not head in on track No. 1, Middle Yard at Portland. Sanding flues of engines between Nicolai Street, Portland, and Lake Yard is prohibited.

5. **Impaired Clearance**—Trolley wires in Portland Hoyt St. Yard will not clear man on top of high car. All tracks in S. P. & S. Hoyt S. Yard, Portland, have impaired clearance and will not clear man on side of car.

6. **Derails**—
 Portland —W. P. Fuller & Company spur.
 Willbridge —Union Oil Co. lead.
 Standard Oil Co. track.
 Kern and Kibbe spur.

7. Speed Restrictions —	M.P.H.	
	Pass.	Fr.
Maximum Speed.....	65	40
Between Lake Yard and 17th Avenue.....	20	20
Between 17th Avenue and end of double track.....	10	10
Between end of double track and Union Station stop.....	6	6
Over bridges between Vancouver and Willbridge.....	30	30
Over draw spans and rail locks.....	10	10

8. **Automatic Block**—Between MP 2.0 and MP 10, both tracks.

VANCOUVER DIVISION

FIRST SUB-DIVISION

1. Speed Restrictions —	M.P.H.	
	Pass.	Fr.
Maximum Speed.....	65	40
Over 8th St. Crossing, Vancouver.....	8	8
Through Camas (City Ordinance).....	20	20
To exchange U. S. mail, Trains 1 and 2.....	20	---
Between first crossing east of depot and overhead bridge west of depot, Washougal (City Ordinance).....	30	25
Between MP 45.7 and MP 106.1.....	60	40
Engines G. N. Class R-1.....	---	35

2. Derails—

- Camas —West end house track.
—East end Converting Plant spur.
—On paper mill New Spur, 500 feet from house track switch.
- Washougal —West end house track.
- Stevenson —Lindis spur, 705 feet from house track switch.
- Underwood —Industry track, clearance point west end.
- Lyle —West end Union Meat Co. spur.
—East end outfit spur.

3. Automatic Block Districts and Signal Locations—

Between	Eastbound Signal	Westbound Signal
MP 10.2 and 14.9	MP 10.2	MP 14.9
MP 33.9 and MP 35.6 Tunnel 1	MP 33.9	MP 35.6
MP 67.4 and MP 70.3 Tunnels 2 to 6	MP 67.4	MP 70.3
	MP 68.4	
MP 81.0 and MP 84.9 Tunnels 7 to 10	MP 81.0	MP 84.9
	MP 82.4	MP 83.7
MP 92.8 and MP 97.9	MP 92.8	MP 97.9
	MP 94.2	MP 96.7
	MP 95.0	

4. Engine Restrictions—Engines Classes E-1 and heavier are permitted on the following spurs or industry tracks only:

- North Bonneville, house track.
- Underwood, industry track.
- Bingen-White Salmon, cross-over and 280 feet of the industry track west of cross-over.
- Lyle, all tracks except outfit spur.

SECOND SUB-DIVISION

1. Speed Restrictions—

	M.P.H.	
	Pass.	Frt.
Maximum Speed.....	65	45
Engines G. N. Class R-1.....	..	35

2. Engine Restrictions—

Engines Classes E-1 and heavier, not permitted to go beyond the frog of the following tracks:
Goodnoe pit tracks; Paterson, Hover and Finley, industry tracks.

3. Derails—

- Sundale —east end of industry track.
- Plymouth —west end of industry track.
- Mottinger —west end of spur.
- Hover —east end of industry track.
- Kennewick —east end of industry track.

4. Automatic Block Districts and Signal Locations—

Between	Eastbound Signal	Westbound Signal
MP 107.8 and MP 111.1	MP 107.8	MP 110.1
	MP 108.6	MP 111.1
MP 193.5 and MP 195.5	MP 193.5	MP 195.5

5. At Pasco—The S. P. & S. register will be used in compliance with Rule 83(A) in lieu of the register at S. P. & S. Junction.

6. Between Pasco and Kennewick—All movements between Pasco passenger station and east switch of siding at Kennewick are governed by block signals, the indications of which supersede the superiority of trains for opposing and following movements on the same track. The sign reading "end of bonded circuit" is located at a point 200 feet west of west switch at Kennewick. Eastward trains will stop clear of east switch of siding Kennewick if eastbound signal at east switch of industry track does not indicate proceed.

THIRD SUB-DIVISION

1. At Snake River Junction—

Normal position of junction switch is for S. P. & S. Ry. 3rd sub-division. Trains from the Northern Pacific Ry. must not occupy S. P. & S. Ry. main track until after obtaining Register Check with clearance Form A from the operator at Snake River, authorizing movement.

2. At Scribner.

Normal position of junction switch is for the line to Fort Wright. Northern Pacific trains, approaching Scribner from S. P. & S., will sound whistle signal, one short one long and one short, in calling for the route to Marshall.

3. At Marshall Junction—

Junction switch is governed by interlocking signals and rules.

4. At Fort Wright—

Junction switch is governed by interlocking signals and rules.

5. Helper District—

Between Spokane and Mock.

6. Engine Restrictions—

Engines Classes E-1, and heavier, not permitted to go beyond the frog of the following tracks:

- Snake River —Farmer's Spur and Pit tracks
- Burr Canyon—Spur
- Farrington —Spur
- Kahlotus —Town Spur
- Sperry —Elevator Spur
- Washtucna —Hole Track
- Lantz —Stockyard Track
- Macall —Stockyard Track
- Lamont —Oil Spur, Cinder track and Warehouse track
- Amber —Stockyard Track
- South Cheney—House Track
- Scribner —Nemours Spur
- Ft. Wright —Outfit Spur

At Spokane—Engines heavier than Mikado type not allowed on turn out leading to the Log, Back, Middle and short Track at the West end, or over turn-out leading to high team tracks at the East end of G. N. yards.

7. Speed Restrictions—		Pass.	Frts.
Maximum Speed.....		60	40
Passing Snake River Gravel Pit.....		25	25
Between Kahlotus and Snake River Jct.....		40	25
G. N. Class R-1.....		..	35

8. Commercial Tracks Not Indicated in Time Table—

	Miles from Portland	Car Capacity	Switch at	Station Number
Burr Canyon Spur....	265.9	5	West end	266
Harder, Stockyard Siding.....	280.7	18	Both ends	281
Washtucna Industry..	292.4	156	East end	292
Ankeny.....	305.8	31	Both ends	306
Nemour's Powder Spur	368.6	48	West end	369

9. Work Tracks Not Show as Stations—

	Miles from Portland	Car Capacity	Switch at
Outfit Spur No. 374.6.	374.6	9	East end

10. Derails—

Levey	—west end of spur.
Redd	—west end of spur.
Snake River	—west end of elevator spur.
Burr Canyon Spur	—west end.
Kahlotus	—east end of house track.
Harder	—west end of stockyard siding.
Sperry	—east end of spur.
Washtucna	{ —west end of house track. —east end of empty coal track.
Hooper	—west end of industry track.
Lantz	—west end of industry track.
Lamont	{ —west end of No. 2 track. —east end of empty coal track. —at top of heavy grade on oil spur.
South Cheney	—east end of industry track.
Nemour	—2 derails (One 820 feet east of H. B. of spur.) (One 1600 feet east of H. B. of spur.)
Outfit Spur No. 374.6	—east end.

11. Automatic Block Districts and Signal Locations—

Between	Eastbound Signal	Westbound Signal
"A" Street, Pasco and MP 234.3	Pasco, "A" Street and Yard lead	{ MP 234.3, 350 ft. E. of Ainsworth Junction on S. P. & S.
	MP 231.8	{ 350 ft. E. of Ainsworth Junction on N. P. 9th Sub- division
	MP 233.2	{ MP 232.5 MP 231.1
MP 271.2 and MP 272.5 (Tunnel 16)	MP 271.2	MP 272.5
MP 275.5 and MP 276.9 Tunnel 17	MP 275.5	MP 276.9
MP 358.6 and MP 360.0 So. Cheney	MP 358.6	MP 360.0
MP 366.2 and MP 366.7 Scribner	MP 366.2	MP 366.7
MP 375.6 and MP 376.7 Tunnel 19	MP 375.6	MP 376.7

11. (Continued)

Eastbound automatic block signal No. 375.6, located just West of Tunnel 19 (Fort Wright), is a three-position signal and connected with home signal at Fort Wright interlocker. This signal will indicate "approach" when home signal indicates "stop" and will indicate "proceed" when home signal indicates "proceed" and route is lined for Eastbound S. P. & S. trains.

