

Spokane, Portland & Seattle Railway Co.
System Lines

**Special
Instructions
No. 12**

Effective 12:01 A. M. Pacific Time

Sunday, January 18, 1953

**These instructions constitute a part of the
Time Table currently in effect.**

**Employees whose duties are in any way
affected by the Time Table must have a copy of
The Current Special Instructions and Current
Time Table with them on duty.**

**J. L. MONAHAN,
Superintendent**

**E. H. SHOWALTER,
General Manager**

TERMINALS SUB-DIVISION

(PORTLAND-VANCOUVER)

1. **Between Portland and Lake Yard**—Transfers in either direction, without cabooses, between sunset and sunrise, or when weather conditions obscure vision, will display red light on rear end of the rear car.
2. **At Portland**—Between end of double track at 10th Avenue and Union Station, 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.

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

On N. P. T. Co. depot yard tracks, maximum permissible speed of 6 MPH must not be exceeded and all trains and engines moving on these tracks must be prepared to stop unless the track is seen or known to be clear and switches are properly lined for movement being made. 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 Station Master or his Assistant. In making this movement with yard engines, a member of the crew must ride on leading footboard of engine and when cars are being pushed must ride on front of leading car in direction engine is moving. A flagman must precede movement of yard engines over crossing in front of baggage room unless a proceed signal is given by Station Master, Baggage Master, or their Assistants.

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 but must not occupy westward main track while waiting for outbound passenger trains.

Freight trains except caboose hops 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. Caboose hops will use main line pocket.

Yard crews when switching over S. P. Co. trackage at East First and Main Streets, Portland, must, before leaving crossing, assure themselves that signals have cleared for S. P. Co. trackage to avoid delay to S. P. Co. trains due to failure of signals to clear. Employes handling switch lock lever must be positive that it is in proper position when they have completed their work in that vicinity. When lever is placed in normal position and door of the box closed, signals on the S. P. Co. will clear. If for any reason, after lever has been restored to normal position, signals on the S. P. Co. tracks fail to clear, the train dispatcher must be notified immediately.

Fire lanes have been established over railroad crossings at 9th and Front Avenues and 14th and Front Avenues. 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, siren will be sounded 2 to 3 minutes before apparatus reaches crossing and immediate action must be taken by trains and engines to clear crossing in order there be no delay in fire apparatus reaching scene of fire.

3. **At Willbridge**—Enginemen of eastward diesel-electric powered passenger trains in addition to sounding whistle signal 14(1) as required, will sound this signal as an additional alarm approaching Automatic Block Signal No. 3.6 located just west of Doane Street Yard lead.

4. **At East Portland**—The following governs the use of tracks constituting the East Second Street Yard: Tracks 1, 4, 5 and 6 are owned by the Union Pacific Railroad. Tracks 2 and 3 are owned by the S. P. & S. Railway.

Track 1 is for S. P. & S. to make delivery of cars to the Union Pacific and the Union Pacific will use this track for other business provided it does not interfere with the S. P. & S. making their deliveries.

Track 2 is for Union Pacific to make delivery of cars to the S. P. & S. and the S. P. & S. will use this track for other business provided it does not interfere with the Union Pacific making their deliveries.

Track 3 is for use as a thoroughfare by the S. P. & S. between Portland and East Portland and must not be used by the Union Pacific.

Track 4 is for use by the Union Pacific as a thoroughfare between Albina and East Portland and must not be used by the S. P. & S.

Tracks 5 and 6 are for exclusive Union Pacific use and must not be used by the S. P. & S.

5. **At North Portland Jct.**—The four tracks located between main track and the stock yards are numbered from east to west (compass direction) as Nos. 1, 2, 3, 4.

Track No. 1 is for interchange of cars from the Peninsula Terminal Company and S. P. & S. to the Union Pacific.

Track No. 2 is for interchange of cars from the Union Pacific and the Peninsula Terminal Company to the S. P. & S.

Track No. 3 is a running track for all companies.

Track No. 4 is for interchange of cars from the Union Pacific and the S. P. & S. to the Peninsula Terminal Company.

6. **Impaired Clearance**—

At Portland—Hoyt Street Yard: All tracks except Nos. 1, 2 and 3 in middle yard have impaired horizontal clearance and will not clear a man on side of car.

At Portland—Union Station Yard: When U. P. engines 3800 class enter or leave tracks in south end of yard, the boilers extend to outside of curve, creating close clearance with any engine standing or moving on adjacent tracks. Engines standing on south end of any of the odd numbered tracks awaiting arrival of U. P. passenger trains must remain back on straight track a sufficient distance to afford proper clearance, which clearance is indicated by yellow marks painted on ties and on edge of station platform.

Clearance of S. P. & S. engines Class E-1 at cab window height with depot sheds is as close as one and one-half inches, which close clearance must be observed by engine crews at all times.

7. **Engine Restrictions**—

At Portland—Hoyt Street Yard: Engines S. P. & S. and GN Classes O-1 and heavier not permitted to head in on any yard track except Tracks 1, 2, and 3 in the Middle Yard, account No. 7 turnouts. These classes of power are permitted to back through other yard tracks.

Steam engines classes O-1 and heavier not permitted to use turnout from Middle Yard lead to old main line at north end of coach yard account heavy curvature.

At Portland—Union Station Yard: S. P. & S. engines Classes E-1, O-3 and O-4 not permitted to enter or leave trackage at south end of station account sharp turnouts.

Between Nicolai Street, Portland, and Lake Yard sanding flues of engines is prohibited.

VANCOUVER DIVISION

FIRST SUB-DIVISION

(VANCOUVER-WISHRAM)

1. **At Vancouver**—In making change of engines on westward passenger trains, the relief engine, if an H-1 or smaller, will be placed on Fletcher Oil Company spur leading off the eastward main track. If the relief engine is heavier than Class H-1, change will be made at the east yard lead switch.

To avoid delay to first class trains, westward freight trains on which main line connections are to be made will allow not less than 30 minutes to effect connection prior to time eastward first class trains are due to leave Vancouver or prior to time westward first class trains are due to leave Eavan.

2. **At Camas**—To avoid unnecessary activation of crossing signals at Adams St. please be governed as follows:

Eastward trains activates these crossing signals after passing a point 1875 feet west of the crossing and westward trains, at a point 1835 feet east of the crossing.

Whenever the switches to the cross-over, located 1615 feet west of Adams St. crossing, or switches to the house track are open the crossing signals are also actuated.

Through freight trains stopped by locals while doing switching at Camas, if within the 1835 and 1875 feet limits, respectively, also actuates the crossing signals.

All concerned must do whatever possible to avoid unnecessary activation of these crossing signals bearing in mind the above information. Members of local crews will avoid leaving cross-over and house track switches open while switching. It is a requirement that main track switches must be locked and lined after being used; if they are not so locked and lined, then a trainman must be in charge of the switch. If a trainman is in charge of the switch he will close it while switching operations are going on.

