

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

David Wilson

21' RT.

**Special
 Instructions
 No. 1**

425.2

In Effect 12:01 A. M. Pacific Time

Sunday, November 21, 1937

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

M. C. LA BERTEW, *Superintendent*

110.
12000

113
109
100

527
1056
1086
1167
6

OS-Wild. No. 1 - Eng. 202 - 4:53 P.M.

SPECIAL INSTRUCTIONS

TERMINALS DIVISION

- 1. All Trains will operate under double track rules.**

Trains must not leave initial station on Terminals Division without a clearance card, Form 1210.

Extra trains may run without train orders, but must obtain clearance card, Form 1210, before occupying the main track.

All trains 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 end car in transfer.
- 2. At Portland—**Between end of double track at 10th Avenue and Union Depot, trains will be handled by switch tenders and westward trains must not pass clearance point at end of double track until proceed signal from switch tender is received.

Eastward trains from S.P.&S. yard will use westward main track against current of traffic 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. Switches at both ends of 15th Avenue connection must be kept set and locked for westward main track.

Trains from S.P.&S. yards running against current of traffic to the 17th Avenue cross-over must not send trainmen to 17th Avenue to line switches and hold opposing trains until their train is actually ready to move.

Trains from S.P.&S. yards must not occupy westward main line while waiting for outbound passenger trains on the eastward main line to pass. Trainmen sent to 17th Avenue to line switches after train is ready to depart, will be instructed to open both cross-over switches so that outbound trains may cross over into the current of traffic without delay.

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

All freight trains entering S.P.&S. yard, except No. 803 (G.N. 672), will, unless specifically advised to the contrary, head in on the 21st Avenue lead, stop north of 14th Avenue and call for track. Trains coming in with caboose only will come up the main line, head in 14th Avenue and drop caboose in 70 yard. Trains handling passenger equipment only will head in 14th Avenue and call for track.
- 3. Engine Restrictions—**At Portland, 01, 03, and G.N. 01 class engines must not be operated over 21st Avenue lead.

Yard engines only will be permitted to use the old main line between the cross-over east of 14th Avenue to the west switch of the 14th Avenue cross-over. All other engines will use the cross-over between the old main line and middle yard lead, just south of 14th Avenue.

Engines working on loading tracks of the oil plants must, under no circumstances, permit the engines to pass S.P.&S. engine stop signs.

Sanding out of engines between Nicolai Street, Portland and Lake Yard is prohibited.
- 4. Impaired Clearance—**Trolley wire in the 30 and 40 yards at Portland will not clear a man on top of high cars.

All tracks in S.P.&S. yards, Portland, have impaired clearance and will not clear a man on side of car.

Sign reading "Impaired Clearance" placed upon switch stand at entrance of spur or siding indicates there are platforms or structures located along side same, which do not provide minimum

horizontal clearance prescribed by Public Utilities Commissioner of Oregon. Employees will use care and avoid risk of injury while working on spurs or sidings protected with "Impaired Clearance" sign.

5. **Derails**—Portland—W. P. Fuller & Company spur.
Willbridge—Union Oil Co. lead.
Standard Oil Co. track No. 1.

6. **Speed Restrictions**—

Between Lake Yard and 17th Avenue, 20 miles per hour.
Between 17th Avenue and umbrella sheds Union Station, 10 miles per hour.
Umbrella sheds to Union Station stop, 6 miles per hour.
Over bridges between Vancouver and Willbridge, 30 miles per hour.
Over draw spans and rail locks at ends thereof, 10 miles per hour.

VANCOUVER DIVISION FIRST SUB-DIVISION

1. **Speed Restrictions**—

	Pass.	Frt.
Over 8th Street crossing, Vancouver.....	8	8
Through Camas (City Ordinance)	20	20
To exchange U. S. mail trains 1 and 2.....	12	
Between first crossing east of depot, Washougal and overhead bridge west of depot, Washougal (City Ordinance)	15	15

2. **Commercial Tracks not shown as Stations**—

	Miles from Portland	Car Capacity	Switch at	Station Number
Ellsworth	16.5	12	Both ends	17
Camas Lumber Co... Std. Oil Co., and United Gas Corp... Packer	25.1	3	East end	25
	25.5	10	East end	26
	101.5	1	East end	102

3. **Derails**—

Camas — West end house track.
East end converting spur.
On "New spur" to paper mill leading from house track back of depot and located 500 feet from house track switch to protect cars on chlorine spot.

Washougal — West end house track.
West end sheep shed spur.

Stevenson — Lindis spur—derail located 705 feet from switch off house track.

Bingen-White Salmon — West end sand track.

Lyle — West end Union Meat Co. spur.
East end outfit spur.
Derails must be left at derail except when in use.

4. **Impaired Clearance**—

Army building located parallel with the end of reservation spur Vancouver barracks, all concerned will use extreme care working in this vicinity.

SECOND SUB-DIVISION

1. All trains will enter passenger yards at Pasco at restricted speed.
2. **Engine Restrictions**—At Pasco, engineers handling S.P.&S. engines 500 to 507, inclusive, while heading into or pulling out of turn-outs in train yard, will close throttle and not work steam until poney truck of engine has passed over frog.

3. **Derails**—

Sundale — east end of house track.
Plymouth — east end of industry track.
Hover — east end of industry track.
Kennewick — east end of industry track.
Derails must be left at derail except when in use.

THIRD SUB-DIVISION

1. All trains will enter passenger yard at Pasco at restricted speed. Block Card Form 1226 will govern the movement of trains between Pasco and Ainsworth Junction. Trains must not move in this territory unless conductor and engineman each hold a card, properly filled out, numbered and completed. (See rule on back of clearance card, Form 1226).
- If a westward train is to meet an opposing train at Ainsworth Junction, it must be brought to a stop before card is delivered.
- All N.P. trains using S.P.&S. railway track between Ainsworth Junction and Marshall Junction will be governed by S.P.&S. railway, Vancouver Division, time table and rules.

At Ainsworth Junction—

Switch will be kept set and locked for S.P.&S. railway main line.

At Snake River Junction—

Junction switch will be kept set and locked for S.P.&S. 3rd sub-division.

At Scribner—

Junction switch will be kept set and locked for the line to Marshall Junction, N.P.

At Marshall Junction—

N.P. switch is governed by the Marshall interlocking tower signal and rules.

At Fort Wright—

Junction switch is governed by G.N. interlocking tower signal and rules.

In compliance with Order No. 6571 of Department of Public Works, Olympia, when trains are standing on road crossing 1600 feet west of depot, South Cheney, trainmen will flag the crossing from the top of car on crossing, using red flag in daytime and red lantern at night.

2. **Helper District**—

Between Spokane and Mock.

3. **Engine Restrictions**—Engineers handling S.P.&S. engines 500 to 507 inclusive, while heading into or pulling out of turn-outs in Pasco train yard and west end of old passing track leading from eastward main line at Maple Street, Spokane, will close throttle and not work steam until poney truck of engine has passed over frog.

4. **Speed Restrictions**—

	Pass.	Frt.
Passing Snake River and gravel pit, between Snake River Junction and Burr.....	25	25
Between Kahlotus and Snake River.....	40	25
Between South Cheney and Scribner.....	40	25

5. **Commercial Tracks Not Shown as Stations**—

	Miles from Portland	Car Capacity	Switch at	Station Number
Pasco Union Stock Yard Spur	233.2	34	West end	233
Burr Canyon Spur... Harder, Stockyard Siding	265.9	5	West end	266
	280.7	17	Both ends	281
Washtucna Ind's Spur Nemour's Powder Spur	292.4	156	East end	292
	368.6	48	West end	369
Outfit Spur	374.6	9	West end	375

6. Derails—

Levey	— west end of spur.
Redd	— west end of spur.
Snake River	— west end of elevator spur.
Burr	— west end of Canyon spur.
Kahlotus	— east end of house track.
Harder	— west end of stockyard siding.
McAdam	— east end of spur.
Washtucna	— west end of house track.
Washtucna	— east end of empty coal track.
Hooper	— west end of industry track.
Lantz	— west end of industry track.
Lamont	— west end of westward passing track.
	west end of No. 2 track.
	east end of empty coal track.
	at top of heavy grade on oil spur.
Stoner	— west end of 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.
Overlook	— east end of passing track.
Fort Wright	— derail, part of interlocker.
Spokane	— east end of 15th Avenue spur.