Telephone located at signal 375.6 to enable crews to contact operator at Fort Wright.

12. Between Pasco and Ainsworth Junction—

All trains and engines will be governed by block signals, the indications of which supersede the superiority of trains for both opposing and following movements on the same track. Freight trains and engines must avoid delay to first-class trains and passenger extras as far as possible.

At Pasco—"STOP" signal located 50 feet east of "A" Street governs eastward movements of passenger trains and movements direct from Northern Pacific Third Sub-division. The normal indication of this signal is "STOP" and eastward trains or engines approaching this signal will be governed by the indication received when entering approach circuit.

Eastward "STOP" signal governing movement from the freight yard to the S. P. & S. Third Sub-division is a semi-automatic signal controlled from the telegraph office. Normal indication of this signal is "STOP" and eastward trains will not leave yard tracks until signal has been changed to "APPROACH" or "CLEAR" indication.

Ainsworth Junction—Switch at Ainsworth Junction is dual control. Normal position is for the S. P. & S. and normal movements are controlled by operator at Pasco. Trains approaching this switch and finding the "HOME" signal at "STOP," will communicate with dispatcher through operator at Pasco as per rule 509(A), and then, if there are no impending movements, examine the switch, and if not in proper position for their movement, first will throw "POWER LEVER," then operate switch with "HAND-THROW" lever. If signals still indicate "STOP," train may proceed complying with automatic block signal rules. "POWER LEVER" must not be returned to normal position until after final movement over switch is made. Both "LEVERS" must be left in normal position and locked.

"STOP AND PROCEED" Signal No. 233.2, located just west of Ainsworth Junction, is a two-arm, two-position signal, and is the last signal for eastward movements. The top arm governs movements to S. P. & S. Third Sub-division, and the lower arm governs movements to N. P. Ninth Sub-division.

"STOP AND PROCEED" Signal No. 234.3 governing S. P. & S. westward train movements is located 6000 feet east of junction switch and governs approach to "STOP" signal located 350 ft. east of junction switch, on S. P. & S. main track. A westward train approaching these signals will be governed by the signal indication received upon entering the clearing section, which extends 8500 feet east of the "STOP" signal. "STOP" signal located 350 feet east of Ainsworth Junction on N. P. Ninth Sub-division, governs movements from N. P. Ninth Sub-division to S. P. & S. main track.

Engines using roundhouse tracks Nos. 20 and 38, East Panama track switch at Panama Junction, or the switch located 83 feet east of Panama Junction switch, after having entered these tracks and cleared the circuit, before again opening the switch and making use of the main track, must observe Rule 513.

FOURTH SUB-DIVISION (GOLDENDALE-LYLE)

1. Speed Restrictions—	M.P.H.
Between Goldendale and Klickitat.....	20
Between Klickitat and Lyle.....	25
On sharp curves.....	15
Klickitat, over road crossing about 500 feet east of depot.....	5

2. **Commercial Tracks not indicated in Time Table—**

	Miles from Lyle	Car Capacity	Switch at	Station Number
Doubling Spur.....	1.6	8	East end	G 2
Klickitat Springs.....	15.8	10	East end	G 16

3. **Derails—**

Wahkiakus—west end of siding.

4. **Bridge and Engine Restrictions—**

Mikado type and heavier power not permitted.

OREGON TRUNK RAILWAY

1. **At O. T. Junction**—Normal position of switch is for Oregon Trunk Ry.

2. **At Celilo Wye**—Normal position of switch is for Oregon Trunk Ry.

3. **At Redmond**—Dropping cars over Ochoco Highway crossing is prohibited.

4. **Westward Freight and Mixed Trains** will stop at Madras and turn up retainers and stop at South Junction and turn down retainers. Running brake tests will be made on westward trains at point one mile west of Madras.

5. **Speed Restrictions—**

	M.P.H.	
	Pass.	Frts. and Mixed
Eastward trains from Union Pacific connection, Oregon		
Trunk Junction through spring switch.....	15	15
Between Wishram and MP 87.....	35	30
Between MP 87 and MP 98.....	25	20
Between MP 98 and Madras.....	35	30
Between Madras and Bend.....	45	40
Further speed reductions to be governed by restriction signs.		

6. **Derails—**

Sherar	—west end siding.
Maupin	—west end house track.
Gateway	{ —west end house track. west end siding.
Paxton	—industry track.
Madras	{ —east end oil spur. west end house track. west end siding.
Agency	—west end.
Metolius	—west end siding.
Prineville Jct.	—west end siding.
Redmond	{ —east end house track. west end house track.
Deschutes	—west end industry track.
Bend	{ —west end depot spur. west end siding. west end house track. east end Union Oil spur. west end Standard Oil spur. east end Pine Tree spur.

7. **Bridge and Engine Restrictions—**

Engines Class 0-2 and heavier, will be spaced not less than ten cars apart in trains. When these engines are moving light coupled, they will be separated when passing over steel bridge No. T-105.6, four-tenth mile east of Madras and steel bridge No. T-88.6, 2.8 miles east of South Junction.

Engines Class Z-6 and heavier are permitted on the following spurs and industry tracks only:

Metolius	—Turn table lead and storage track No. 1.
Redmond	—Union Oil Spur, Standard Oil Spur, Team track from west end to stock yards; storage track.
Deschutes	—Industry track.
Bend	—Storage tracks Nos. 1 and 2, Engine house tracks and Wye, north end house track.

Engines Class Z-6 and heavier, not permitted to go beyond the frog of the following sidings: South Junction, Gateway, Madras.

8. **Celilo Draw Bridge** is closed as a draw span except when actually in use to permit passage of navigation; stop signs have been removed and it will not be necessary for trains to stop except when flagged. When draw is to be opened, it will be protected in accordance with Rule 728, (Consolidated Code). Government order permits closing of this draw requiring vessels desiring movement through bridge to notify Chief Dispatcher of S. P. & S. Railway at Portland, the time vessel desires passage through the draw; Chief Dispatcher will then instruct section foreman at Wishram to be on hand at Celilo draw at proper time, and after the flagmen have been placed in accordance with Rule 728 (Consolidated Code), and vessel is ready to pass through, will remove the angle bars which will allow the draw span to be opened. After vessel has passed through draw and the angle bars have been replaced, flagmen will be recalled and section foreman and flagmen released.

PORTLAND DIVISION

FIRST AND SECOND SUB-DIVISION

(PORTLAND-SEASIDE)

- At Willbridge**—Whistle signal, 1 long, 1 short and 1 long blast (___ o ___) will be sounded for route to Astoria line.
- At United Junction**—Spring switch, normal position for United Railways main track. Westward first sub-division (Astoria Line) trains will stop to line switch for their route.
- At St. Helens**—Trains must not block highway crossing while taking water.
- At Warrenton**—Normal position of switch is for 1st sub-division.
- At Fort Stevens**—Normal position of switch is for track leading to barracks.
- Draw Bridges—**
Clatskanie River, MP 62.7 center of draw.
Blind Slough, MP 84.8 center of draw.
John Day River, MP 94.8 center of draw.
Youngs Bay, MP, 102.6 center of draw.
Skipanon Creek, MP 105.5 center of draw.
- Telegraphones**—Located at: Goble (Section House); Rainier; Pyramid; Mayger; Clatskanie; Bradwood; Westport; Clifton; Knappa; Van Dusen; Astoria.