Trains or engines using that portion of the siding east of insulated joints, located about 100 feet west of Adams St. crossing, actuate the crossing signals. Westward trains or engines using this siding will pull clear of these insulated joints. Engines of eastward trains will remain west of these insulated joints, to prevent unnecessary operation of the crossing signals.

3. **At Wishram**—Automatic block signal circuit extends through yard and governs main track operation. When either switch of the cross-over west of the depot or either switch of the crossover east of the depot is open, it places westward signal 107.7 at the extreme east end of yard at "stop" indication. The use of these crossovers by trains and engines on the time of a westward first-class train delays such train unnecessarily. A signal overlap sign is installed 2000 ft. east of west switch Oregon Trunk lead.

West car boards indicate number of car lengths from depot instead of west crossover switch.

4. Impaired Clearance—

At Camas—Spur track serving the Bag Factory extends 96 feet inside building. Crews handling cars for this building must leave such cars outside and engines must not enter building account impaired side and vertical clearance.

5. Engine Restrictions—

At Vancouver—California Packing Corporation Spur restricted to diesel switch engines or lighter power.

Steam engines classes E-1 and heavier not permitted on the following tracks:

Vancouver—Barracks spur.

Camas—Warehouse spurs 1 and 3; mill spurs 1 and 2; and Standard Oil Company spur.

Stevenson—Union Oil Company spur and Standard Oil Company spur.

Carson—Spur.

Mile Post 80—Rock Spur.

Engines classes DE6000 and 6400 H. P. are permitted on the following tracks:

Camas—Standard Oil Company Spur.

Carson—Spur.

But are not permitted on the Barracks spur at Vancouver, on Warehouse spurs 1 and 3 and Mill spurs 1 and 2 at Camas; on Union Oil Company and Standard Oil Company spurs at Stevenson, or on the Rock spur at Mile Post 80.

SECOND SUB-DIVISION

(WISHRAM-PASCO)

1. **At Wishram**—Automatic block signal circuit extends through yard and governs main track operation. Whenever either switch of the crossover west of the depot or either switch of the crossover east of the depot is open, it places westward signal 107.7 at the extreme east end of yard at "stop" indication. The use of these crossovers by trains and engines on the time of a westward first-class train delays such train unnecessarily. A signal overlap sign is installed 2000 feet east of west switch Oregon Trunk lead.
2. **Between Wishram and Pasco**—Swing brakeman will ride engine of eastward freight trains from Wishram to Roosevelt, get off on river side there, allow train to pull by so that inspection may be made for hot journals and other defects. The swing brakeman of westward freight trains will ride engine from Pasco to Plymouth and make running inspection from bank side at that station.
3. **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 end of bonded circuit is located 4500 feet west of west switch at Kennewick. Eastward trains will stop clear of east switch of siding Kennewick if eastbound signal at east switch does not indicate proceed.

Trains to and from the S. P. & S. will display the same classification signals as required arriving S. P. & S. junction on S. P. & S. Ry., but regular trains will use schedules shown on N. P. time table carrying S. P. & S. connections.

4. Register Exception—

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.

THIRD SUB-DIVISION

(PASCO-SPOKANE)

1. **At Pasco**—Dwarf signal located 1000 feet east of M. P. 232 governs eastward movements from siding to main track, the approach lighting section of which extends 400 feet west of the signal. A time release and key switch is located 10 feet east of head block and to operate, trainmen will insert key in switch key box and turn in clockwise direction to actuate dwarf signal. If signal does not then indicate proceed, open door of box, operate push button and wait three (3) minutes for time release, and if signal does not then indicate proceed, be governed by Rule 509(A). Spring switch located east end of siding is equipped with piston rod clamp. To avoid damage, main track trailing points movements must not be made through switch when lined for siding or reverse normal position.

Normal position of dual control switch at intersection of freight yard lead and main track at M. P. 231 is for main track and is electrically operated by remote control by the operator at Pasco.

Normal position of switch at intersection of the back-up track and S. P. & S. Ry. Third Subdivision main track is for S. P. & S. Ry. Third Subdivision main track.

2. **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.

3. **Between Pasco and Ft. Wright**—Cinders must not be dumped on main track at any point where crushed ballast has been placed except at Washtucna and Lamont when taking coal and water. Benches used by enginemen when cleaning ash pans must be removed after being used to avoid hazard.

Swing brakeman will ride engine of eastward freight trains from Pasco to Washtucna, get off on side opposite to depot at that point, allow train to pull by so that inspection may be made for hot journals and other defects. The swing brakeman on westward freight trains will ride engine from Hillyard to Lamont and make running inspection from side opposite to depot at that station.

4. **At Ainsworth Junction**—Dual control switch, electrically operated by remote control by the operator at Pasco, normal position for N. P. Ry. Ninth Subdivision.

Upper unit of eastward home signal governs movements to N. P. Ry. Ninth Subdivision. The middle unit governs movements to S. P. & S. Ry. Third Subdivision.

5. **At Snake River Junction**—Normal position of junction switch is for S. P. & S. Ry. 3rd sub-division. Trains from Northern Pacific Ry. must not occupy S. P. & S. Ry. main track until after obtaining Register Check with clearance Form A from operator authorizing movement. Junction switch is equipped with an electric switch lock.

6. **At Scribner**—Normal position of junction switch is for the Fort Wright line.

Northern Pacific trains approaching Scribner from S. P. & S. will sound whistle signal one short, one long and one short to call for route to Marshall.

Junction switch is equipped with an electric switch lock. The locking device is also equipped with a sealed emergency release for use only when apparatus fails to unlock following normal procedure.

6. (Continued)

To operate emergency release, break the seal, remove lock pin, depress and hold down push button on the emergency release, while moving lock handle to unlocking position. Wait three minutes and if there is no impending train movement, junction switch may be thrown, and if signal fails to clear, train may proceed under provisions of Rule 509(B). Operators at Scribner will handle junction switch for N. P. route when on duty.

The end of track circuit governing eastward automatic block signal 367.4 at Scribner is located 7000 feet west of that signal and junction switch cannot be operated to admit an eastward train to enter Northern Pacific route until such train has entered the westerly limit of this bonded circuit. Eastward Northern Pacific trains will approach this junction switch at a low rate of speed to enable operator to line switch.

7. **At Marshall Junction**—Junction switch is governed by interlocking signals and rules.
8. **At Fort Wright**—Junction switch is governed by interlocking signals and rules.
9. **At Hillyard**—Westward S. P. & S. Ry. Co. trains must secure S. P. & S. clearance Form A before proceeding.

10. **Engine Restrictions—**

Steam engines, Classes E-1 and heavier, not permitted on the following tracks:

Farrington —Spur
 Kahlotus —Town spur
 Lamont —Oil spur
 Scribner —Nemour spur
 Ft. Wright —Brick Yard spur

Engines, Classes DE6000 and 6400 H. P. are permitted on the following tracks:

Farrington —Spur.
 Kahlotus —Town spur.