Derails must be left at derail except when in use.

FOURTH SUB-DIVISION (GOLDENDALE-LYLE)

1. Speed Restrictions—

	Pass.	Fr. and Mixed
Between Goldendale and Klickitat	20	20
Between Klickitat and Lyle	25	25
On sharp curves	15	15
Klickitat, over road crossing about 500 feet east of depot	5	5

2. Commercial Tracks not Shown as Stations—

	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.
Derails must be left at derail at all times except when in use.

OREGON TRUNK RAILWAY

1. At O. T. Junction—Switch will be set and locked for O.T. Ry.

At Celilo Wye—Junction switch will be set and locked for O.T. main line.

Running brake tests will be made on westward trains at point one mile west of Madras.

Westward freight and mixed trains will stop at Madras where trainmen will test air and turn up retainers necessary for proper control on heavy grades, Madras to South Junction, and stop at South Junction to turn down retainers.

2. Speed Restrictions—

	Pass.	Fr. and Mixed Trains
Maximum speed at any point.....	45	40
Over draw span, Celilo bridge.....	25	25
Eastward trains from Union Pacific connection, Oregon Trunk Junction through spring switch	15	15
Between Wishram and Lockit	35	30
Between Lockit and South Junction, except trains 102 and 103	35	25
Between Lockit and South Junction, trains 102, 103 .....	..	30
Between South Junction and M. P. 92.3.....	25	20
Between M. P. 92.3 and Madras.....	25	20
Between Madras and Metolius	25	25

Further speed reductions to be governed by restriction signs.

3. Derails—

Sherar	— west end passing track.
Maupin	— west end house track.
Gateway	— west end house track.
	— west end passing track.
Paxton	— west end house track.
Madras	— east end oil company spur.
	— west end passing track.
	— west end house track.
Agency	— west end industry track.
Metolius	— west end passing track.
Prineville Jct.	— west end industry track.
Redmond	— east end house track.
	— west end house track.
Deschutes	— west end passing track.
Bend	— main line, 713 feet west of depot.
	— west end depot spur.
	— west end passing track.
	— west end house track.
	— west end Union Oil spur.
	— west end Standard Oil spur.

Derails must be left at derail except when in use.

4. Impaired Clearance—

All trainmen and others interested are hereby warned that the majority of cattle guards on O.T. Railway are closer to tracks than the required standard of the Public Utilities Commissioner of Oregon. Sign reading: "Impaired Clearance" placed upon switchstand at entrance of spur or siding, indicates there are platforms or structures located along side same, which do not provide minimum horizontal clearance prescribed by Public Utilities Commissioner of Oregon. Employees will use care and avoid risk of injury while working on spurs or sidings protected with "Impaired Clearance" sign.

5. Engine Restrictions—

01, 03 and 06 class engines will be spaced not less than ten cars apart in trains. When these engines are moving light coupled together, they will be separated when passing over steel bridge No. T-105.6, four miles east of Madras and steel bridge No. T-88.6, 2.8 miles east of South Junction.

All engines being turned on wye at Bend will head around west leg of wye and back around east leg of wye, account heavy curvature.

6. 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 under first section of rule 980, by flagman fully equipped with flagging material in complete use in each direction from draw span.

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 crew at Wishram to be on hand at Celilo draw at proper time, and after the flagmen have been placed in accordance with Rule 980, will remove the angle bars which will allow the draw span to be opened. After vessel has passed through draw and angle bars have been replaced, flagmen will be recalled and section crew released from protecting the open draw.

ALL SUB-DIVISIONS, INCLUDING OREGON TRUNK AND TERMINALS DIVISION

1. Special instructions supersede rules and regulations of Transportation Department.

When an order is issued to a train at a station, directing them to meet an opposing train at that station, and the order contains the clause, "—gets this order at meeting point," the train receiving the order at the meeting point will hold the main track; the opposing train must take the siding.

Yard men are prohibited from shoving cars on yard tracks without having a member of crew stationed on the leading car of the string

being shoved, or at the extreme end of track, and the remainder of crew in such position as will enable signals to be passed to engineers in ample time to prevent cars being shoved over end of track, or damage bumper or cars. Conductors and engine foreman will be held personally responsible in every case where cars are shoved over end of track or equipment damaged as result of violation of these instructions.

When passenger trains meet at stations where view is not clear, and track straight for at least one-half mile ahead, train holding the main track will stand one thousand (1000) feet from the switch to be used by opposing train, until such train has arrived.

Before coupling to or moving occupied outfit cars, trainmen must notify occupants, and see that all ladders and other obstacles are cleared.

Running switches must not be made when work can be done in any other manner. When necessary to make a running switch, the engine must use the straight line. Running switches of tank cars must not be made, or tanks kicked or cut off while in motion; neither may cars be kicked or dropped against tank cars.

When trains are approaching highway crossings at grades, engineers will, in addition to sounding the standard crossing whistle signal at whistling post, continue to sound the crossing whistle signal up to and over crossing.

NOTE:

Schedule meeting or passing stations on the time table are indicated by figures in fullface type; numbers of the trains meeting, passing or being passed will not be shown.

2. Speed Restrictions—	Pass.	Frt.
At any point	60	40
When picking up train order hoops or hoop racks....	25	25
Further speed reductions to be governed by the restriction signs.		

3. Bulletin Boards—

Portland	— Union Station telegraph office, Hoyt Street telegraph office, Roundhouse.
Bend	— Telegraph office and roundhouse.
Vancouver	— Telegraph office and roundhouse.
Wishram	— Telegraph office and roundhouse.
Goldendale	— Telegraph office.
Lyle	— Telegraph office.
Pasco	— Yard office, Passenger Station telegraph office, Roundhouse.
Spokane	— G.N. and N.P. passenger stations.
Parkwater	— Roundhouse.
Yardley	— Yard office.

4. Tunnel Locations—

No.	Length
1—2.9 miles west of Prindle	2,381 ft.
2—1.7 miles east of Cooks	122
3—2.1 miles east of Cooks	416
4—2.6 miles east of Cooks	267
5—3.2 miles east of Cooks	394
6—3.9 miles east of Cooks	657
7—7.2 miles east of Bingen White Salmon	966
8—7.5 miles east of Bingen White Salmon	755
9—7.7 miles east of Bingen White Salmon	392
10—7.9 miles east of Bingen White Salmon	575
11—0.6 miles east of Lyle	269
12—2.1 miles east of Wishram	385
13—1.1 miles east of Plymouth	699
14—5.1 miles west of Farrington	203
15—2.5 miles west of Farrington	323
16—3.2 miles east of Farrington	2,494
17—0.9 miles west of Kahlotus	2,220
18—4.1 miles east of Hooper	369
19—0.6 miles west of Ft. Wright	2,134

Oregon Trunk—

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

5. Junctions—

	Miles from Portland
N. P. T. Co., S. P. Co., U. P. RR., Portland.....	0.0
Portland Division, Willbridge	4.5
Union Pacific RR. (Barnes)	6.9
Union Pacific RR., No. Portland Jct.....	8.1
N. P. 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., Pasco	232.0
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

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

	Miles from Wishram
Union Pacific RR., 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

6. Interlocking Plants—

	Miles from Portland
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
Fort Wright, G. N.	377.2
Marshall Junction, N. P.	368.8

The following engine whistle signals will be sounded by engineers of trains and engines, in calling for signals for Columbia River bridge between Vancouver and North Portland:

Eastward, one long blast for N.P. route; one short and one long blast for S.P.&S. route.

Westward, from S.P.&S. main line, one short, one long and one short; from N.P. line four short blasts.

Assigned hours of draw bridge tender, Oregon Slough bridge, are 8 A.M. to 4 P.M., but he is subject to call (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.