OREGON ELECTRIC RAILWAY

	M.P.H.	
	Pass.	Frt.
8. Speed Restrictions—		
Maximum speed.....	40	30
Through Linnton.....	20	20
Hageman Moorage crossing, located 462 feet west of Bridge A-9.3.....	15	15
Through Scappoose.....	20	20
Over P. & S. W. Railway crossing, Scappoose.....	20	20
Through Rainier (City Ordinance).....	8	8
Rainier, between a point 700 feet east of Standard Oil spur and east end of pavement.....	8	8
Between Locoda and U. S. Government Yard.....	..	10
Between Curve 163 and Warrenton.....	25	25
Over Youngs Bay draw span, bridge 102.6, west of Astoria	12	12
On Pacific Avenue, Hammond.....	8	8
Between Warrenton and Seaside.....	30	20
Between Warrenton and Fort Stevens.....	15	15

	Commercial Tracks Not Indicated in Time Table—			Station Number
	Miles from Portland	Car Capacity	Switch at	
Gasco.....	5.6	28	West end	A 6
Gasco.....	5.6	25	East end	A 6
Harbor Track.....	9.8	57	East end	A 10
Trojan.....	40.7	15	East end	A 41
Reeds.....	45.2	5	East end	A 45
Van Vleet Spur.....	47.0	7	West end	A 47 A
Hickox Spur.....	47.3	12	East end	A 47 C
Pyramid.....	53.5	7	West end	A 54
Tongue Point.....	96.2	19	East end	A 96
Warrenton Clay Spur..	106.3	54	West end	F S 1
Point Adams Spur....	108.3	5	East end	F S 3

- 10. Derails—**
- Willbridge —Union Oil Co. lead
Standard Oil Co. track No. 1
Bethlehem Steel Co. spur.
Kern and Kibbe spur.
 - Linnton —Sunset Oil Co. spur No. 3.
General Petroleum spur No. 2.
C. E. Gunderson spur.
American Brake Shoe Co. spur.
 - St. Helens —East end of siding.
Standard Oil Co. spur.
 - Deer Island —spur.
 - Marshland —spur.
 - Tongue Point—Mill Creek spur.
Naval Base spur.
 - Camp Clatsop—spur.

- 11. Impaired Clearance—**
- At Astoria, overhead crossing over port dock tracks leading from Pier 1 to Pier 3 have but 17 feet clearance from top of rail. Trainmen must use care when switching on this track.
- At Gasco, three car lengths on both sides of stub end of the loading track.

- 12. Bridge and Engine Restrictions—**
- Engines heavier than Class F-1 not permitted.
- Engines Class F-1 not permitted on the following tracks:
- Westport —beyond lower dock on spur.
 - Wauna —Wauna Lumber Co. spur No. 2, and Wood tracks.
 - Astoria —Hanthorne cold storage spur and Port dock tracks.
 - Between Astoria and Seaside, double heading is prohibited.

1. Eastward trains handling logs on flat cars will stop at water tank, Salem, and make inspection of all such loads, and know before proceeding, that logs are riding properly for safe movement through the City of Salem.
2. Cars handled in trains or by yard engines in city streets, must have air coupled, except when actually switching.
3. **At Portland**—Cars exceeding 44 feet in length must not be handled between First Avenue and Flanders Street and Twelfth Avenue. Cars must not be spotted on Flanders Street between Second and Third Avenues. Cars spotted on city streets must be protected by two red lanterns on each end of end car.
4. **At Salem**—All cars delivered by the O. E. Ry. to the S. P. Co. and left on interchange track, between 4:30 P.M. and 7:30 A.M., must be protected by two red lanterns placed on each end of end car. Cars exceeding 44 feet in length must not be placed on Fruit Union Spur. When necessary to place or remove 50-foot cars on hop track it will be necessary to handle such cars separately.
5. **At Albany**—On account of heavy curvature, the placing of double or triple loads on House track and 50-foot cars on Sender's Spur is prohibited. Normal position of Junction switch is for third sub-division. When switching M. and M. Plywood Plant look out for log trucks unloading at Donkey track.
6. **At Lebanon**—Junction switch, O. E. Ry., is located at S. P. Co. MP 688.9. Normal position of switch is for S. P. main track. Normal indication block signal on O. E. track is "STOP" and will change to "PROCEED" when switch is opened, providing S. P. main track is clear between block signals located on both sides of junction switch. Telephone connected with telegraph office, S. P. Co., Lebanon, is located in booth near junction switch. In addition to a clear block signal, eastward O. E. Ry. trains must obtain permission from operator, Lebanon, before entering S. P. Co. main track.
7. **Trolley Poles** must always be lowered from trolley wire by means of a rope. To lower trolley pole from trolley wire by getting on top of motor car or engine and taking hold of trolley pole by hand is not permitted; to do so is dangerous and may prove fatal. Trolley poles on double end control cars must be kept under hook when not in use and must not be left suspended by retriever rope. When trolley pole leaves wire or it becomes necessary to change it from one wire to another, controller must be returned to the "off" position, and speed of train reduced to five miles per hour; controller to remain in the "off" position until proceed signal has been given by person replacing or adjusting trolley pole.
8. **Electric Switches** used for cutting power off of trolley wire, are located at the following industrial spurs and tracks. These switches must be closed by conductors or engine foremen before using track and must be opened and locked in open position after work is finished. Before closing switch, conductors and engine foremen must be sure that no one is working where they might come in contact with trolley wires:
 - S. P. & S. "30" yard (wires east of the east line of 12th Ave.) Portland. On pole east side 12th Avenue between Kearney and Johnson Streets. Tracks 40 and 41 in 12th Avenue yard, Portland; on pole near telephone booth, S. P. & S. cross-over.
 - Crane & Co. Spur, 12th Avenue, Portland; on pole at switch.
 - Soule Steel Co., N.W. 35th Ave., Portland, on pole near switch.
 - Chase Bag Co., N.W. Nicholai St., on pole at corner of Nicholai and 25th Place.
 - Gravel Pit spur, Salem; on pole east end of spur.
 - Hunt Bros. spur, Salem: on pole 100 feet east of switch.

Larmer Warehouse spur, Salem: on pole in front of warehouse.

Union Fruit spur, Salem: on pole northeast corner Trade and High streets.

Spaulding Lumber Company's spur, Salem: on pole near east end of spur.

Terminal Ice and Cold Storage Company, Salem: on pole near center of spur track.

Malarky & Malarky Co. Spur, Albany; on pole near east end of spur.

Terminal Ice and Cold Storage Company spur, Hillsboro: on pole near center of spur.

An interlocked electric track and trolley switch is located on the Gilmore Oil and General Petroleum spur at Albany; when open, this switch cuts off both the track and trolley from the main track. When using this spur, it will be necessary to close switch which is operated by a single lever and must not under any circumstances be operated under load. To avoid the possibility of this switch being opened under load, it must never be opened until after the engine has cleared the spur and the trolley pole of the engine has been changed from the spur to the main track trolley wire.

9. **Section Breakers** have been cut in trolley wires at S. P. Co. bridge just north of Tualatin, one breaker about fifty feet on each side of the bridge. Normally the section between these breakers will be kept "dead" and motormen should shut off power and coast under the "dead" section. In the event train stalls on "dead" section, a switch is located on pole just west of bridge to make "dead" section alive. Switch to again be opened after movement has been completed.

10. **Interchange Tracks** with S. P. Co. are located at Portland, Salem, Albany and Lasen.

11. **Instructions Governing Operation over S. P. Co. Track Between Greton and Beburg—**

Absolute signal located 306 feet west of Beburg junction switch governs eastward movement from Southern Pacific tracks.

Absolute signal located 225 feet east of Greton junction switch governs westward movement from Southern Pacific tracks.

Absolute signal located 306 feet east of Beburg junction switch governs westward movement from Oregon Electric tracks. Absolute signal located 225 feet west of Greton junction switch governs eastward movement from Oregon Electric track.

Normal position of Junction switches at Greton and Beburg is for Southern Pacific movement. Normal position of absolute signals at Greton is "stop." Normal position of absolute signal at Beburg governing Southern Pacific movement is "proceed" and normal position of absolute signal governing the Oregon Electric movement is "stop." Switch indicators are in use.

When an absolute signal governing Southern Pacific movement indicates "stop" train after stopping will comply with S. P. Co. Rule 744.

Oregon Electric trains will stop at absolute signals; if switch indicators at junction switch indicate "block clear" switch may be set for movement from Oregon Electric track. If switch indicators at junction switches indicate "block occupied" wait 10 minutes and if no train is heard or seen approaching, the switch may then be set for movement from Oregon Electric track. If signal does not then indicate "proceed" comply with S. P. Co. Rule 744.