But are not permitted on the Oil spur at Lamont, on Nemour spur at Scribner, or on the Brick Yard spur at Ft. Wright.

At Washtucna—Engines classes Z-6, Z-8 and DE6000 H. P. and heavier, not permitted to use trackage beyond the Union Oil Company spur on Hole Track.

At Washtucna and Lamont—Engines must not be run over hopper on Coal Hopper spur tracks.

FOURTH SUB-DIVISION

(GOLDENDALE-LYLE)

1. **Bridge and Engine Restrictions—**

Engines heavier than Class DE 1600 H.P. not permitted.

OREGON TRUNK RAILWAY

(WISHRAM-BEND)

1. **At Celilo Wye**—Normal position of switch is for Oregon Trunk Ry.
2. **At O. T. Junction**—Normal position of spring switch is for Oregon Trunk Ry.
3. **At South Junction**—West switch of siding is a dual control switch electrically operated by remote control by the operator. When necessary to perform switching service over this switch be governed by Rule 663 (B).
4. **At Madras**—
 - (a) Westward freight and mixed trains when handled by steam engines or Diesel-electric engines, with dynamic brakes not in operation, will stop and turn up retaining valves on all loaded cars and on alternate empties and stop at South Junction to turn down retainers. Running brake tests will be made on westward trains at, or one mile west of Madras. Trainmen will not be required to ride on top of cars between these points.
 - (b) Westward freight and mixed trains when handled by Diesel-electric engines consisting of two, three or four units, with dynamic brakes operative, will come to a complete stop at Madras by use of automatic brakes to ascertain positively that automatic brake equipment is completely effective.

The following will govern use of retaining valves between Madras and South Junction:

When retaining valves are in use, speed of 20 MPH must not be exceeded.

2-Unit Locomotive	3-Unit Locomotive	4-Unit Locomotive
2000 tons or less	3000 tons or less	4000 tons or less
None	None	None
Over 2000 tons and not exceeding 2200 tons averaging not to exceed 60 tons per operative brake	Over 3000 tons and not exceeding 3300 tons averaging not to exceed 60 tons per operative brake	Over 4000 tons and not exceeding 4400 tons averaging not to exceed 60 tons per operative brake
None	None	None
Over 2200 tons averaging more than 60 tons per operative brake—One retaining valve must be used for each 60 tons in excess of 2200 tons but not less than 15 retaining valves must be used.	Over 3300 tons averaging more than 60 tons per operative brake—One retaining valve must be used for each 60 tons in excess of 3300 tons but not less than 15 retaining valves must be used.	Over 4400 tons averaging more than 60 tons per operative brake—One retaining valve must be used for each 60 tons in excess of 4400 tons but not less than 15 retaining valves must be used.

When use of retaining valves is required these valves must be used starting from head end of train. Tonnage per operative brake must not exceed maximum of 70 tons.

Additional retaining valves must be used when in the judgment of the engineer and conductor their use is necessary to control speed of train.

- (c) Dynamic brake must be tested for proper operation before passing summit of grade and if one or more units have inoperative dynamic brake, train must be stopped immediately and retaining valves set up in accordance with paragraph (b) of these instructions. If less than 2 units have operative dynamic brake, the dynamic brakes must not be used and paragraph (a) will govern.

4. (Continued)

(d) During test and before passing summit of grade, the fireman must make inspection of each unit of the locomotive to determine if dynamic brake is operating properly and report results of inspection to the engineer and will make frequent inspections thereafter while descending grade.

5. **At Culver**—To afford vehicular traffic additional protection when passing over road crossing just east of depot, train and engine crews passing over this crossing will be governed by the following:

(a.) Cars shall not be left spotted on siding closer than 100 feet from the crossing on either side.

(b.) Engineers will provide adequate warning to drivers of vehicles by standard whistle and bell signals in all cases.

(c.) There must be no failure on the part of train crews to provide adequate on-the-ground protection during all switching movements.

6. **At Redmond**—Dropping cars over Ochoco Highway crossing is prohibited. When performing switching service on the Dant and Russell Spur cars must not be left foul of bonded circuit governing operation of the flashing light crossing signals installed at this crossing.

7. **Impaired Clearance—**

At Madras—Concrete curbing enclosing loading platform paralleling house track full length of seed cleaning plant of The Pacific Supply Co-operative affords close clearance when riding on footboards of engines or on sill steps of cars and/or engines.

8. **Engine Restrictions—**

At Madras—Engines U. P. 7000 Class not permitted on Oil spur and Government spur tracks.

Engine classes DE6000 and 6400 H. P. not permitted on the Oil spur at Madras, or on the Standard Oil, Pine Tree, Haines, Aune, Associated Oil, Gas, Drill and Mill spurs at Bend.

PORTLAND DIVISION

FIRST AND SECOND SUB-DIVISIONS

(PORTLAND-SEASIDE-POINT ADAMS)

1. **At Willbridge**—Eastward trains when waiting to enter double track, will remain a sufficient distance west of Chipman Street in order for motorists using crossing to have ample visibility of trains approaching from the east on the westward main track.

2. **At United Junction**—Spring switch, normal position for Third Subdivision.

3. **At Clatskanie**—To afford vehicular traffic additional protection when passing over road crossing adjacent to depot, train and engine crews operating over this crossing will be governed by the following:

(a.) Cars shall not be left spotted on trackage closer than 125 feet from the crossing on either side.

(b.) Engineers will provide adequate warning to drivers of vehicles by standard whistle and bell signals in all cases.

(c.) There must be no failure on the part of train crews to provide adequate on-the-ground crossing protection during all switching movements.

4. **At Astoria**—During hours telegrapher is on duty, trains must secure Clearance Form A before proceeding.

5. **At Warrenton**—Normal position of switch is for First Sub-division.

6. **Impaired Clearance—**

At Astoria—Overhead crossing over port dock tracks leading from Pier 1 to Pier 3 has but 17 feet clearance from top of rail. Trainmen must use care when switching in this area.

7. **Bridge and Engine Restrictions—**

Engines heavier than Class DE single units of 1600 H.P. not permitted west of Astoria.

THIRD SUB-DIVISION

(UNITED JCT.-KEASEY)

1. **At United Junction**—Spring switch, normal position for Third Sub-division.

2. **At River Junction**—Normal position of switch is for Third Sub-division.

3. **At Bowers Junction**—Spring switch, normal position for O. E. Ry.

4. Trainmen in charge of trains handling logs must step out on rear platform of caboose occasionally, particularly during night hours, and, with the aid of an electric lantern, observe if there are any new marks on ties and keep a sharp lookout for logs which may have fallen off cars in their train.

5. **Eastward trains** will stop at Tunnel Spur and turn up retainers and stop at United Jct. and turn down retainers.