7. Location, Capacity and Facilities of Stockyards.

Location	No. of Pens	Capacity in Cars	Facilities
Vancouver	1	2	Water
Bingen-White Salmon	2	2	Water
Lyle	4	10	Water
Northdalles	3	7	None
Wishram	6	20	Water
Maryhill	2	5	None
Towal	1	1	None
Goodnoe	1	2	None
Roosevelt	4	10	Water
Alderdale	1	2	None
Whitcomb	2	4	None
Paterson	2	5	None
Plymouth	2	5	Water
Hover	1 sheep only	8	None
Kennewick	1 cattle	2	None
	1 sheep	8	
Pasco	6	6	Water
Harder	2	5	None
Washtucna	2	2	Water
Hooper	3	8	None
Benge	2	2	Water
Lantz	2	2	None

Location	No. of Pens	Capacity in Cars	Facilities
Macall	2	2	Water
Rockwell	2	4	None
Lamont	4	4	Water
Rodna	2	5	None
Amber	2	3	None
Warwick	1	2	None
Centerville	1	2	Water Near
Goldendale	3	5	Water
Sinamox	1	2	None
Shearer	2	4	Water, Feed Racks & Scales
Maupin	4	8	Water, Feed Racks & Scales
Nena	2	4	Feed Racks, No Water
Nathan	1	1	Water & 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	Water & Feed Racks
Bend	{ 6 5 sheep	{ 10 10 }	{ Water, Feed Racks & Scales

WATCH INSPECTORS

Ball Railroad Time Service of Ohio, 284 Endicott Bldg....	St. Paul, Minn.
Weisfield & Goldberg, 530 S. W. Washington St.....	Portland
Dillen Rogers, Killingsworth and Albina Aves.....	Portland
Joseph Carter.....	Vancouver
H. W. Hull.....	Pasco
D. Burt Bryan.....	Pasco
T. J. Morris.....	Spokane
L. R. Squibb.....	Hillyard
M. H. Symons.....	Bend

PORTLAND DIVISION FIRST AND SECOND SUB-DIVISIONS (PORTLAND-SEASIDE)

- At United Junction**—Normal position of switch will be for 1st sub-division main track.
At St. Helens—Trains must not block highway crossing while taking water.
At Fort Stevens—Normal position of switch will be lined for track leading to barracks.
- Draw Bridges**—
Clatskanie River, 0.5 miles west of Clatskanie.
Blind Slough, M. P. 84.8.
John Day River, 0.6 miles east of VanDusen.
Youngs Bay, 2.8 miles west of Astoria.
Skipanon Creek, 0.1 miles east of Warrenton.

3. Telegraphones—

Located at:	Goble
	Rainier
	Pyramid
	Mayger
	Clatskanie
	Bradwood
	Westport
	Clifton
	Knappa
	VanDusen
	Astoria

4. Speed Restrictions—

	Pass.	Frts.
At any point	40	30
Through Linnton	20	20
Through Scappoose	20	20
Over P. & S. W. Railway crossing, Scappoose	20	20
Through Goble, (City Ordinance)	10	10
Through Rainier, (City Ordinance)	8	8
Rainier, between a point 700 feet east of Standard Oil spur and east end of pavement	8	8
Astoria, trains approaching depot	10	10
Between Tongue Point and east end of Youngs Bay	20	20
Over Bridge 98.0 east of Astoria	12	12
Trains must not exceed time table schedule between Astoria and Warrenton.		
Over Youngs Bay trestle and draw span, bridge 102.6, west of Astoria	12	12
On Pacific Avenue, Hammond	8	8
When Youngs Bay draw is open, eastward trains should stop 1000 feet back of draw until draw is seen to be closed.		

5. Commercial Tracks Not Shown as Stations on Time Table—

	Miles from Portland	Car Capcy.	Switch at	Station Number
Portland, G. & C. Spur	5.6	28	West end	A 6
Jacobson Const'n Co.	5.8	7	East end	A 6 A
Harbor Track	9.8	55	East end	A 10
Rafton	10.7	..		A 11
Union Oil Co. Spur	28.4	7	West end	A 28 A
Standard Oil Co. Spur	28.4	7	West end	.....
Texas Oil Co. Spur	28.5	5	West end	.....
Nehalem Junction	38.0	2	West end	A 38
Shell Oil Co.	38.9	1	East end	A 38 A
Trojan	40.7	24	East end	A 41
Prescott	42.2	16	East end	A 42
Dubois & Kittering Spur	47.0	7	West end	A 47 A
Hickox Spur	47.3	12	East end	A 47 B
Fluhrer's Spur	55.4	4	East end	A 55
Bradwood	76.8	14	Both ends	A 77
Brownsmead	83.3	2	East end	A 83
Carnahan	110.3	3	West end	A 110 A
Allendale	111.4	3	West end	A 111
Dellmoor	113.1	4	West end	A 113
Neawanna	116.7	6	East end	A 117
Warrenton Clay Spur	106.3	54	West end	FS 1
Point Adams Spur	108.3	5	East end	FS 3

6. Derails—

Willbridge	— Union Oil Co. lead
	Standard Oil Co. track No. 1
Linnton	— Sunset Oil Co. spur No. 3
	General Petroleum spur No. 2
	C. E. Gunderson spur
	American Brake Shoe Co. spur
Cormick	— East end of passing track
St. Helens	— Standard Oil Co. spur
Deer Island	— Siding
Nehalem Jct.	— Spur track
Marshland	— Spur track
Kerry, connection to Columbia & Nehalem River Railway	
Camp Clatsop	— Spur track
Gearhart	— Siding, west end
Derails must be left at derail at all times except when in use.	

7. Impaired Clearance—

At Astoria, overhead crossing over port dock tracks leading from Pier 1 to Pier 3 have but 17-foot clearance from top of rail. Trainmen must use care when switching on this track.

OREGON ELECTRIC RAILWAY

1. Eastward trains handling logs on flat cars will stop at Melas and make inspection of all loads, ascertaining that logs are riding properly for safe movement through the City of Salem.

Cars handled in trains by yard engines in city streets, must in all cases have air coupled, except when switching operations, such as making up or breaking up of train, make it impracticable; and conductors and yard foreman will be held responsible for any damage resulting from violation of these instructions.

2. At Portland—Eastward trains approaching Hood and Porter Street crossing, must reduce speed so as to enable them to stop to avoid striking vehicles or pedestrians using this crossing.

When helper engine is placed in train at 12th Avenue, power on helper must not be used until train departs from Jefferson Street.

Spring switch is located at the end of double track, Mead Street. Normal position is for movement of westward trains and permissible for eastward trains to run through this switch at speed of ten (10) miles per hour. Switch at end of double track Terwil is rigid hand throw switch and normal position is for movement of westward trains.

Breaker between 600 and 1200 volt trolley current on main line is located at intersection of Hood and Pennoyer Streets. Westward trains must stop before passing same and throw commutating switch on all motor cars to 1200 volt position. Eastward trains will stop after passing breakers and throw commutating switch to 600 volt position.

Breaker between 600 and 1200 volt trolley current on Macadam Road, is located just south of Ross Island Bridge, approximately 90 feet north of intersection of Grover Street. Westward trains, engines or motors must stop before passing this breaker and throw commutating switch to 1200 volt position. Eastward trains, engines or motors must stop after passing breaker and throw commutating switch to 600 volt position.

Cars exceeding 44 feet in length cannot be handled between Front Avenue and Flanders Street and S.P.&S. connection 12th Avenue. Cars in excess of this length will be received and delivered through the N.P.T. Company's connection Front Avenue. All trains, including light engines and motors, must approach all street crossings under control and stop before crossing tracks of another company. Street cars must be given right of way.

Following rules will govern movement of Oregon Electric and United Railways trains or engines over crossing of Union Pacific R. R. main line on Front Avenue, west end Willamette River bridge:

(a) A two position light signal displaying "RED" or "STOP" and "GREEN" for "PROCEED" is located on the south side of the Union Pacific Railroad-United Railways crossing on Front Avenue.

(b) This signal is attached to the steel floor beams of the upper deck of the Steel bridge at a point directly over the United Railways tracks and governs movements on either of these tracks beyond the point where the signal is located.

(c) An electrically interlocked hand operated Hayes derail is located approximately 300 feet north of this signal in the Northern Pacific Terminal Company yard on the transfer track.