Signal 7772 located between Beburg and Greton governs eastward movement for Southern Pacific trains and westward movement for Oregon Electric trains.

Signal 7779 located between Greton and Beburg governs westward movements for Southern Pacific trains and eastward movements for Oregon Electric trains.

Trains stopped by Signals 7772 or 7779 indicating "stop" will send flagman ahead immediately, wait ten minutes then proceed, keeping at least one-half mile behind flagman until train has passed and is clear of junction switch.

11. (Continued)

Spur track at Fanno is equipped with double switch indicator and dwarf light signal 7775. East end Southern Pacific siding at Beburg is equipped with double switch indicator and dwarf light signal 7766. If switch indicator indicates block is clear dwarf signal will indicate "proceed" when derail and switch lined for movement to main track. If switch indicator indicates block "occupy" wait 10 minutes then provide flag protection both directions as prescribed by Rule 99 before fouling main track.

Eastward Southern Pacific trains will, when meets are made at Beburg, move through siding unless otherwise provided by train order. Eastward trains entering siding at Beburg must clear main track as soon as possible to release signals for other movements.

12. **Instructions Governing Operation over S. P. Co. Tracks between Albany and Lebanon.**

O. E. Ry trains between Albany and Lebanon will use S. P. Co. main track just west of signals 6912 and 6913, and use Albany and Page siding between Albany and Tallman Branch junction switch at Page, and must comply with S. P. Co. Rules 93 and 842.

When no yardmaster or representative present, train and engine men must comply with S. P. Co. Rules 83 and 83-C. Eastward O. E. Ry. trains (S. P. Co. timetable direction) will obtain check of register at Albany station. Westward O. E. Ry. trains (S. P. Co. timetable direction) will obtain check of register by telephone from S. P. Co. operator at Albany and repeat it back to operator for verification before delivery to engineer.

Before lining derail and main line switch, the position of Signals 6912-6913 located on the S. P. Co. main track, just west of the connection, should be observed. If either signal is in "STOP" position, it indicates there is a train in the block, and derails should not be lined or the switch opened until such train has passed, signal cleared, or it has been ascertained that it is in "STOP" position for some other reason.

Telephone connected with telegraph office, S. P. Co. Albany, is located in booth at LaFayette Street.

O. E. Ry. trains on S. P. Co. tracks at Albany, on what is known as the "Bridge Line," which extends from the point where O. E. Ry. trains enter Albany siding to Page, are not permitted to take water, fuel or other supplies, pick up or set out cars or perform any other service.

Between Page and Lebanon, picking up and setting out of cars is permissible under joint track operation.

13. **Impaired Clearance—**

Train employees are cautioned not to lean out of cab or cars while passing following overhead and side obstructions:

At Portland: All tracks in S. P. & S. Ry. and O. E. Ry. yards have impaired clearance and will not clear a man on side of car.

Double track on 12th Avenue between Overton and Glisan Streets have only ten-foot nine-inch centers. All trains and engines meeting or when moving on either track, when cars are standing on the opposite track between these points, must come to a stop and see that nothing is projecting that will foul equipment.

Trolley wire in the "30" and "40" yards will not clear a man on top of high car.

Bridge 14.9 Tualatin River, one mile east of Tualatin.

Cab ventilators on all steam engines must be lowered and sand dome covers on engines classes 0-1 and 0-3 must be removed when passing under S. P. Co. overhead bridge at Tualatin account very impaired clearance.

S. P. Co. overhead bridge, Water Street, Albany.

S. P. Co. siding, Water Street, Albany, opposite Sender's Warehouse. These bridges will not clear a man on top of high car.

Trolley wires will not clear a man standing on top of a steam engine tank or high car.

14. Speed Restrictions—	MPH
Under S. P. Co. bridge at Tualatin.....	15
Over bridge 22.9, Wilsonville, trains handled by electric engines..	20
Trains handled by steam power, 20 MPH, except over steel span, 10 MPH. Brakes must be released before moving on any portion of the structure and the application of brakes while moving on the bridge must be avoided as far as possible.	
Through Salem.....	10
Passing paper mill, Salem.....	5
Through Albany.....	12
Between second crossing east of depot at Harrisburg and county road crossing, 1800 feet west.....	8
Through Junction City.....	20
Between Forest Grove Junction and Forest Grove.....	20
Between Bowers Junction and Forest Grove Junction.....	35
Between Forest Grove Junction and Beburg.....	30
Between Greton and Beburg on S. P. tracks.....	20
Between Greton and MP 40.....	30
Between MP 40 and MP 51.....	35
Between MP 51 and MP 104.....	30
Between MP 104 and Eugene.....	40
Through Hillsboro.....	10
Through Forest Grove.....	15
Between Pacific Avenue and end of track, Forest Grove.....	5
Between Sweet Home and Calapooia.....	25
Between Lebanon and Sweet Home.....	25
Between Calapooia and Dollar.....	12

Trains handling logs in gondola cars, skeleton flat cars, or flat cars equipped with bunks—

Between Bowers Junction and Forest Grove Junction.....	30
Between Greton and MP 51.....	30
Between MP 104 and Eugene.....	30
At all other points.....	25

Trains and engines must stop before crossing S. P. Co. track at Front and Trade Streets, Salem, and the three S. P. Co. crossings on Water Street, Albany, and not proceed until flagman has been sent to center of intersection and proceed signal received from him.

15. Engine Restrictions—

Double header steam engines, when crossing bridge 22.9, Wilsonville, must be separated in trains by not less than 5 cars. If both engines are on head-end, train must be stopped, lead engine cut off and cross over bridge before train is started.

Steam engines permitted on the following spurs only:

Sidney	—Spur.
Talbot	—Spur.
Dever	—Spur.

16. Bridge Restrictions—

Engines Classes 0-2, and heavier, not permitted west of east end of Bridge 22.9, Wilsonville.

17. Commercial Tracks not Indicated in Time Table:

	Miles from Portland	Capacity	Station Number
Broad Acres.....	51.9	17 E	E 52
Gravel Pit Spur.....	68.7	37 E	E 69
Albany Lumber and Supply Spur.....	100.4	4 E	E 100
Miller Seed Spur.....	118.3	4 W	E 118
Johnson and Powell Bros. Spur..	130.0	10 E	E 130

18. Work Tracks not Shown as Stations:

	Miles from Portland	Capacity
Sub-Station Spur 19.....	18.9	2 E
Outfit Spur No. 75.4.....	75.4	23 E
Sub-Station Spur 61.3.....	61.3	8 E
Sub-Station Spur 101.7.....	101.7	13 E
Sub-Station Spur 121.3.....	121.3	11 E
Sub-Station Spur F3.5.....	25.0	2 E

19. Derails—

Donald	—West end siding.
Salem	—Producers Canning & Packing Co. spur. Oregon Gravel Co. spur. Paulus Bros. spur.
Outfit Spur No. 75.4.	
Sweet Home	—Santiam Lbr. Co., east end. Linn Lane Logging Co., spur. Vancouver Plywood spur. Clark Log Co.
Albany	—Clark Log Co. Spur on O. E. Ry. track at junction with S. P. Co. main track.
Ryan	—Industry track, east end.
Woodraffe	—Industry track, east end.

20. Draw Bridges—

	Miles from Portland
Willamette River Bridge.....	126.1

UNITED RAILWAYS CO. & G. C. & W. R. RAILROAD

1. **At Gray**—Roger mill spur may be used for empty log trains meeting and passing loaded log trains. Track may be used up to the old turn table and will accommodate 26 sets of logging trucks, engine and cabooses clear of main track.
2. **At United Junction**—Normal position of switch is for United Railways main track.
3. **At River Junction**—Normal position of switch is for route to Rafton.
4. A minimum of 16 brakes must be used on all full trains of loaded disconnected trucks on the necessary descending grades between Glenwood and Rafton where brakes are now used. Brakes will be used in proportion on less than full trains. When starting down descending grades, engineer will control speed of trains to give ample time to apply the necessary number of hand brakes.
5. **At Bowers Junction**—Spring switch. Normal position is for O. E. Ry.
6. **At Wilkesboro**—Normal position of junction switch is for G. C. & W. R. Railroad.
7. **At Keasey**—When necessary for trains or engines to move west of Keasey, conductor will call Oregon American Lumber Company Dispatcher by telephone from Keasey, and arrange for such movement.