6. **Impaired Clearance—**

At Haydite—Account proximity of shale bluff, clearance is less than standard between switch and clearance point on east end.

OREGON ELECTRIC RAILWAY

(BOWERS JCT.-EUGENE)
(ALBANY-DOLLAR-FOSTER)

1. **At Any Station**—Cars handled in trains or by yard engines in city streets must have air cut in and operative, except when actually switching.

2. **At Portland**—Cars spotted on city streets must be protected by two red lights on each end of end car.

Cars exceeding an outside length of 51 feet and 9 inches must not be handled around heavy curvatures at Pettygrove and Nicolai Streets on 22nd Avenue.

3. **Instructions Governing Absolute-Permissive Block System Operation over S. P. Co. Track Between Greton and Beburg**—

Absolute signal located 306 feet east of Beburg junction switch and 225 feet west of Greton junction switch govern westward and eastward movements from Oregon Electric trackage.

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

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 trackage. 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 trackage. 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.

Spur track at Fanno is equipped with double switch indicator and dwarf light signal 7775.

Telephone in booth at Beburg and Greton connected with both O. E. and S. P. dispatcher's offices by means of two-way switch.

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 lights 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, handle such cars separately.

Eastward trains handling logs on flat cars will stop and make inspection of all such loads, and know before proceeding that logs are riding properly for safe movement through the City of Salem.

5. **At Salem and Albany**—Trains and engines, moving on Front Street, Salem, must stop before crossing S. P. Co. trackage at Trade, Cheme-keta, Union and Division Streets, and at all three crossings with the S. P. Co., on Water Street, Albany, and not proceed until flagman has been sent ahead and proceed signal received from him.

6. **At Albany**—Normal position of Junction switch is for Third Sub-division.

During hours telegrapher is on duty, trains must secure Clearance Form A before proceeding.

7. **At Eugene**—Trains and engines will stop before passing over West Fifth Street at its intersection with Blair Boulevard.

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

O. E. Ry. trains between Albany and Lebanon will cross S. P. main track through crossovers 300 feet west of Signal 6915; being governed for westward movement by indication of dwarf Signal 6913 located at derail on O. E. Ry. track; and will use Albany and Page sidings between Albany and Tallman Branch junction switch at Page; but must comply with Rules 93 and 842. When no yardmaster or representative present must comply with Rules 83 and 83(C), eastward O. E. Ry. trains obtaining check of register at Albany station, and westward O. E. Ry. trains obtaining check of register by telephone from S. P. Co. operator at Albany, before fouling S. P. Co. main track. Check of register received by telephone must be repeated for verification.

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

O. E. Ry. Co. 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. Co. 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.

9. **At Lebanon**—O. E. Ry. junction switch located at S. P. Co. MP 688.9 is protected by Signals 6889 and 6891 located near clearance points and Signal 6888 approximately 1500 feet west of junction switch.

Normal position of switch is for movement on S. P. main track with derail on O. E. Ry. track in derailing position. Normal indication of signals on S. P. track is "proceed" and signal on O. E. Ry. "stop."

When switch indicator located at derail indicates block clear, derail and switch may be lined for movement to S. P. track and when so lined, and block is clear, signal on O. E. Ry. will change to proceed. If signal does not change to proceed, be governed by Rules 509 and 99.

When operator is on duty at Lebanon, O. E. Ry. trains will obtain permission from operator before entering S. P. main track.

10. **When operating over Southern Pacific Co. trackage**, strict compliance must be observed of Southern Pacific Company Air Brake Rules and Regulations.

Oregon Electric employees operating over joint trackage of the Southern Pacific Company who carry standard watches and who fully comply with S. P. & S. Ry. Co. watch comparison and cleaning regulations will be considered as having complied with Southern Pacific requirements.

11. Trainmen in charge of trains handling logs must step out on rear platform of caboose occasionally, particularly during night hours, and, with the aid of an electric lantern, observe if there are any new marks on ties and keep a sharp lookout for logs which may have fallen off cars in their train.

At Tualatin—Trains handling logs will stop and inspect train for projecting logs before passing under S. P. Co. overhead bridge 35.8 and over Tualatin River bridge 35-3.

At Bridges 89-0, 99-9 and 126-1—Conductors of trains handling logs must personally know that such cars are safe to move without loss of lading before passing over bridges.

12. Impaired Clearance—

At Portland—United Supply Company spur located in the Industrial Center Addition and all tracks in the Hoyt Street Yard except Nos. 1, 2, and 3 in Middle Yard have impaired horizontal clearance and will not clear a man on side of car.

At Albany—S. P. Co. overhead bridge, State Highway bridge and S. P. Co. siding all on Water Street, will not clear a man on top of high car.

Bridge 35.3 Tualatin River, one mile east of Tualatin.

ALL SUB-DIVISIONS

1. Rule 83(B) will not apply at initial stations which are not telegraph stations, and at telegraph stations except during office hours, if train order signal is in clear position.
2. Whistle signal 14(K) must be sounded when passing track and bridge crews.
Whistle signal 14(L) must be sounded when approaching trackmen and others working on the track to give adequate warning of approach of train.
3. Careless handling of lighted fuses must be avoided to eliminate hazard of starting grass fires on or off the right of way. Fuses and torpedoes must not be placed in coach lockers account of hazard. Torpedoes must not be attached to any part of the inside of engine cabs, Caboose railings or lanterns and must at all times be kept in proper containers.
4. Car loads of cigarettes and whiskey must be placed in trains next ahead of caboose where they can be watched by trainmen.
5. When blocking trains as prescribed by Rule 91(A), at which time orders are held for a train in either direction, operators must not clear either signal until the orders have been delivered. Clearance issued by authority of the train dispatcher must be handed up to the train for which there are no orders.
6. Dropping cars into tracks on which there are occupied outfit cars is prohibited.
7. When necessary to set out equipment due to hot journal, be sure that all traces of fire are extinguished and journal box properly marked.
8. Open cars loaded with rail must not be handled next to caboose or directly behind engine if the consist of the train permits handling in another location. Open cars of lumber and piling must not be handled directly behind engine when it can be avoided. Open cars loaded with ballast or fines must not be handled next to caboose if consist of train permits handling in another location.
9. Pusher engines must not push on cabooses not equipped with steel center sills.
When a deadhead caboose is handled in a train, either empty or occupied, it must not be placed next to engine if there are other cars in train which can be placed ahead of such caboose.
Trainmen must not blow backup whistle on cabooses of freight trains unnecessarily account resulting in brakes sticking on rear of such trains.
10. Sign reading: "Impaired Clearance" placed on switch stand or entrance of spur or siding indicates there are platforms or structures located along track which do not provide minimum horizontal clearance. Employees will use care and avoid risk of injury while working on spurs or sidings protected with "Impaired Clearance" signs.
11. In column on time table marked "Car Capacity," suffix letters E or W indicates the end of track at which switch is located.
12. Trains must not pass under overhead crossing of logging roads while log train is passing over the crossing.
13. During the winter season when weather conditions are foggy or obscured to the extent that trains cannot be fully inspected while running, stop must be made approximately every 35 miles for inspection.
14. Whenever descending grades require the use of retaining valves, trains will stop at 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.
15. 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.