(d) This derail is normally locked in the derailing position, and will be handled by train crews upon securing "unlock" from the N.P.T. Company towerman. A telephone and an indicator have been located at the derail for the use of train crews desiring to secure a clear signal. One ring of the 'phone will call towerman and when indicator shows "clear" derail may be operated. When derail has been shifted from rail and signal changes from "RED" to "GREEN", United Railways trains or engines may proceed past the light signal.

(e) When switching crews have completed their work and the engine or motor and cars have moved to a point south of the light signal, the derail must be returned to its normal position on the rail and the towerman so advised.

(f) Derail must not be restored to its normal position until the engine or motor and all cars have moved to a point south of the light signal.

3. At Multnomah—All eastward trains must stop just before passing over first road crossing east of depot, and be sure air brakes are working properly before proceeding.

4. At Garden Home—Junction switch when not in use will be left set and locked for first subdivision track.

Eastward trains must approach Nichols Street crossing under control and sound crossing whistle 600 feet west thereof.

5. At Greensburg—Interlocking signals govern the use of crossing with the Southern Pacific Co. Normal position of the signals is "STOP." Train approaching on either the O.E. or the S.P. railroads will cause the signal governing use of the crossing to change to "PROCEED" position, providing no other train is in the approach circuit, or within the limits of the plant.

If signal does not display "PROCEED" indication for train which is to use the crossing, the train must be preceded by a flagman, and train must not move beyond signal at "STOP" position until it receives "PROCEED" signal from flagman at the crossing. Flagman must not give "PROCEED" signal until it is known that the signals governing movement of train on intersecting line are at "STOP" and that any approaching train has stopped. In the event that signals on intersecting line do not indicate "STOP", movement over the crossing must be protected in both directions.

6. At Salem—All trains, including light engines, and motors, must approach all street crossings under control and stop before crossing tracks of Southern Pacific Company on Union Street and on Trade Street.

All train and engine movements over Commercial Street crossing must be protected by a flagman on the crossing.

All trains, including light engines and motors, must come to full stop before crossing S.P. track at Front and Trade Streets, and not proceed until flagman has been sent ahead to crossing and proceed signal given.

All cars delivered by the O.E. to the S.P. interchange track, Front Street, between Court and State Streets, between hours 4:30 P.M. and 7:30 A.M., must be protected by two red lanterns placed on each end of car, or when more than one car, on the outer end of each of the end cars in the cut. These red lanterns will be placed on end of cars near the corner, one on the ladder and one on the handhold on the opposite corner, in such position that the entire width of the car will be protected by the lights.

When handling cars ahead of engine over Center Street, the intersection must be protected by flagman and speed must be restricted to five miles per hour.

All westward trains, light engines and motors must come to a full stop and not proceed over Fourth Street until flagman has been sent ahead to center of intersection and proceed signal given.

The following instructions must be observed in using interchange track between Oregon Electric Railway and Southern Pacific Company at Front and Court Streets:

Cars delivered by the Oregon Electric to the Southern Pacific will be shoved through the cross-over far enough west on the Southern Pacific tracks to clear west intersection of Court Street.

Cars delivered by the Southern Pacific to the Oregon Electric will be shoved through cross-over and far enough east on Oregon Electric main line to clear the east intersection of Court Street.

Cars exceeding 44 feet in length cannot be placed on Fruit Union spur.

7. **At Albany**—All trains, including light engines and motors, must approach all street crossings under control.

All trains will stop and flag the four Southern Pacific crossings on Water Street.

Both switches to cross-over, S.P. interchange track, when not in use, must be left set for straight track and not for cross-over movement.

Cars exceeding 44 feet in length cannot be placed on Hunt's Cannery spur.

8. **At Lebanon**—Junction switch, Oregon Electric Railway, is located at Southern Pacific M.P.-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 on S.P. main track, located on both sides of junction switch.

Telephone connected with telegraph office, Southern Pacific Company, Lebanon Station, is located in booth near junction switch.

In addition to a clear block signal, eastward O.E. trains must obtain permission from operator, Lebanon Station, before entering on S.P. main track, and conductors of westward trains must immediately report to this operator by telephone when their trains have cleared S.P. main track.

9. **At Harrisburg**—Keep engine bell ringing when moving between first road crossing east of depot and county road crossing, 1800 feet west.

10. **At Eugene**—All trains, including light engines and motors, must approach all street crossings under control and will stop before crossing Blair Street.

11. **Automatic Substations** are designed to be started by one or two minutes continuous demand for power and to be shut down in seven or eight minutes after either a continuous or momentary demand for power. After a train has been standing a period of seven minutes or more, there will probably be insufficient power to lift the contactors and start train. When this occurs, place controller in "series" position and leave it there for at least two minutes or until train starts.

12. **Trolley Poles** must be lowered from trolley wire by means of a rope at all times. To lower trolley pole from trolley wire by getting on top of motor car and taking a hold of trolley pole by hand will not be 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. But one trolley pole must be used between bridge 3, west of Corbett Street and 12th Avenue, Portland.

When trolley pole leaves wire or it becomes necessary to change trolley pole 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.

13. **Electric Switches** used for cutting power off trolley wire, are located at the following industrial spurs and tracks:

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.

Macadam Road Industry track, Portland: on first pole south of Ross Island bridge, west side Macadam Road.

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.

Terminal Ice and Cold Storage Company spur, Hillsboro: on pole on south side of Washington Street, about 150 feet east of

spur track switch. Before closing switch, trainmen must be sure that no one is working where they might come in contact with trolley wires.

Orengo Junction: on pole near junction switch.

These switches must be closed by trainmen before using track and must be opened after work is finished and left open when tracks are not in use.

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 line. 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 line trolley wire.

14. **Interchange Tracks** are located at Jefferson Street Portland, Salem, Albany and Lasen, with Southern Pacific Company.

15. **Section Breakers** have been cut in trolley wires at S.P. 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 motorman should shut off power and coast under this "dead" section. In the event train gets stalled on "dead" section, a switch is located on pole just west of bridge to make "dead" section alive.

Trolley wire between breakers S.P. overhead bridge, Albany, will normally be kept alive. In case of the movement of steam locomotives or for any other reason it should be necessary to "kill" this trolley wire between the breakers, it may be done by opening the switch located on pole just east of bridge, switch to again be closed after movement has been completed.

16. **Instructions Governing Operation over S. P. Track—5th Subdivision—**

Oregon Electric trains cross Southern Pacific main track just west of Signals 6912-6913 and use Albany and Page sidings, between Oregon Electric junction switch at LaFayette Street and Tallman Branch track.

Oregon Electric trains, in both directions, before crossing Southern Pacific main track, must comply with Southern Pacific Rules 83 and 83-C, using check of train register, Southern Pacific Form CS-2529. Conductors westward Oregon Electric trains will obtain this check of train register by telephone from S.P. operator, Albany station, repeating it back to the operator for verification before delivering it to engineer.

Conductors eastward O.E. trains will make this check from the train register at Albany station.

Oregon Electric trains, in both directions, must obtain permission from the S.P. operator, Albany, by telephone, before crossing S.P. main track and conductors must immediately report to this operator when their trains have cleared S.P. main track.

This permission to cross S.P. main track does not relieve conductors from seeing that their trains are protected against over-due first class trains, as prescribed by S.P. Rule No. 93.

Telephone connected with telegraph office, Southern Pacific Company, Albany station, is located in booth at LaFayette Street.

Oregon Electric trains on Southern Pacific tracks at Albany on what is known as the "Bridge Line," which extends from the point where O.E. 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.

17. Impaired Clearance—

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

- Two overhead bridges Portland Lumber Company, between Harrison and Sherman Streets, Portland.
- Union Pacific Steel bridge, Front and Glisan Streets, Portland.
- Tualatin River bridge, just east of Tualatin.
- Southern Pacific overhead bridge, just east of Tualatin.
- Southern Pacific overhead bridge, Water Street, Albany.
- Southern Pacific siding, Water Street, Albany, opposite Senders Warehouse. These bridges will not clear men on top of box cars.

Double track between Mead Street and Terwil has only ten foot nine-inch centers. Trains meeting between these points must come to full stop and see that nothing is projecting from train that will foul equipment.

Trolley wire in the 30 and 40 yards, Portland, will not clear a man on top of high cars.