8. **Couplers**—When engines and cabooses equipped with adjustable couplers are being moved, the Federal Law prohibits the handling in one train, equipment including engines and cabooses, unless couplers are all in either the high or the low position. This includes couplers on engines and on cabooses on the opposite ends from those in service. When it is necessary to change position of adjustable couplers, there must be no failure to again connect between cutting lever and pin lifter so that cutting lever will be operative.

9. **Log Restrictions**—Following restrictions must be observed in the handling of logs loaded on disconnected trucks; loads must not exceed eleven (11) feet in width, nor eighty-five (85) feet in length, except by special permission.

The load limit for 80,000 capacity trucks is 12,000 feet, and for 100,000 capacity trucks, 14,000 feet.

There must be a clearance of not less than twelve (12) inches from the top of rail to bottom of logs.

In event of trains stalling on grade, enginemen must not take slack to start because of liability of pulling trucks from under loads.

When handling logs on disconnected trucks, trainmen will be required to ride out on trains for the purpose of controlling trains over district between Keasey and Zan, Top Hill and Manning, Rockton and Rafton, Glenwood and Washburn, and between Mile Posts 6 and 3. When handling empty trucks with caboose on rear, trainmen will not be required to ride out, but in every case there must be not less than two trainmen in caboose over these districts.

When handling logs on disconnected trucks, trainmen will be required to wear shoes equipped with caulks.

Log trains must not cross overhead crossing just west of Wilkesboro when S. P. Co. trains are passing underneath. If an S. P. Co. train is passing or approaching, log train must come to a stop and wait until S. P. Co. train has cleared the crossing.

Whenever from any cause, logs are lost from cars or trucks, conductors will file a message at the first open telegraph office, addressed to Superintendent, showing number of logs lost, location, brand and whether from trucks or flat cars.

Double heading of trains handling logs on disconnected trucks is prohibited.

10. **Engine Restrictions**—At Glenwood engines must not enter the five turnouts located between the derrails at the east end of the Mill Tracks and the east switch of Yard Track No. 1. If necessary to use east lead track to Shingle Mill and engine house or west end of mill siding, enough cars must be used so engine will not enter turnouts.

11. **At Rafton**—Round-house track No. 2 must not be used by Engines or cars beyond round-house door.

Due to sharp curvature, engines not allowed on the east end of Dump 3 track.

12. Speed Restrictions—	MPH
Over bridge B-07 between River Junction and Rafton.....	12
Between United Junction and Wilkesboro.....	25
Between Wilkesboro and Keasey.....	20
Between Wilkesboro and Glenwood.....	15
Eastward trains will use not less than 25 minutes between Top Hill and Manning.	
Trains handling logs, disconnected trucks.....	15
Trains handling empty disconnected trucks.....	25

13. **Bridge Restrictions**—Engines heavier than Class 0-2 not permitted west of Wilkesboro on United Railways or on G. C. & W. Railroad.

14. **Commercial Tracks not Indicated in Time Table—**

	Miles from Wilkesboro	Car Capacity	Switch at	Station Number
South Fork Industry track	12.1	36	Both ends	R 12

15. **Work Tracks not Shown as Stations—**

	Miles from Portland	Car Capacity	Switch at
Outfit Spur 39.3.....	39.3	8	West end

16. **Derrails—**

Portland	—Kautz Spur, 26th and Nicolai Street.
Burlington	—East end siding.
Tunnel Spur	—Industry spur.
Rockton	—Industry spur.
Vadis	—Industry track, west end.
Manning	—Industry spur.
Top Hill	—Siding, east end.
Outfit Spur 39.3	
Glenwood	—South Mill spur. North Mill siding. Main track just west of head block to South Mill spur.
South Fork	—Industry track, east end.

17. **Automatic Block Districts and Signal Locations—**

Between	East Signal	West Signal
MP 16.6 and MP 17.6.....	17.6	16.6
MP 40.9 and MP 41.6.....	41.6	No Signal (end of bond MP 40.9)

ALL SUB-DIVISIONS

INCLUDING OREGON TRUNK, TERMINALS, O. E. RAILWAY, UNITED RAILWAYS CO., AND G. C. & W. R. RAILROAD

1. Train and yard men are prohibited from shoving cars on yard tracks without having a member of crew stationed on the leading car shoved, or at the extreme end of track being used, and the remainder of crew in such position as will enable signals to be passed to engineman in ample time to prevent cars being shoved over end of track, or fouling other tracks, or causing damage to bumper or equipment. Conductors and engine foreman will be held personally responsible in every case where cars are shoved foul or over end of track or equipment damaged as result of violation of these instructions.
2. Rule 83(B) will not apply at initial stations which are not telegraph stations, and at telegraph stations except during office hours, if the train order signal is in clear position.
3. In addition to the requirements listed under Transportation Rule 2, the following officers and employees are required to use watches that have been examined and certified to by designated inspectors: All Division Officers, Track Inspectors, Section Foremen, Bridge and Building Foremen, Electrical Department Line Foremen, Telegraph Line Foremen and Linemen.
4. Whistle signal 14(K) must also be sounded when passing track and bridge crews.

5. Lights will be displayed at night on all main line train order signals.
6. Operators must block trains in the same direction ten minutes apart, using train order signal for that purpose, placing it in "STOP" position after train to be protected has passed the train order signal three hundred feet.
7. That part of Rule 211 of the Consolidated Code of Transportation Rules reading: "Each operator receiving the order **should** observe whether the others repeat correctly" is hereby changed to read, "Each operator receiving the order **must** observe whether the others repeat correctly."
8. Rule 728 is modified as follows:
In case of an emergency when track is found impassable and there are not sufficient men to send in both directions, the flagman will go in the direction that a train is expected first, and not less than fifty (50) rail lengths from obstruction, or farther if necessary to insure good visibility, must place a red flag by day and in addition a red light by night, and ten (10) rail lengths farther, two torpedoes must be placed; then protect the opposite side of the obstruction in the same manner, after which he must go out and place the yellow signals and torpedoes, as prescribed. Trains stopped by these signals must be governed by signal or instruction from the foreman in charge, who in giving such signal must use a yellow flag by day or a yellow light by night.
9. When a siding is to be used temporarily as a main track, the switches must be set and locked for the siding, and must be protected by flagmen and the section foreman of that section notified, the flagmen to remain until released by the Superintendent.
10. Helper engines waiting to help trains will keep clear of main track until train to be helped has arrived and stopped.
11. Before moving a work or wrecking train, the whistle signal (14-b) or (14-h) must be sounded for the protection of men working about such trains.
12. In case of failure of communicating signal system on passenger trains, and on freight trains when conditions permit, the engineman must receive a proceed signal from trainmen before passing any station.
13. Trap doors and vestibule doors on passenger trains must not be opened until after the train comes to a stop, and must be closed as soon as train starts to move, unless there is a train employe in a position to protect anyone from getting on or off while train is in motion. Trainmen must be sure before closing vestibule doors that no one is clinging to hand rails.
14. Car loads of cigarettes and whiskey must be placed in trains next ahead of caboose where they can be watched by trainmen.
15. When a train strikes livestock bring train to a stop and make prompt inspection to ascertain if any damage to equipment. If livestock is struck by trains near switches, the switches should be examined, dispatcher notified, and sectionmen called so permanent repairs can be made.
16. When a main track switch is run through trainman must, in addition to spiking it, notify dispatcher and call section man so that permanent repairs can be made.
17. Trainmen will closely observe lading of open top cars in transit, and if found shifting, see that it is properly adjusted or car set out.

18. Handling of Explosives—

(Position of Explosive Cars in Trains.)

Cars placarded "Explosives" must be placed in through freight trains near the middle of the trains and must be not nearer than the sixteenth car from the engine, or a caboose in service if next to engine, electric locomotive, or motor car, nor the eleventh car from the rear end caboose, if the length of the train will permit. Cars placarded "Explosives" in all cases must be not nearer than the second car from engine, electric locomotive, motor car, or caboose. Where helper engines or electric locomotives are employed ahead of caboose, cars placarded "Explosives" must be separated from such helpers by at least one car.