16. When dining cars or other non-platform cars are placed on rear of passenger trains, in addition to keeping the flexible gate closed and fastened in place, the rear door of car must be kept locked.
17. Under Rule 2 of the Consolidated Code of Operating Rules, watches that have been examined and certified to by a designated inspector must also be used by all officers and following employees: Train dispatchers and yardmen.
18. At points where yard engines are employed, Yardmasters and Engine Foremen will record on Form 1208 "DAILY YARDMASTER AND ENGINE FOREMAN WATCH COMPARISON REPORT," a comparison of their watch made with a standard clock before commencing each day's work in compliance with Rule 3 of the Consolidated Code of Operating Rules.
19. As provided by Rule 8(A), the use of electric flagging lanterns equipped with red globes is authorized for displaying red light for signalling purposes.
20. When foreign-line trains or engines are detoured and foreign-line power is used in such movements, the tenant-line engineer will in all cases handle the locomotive under the supervision of the engineer pilot.
21. Telephones located in booths, boxes and freight houses must have switch cut out after using and must be kept secured by lock except when being used.
22. **Electric Switch Locks**—To operate, open door of electric switch lock and push the button. This will start operation of clock release, which will run down in three minutes and, at the end of that time, switch can be unlocked by moving lever to the left. Restore lock lever, close and lock doors of electric locks and release boxes when switches are restored to normal position.
23. **Notice to Crews of Cars containing Explosives in Freight Trains or Mixed Trains**—

At all terminals or other places where trains are made up by crews other than road crew accompanying the outbound movement of cars, the railroad shall execute a consecutively numbered notice showing the location in the freight train or mixed train of every car placarded "Explosives." A copy of such notice shall be delivered to the train and engine crew and a copy thereof showing delivery to the train and engine crew shall be kept on file by the railroad at each point where such notice is given. At points other than terminals where train or engine crews are changed, the notice shall be transferred from crew to crew.

Switching Cars Containing Explosives or Poison Gas—

A car placarded "Explosives" or "Poison Gas" shall not be cut off while in motion nor shall be coupled into with more force than is necessary to complete the coupling. No car moving under its own momentum shall be allowed to strike any car placarded "Explosives," or "Poison Gas."

When transporting cars placarded "Explosives" in terminals, yards, side tracks, or sidings, such cars shall be separated from engine by at least one non-placarded car.

Closed cars placarded "Explosives" shall have doors closed before they are moved.

Switching of Cars Containing Dangerous Articles—

In switching operations where use of hand brakes is not necessary, a placarded loaded tank car, or a cut of cars, which includes a placarded loaded tank car shall not be cut off until the preceding car or cars clear the ladder track and the cut of cars containing the placarded loaded tank car, or a placarded loaded tank car shall in turn clear the ladder before another car is allowed to follow.

In switching operations where hand brakes are used, it shall be determined by trial that a car placarded "Dangerous" or that a car occupied by a rider in a cut of cars containing a car placarded "Dangerous" has its hand brakes in proper working condition before it is cut off.

Placement of Freight Cars Containing Explosives, in Yards, on Sidings, or Sidetracks—

Cars placarded "Explosives" shall be so placed that they will be safe from all probable danger of fire. Freight cars placarded "Explosives" shall not be placed under bridges or overhead highway crossings, nor in or alongside of passenger sheds or stations except for loading or unloading purposes.

23. (Continued)

Position in Train of Cars Containing Explosives—

In a freight train or a mixed train either standing or during transportation thereof, a car placarded "Explosives" shall, when length of train permits, be placed not nearer than the sixteenth car from both the engine or occupied caboose, except:

When the length of freight train or mixed train will not permit it to be so placed, it shall be placed near the middle of the train;

When transported in a freight train made up in "blocks" or classifications, a car placarded "Explosives" shall be placed near the middle of the "block" or classification in which moving, but not nearer than the sixth car from both the engine or occupied caboose;

When transported in a freight train or a mixed train performing pickup and/or setoff service, it shall be placed not nearer than the second car from both the engine or occupied caboose, unless otherwise provided.

In a freight train or a mixed train either standing or during transportation thereof, a car placarded "Explosives" must not be handled next to:

1. Occupied passenger car, other than gas handlers accompanying shipment.
2. Occupied combination car, other than gas handlers accompanying shipment.
3. Any car placarded "Dangerous."
4. Engine.
5. Any car placarded "Poison Gas."
6. Wooden underframe car (except on narrow gauge railroads).
7. Loaded flat car.
8. Open-top car when any of the lading extends or protrudes above or beyond the ends of sides thereof.
9. Car equipped with automatic refrigeration of the gas-burning type.
10. Car containing lighted heaters, stoves, or lanterns.
11. Car loaded with live animals or fowl, occupied by an attendant.
12. Occupied caboose unless otherwise provided.

Position in Train of Loaded Placarded Tank Cars—

In a freight train or a mixed train, except a train consisting entirely of placarded loaded tank cars and as provided otherwise a placarded loaded tank car shall when the length of the train permits, be not nearer than the sixth car from the engine, occupied caboose or passenger car.

When the length of the freight train or mixed train will not permit it to be so placed, it shall be not nearer than the second car from the engine, occupied caboose or passenger car.

When transported in a freight train engaged in "pickup" or "setoff" service, a placarded loaded tank car shall be not nearer than the second car from both engine or occupied caboose.

In a freight train or mixed train either standing or during transportation thereof, a placarded loaded tank car must not be handled next to:

1. Occupied passenger car, other than gas handlers accompanying shipment.
2. Occupied combination car, other than gas handlers accompanying shipment.
3. Any car placarded "Explosives."
4. Engine (except when train consists only of placarded loaded tank cars).
5. Any car placarded "Poison Gas."
6. Wooden under-frame car.
7. Loaded flat cars.
8. Open-top cars when any of the lading extends or protrudes above or beyond the ends or sides thereof.
9. Car equipped with automatic refrigeration of the gas-burning type.
10. Car containing lighted heaters, stoves, or lanterns.
11. Car loaded with live animals or fowl, occupied by an attendant.
12. Occupied caboose (except when train consists only of placarded loaded cars).

Position in Train of Cars Placarded "Poison Gas" or Containing Poison Liquids Class A—

In a freight train or mixed train either standing or during transportation thereof, a car placarded "Poison Gas" or containing poison liquids, Class A, shall not be next to other freight cars placarded "Explosives" or cars placarded "Dangerous."

Position in Train of Cars Placarded "Explosives" and "Poison Gas" or Containing Poison Liquids When Accompanied by Cars Carrying Gas Handling Crews—

A car placarded "Poison Gas" or containing poison liquids Class A in drums, tanks or bombs, or a car placarded both "Explosives" and "Poison Gas" shall at all times be next to and ahead of the car occupied by gas handling crews, accompanying such car.