18. Speed Restrictions—

Freight

Between Portland and Eugene	25
Crossing Front and Jefferson Streets, Portland	5
Between Portland, 12th Ave. connection and Terwil	10
Eastward freight trains will not use less than 15 minutes between Ryan Place and Terwil, and must not exceed speed of 15 miles per hour at any intermediate point. Retainers must be used in every case and engineer will advise trainmen the number required to observe this speed restriction as per Rule 16. Retainers will be turned up when train makes the stop for air brake test at road crossing east of Multnomah, and will be turned down when stop is made at Terwil.	
Between Terwil and Multnomah	15
Between Multnomah and Metzger	20
Between Tualatin and Nasoma	20
Over S.P. Co. crossing at Greenburg	10
Over first road crossing west of depot at Tigard	5
Over two crossings on curve at Durham	20
Under S.P. Co. bridge at Tualatin	15
Through Donald	20
Freight trains will use not less than 7 minutes between Prael and Wilsonville and must not exceed speed of 8 miles per hour at any intermediate point. Trains must reduce to this speed and have brakes released before passing either of these points and will avoid as far as practical any application of brakes while on Wilsonville bridge.	
In double heading trains operated by steam engines, when crossing Wilsonville bridge 22-9 engines must in every case, be separated in the trains by not less than 5 cars, or if both engines are on head-end train must be stopped, lead engine cut off and cross over bridge before train is started.	
Over road crossing at Quinaby	15
Through Salem	10
Passing paper mill, Salem	5
Through Albany	12
Between first crossing east of depot at Harrisburg and county road crossing, 1800 feet west	8
Over Willamette River bridge, 1 miles west of Harrisburg	15
Through Junction City	20
Over Sixth Street crossing, Junction City, (second crossing east of depot)	5
Between Garden Home and Orenco	20
Between Orenco and Forest Grove	25
Over Lombardy Avenue, Beaverton, and between depot and 1000 feet west	15
Over highway crossing at Beaverton	5
Through Hillsboro	10
Through Forest Grove	15
Over Pacific Avenue, Forest Grove, and between Pacific Avenue and depot and over all wye switches	5
Between Orenco and Bowers Junction	20
Over switch, Bowers Junction	12
Between Sweet Home and Calapooia	25
Between Lebanon and Sweet Home	25
Between Calapooia and Dollar	12
Trains handling logs on flat cars	20

19. Commercial Tracks Not Shown as Stations on Time Table—

	Miles from Portland	Capacity	Station Number
Shops	2.6	....	E 3
Greenburg	11.0	9 E	E 11
Bonita, out of service	13.4	5 W	E 13
Durham	14.2	5 E	E 14 A
Tualatin Mill, out of service	15.4	4 W	E 15
Clutters, spiked	20.7	1 E	E 21
Prael	23.7	3 W	E 24
Wallace	24.6	4 W	E 25
Butteville	25.3	6 E	E 26
Fargo	26.8	3 W	E 27
Fellers, spiked	29.8	6 W	E 30
Loganville, out of service	33.1	3 W	E 33
Gravel Pit Spur	48.5	37 E	E 48
Coover	78.6	11 W	E 79
Johnson and Powell Bros. Spur	109.7	10 E	E 110
Awbrey	114.9	2 E	E 115

	Miles from Leander	Capacity	Station Number
Waterloo	19.5	2	S 20
Nye	22.1	8	S 22
Narrows	24.3	3	S 24

	Miles from Orenco	Capacity	Station Number
Bendemeer	3.3	4 W	D 3

	Miles from Garden Home	Capacity	Station Number
Firlock, spiked	0.6	2 W	F 1
Milkapsi, spiked	10.1	3 E	F 10
Moffat, spiked	12.0	2 E	F 12
Rhoades, spiked	12.4	3 E	F 12 A
Haynes, spiked	17.8	4 E	F 18

20. Derails—

- Portland — Macadam Street connection at Mead Street
Portland Box & Lumber Co. spur, Mead Street
O. E. shop track No. 3, east end
O. E. shop track No. 6, west end
 - Multnomah — Portable substation spur
 - Barstow — Passing track, west end
Yard track No. 2, west end
 - Garden Home — Industry track
 - Greenburg — Industry track
 - Durham — Industry track
 - Nasoma — Industry track No. 1
 - Curtis — Passing track, east end
 - Donald — Passing track, west end
 - Salem — Producers Canning & Packing Co. spur
Oregon Gravel Co. spur
Paulus Bros. spur
 - Roberts — Industry spur
- Derails must be left at derail except when in use.

21. Draw Bridges—

	Miles from Portland
Willamette River Bridge	106.0

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

22. 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 caboose into clear of main line.

At United Junction—Eastward trains will comply with Rule 83 by obtaining check on all over-due trains from train dispatcher by telephone.

At United Junction—Normal position of switch will be for S.P.&S. Ry. 1st sub-division main track.

At River Junction—Normal position of switch will be lined and locked for route to Rafton.

At Wilkesboro—Normal position of switch will be for Gales Creek and Wilson River Railroad main track.

At Glenwood—Derail on main line 170 feet west of east switch must be left in derail position.

Double Heading of trains handling logs on disconnected trucks must not under any circumstances be done.

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 operated.

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, and must not exceed eighty-five (85) feet in length, except when special permits are issued authorizing conductors to move loads exceeding eighty-five (85) feet in length. The load limit for 80,000 capacity trucks will be 12,000 feet. Load limit for 100,000 capacity trucks will be 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 stalling on grade, enginemen must not take slack in attempting to start, as to do so may result in pulling trucks from under loads.

Conductors will decline to handle in train, loads of logs which do not conform to the above restriction.

Trainmen handling logs on disconnected trucks will be required to ride out on loaded trains for the purpose of controlling trains over district between Keasey and Zan, Top Hill and Manning, and Rockton and Rafton, and Glenwood and Washburn, and between Mile Posts 6 and 3.

Trainmen handling empty trucks when provided with caboose on rear, will not be required to ride out, but in every case there must be not less than two trainmen in caboose over district mentioned above.

Trainmen in log service when handling logs on disconnected trucks will be required to wear shoes properly equipped with caulks.

Log trains must not cross overhead crossing just west of Wilksboro when Southern Pacific Company trains are passing underneath. If S.P. train is passing or approaching, log train must come to a stop and wait until S.P. 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 jointly to Superintendent and Agent, Rafton, showing number of logs lost, location, brand and whether from trucks or flat cars.

23. Speed Restrictions—

	Freight
Between United Junction and Wilksboro.....	25
Between Wilksboro and Keasey.....	20
Over all bridges between United Junction and Tunnel No. 1..	12
Between Wilksboro and Glenwood.....	15
Eastward trains will use not less than 35 minutes between Top Hill and Manning.	

24. Commercial Tracks Not Shown as Stations on Time Table—

	Miles from United Jct.	Car Capcy.	Switch at	Station Number
Ban Spur	1.0	31	West end	U 1 A
Falkenberg	3.4	S 2	West end	U 3
Culliton	5.9	S 9	West end	U 6 A
Helvetia	7.6	S 6	East end	U 8
Connell	9.1	S 1	West end	U 9
Twinfir (spiked)	9.5	S 3	East end	U 10
Lincoln	10.2	S 6	East end	U 10 A
Vadis	13.3	S 8	East end	U 13
		S 12	Both ends	U 13
Grove Lumber Co.....	13.3	S 6	East end	U 13 A
Christie	15.5	S 11	East end	U 15
The Vernonia Co.)	20.0	S 6	East end	U 20
Thornburg (spiked))				
		Mill		
Buxton	24.6	Spur Conn.	West end	U 25
Elwood Lbr. Co. spur..	24.7	S 12	West end	U 25 A
Outfit Spur	29.3	S 8	West end	U 29 A
Schmidlin Spur	31.6	S 3	East end	U 32
Connacher Spur	34.2	Log spur	West end	U 34
McPherson No. 1.....	36.4	Log spur	East end	U 36
McPherson No. 2.....	36.4	Log spur	West end	U 36
Trehorn	36.7	S 3	East end	U 37
Tara	45.2	S 4	East end	U 45
Eastman	48.5	Log spur	West end	U 48

25. Derails—

Portland	— Kautz Spur, 26th and Nicolai Streets Portland Furniture Mfg. Co. Spur, on Macadam Road
Burlington	— East end passing track
Tunnel Spur	— Industry spur
Rockton	— Industry spur
Vadis	— E. J. Sherman, siding west end
Dixon	— Interchange track No. 1, west end
Manning	— Industry spur
Top Hill	— Siding, east end Outfit spur
Glenwood	— South Mill spur North Mill siding Main line, just west of head block to South Mill spur

Derails must be left at derail except when in use.