Cars placarded "Explosives" may be placed in local freight trains, or mixed trains when authorized herein, not nearer than the second car from the engine, electric locomotive, motor car, or a caboose in service, 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 dead engines, placarded tank cars, wooden-frame flat or gondola cars; or carloads of pipe, lumber, poles, iron, steel, or similar lading which by shifting may break through end of car placarded "Explosives" due to rough handling; refrigerator cars equipped with automatic refrigeration of the gas-burning type; nor next to cars containing lighted heaters, stoves, or lanterns; or cars with live stock or poultry occupied by an attendant.

Cars placarded "Explosives" must not be placed in through or local trains next to cars which bear "Dangerous" placards, unless the remainder of the train consists only of such cars.

(Position of Loaded Placarded Tank Cars in Trains.)

Placarded loaded tank cars must not be placed in trains next to cars placarded "Explosives" nor next to cars containing lighted heaters, stoves, or lanterns; nor next to refrigerator cars equipped with automatic refrigeration of the gas-burning type; nor next to flat cars with lading such as logs, lumber, rails, or pipe, or gondola cars with such lading higher than ends, that is liable to shift. In through trains such tank cars must not be placed nearer than the sixth car from the engine, electric locomotive or motor car, or a caboose in service, and in local trains not nearer than the second car from the engine, electric locomotive, motor car or a caboose in service, when length of train permits and cars other than loaded tank cars are in the train.

19. Whenever there is a derailment, after cars are rerailed, a careful inspection must be made of the journal boxes and the axle so that it will be known positively that the wedge and brass are in place and that the axle is not sprung or bent.
20. In column on time table marked "Car Capacity," suffix letters E or W indicates the end of track at which switch is located.
21. Trains must not pass under overhead crossing of logging roads while logging train is passing over the crossing.
22. Trains must not block any street or highway crossing in excess of five minutes. When delay will exceed five minutes, conductor must see that train is promptly out.
23. Whenever descending grades require the use of retaining valves, trains will stop at the top of grade and turn up retainers after brakes are released, following the air test, and stop at foot of grade for retainers to be turned down.
24. On Engines equipped with bridge sprinklers, enginemen must use sprinklers (except during freezing weather) when passing over bridges.
25. Station signs indicating "One Mile S" are placed one mile from the switch where trains enter the siding. Where there is no siding, these signs are placed one mile from the depot building or where traffic is received and discharged.
26. The explosion of torpedoes must be acknowledged by enginemen by sounding two short blasts of the whistle.
27. Transportation Rule 105 is modified as follows: When a siding of an assigned direction is blocked with cars, or taken out of service for any reason, the siding of the opposite direction will be used as a single siding. At lap sidings, unless otherwise provided, trains taking siding must head in at the lap.
28. Rule 812—Supplemented: Running inspection should also include frequent inspection of the track behind the caboose. If any fresh marks are noticed trains should be stopped immediately and train dispatcher notified so slow order can be issued for information of other trains to avoid unnecessary stopping of trains.

29. **Impaired Clearance—**

Sign reading: "Impaired Clearance" placed on switch stand or entrance of spur or siding indicates there are platforms or structures located along the side of same, which do not provide minimum horizontal clearance. Employes will use care and avoid risk of injury while working on spurs or sidings protected with "Impaired Clearance" signs.

30. **Spring Switches—**

Maximum speed for all facing point and trailing point movements through switch fifteen (15) MPH. Trailing movements on the track for which the switch is normally lined may be made at normal speed.

Trains trailing through or stopping on a spring switch must not back up or take slack until points have been thrown by hand. Flying switches over or through spring switches are prohibited. When operated by hand, lever must be moved slowly, keeping a steady pressure on the handle until the switch is thrown and the handle is in the notch on the switch stand provided for it.

Sand must not be used over points of spring switches.

31. At points where there are close clearances, trainmen will work on the opposite side of train from them, and, if necessary, the fireman will receive the signals and communicate them to the engineman.

32. **Speed Restrictions—**

M.P.H.

When picking up train order hoops (except where hoop stands are located)..... 25
Over switches in paved streets..... 10

To avoid damage to rail and bridges by moving locomotives having main or side rods down, over the road at too high a speed, the following speeds will be maximum permitted:

With main and side rods removed:
All classes..... 20 MPH.

With main rods removed and side rods in place:
All classes..... 25 MPH.

Over Bridges..... 20 MPH.

Engines with either or both main and side rods removed shall not be moved over any bridge at a speed in excess of 20 MPH, and the speed shall be further reduced over bridges which carry speed restrictions against the class of power being so moved. In the latter case, the speed of an engine with rods removed shall be reduced over the bridge to one-half the restricted speed for that engine in working order, as shown under "Bridge and Engine restrictions."

Dead engines with all rods up or in place, the piston rod being parted from the crosshead and removed and the valve motion disconnected and blocked, may be moved in trains at not to exceed the permissible speed of freight trains operating in the territory over which such engines are moved.

Bridge or other restrictions applicable to these engines when in operating condition to be observed.

For engines coming from the shop, to prevent running hot authorized maximum speed is..... 25 MPH.

M.P.H.

33. Locomotive Cranes, Pile Drivers, Steam Shovels, on own wheels. 25

Cranes, Piledrivers, Shovels and other machines on own wheels and equipped with boom must be handled with boom in trailing position, unless otherwise authorized by special instructions.

34. **Tunnel Locations—**

(Main Line)	Length
No. 1—2.9 miles west of Prindle.....	2,381 ft.
No. 2—1.7 miles east of Cooks.....	122 ft.
No. 3—2.1 miles east of Cooks.....	416 ft.
No. 4—2.6 miles east of Cooks.....	267 ft.
No. 5—3.2 miles east of Cooks.....	394 ft.
No. 6—3.9 miles east of Cooks.....	657 ft.
No. 7—7.2 miles east of Bingen-White Salmon.....	966 ft.

No. 8—7.5 miles east of Bingen-White Salmon.....	755 ft.
No. 9—7.7 miles east of Bingen-White Salmon.....	392 ft.
No. 10—7.9 miles east of Bingen-White Salmon.....	575 ft.
No. 11—0.6 miles east of Lyle.....	269 ft.
No. 12—2.1 miles east of Wishram.....	385 ft.
No. 13—1.1 miles east of Plymouth.....	699 ft.
No. 14—5.1 miles west of Farrington.....	203 ft.
No. 15—2.5 miles west of Farrington.....	323 ft.
No. 16—3.2 miles east of Farrington.....	2,494 ft.
No. 17—0.9 miles west of Kahlotus.....	2,220 ft.
No. 18—4.1 miles east of Hooper.....	369 ft.
No. 19—0.6 miles west of Ft. Wright.....	2,134 ft.

(Oregon Trunk)

No. 1—1.4 miles west of Moody.....	782 ft.
No. 2—3.4 miles west of Sherar.....	800 ft.
No. 3—0.5 miles west of Frieda.....	519 ft.
No. 4—0.6 miles east of North Junction.....	584 ft.
No. 5—1.8 miles west of Gateway.....	542 ft.

(United Railways Co.)

No. 1—1.0 mile west of Tunnel Spur.....	4,111 ft.
No. 2—0.3 mile west of Top Hill.....	1,136 ft.