Cars Containing Explosives or Poison Gas and Tank Cars Placarded "Dangerous" in Passenger or Mixed Trains.

Cars containing explosives, Class A, poison gases or liquids, Class A, and tank cars requiring "Dangerous" placards shall not be transported in a passenger train. Such cars may be transported in mixed trains but only at such times and between such points that freight train service is not in operation.

Cars containing explosives, Class A, poison gases or liquids, Class A, and tank cars placarded "Dangerous" shall not be transported next to occupied cabooses or cars carrying passengers in mixed trains unless otherwise provided.

When a car containing explosives, Class B, or dangerous articles other than explosives requiring labels (not including Class A poison gases or liquids) is moved in a mixed train and such car is not occupied by an employee of the carrier, placards must be applied to the car as required by these regulations.

In a freight train or mixed train either standing or during transportation thereof, a car placarded "Dangerous—Class D Poison" must not be handled next to cars placarded "Explosives" or next to carload shipments of undeveloped film.

24. Instructions to Engine and Train Crews to Prevent Hazards from Dangerous Gases in the Event of Diesel Locomotives Stopping in Tunnels.

Dangerous gases, not readily detected even in dangerous quantities, are present in exhaust from Diesel locomotives, Clarkson steam generators and engines of the Waukesha air conditioning equipment, which if in sufficient concentration could result in incapacitation or fatalities. In the event that a Diesel locomotive is stopped in a tunnel, with indications of remaining in tunnel for an unusual period, the Diesel engine must be promptly shut down and the Clarkson steam generator shut off. Passenger cars equipped with Waukesha air conditioning must have both the ice engine and engine generator shut off, fresh air intakes must be closed and circulating fans shut off.

Prevailing conditions should be carefully considered as such action may not be necessary where exhaust from Diesel engines and steam generators is being carried away from train by air currents, but the first consideration must be for the safety of passengers and crew members and dispatchers should be notified immediately so that arrangements can be made for the protection of passengers and equipment.

When Diesel propulsion engines are shut off air brakes must be fully applied and sufficient hand brakes applied throughout train to insure against any movement in the event air brakes leak off.

During freezing weather cooling water must be drained from the Diesel locomotive to prevent freezing and damage to the engine.

25. Do not throw tinfoil, cigarette or gum wrappers, or any package containing tinfoil on the floor in the cabs of electric or Diesel engines. By doing so, this material is drawn into the air ducts and lodges in the electric or Diesel machinery which results in a short and damage to the machines.

Fire extinguishers on diesel-electric locomotives must not be used for any other purpose than that for which they are intended.

Trainmen riding in cab end of Diesel-electric Units must keep their hands and feet off of instrument panels and brake equipment to avoid damage to same as well as the placing of braking equipment in some undesired position which would result in hazard.

Engineers handling freight trains with multiple unit diesel-electric engines, when stopping for any purpose, will not proceed until head brakeman has returned to engine account of hazard in walking over top of train after train has started.

Train and engine crews or any member thereof in deadhead service are prohibited from diesel-electric locomotives which handle the train on which they deadhead.

Where multiple-unit diesel-electric locomotives are used in freight service, both the fireman and head brakeman shall not be absent at the same time from the leading cab when train is under way on main track between stations.

Where diesel-electric multiple-unit engines are used to handle main line through passenger trains making few or no stops, the fireman will remain in the cab at all times while the train is in motion.

To avoid possibility of fire or damage to traction motors, diesel-electric engines must not be permitted to pass over or to stand on cinder pits containing live fire or hot cinders.

Under no circumstances should diesel-electric engines pass through water which is deep enough to touch the bottom of the traction motor frame. When passing through water, movement must always be at very slow speed (2 to 3 MPH).

When necessary to doublehead a diesel-electric engine with a steam engine, except in case of emergency, the steam engine must be placed behind the diesel engine.

Diesel electric engines when operating with multiple units and having a different engine number on the head and rear operating units, will display engine number indicator lights on the lead unit only.

26. On Diesel road engines consisting of one or more units in freight and passenger service, the following will govern in the event of emergency:

In the event that enginemen observe Diesel engine emitting fire, smoke or water; or in the event of derailment, fire in one of the units; or broken connecting rod or other rotating part in the one of the engines causing excessive pounding, the enginemen should immediately shut down all the engines from the operating position in the engineer's control station in the cab. This can be done on EMD road engines by pushing the button at the end of the throttle handle with the thumb and then moving the throttle forward to the farthest position, and on American-type locomotives by pushing the red emergency stop button on the control stand. On both types of locomotives the fuel pump switch at the control box should be pulled; and in the event of fire the emergency fuel cut-off valve cord should be pulled.

If there is any doubt as to what is occurring in the trailing cabs, all the units should be shut down from the operating cab as stated above and details investigated when the train has stopped.

In the event of a fire in the engine, fire fighting equipment should be operated in accordance with the instructions mounted in each engine cab.

27. On locomotive, tender and freight car wheels, flat spots two and one-half inches or longer, or if there are two or more adjoining spots each two inches or longer; and on passenger train equipment one inch or longer, are condemnable, and when discovered in train, conductor and engineer must immediately report to chief dispatcher and be governed by his instructions.**28. Streamliner cars are equipped with diaphragm full width of the car and there is no clearance between the ends of these cars when coupled. Employes must stay entirely in the clear while these cars are being switched or coupled.**

To couple a conventional coupler with a streamlined passenger car equipped with tight lock coupler, knuckle of the tight lock coupler must be closed and lock block down in its proper locked position before coupling is attempted.

The slightest accumulation of snow, ice or dirt on contact surfaces of knuckles, knuckle locks and coupler body, will prevent lock blocks from dropping into locked position. Therefore, it is necessary to see that all of the contact surfaces are clean and free of snow, ice and dirt before attempting to make a coupling.

29. On the Terminals, First, Second and Third Subdivisions of the Vancouver Division, advance warning reduce speed signs set in an upward angle of 45 degrees are located 4500 feet in advance of the slow boards and indicate by figures the permissible speed. Slow boards, hexagon shaped, are located at the beginning of the restricted territory and also indicate by figures the permissible speed through the restricted area. On the Oregon Trunk Railway advance warning reduce speed signs are located 3000 feet in advance of the slow boards. On all other sub-divisions of the S. P. & S. system, advance warning reduced speed signs are located 1500 feet in advance of the slow boards. Resume speed signs bearing the letters "RS" or colored green without any lettering indicate the end of the restricted territory.

30. **Use of Mars Headlight on Engines so Equipped—**

The Mars headlight can be displayed with either stationary or oscillating white light at the same time that the standard headlight is in use, but cannot be displayed with either stationary or oscillating red light when the standard headlight is in use.