ALL SUB-DIVISIONS,

INCLUDING O. E. RY., UNITED RYS. & G. C. & W. R. RR.

1. Special rules supersede rules and regulations of Transportation Department.

Rule 83-A will not apply at initial stations which are not telegraph stations, and at telegraph stations except during office hours, or when an operator is on duty after office hours.

When an order is put out to a train at a station, directing them to meet an opposing train at that station and the order contains the clause "— gets this order at meeting point," the train receiving the order at the meeting point will hold the main track, and the opposing train must take the siding.

When passenger trains meet at stations where view is not clear, and track straight for at least one-half mile ahead, train holding the main track will stand one thousand (1000) feet from the switch to be used by opposing train until such train has arrived.

Before coupling to or moving occupied outfit cars, trainmen must notify occupants and see that all ladders and other obstacles are cleared before cars are moved.

Running switch or drop must not be made when work can be done in any other manner. When necessary to make a running switch the engine must use the straight line.

When trains are approaching highway crossings at grade, enginemen will in addition to sounding the standard crossing whistle signal at whistling post, continue to sound the crossing whistle signal up to and over the crossing.

The movement of trains over street crossings within corporate limits of a city where the city has installed traffic signals, will be governed by the indication of the traffic signal during the period when such signals are in operations.

At street intersections within the corporate limits of a city, where "STOP" signs have been erected, for the protection of traffic on through streets, trains and yard engines will not be required to make a full stop, but must reduce speed and pass over the intersection not to exceed five miles per hour. Normal speed may again be resumed as soon as the engine of train has passed over intersection.

Trains must not pass under overhead crossing of logging roads while logging train is passing over the crossing.

Trains must not block any street or highway crossing in excess of five minutes. When delay will exceed five minutes, conductors must see that crossings are promptly cut.

Whenever descending grades require the use of retainers, trains will be stopped at the top of grade and retainers turned up, and stop made at foot of grade for retainers to be released.

In column, "Car Capacity" prefix letter "S" indicates spur, suffix letters "E" or "W" indicate the end of track at which switch is located. Yardmen are prohibited from shoving cars on yard tracks without having a member of the crew stationed on the leading car of the string being shoved or at extreme end of track, and remainder of crew in such positions as will enable signals to be passed to enginemen in ample time to prevent cars being shoved over end of track or damage to bumper or cars. Conductors and engine foreman will be held personally responsible in every case where cars are shoved over end of track or equipment damaged as a result of violation of these instructions.

NOTE:

Schedule meeting or passing stations on the time table are indicated by figures in fullface type; numbers of the trains meeting, passing or being passed will not be shown.

2. Impaired Clearance—

All trainmen and others interested are hereby warned that the majority of cattle guards are closer to tracks than required standard of the Public Utilities Commissioner of Oregon.

Sign reading: "Impaired Clearance" placed upon switch stand at entrance of spur or siding indicates there are platforms or structures located along side same, which do not provide minimum horizontal clearance prescribed by Public Utilities Commissioner of Oregon. Employees will use care and avoid risk of injury while working on spurs or sidings protected with "Impaired Clearance" sign.

3. Speed Restrictions—

	Pass.	Frt.
Passing telegraph offices where orders are to be received	25	15
Over switches in paved streets.....	10	10
Locomotives backing up	20	20

4. Bulletin Boards—

Portland—Union Depot telegraph office
Hoyt Street telegraph office
Roundhouse

Astoria
Seaside
Salem
Albany
Eugene
Sweet Home
Vernonia

5. Overhead Crossings—

	Miles from Portland
United Railways, 0.5 miles west of United Jct.....	10.5
K. P. Timber Ry., 0.1 miles east of Kerry.....	69.7
Bradley Woodward Lumber Co., Bradwood.....	76.8
Big Creek Logging Co., 0.5 miles west of Knappa.....	87.0

6. Grade Crossings—
(O. E. 1st-2nd Sub-Division)

	Miles from Portland
P. T. Co., Corbett Street, Portland.....	0.0
Southern Pacific Company	11.1
Southern Pacific Company	50.7
Southern Pacific Company	50.8
Southern Pacific Company	51.0
Southern Pacific Company	51.3
Southern Pacific Company	77.4
Southern Pacific Company	77.5
Southern Pacific Company	77.6
Southern Pacific Company	77.7
Southern Pacific Company	120.5

(O. E. 4th Sub-Division)

	Miles from Garden Home
Southern Pacific Company	3.0
Southern Pacific Company	13.3

7. Interlocking Plants—

	Miles from Portland
Willbridge, Portland Div. 1st Sub.....	4.5
Scappoose, P. & S. W. Ry., Portland Div. 1st Sub.....	20.3
Clatskanie, B. T. Co., Portland Div. 1st Sub.....	62.4
Greensburg, S. P. Co., O. E. Ry. 1st Sub.....	11.1

8. Junctions—

	Miles from Portland	Switch at
Vancouver Division, Willbridge	4.5	.....
United Railways Co., United Jct.....	10.0	.....
Portland & Southwestern Ry., Scappoose..	20.1	East end
St. Helens Terminal Co., Cormick.....	27.0	West end
Benson Timber Co., Clatskanie.....	62.3	East end
K. P. Timber Ry., Kerry.....	69.8	West end
Bradley Woodward Lumber Co., Bradwood	76.9	West end
Crossett Western Lumber Co., Knappa.....	86.8	West end

United Railways—

	Miles from United Jct.
S. P. & S. Ry., United Junction.....	0.0
Southern Pacific Co., Wilksboro.....	16.4

9. Tunnel Locations—

	Length
No. 1—1.0 miles west of Tunnel Spur, United Rys.....	4111 ft.
No. 2—0.3 miles west of Top Hill, United Rys.....	1136 ft.
No. 3—1.2 miles east of Mayger, 1st Sub.-Portland-Seaside..	188 ft.

10. Location, Capacity and Facilities of Stockyards.

	No of Pens	Capacity in Cars	Facilities
Deer Island	1	1	None
Quincy	1	1	Water
Marshland	1	1	None
Clifton	1	1	None
Astoria	1	2	None
Carnahan	2	1	None
Warrenton	1	1	None
Oregon Electric Ry.—			
Broadacres	1	1	None
Leander	4	5	Water
Tulsa	2	4	Water
Harrisburg	3	5	Water

WATCH INSPECTORS

Ball Railroad Time Service of Ohio..	284 Endicott Bldg., St. Paul, Minn.
Weisfield & Goldberg.....	530 S. W. Washington St., Portland
Dillen Rogers.....	Killingsworth & Albina Aves., Portland
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