(Astoria Line)

No. 1—1.2 miles east of Mayger.....	188 ft.
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35. **Junctions—**

	Miles from Portland
N. P. T. Co., S. P. Co., U. P. R.R., Portland.....	0.0
Portland Division, 1st Sub. Willbridge.....	4.5
Union Pacific R.R. (Barnes).....	6.9
Union Pacific R.R., No. Portland Jct.....	8.1
Northern Pacific Ry., Vancouver.....	9.9
Fourth Sub-division, Lyle.....	85.4
Oregon Trunk Ry., Wishram.....	105.0
Northern Pacific Ry., S. P. & S. Jct.....	229.7
Northern Pacific Ry., Ainsworth Jct.....	233.5
Northern Pacific Ry., Snake River Jct.....	256.9
Northern Pacific Ry., Marshall Jct.....	368.8
Great Northern Ry., Ft. Wright.....	377.2
Vancouver Division, Willbridge.....	4.5
United Railways Co., United Jct.....	10.0
Portland & Southwestern Ry., Scappoose.....	20.1

	Miles from Lyle
Klickitat Log & Lumber Co., Klickitat.....	13.4

	Miles from Wishram
Union Pacific R.R., O. T. Jct.....	1.5
City of Prineville Ry., Prineville Jct.....	132.3
Great Northern Ry., Bend at end of O. T. Ry. Main track...	152.4

	Miles from United Junction
United Railways Co.— S. P. & S. Ry., United Junction.....	0.0

	Miles from Portland
Oregon Electric Co.— Southern Pacific Co., Beburg.....	28.1
Southern Pacific Co., Greton.....	31.2

	Miles from Albany Yard
Southern Pacific Co., Albany.....	0.9
Southern Pacific Co., Lebanon.....	14.5

	Miles from Portland
36. Interlocking Plants—	
Willbridge.....	4.5
Willamette River draw bridge.....	5.3
North Portland Junction.....	8.1
Oregon Slough draw bridge.....	8.7
Columbia River draw bridge.....	9.8
Marshall Junction, Northern Pacific Ry.....	368.8
Fort Wright, Great Northern Ry.....	377.2

The following engine whistle signals will be sounded by enginemen in calling for route at Columbia River draw bridge between No. Portland and Vancouver:

Eastward: one long blast for N. P. Ry.; two short and one long blast for S. P. & S. Ry.

Westward: from S. P. & S. Ry. main track, one short, one long and one short.

From N. P. Ry. four short.

In calling for diverging route through interlocking at North Portland Jct. the following engine whistle signals will be sounded:

From and to U. P. R.R. one short and one long blast.

Stock yards: from S. P. & S. Ry. one short, one long and one short blast; from U. P. R.R. four short blasts.

Assigned hours of draw bridge tender, Oregon Slough bridge, are 8 A.M. to 4 P.M., but is subject to call (Tel. University 2982) while off duty to operate draw for river traffic. Should it become necessary to flag through this interlocking plant, it must first be ascertained if the draw bridge tender is not on duty, and then flagmen must precede train and be sure that derails and rail locks are in proper position.

	Miles from Portland
37. Overhead Crossings—	
United Railways, 0.5 mile west of United Jct.....	10.5
Union Pacific R.R., 0.8 mile west of Kennewick.....	228.4
Union Pacific R. R., 2.1 mile east of South Cheney.....	362.5
Northern Pacific R. R., 3.7 mile east of South Cheney.....	364.1
Southern Pacific Co., Tualatin.....	35.8
Southern Pacific Co., Albany.....	97.6

	Miles from Portland
38. Railway Crossings—	
(O. E. 1st Sub-Division)	
S. P. Co., Salem.....	70.9
S. P. Co., Salem.....	71.0
S. P. Co., Albany.....	97.6
S. P. Co., Albany.....	97.8
S. P. Co., Albany.....	97.9
S. P. Co., Lasen.....	140.7
(O. E. 4th Sub-Division)	
S. P. Co., Hillsboro.....	26.3

39. Location, Capacity and Facilities of Stockyards—			
Vancouver Division:			
Location	No. of Pens	Capacity in Cars	Facilities
Vancouver.....	1	2	Water
Bingen-White Salmon.....	2	2	Water
Lyle.....	4	10	Water
North Dalles.....	3	7	None
Wishram.....	6	20	Water
Maryhill.....	2	5	None
Goodnoe.....	1	2	None
Roosevelt.....	4	10	Water
Alderdale.....	1 cattle 2 sheep	2 9	None
Whitcomb.....	2	4	None
Paterson.....	2 cattle 3 sheep	5 20	None
Plymouth.....	2	5	Water
Hover.....	1 sheep only	8	None
Kennewick.....	1 cattle 1 sheep	2 8	None

39. Location, Capacity and Facilities of Stockyards—(Continued)			
Pasco.....	27	40	Water
Harder.....	2	5	None
Washuena.....	2	2	Water
Hooper.....	3	8	None
Ankeny.....	Chute		None
Benge.....	2	2	Water
Lantz.....	2	2	None
Macall.....	2	2	None
Rockwell.....	2	4	None
Lamont.....	1	2	None
Rodna.....	2	5	None
Amber.....	2	3	None
Centerville.....	1	2	Water near
Goldendale.....	3	5	Water
Sinamox.....	1	2	None
Shearer.....	2	4	Feed Racks
Maupin.....	4	8	{Water, Feed Racks & Scales
Nena.....	2	4	{Feed Racks {No Water
Nathan.....	1	1	Feed Racks
Kaskela.....	1	1	None
South Junction.....	4	10	Water
Gateway.....	4	12	Water
Madras.....	4	12	Water
Metolius.....	1	2	{Water & {Feed Racks
Culver.....	2	4	None
Terrebonne.....	4	8	{Water & {Feed Racks
Redmond.....	10	22	{Water, Feed {Racks & Scales
Deschutes.....	2	4	Feed Racks
Bend.....	7 2 sheep	15 5	{Water, Feed {Racks & Scales
Portland Division—	No. of Pens	Capacity in Cars	Facilities
Quincy.....	1	1	Water
Warrenton.....	1	1	None
Oregon Electric Ry.—			
Albany Yard.....	4	5	Water

40. Bulletin Stations—	
Portland	—Union Station telegraph office. Hoyt Street telegraph office. Roundhouse. Yard office (for yard men only).
Vancouver	—Telegraph office and roundhouse. Yard office (yard men only).
Wishram	—Telegraph office and roundhouse.
Bend	—Telegraph office and roundhouse.
Goldendale	—Telegraph office.
Lyle	—Telegraph office.
Pasco	—Passenger Station telegraph office. Roundhouse.
Spokane	—G. N. passenger station.
Hillyard	—Roundhouse.
Astoria	—Passenger Depot.
Seaside	—Passenger Depot.
Salem	—Depot.
Albany	—Depot and Yard Office.
Eugene	—Depot.
Sweet Home	—Depot.
Vernonia	—Depot.

41. **Watch Inspectors—**

Ball Railroad Time Service of Ohio. 284 Endicott Bldg., St. Paul, Minn.
 Roy and Molin..... 316 S. W. Alder St., Portland
 Dillen Rogers..... Killingsworth and Albina Ave., Portland
 Zell Brothers..... 629 S. W. Broadway, Portland
 W. L. Runyan..... Vancouver
 H. W. Hull..... Pasco
 Pacific Watch Co..... No. 7 Washington St., Spokane
 Mrs. Cora Squibb..... Hillyard
 M. H. Symons..... Bend
 E. M. Young..... Rainier
 Loop-Jacobsen..... Astoria
 A. L. Kullander..... Vernonia
 Hartman Bros. Co..... Salem
 F. M. French & Sons..... Albany
 Seth Laraway..... Eugene
 W. E. White..... Sweet Home

42. **Standard Time Clocks—**

Portland —Union Station telegraph office.
 Hoyt Street telegraph office.
 Roundhouse.
 Vancouver —Telegraph office and Roundhouse.
 Wishram —Telegraph office.
 Pasco —Telegraph office and Roundhouse.
 Spokane —G. N. Passenger Station.
 Hillyard —Yard office, Roundhouse.
 Bend —Telegraph office.
 Astoria —Telegraph office.
 Seaside —Telegraph office.
 Vernonia —Telegraph office.
 Salem —Telegraph office.
 Albany —Yard office.
 Eugene —Telegraph office.