The Mars white light may be used in a stationary position as a substitute headlight in case of failure of the standard headlight, but will normally be used as an oscillating light during the time full display of standard headlight is required. The Mars oscillating red light will be used when head end protection is required, either by day or by night by engineer control, if the train becomes disabled or is stopped suddenly due to unusual occurrence with the possibility of an adjacent track being obstructed, or if it overruns the clearance point at a meeting or waiting point, or at the end of double track or at a junction, or in any other emergency situation.

The engineer of an approaching train, finding oscillating red light displayed, must stop and then be governed by conditions existing. If on an adjacent track which he finds unobstructed and safe for operation, he may proceed at restricted speed until the standing train displaying the oscillating red light has been passed. The Mars red light will be displayed in stationary position when a train is occupying the main track at a meeting point with an opposing train until the headlight of the opposing train has been dimmed, per Rule 17(B), after which the red headlight will be extinguished and the standard white headlight turned on dim until opposing train is into clear on siding.

The use of the red headlight does not in any manner relieve the train or engine men of responsibility for compliance with the provisions of Rules 99 and 102.

31. During or following snow storms or violent wind storms, spring switches should be examined before heading in or out through the switch in facing or trailing movement, to be sure that the switch is in proper operating condition.

During severe storms and circumstances are such that trackmen are not stationed at spring switches to be sure that they are kept clear of ice or snow, the crew of a train must know that the switch is in proper operating condition before heading in or out through it.

32. Except in case of fog, storms, or otherwise bad weather, yellow signals may be used, without flagmen, when placed as prescribed by Rule 10(h) to indicate approach to a red signal, on the subdivisions shown below:

Vancouver Division

Fourth Sub-division (Goldendale Branch).

Portland Division

Second Sub-division.

Third Sub-division only between Bowers Jct. and Keasey.

Oregon Electric Ry.

Second, Third and Fourth Sub-divisions;

and also in special cases on other districts authorized by the Superintendent when protected by train order.

33. Provisions of fourth paragraph of Rule 854 of the Consolidated Code of Operating Rules and General Instructions are applicable within as well as outside of yard limits regardless of whether or not there are first class trains in the same direction due or overdue.

This means that regardless of location, when a passenger train stops even though momentarily, the flagman properly clothed and with necessary flagging equipment must appear on the ground and if time permits, at the rear of the rear car prepared to provide protection.

34. Where automatic block and interlocking rules and signal indications require movement at restricted speed, such movement must be made prepared to stop short of train, obstruction or switch not properly lined and be on the lookout for broken rail or anything that may require the speed of a train to be reduced but a speed of 15 MPH must not be exceeded.

The definition of restricted speed as designated on Page 8 of the 1945 Edition of Consolidated Code of Operating Rules will continue to apply, except where automatic block and interlocking rules and signals govern as specified above.

35. **Dragging Equipment Detector Indicator** consists of a single white light unit (normally dark) with circular background mounted on signal or other mast. When white light is displayed, train must be stopped and inspected for dragging equipment. Notify Superintendent from first available point of communication.

36. **Operating Rule 923** is amended as follows:

Engineers must not permit any unauthorized person to handle the locomotive. The Fireman, when competent, may handle the locomotive when in road-freight, and yard service under the supervision of the engineer, the engineer being responsible. The fireman must not be permitted to handle the locomotive when in road-passenger service, except in emergency.

37. **Signal Overlap Signs** installed near center of sidings at certain stations govern trains in a specified direction. When trains meet at these stations, no part of train or engine occupying main track shall pass overlap sign until opposing train has entered siding. Crews of trains occupying siding in the governing direction of the overlap, must not open leaving switch until rear of opposing train has passed overlap.

38. **Tunnel Locations—**

Vancouver Division—First, Second and Third Subdivisions—

	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. 14—5.1 miles west of Farrington.....	203 ft.
No. 15—2.5 miles west of Farrington.....	331 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 Ry.—

No. 1—1.4 miles west of Moody.....	814 ft.
No. 2—3.4 miles west of Sherar.....	810 ft.
No. 3—0.5 miles west of Dant.....	519 ft.
No. 4—0.6 miles east of Davidson.....	584 ft.
No. 5—1.8 miles west of Gateway.....	542 ft.

Portland Division—First Subdivision—

No. 1—1.2 miles east of Mayger.....	188 ft.
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Portland Division—Third Subdivision—

No. 1—1.0 mile west of Tunnel Spur.....	4,103 ft.
No. 2—0.3 mile west of Top Hill.....	303 ft.

39. Location, Capacity and Facilities of Stockyards—

Vancouver Division—			
Location	No. of Pens	Capacity in Cars	Facilities
Wishram.....	6	20	Water
Roosevelt.....	4	10	Water
Alderdale.....	1	1	None
Whitcomb.....	2	4	None
Paterson.....	2 cattle 3 sheep	5 20	None
Plymouth.....	2	4	Water
Kennewick.....	1 cattle 1 sheep	2 8	None
Pasco.....	27	40	Water
Harder.....	2	5	None
Washtucna.....	2	2	Water
Hooper.....	2 cattle 1 sheep	2 4	Water
Ankeny.....	2	2	None
Benge.....	2	2	Water
Macall.....	2	2	None
Rockwell.....	2	4	None
Lamont.....	1	2	None
Rodna.....	2	5	None
Centerville.....	1	2	Water near

Oregon Trunk Ry.—

Maupin.....	1	2	{ Water & Feed Racks
Kaskela.....	1	1	None
South Junction.....	4	10	Water
Gateway.....	4	12	Water
Madras.....	4	12	Water
Redmond.....	4	8	{ Water & Feed Racks
Deschutes.....	2	4	Feed Racks
Bend.....	7 cattle 2 sheep	15 5	{ Water, Feed Racks & Scales

Portland Division—

Quincy.....	1	1	Water
Clifton.....	Portable Chute		None

Oregon Electric Ry.—

Albany Yard.....	4	5	Water
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40. Bulletin Stations—

Portland	—Union Station telegraph office. Roundhouse. Yard office.
Vancouver	—Telegraph office and roundhouse. Yard office (yard men only).
Wishram	—Telegraph office and roundhouse.
Bend	—Telegraph office and roundhouse.
Goldendale	—Telegraph office.
Pasco	—Passenger Station telegraph office. Roundhouse.
Spokane	—G. N. passenger station.
Hillyard	—Yard Office and Roundhouse.
Astoria	—Depot.
Seaside	—Depot.
Salem	—Depot.
Albany	—Yard Office and Round House.
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
Zell Brothers.....	800 S. W. Morrison, Portland
N. L. Nielsen.....	31 N. Russell St., Portland
W. L. Runyan.....	Vancouver
J. Dressell.....	Goldendale
Robt. G. Tyack.....	The Dalles, Ore.
Craters Jewelry.....	Pasco
Swanson Jewelry Co.....	No. 9, Washington St., Spokane
Bob's Jewelry.....	5101 North Market St., Hillyard
Archie A. Symons.....	Bend
Loop-Jacobsen.....	Astoria
Hinson's Jewelry.....	Seaside
L. H. Mason.....	St. Helens
Stevens & Son.....	339 Court Street, Salem
F. M. French & Sons.....	Albany
Seth Laraway.....	Eugene
W. E. White.....	Sweet Home
Kullander's Jewelry Store.....	Vernonia

42. Standard Time Clocks—

Portland —Union Station telegraph office.
 Roundhouse and Yard Office.
 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.