CLEARANCE TABLE

HEIGHTS ABOVE TOP OF RAIL

	1' Wide	2' Wide	3' Wide	4' Wide	5' Wide	6' Wide	7' Wide	8' Wide	8' 6" Wide	9' Wide	10' Wide	11' Wide	11'-6" Wide
Portland—Vancouver.....	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 4"	19' 2"	18' 3"	17' 9"	17'
Vancouver—Spokane.....	20'	19' 6"	19' 6"	19' 6"	19' 6"	19' 6"	19'	18' 6"	18'	18'	17' 6"	17'	16'-6"
Lyle—Goldendale.....	20'	20'	19' 6"	19' 6"	19' 6"	19'	21'	20' 6"	19' 10"	19' 5"	18' 9"	17'	16'
Wishram—Bend.....	21'	21'	21'	21'	21'	16' 6"	16' 6"	16'	15' 9"	15' 6"	15'	14'	—
Portland—Holladay.....	18' 6"	18'	17' 6"	17'	20'	20'	20'	20'	20'	20'	20'	20'	18'
Warrenton—Fort Stevens.....	20'	20'	20'	17'	17'	17'	17'	17'	17'	17'	17'	—	—
O. E. Ry.-U. Rys. Portland Yard Limits	17'	17'	17'	17'	17'	17'	17'	17'	17'	17'	17'	—	—
Portland—Garden Home.....	17'	17'	17'	19'	19'	19'	19'	19'	19'	19'	19'	19'	16'
Garden Home—Forest Grove.....	19'	15' 9"	15' 9"	15' 9"	15' 9"	15' 9"	15' 9"	15' 9"	15' 9"	15' 9"	15' 9"	—	—
Garden Home—Eugene.....	19'	19'	19'	19'	19'	19'	19'	18' 6"	18'	18'	18'	17'	16'
Lebanon—Dollard.....	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	18'
Orengo—Bowers Junction.....	19'	19'	19'	19'	19'	19'	19'	18' 6"	18'	17' 6"	17'	17'	—
United Junction—Wilkesboro.....	19'	19'	19'	19'	19'	19'	19'	18'	17' 9"	17' 6"	17'	16'	—
Wilkesboro—Keasey.....	19'	19'	19'	19'	19'	19'	19'	18'	17' 9"	17' 6"	17'	16'	—
Wilkesboro—Glenwood.....	20'	20'	20'	20'	20'	20'	19'	18' 6"	18'	18'	18'	18'	—

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

Sign reading "Impaired Clearance" placed upon switch stand at entrance of spur or siding indicates there are platforms or structures located alongside same which do not provide prescribed minimum horizontal clearance. Employees will use care and avoid risk of injury while working on spurs or sidings protected with "Impaired Clearance" signs.

TONNAGE RATING

Ruling Grade	A-1 1-5	A-3 7-8	D-2 150-151	D-3 152, 157 158	D-4 153-155	D-6 159	D-7 160-162	M-2 201	N-4, N-5 300-30 315	N-6, F-1 325-326 450-466	N-2, N-7 355-365 333-339
Level	6897	7302	6477	6463	6076	5711	7793	4459	8328	8900	9975
1.0%	4347	4722	4170	4165	3811	3544	4898	2876	5362	5740	6396
2.0%	3197	3473	3054	3054	2800	2598	3599	2111	3928	4211	4743
3.0%	2519	2741	2396	2398	2203	2304	2834	1639	3112	3309	3796
4.0%	2072	2252	1962	1968	1810	1672	2312	1362	2558	2715	3007
5.0%	1755	1907	1654	1659	1530	1411	1971	1151	2164	2293	2602
6.0%	1518	1650	1424	1431	1322	1216	1704	993	1871	1978	2251
7.0%	1334	1464	1247	1253	1161	1066	1497	871	1643	1729	1979
8.0%	1188	1292	1105	1112	1032	945	1332	744	1462	1540	1762
9.0%	1069	1163	989	997	927	847	1197	694	1314	1381	1585
1.0%	970	1055	893	900	840	766	1085	628	1191	1250	1438
1.1%	886	964	812	821	766	697	990	572	1087	1138	1314
1.2%	815	887	742	751	703	638	909	519	999	1046	1208
1.3%	752	820	682	691	649	586	839	483	921	960	1116
1.4%	698	760	621	638	601	539	778	446	854	888	1035
1.5%	650	708	583	592	559	503	724	415	795	824	964
1.6%	608	662	542	551	522	468	676	387	742	768	901
1.7%	570	621	505	514	488	436	633	362	695	718	845
1.8%	536	584	472	481	458	408	595	339	652	672	794
1.9%	504	550	442	451	431	381	560	319	615	631	748
2.0%	477	520	414	428	406	360	530	300	580	594	707
2.1%	451	492	389	399	384	328	499	283	548	559	669
2.2%	428	469	367	377	363	308	475	267	519	528	634

TONNAGE RATING

Ruling Grade	N-1, N-3 350-352 370	O-1, O-3 500-507 530-534	O-2 525	C-1 600-608	H-1 620-624	GCWR 1	GN O-4 3210- 3254	GN O-5 3350- 3357	GN O-6 3368, 3369	GN O-8 3358	GN N-2 2000
Level	6738	15000	12700	6623	9725	6016	16258	16671	17051	16170	.....
.1%	4353	10000	8225	4258	6265	3885	10521	10792	11020	10422	.....
.2%	3200	8000	6049	3110	4591	2853	8445	7947	8102	7658	11200
.3%	2519	5800	4766	2538	3603	2247	6108	6268	6381	6028	8760
.4%	2071	4770	3928	1990	2952	1838	5011	5162	5246	4953	7180
.5%	1752	4040	3319	1674	2490	1555	4262	4377	4441	4191	6060
.6%	1514	3500	2870	1438	2146	1356	3692	3792	3853	3622	5230
.7%	1320	3070	2524	1256	1879	1185	3248	3338	3375	3181	4590
.8%	1184	2730	2247	1110	1666	1054	2997	2977	3004	2830	4080
.9%	1064	2460	2022	990	1492	947	2608	2682	2706	2548	.....
1.0%	965	2230	1838	907	1348	858	2368	2436	2450	2304	3320
1.1%	880	2037	1675	809	1226	783	2166	2239	2237	2104	.....
1.2%	809	1872	1539	738	1121	719	1993	2051	2055	1931	.....
1.3%	747	1729	1420	676	1031	663	1842	1898	1898	1782	.....
1.4%	692	1604	1319	622	952	614	1712	1764	1760	1652	.....
1.5%	644	1493	1228	574	882	572	1590	1645	1639	1537	.....
1.6%	601	1395	1148	532	821	533	1494	1540	1531	1435	.....
1.7%	563	1308	1077	491	765	499	1402	1446	1434	1343	.....
1.8%	529	1229	1012	462	748	469	1320	1362	1348	1261	1800
1.9%	498	1158	953	429	671	441	1245	1285	1269	1187	.....
2.0%	470	1093	900	401	630	416	1178	1227	1198	1120	.....
2.1%	408	1034	852	378	592	393	1116	1153	1133	1058	.....
2.2%	387	976	808	352	559	372	1059	1095	1074	1002	.....

Above ratings for districts with long continuous grades. For districts with short pieces of maximum grade ratings should be increased 10%.

Make 10% reduction when temperature 5° to 25° above.

Make 20% reduction when temperature 5° above to 10° below.

Make 30% reduction when temperature 10° below or colder.

Special: Rating for Class .01-03 between Scribner and Spokane,
Westward 1850 tons, Eastward 2700 tons.

Special Rating, South Junction to Madras.
Class .01 Engines 1250 tons.
Class .03 Engines 1350 tons.
Class .06 Engines 1450 tons.

Special Rating, Class Z-6 Engines No. 900-905.

	Ruling Grade	15 Miles Per Hour
Vancouver to Snake River.....	.2	10750
Snake River to Marshall.....	.4	7500
Marshall to Parkwater.....	1.0	7000
Parkwater to Marshall.....	32.50 1.2	3193 2632
Marshall to Mock.....	.4	7500
Mock to Vancouver.....	Level	23061

TONNAGE RATING

DISTRICT	Ruling Grade	D-2 150 151	D-3, 152 157 158	D-4 153 154	D-6 159	D-7 160 162	N-1, N-3 350, 352 370
Portland to Goble.....	.56	1489	1512	1423	1333	1669	3000
Goble to Portland.....	.52	1600	1629	1532	1439	1798	3000
Goble to Astoria.....	.31	2310	2338	2189	2066	2571	3000
Astoria to Goble.....	.38	2086	2113	1980	1866	2325	3000
Astoria to Flavel.....	.33	2193	2220	1949	1961	2442	3000
Flavel to Astoria.....	.44	1742	1768	1658	1561	1931	3000
Warrenton to Holladay....	1.22	742	800	766	831	935	3000
Holladay to Warrenton....	.70	1215	1236	1168	1036	1374	3000