SPEED TABLE

Time per Mile		Miles per Hour	Time per Mile		Miles per Hour	Time per Mile		Miles per Hour
Min.	Sec.		Min.	Sec.		Min.	Sec.	
0	51	70.6	1	7	53.7	2	30	24
0	52	69.2	1	8	52.9	2	40	22.5
0	53	67.9	1	9	52.1	2	45	21.8
0	54	66.6	1	10	51.4	2	50	21.2
0	55	65.4	1	12	50	3	..	20
0	56	64.2	1	15	48	3	9	19
0	57	63.1	1	20	45	3	20	18
0	58	62	1	25	42.3	3	31	17
0	59	61	1	30	40	3	45	16
1	..	60	1	40	36	4	..	15
1	1	59	1	45	34.3	5	..	12
1	2	58	1	50	32.7	6	..	10
1	3	57.1	2	..	30	7	..	8
1	4	56.2	2	10	27.6	10	..	6
1	5	55.3	2	15	26.6
1	6	54.5	2	20	25.7

R. C. SCOFFERN, Assistant Superintendent
 J. L. MONAHAN, Trainmaster
 C. F. CROFFUT, Trainmaster
 WM. ROSE, Trainmaster
 GEO. BIGGS, Trainmaster
 H. M. BATES, Trainmaster
 R. G. HASKELL, Trainmaster
 A. W. GEORGE, Trainmaster
 H. JACKSON, Chief Dispatcher, Portland
 F. C. WAGER, Mechanical Supt., Vancouver
 C. E. BARNES, Master Mechanic
 W. C. ABBOTT, Traveling Engineer
 J. M. WASSENAR, Traveling Engineer
 J. T. CRAINE, Traveling Engineer

CLEARANCE TABLE

	HEIGHTS ABOVE TOP OF RAIL												
	11'-6" Wide	11 Wide	10' Wide	9' Wide	8'6" Wide	8' Wide	7' Wide	6' Wide	5' Wide	4' Wide	3' Wide	2' Wide	1' Wide
Portland—Vancouver.....	17'	17'	18'3"	19'	19'2"	19'4"	19'4"	19'4"	19'4"	19'4"	19'4"	19'4"	19'4"
Vancouver—Spokane.....	16'6"	17'9"	17'6"	18'	18'	18'6"	19'	19'6"	19'6"	19'6"	19'6"	20'	20'
Lyle—Goldendale.....	17'	17'	17'6"	18'	18'	18'6"	19'	19'6"	19'6"	19'6"	19'6"	20'	20'
Wishram—Bend.....	16'	17'	17'6"	18'9"	19'5"	20'6"	21'	21'	21'	21'	21'	21'	21'
Portland—Holladay.....	18'	18'	15'	15'6"	15'9"	16'	16'6"	17'	17'	17'	17'	18'	18'6"
Warrenton—Fort Stevens.....	18'	20'	20'	20'	20'	20'	20'	20'	20'	20'	20'	20'	20'
O. E. Ry.—U. Rys. Portland Yard Limits..	16'	19'	17'	19'	19'	17'	17'	17'	17'	17'	17'	17'	17'
Forest Grove Jct.—Forest Grove.....	16'	19'	19'	15'9"	15'9"	15'9"	15'9"	15'9"	15'9"	15'9"	15'9"	15'9"	15'9"
Bowers Jct.—Eugene.....	16'	17'	18'	18'	18'	19'	19'	19'	19'	19'	19'	19'	19'
Lebanon—Dollar.....	18'	17'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'
Orengo—Bowers Junction.....	18'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'
United Junction—Wilkesboro.....	18'	17'	17'	17'	17'	18'6"	18'6"	18'6"	18'6"	18'6"	18'6"	18'6"	18'6"
Wilkesboro—Keasey.....	18'	16'	17'	17'	17'	18'3"	18'6"	18'6"	18'6"	18'6"	18'6"	18'6"	18'6"
Wilkesboro—Glenwood.....	18'	18'	18'	18'	18'	19'	19'	19'	19'	19'	19'	19'	20'

Conductors must be absolutely positive that loads do not exceed these dimensions and must not move cars of greater dimensions without instructions from Superintendent.

LOCOMOTIVE TONNAGE RATINGS

DISTRICT	CLASSES AND ENGINE NUMBER									
	Ruling Grade	0-1, 0-3 500-510 510-540	H-1 620-624	C-1 600-609	GN 0-6 3350-3357	Z-6 900-905	GN R-1 2030-2040	NP W-3 1700's	E-1 700-702	
Hillyard—Ft. Wright.....	Down				Car	Limit				
Ft. Wright—Mock.....	1.0	1800	1200		2000	3820	4000	1800	2400	
Mock—Vancouver.....	Down				Car	Limit				
Vancouver—Snake River.....	.2	6600	4200	3000	6900	10000	10000	6600	8000	
Snake River—Mock.....	.4	4000	1500	1000	4200	7050	7200	4000	5000	
Mock—Ft. Wright.....	Down				Car	Limit				
Ft. Wright—Hillyard.....	1.0	1800			2000	3950	4100	1800	2400	
Wishram—South Jct.....	.6	3500	1500	1000	3700	6000	6200	3500		
South Jct.—Madras.....	1.5	1400	600	450	1550	2400	2600	1400		
Madras—Bend.....	1.0	2230	1200	800	2430	3820	4318	2230		
Bend—Wishram.....	Down				Car	Limit				

LOCOMOTIVE TONNAGE RATINGS

DISTRICT	CLASS AND ENGINE NUMBERS				
	Ruling Grade	D-2 150-151	D-4 153-154	N-1 350-352	F-1 451-461
Portland—Goble.....	.56	1200	1200	2000	2150
Goble—Warrenton.....	.33	2000	2000	2800	3000
Warrenton—Seaside.....	1.22	600	600	750	1000
Seaside—St. Helens.....	.70	1800	1800	2800	3000
St. Helens—Portland.....	.52	1800	1800	2800	3000

TONNAGE RATING ELECTRIC ENGINES

DISTRICT	Grade	40-41-42	1-2-3-4-10	21-22-23-24-25-26	60-61-62-63-64	50-51
For. Gr. Jct.—W. Woodburn	1.0%	556	700	850	1120	1415
West Woodburn—Eugene..	Level	662	875	1050	1400	1750
Eugene—West Woodburn..	Level	662	875	1050	1400	1750
West Woodburn—F.G. Jct.	1.0%	556	700	850	1120	1415

LOCOMOTIVE TONNAGE RATINGS

DISTRICT	CLASS AND ENGINE NUMBERS									
	Ruling Grade	N-1	N-2	N-6	N-7	F-1	O1, O3	O-2		
Bowers Jct.—Tualatin.....	Down			Car	Limit					
Tualatin—Wilsonville.....	1.0	1000	1250	1250	1250	1200	2300	2100		
Wilsonville—Albany.....	Down			Car	Limit					
Albany—Salem.....	.4	3500	5000	4700	4700	4500				
Salem—Wilsonville.....	1.0	1200	3650	3450	3650	2800				
Wilsonville—Forest Grove Jct.....	1.0	2300	2750	2750	2750	2500	3200	3000		
Forest Grove Jct.—Rockton.....	1.0	1400	1500	1450	1450	1200	2200	1850		
Rockton—United Jct.....	Down			Car	Limit					
Albany—Sweet Home.....	2.0	1200	1500	1500	1500					
Sweet Home—Dollar.....	2.4	500	550	500	500					
Dollar—Sweet Home.....	1.75	690	800	800	800					
Sweet Home—Albany.....	Down			Car	Limit					

LOCOMOTIVE TONNAGE RATINGS

DISTRICT	CLASS AND ENGINE NUMBERS									
	Ruling Grade	N-1	N-2	N-6, N7	F-1	O1, O3	O-2			
United Jct.—Ban Spur.....	2.0	475	700	675	550	1200	950			
Ban Spur—Manning.....	1.5	700	900	850	750	1400	1100			
Manning—Tophill.....	2.3	400	575	520	500					
Tophill—Vernonia.....	Down			Car	Limit					
Vernonia—Keasey.....	2.3	400	575	520	500					
Keasey—Vernonia.....	Down			Car	Limit					
Vernonia—Brauns.....	.63	1600	2000	2000						
Brauns—Tophill.....	1.5	700	900	875						
Tophill—North Plains.....	Down			Car	Limit					
North Plains—Rockton.....	1.0	1000	1500	1400		2450	1850			
Rockton—United Jct.....	Down			Car	Limit					

LOCOMOTIVE TONNAGE RATINGS

DISTRICT	CLASS AND ENGINE NUMBERS					
	Ruling Grade	N-1	N-2	N6, N7	F-1	O-2
Wilksboro—Glenwood....	2.2	400	600	600	500	800
Glenwood—Washburn...	Down		Car	Limit		
Washburn—Wilksboro...	.8	1200	1500	1500	1400	1800