F. S. BARLOW, JR., Assistant Superintendent
 C. F. CROFFUT, Trainmaster
 R. G. HASKELL, Trainmaster
 H. J. TIERNEY, Trainmaster
 H. J. WASSENAR, Trainmaster
 A. R. WINN, Chief Dispatcher
 J. A. CANNON, General Superintendent Motive Power
 C. E. BARNES, Master Mechanic
 L. J. FITZGERALD, Traveling Engineer
 A. C. ANDERSON, Traveling Engineer
 L. Z. DANIELS, Traveling Engineer

CLEARANCE TABLE

	HEIGHTS ABOVE TOP OF RAIL											GOVERNING STRUCTURE		
	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' 4"	18' 3"	17' 9"	17'	Willamette River Bridge
Vancouver—Spokane.....	20'	20'	19' 6"	19' 6"	19' 6"	19'	19'	18' 6"	18'	18'	17' 6"	17'	16'-6"	Columbia River Bridge
Lyle—Goldendale.....	20'	20'	19' 6"	19' 6"	19' 6"	19'	19'	18' 6"	18'	18'	17' 6"	17'	17'	All Tunnels
Wishram—Bend.....	20'	20'	20'	20'	19' 9"	19' 6"	19' 3"	19'	18' 9"	18' 6"	18'	17' 6"	17'	None
Portland—Holladay.....	18' 6"	18'	17' 6"	17'	17'	16' 6"	16' 6"	16'	15' 9"	15' 6"	15'	14'	—	All Tunnels
Warrenton—Point Adams.....	20'	20'	20'	19'	19'	19'	19'	19'	18'	18'	18'	18'	18'	Mayger Tunnel
O. E. Ry.—S. P. & S. Portland Yard Limits	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	18'	—	None
Forest Grove Jct.—Forest Grove.....	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	19'	18'	—	Track Centers
Bowers Jct.—Eugene.....	16'	16'	16'	16'	16'	16'	16'	16'	16'	16'	16'	16'	16'	None
Lebanon—Dollar.....	19'	19'	19'	19'	19'	19'	19'	18' 6"	18'	18'	18'	17'	16'	Tualatin S. P. Overhead
Orengo—Bowers Junction.....	19'	19'	19'	19'	19'	19'	19'	18'	18'	18'	18'	18'	18'	None
United Junction—Manning.....	19'	19'	19'	19'	19'	19'	19'	18' 6"	18'	17' 6"	17'	17'	—	Cornelius Tunnel
Manning—Keasey.....	19'	19'	19'	19'	19'	18' 6"	18' 3"	18'	17' 9"	17' 6"	17'	16'	—	Tophill Tunnel

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

SUB-DIVISION	VANCOUVER DIVISION District	Ruling Grade %	CLASS OF ENGINE										
			O-3 O-4	Z-6 Z-8	E-1	N-2 Sup.	DE 1500 1600	DE 3000	DE 4500	DE 6000 6400 Car Limit			
Oregon Trunk—Eastward	Wishram to South Junction	.6	3200	6000			2500	4400	6500	Car Limit			
	South Junction to Madras	1.5	1400	2400			1100	2200	3300	4600			
	Madras to Bend	1.0	2200	3820			1600	3200	4600	6000			
	Bend to Wishram	Down											
Oregon Trunk—Westward	Vancouver to Pasco	.2	6600	9000	8000		3500	6000	Car Limit				
	Pasco to Vancouver	Down											
First and Second—Eastward	Pasco to Mock	.4	3200	7050	4500		2000	4000	6000	8000			
	Mock to Ft. Wright	Down											
Third—Westward	Ft. Wright to Hillyard	1.0	1800	3950	2400		1600	3200	4800	6400			
	Hillyard to Ft. Wright	Down											
	Ft. Wright to Mock	1.0	1800	3820	2400		1600	3200	4800	6400			
	Mock to Pasco	Down											
Fourth—Eastward	Lyle to Goldendale	2.2					800						
	Goldendale to Lyle	Down											

LOCOMOTIVE TONNAGE RATINGS

SUB-DIVISION	OREGON ELECTRIC District	Ruling Grade	CLASS OF ENGINE										
			N-2 Sup.	DE 1000	DE 1500 1600	DE 1600 M.U.	DE 2000	DE 2500	DE 3000 4000 8000	DE 3800 6700			
First—Westward	Bowers Jct. to Tualatin	Down											
	Tualatin to Tonquin	1.1	1600	1600	2000	4200							
	Tonquin to Wilsonville	Down											
	Wilsonville to West Woodburn	1.2	2000	2000	2500	5200							
	West Woodburn to Eugene	.4	4000	3000	4000	8000							
	Eugene to Salem	.4	4000	3000	4000	8000							
	Salem to Wilsonville	1.0	3800	2800	3800	6700							
	Wilsonville to Bowers Jct.	1.0	1850	1600	2000	4200							
	Forest Grove Jct. to Forest Grove	1.0		1600	2000								
	Forest Grove to Forest Grove Jct.	Down											
Second—Westward	Albany to Sweet Home	2.0	1850	1600	1850	3700							
	Sweet Home to Albany	Down											
	Sweet Home to Dollar	2.34	750	550	750	1500							
	Dollar to Sweet Home	1.75	1050	850	1050	2100							

LOCOMOTIVE TONNAGE RATINGS

SUB-DIVISION	PORTLAND DIVISION District	Ruling Grade	CLASS OF ENGINE									
			N-2 Sup	DE 1000	DE 1500 1600	DE 1600 4000	DE 1600 M.U. 7500	DE 1600 M.U. 7500				
First—Westward	Willbridge to St. Helens	.56										
	St. Helens to Astoria	Down										
	Astoria to St. Helens	.52										
First—Eastward	St. Helens to Willbridge	Down										
	United Jct. to Ban Spur	2.0	950	900	1100	2400						
	Rafton to Ban Spur	2.3	750	700	900	2200						
	Ban Spur to Cornelius Tunnel	1.5	1100	1000	1300	2600						
	Manning to Tophill	2.5	700		800	1600						
	Tophill to Vernonia	Down										
Third—Eastward	Vernonia to Brauns	.8	2500	2200	3000	5000						
	Braun to Tophill	1.5	1100	900	1200	2200						
	Tophill to North Plains	Down										
	North Plains to Cornelius Tunnel	1.0	1850	1600	1800	3600						