TONNAGE RATING OF ENGINE

Based on 10 Miles per Hour

District	Ruling Grade	Class of Engine								
		N-1,N-3	N-4	N-6, F-1	N-2, N-7	D-2	D-3	D-4	D-6	D-7
		350-352 370	300-304	325-329 451-466	355-368 335-339	150-151	152-157 158	153-154	1866	1888	160-162
Linton to Rafton.....	0.35	2295	2835	3012	3401	2079	2084	1866	1988	2574
Rafton to River Jct.....	2.3	366	490	497	599	345	355	342	288	461
River Jct. to Wilkesboro.....	1.5	644	795	824	964	583	592	559	503	724
Wilkesboro to Keasey.....	2.3	366	490	497	599	345	355	342	288	461
Keasey to Wilkesboro.....	1.5	644	795	824	964	583	592	559	503	724
Wilkesboro to Glenwood.....	2.2	387	519	528	634	367	377	363	308	475
Glenwood to Wilkesboro.....	.8	1184	1462	1540	1762	1105	1112	1032	945	1332
United Jct. to River Jct.....	2.3	366	490	497	599	345	355	342	288	461
Bowers Jct. to Cornelius Tunnel.....	1.2	809	999	1046	1208	742	751	703	638	909

FOOTAGE RATING FOR ENGINES IN LOGGING SERVICE

Keasey to Rafton.....	1.5	112,000	126,000	140,000	154,000	84,000	98,000	84,000	84,000
Wilkesboro to Rafton.....	1.2	140,000	154,000	168,000	182,000	112,000	112,000	112,000	112,000
Glenwood to Wilkesboro.....	.8	214,000	251,000	267,000	290,000	178,000	179,000	179,000	160,000

DISTRICT	Ruling Grade	TONNAGE RATING OF ENGINE						
		Based on 5 Miles Per Hour						
		CLASS OF ENGINE						
		N-1, N-3	N-2, N-7	N-4	N-6, F-1	D-4	D-6	D-7
		350-352 370	355-368 335-339	300-304	325-329 451-466	153-154	159	160-162
Jefferson St. to Multnomah..	2.87	400	471	414	404	283	235	318
Multnomah to Tualatin.....	.70	1653	2009	1718	1773	1233	1106	1410
Tualatin to Wilsonville. No Stop.....	.95	1390	1685	1444	1483	998	885	1121
Tualatin to Wilsonville. Stop.	.95	1264	1532	1313	1348	938	835	1071
Wilsonville-Fellers Stop. Curtis-Donald.....	1.00	1236	1460	1253	1285	851	795	998
Wilsonville-Fellers Run Grades.....	1.00	1359	1606	1377	1413	953	895	1132
Bowers Jct. to Orenco.....	Down	4000	5478	4000	5000	4200	4200	4500
Orenco to Bowers Jct.....	1.00	1236	1460	1253	1285	851	795	998
Forest Grove to Garden Home.	2.00	600	719	623	624	435	374	491
Garden Home to Forest Grove.	2.33	508	597	526	523	365	310	412
Albany to Sweet Home.....	2.00	600	719	623	624	435	374	491
Sweet Home to Albany.....	1.3	938	849	975	994	692	610	788
Sweet Home to Dollar.....	2.4	490	583	507	503	351	297	396
Dollar to Sweet Home.....	1.75	693	753	719	726	506	438	574
Fellers to Salem.....	.8	1474	1789	1531	1578	1098	982	1301
Salem to Albany Frt. Yard..	.4	2557	3117	2659	2760	1918	1736	2198
Water St. South of Yard....	Start	532	731	633	679	442	466	573
Water St. South of Yard....	Run'g	700	800	700	744	470	490	613
Albany to Eugene.....	.3	3106	3790	3231	3360	1606	2118	2677
Eugene to Albany.....	.4	2557	3117	2659	2760	1918	1736	2198
Albany to Salem.....	.4	2557	3117	2659	2760	1918	1736	2198
Salem to Wilsonville.....	.85	1397	1695	1451	1491	1039	970	1187
Wilsonville to Tigard.....	1.0	1236	1460	1253	1285	851	811	998
Tigard to Portland.....	1.67	737	887	765	848	540	511	624
Tigard to Portland, No Stop.	1.67	810	975	841	862	570	543	654

SPEED TABLE

60 miles per hour is equivalent to one mile in 1 minute and 0 seconds
55 miles per hour is equivalent to one mile in 1 minute and 5 seconds
50 miles per hour is equivalent to one mile in 1 minute and 12 seconds
45 miles per hour is equivalent to one mile in 1 minute and 20 seconds
40 miles per hour is equivalent to one mile in 1 minute and 30 seconds
35 miles per hour is equivalent to one mile in 1 minute and 43 seconds
30 miles per hour is equivalent to one mile in 2 minutes and 0 seconds
25 miles per hour is equivalent to one mile in 2 minutes and 24 seconds
20 miles per hour is equivalent to one mile in 3 minutes and 0 seconds
15 miles per hour is equivalent to one mile in 4 minutes and 0 seconds

R. C. SCOFFERN, Trainmaster, Portland
E. B. HEATH, Trainmaster, Portland
J. A. O'HEARN, Trainmaster, Vancouver
A. E. JOHNSON, Asst. Trainmaster, Spokane
B. L. SPERRY, Chief Dispatcher, Portland
J. DICKSON, Master Mechanic, Vancouver
F. C. WAGER, Traveling Engineer, Vancouver
R. M. MYLES, Traveling Engineer, Spokane

LIST OF SURGEONS AND MEDICAL DEPARTMENT INSTRUCTIONS

Surgeons will attend, when called upon officially, to all cases of accident occurring to employes or passengers. In cases of sickness it is the intention to limit medical service to the locality or town where a surgeon resides, unless some urgent necessity exists, for which distinct official authority must be had in accordance with established regulations. Railway officials are required to call on the nearest authorized surgeons whenever practicable, when surgical or medical services are needed. When such are accessible, no responsibility will be assumed for bills for medical services rendered by any other physician. In the event of a sudden emergency, arising from accident, if necessary, proper surgical aid should be procured until the arrival of a regularly appointed surgeon, when the case should be placed in his charge, and in no case should the services of any but an authorized company surgeon be continued after such surgeon is able to assume charge of the case.

Boarding and nursing are furnished only at hospitals with which arrangements have been made. No responsibility will be assumed for bills incurred elsewhere unless specially authorized or approved by the Chief Surgeon.

SURGEONS

DR. CHAS. C. NEWCASTLE, Chief Surgeon }—318 Mayer Building, Portland.
DR. WILMOT C. FOSTER, Asst. Surgeon }—Telephone BEacon 5070; if no answer call ATwater 4175.
DR. C. E. BROUS, Local Surgeon, Linnton.
DR. A. E. JOHNSTONE, Local Surgeon, St. Helens.
DR. M. A. KENNEY, Local Surgeon, Rainier.
DR. PAUL H. STARR, Local Surgeon, Clatskanie.
DR. J. L. WOODIN, Local Surgeon, Clatskanie.
DR. V. S. GEARY, Local Surgeon, Westport.
DR. ARTHUR VAN DUSEN, Local Surgeon, Astoria.
DR. O. C. HAGMEIER, Local Surgeon, Seaside.
DR. J. E. VINSON, Local Surgeon, Seaside.
DR. ROLAND D. EBY, Local Surgeon, Vernonia.
DR. A. O. PITMAN, Local Surgeon, Hillsboro.
DR. W. B. MORSE, Local Surgeon, Salem.
DR. C. H. ROBERTSON, Local Surgeon, Salem.
DR. L. M. BAIN, Local Surgeon, Albany.
DR. R. BRUCE MILLER, Local Surgeon, Lebanon.
DR. ROBT. LANGMACK, Local Surgeon, Sweet Home.
DR. D. G. CLARK, Local Surgeon, Harrisburg.
DR. GEO. I. HURLEY, Local Surgeon, Eugene.
DR. HARRY G. TALBOT, Local Surgeon, Eugene.

Stretchers are located at following points:

Astoria
Rainier
Portland, Baggage Room
Portland, Oregon Electric Shops
Vernonia
Salem
Albany

R. C. SCOFFERN, Trainmaster, Portland
A. E. JOHNSON, Trainmaster, Portland
H. JACKSON, Chief Dispatcher, Portland

F. C. WAGER, Master Mechanic, Vancouver
C. E. BARNES, Traveling Engineer, Vancouver
R. M. MYLES, Traveling Engineer, Spokane