

# UNION PACIFIC SYSTEM

OREGON-WASHINGTON RAILROAD &  
NAVIGATION COMPANY

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## Washington Division

### Special Rules No. 2

**Effective Monday,  
April 1, 1935**

Superseding Special Rules No. 1.

*40,000*  
*30,000*

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Employees whose duties are in any way affected  
thereby, must have a copy of these rules with  
them while on duty.

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**M. C. WILLIAMS, Superintendent.**

**F. N. FINCH,**  
General Manager

**G. L. WHIPPLE,**  
General Supt. Transportation

4 (B). Rule 4(A) of the "Rules and Instructions of the Transportation Department" is changed as follows:

"From 24 hours prior to, and for six days after a new time-table takes effect, train dispatchers must deliver to all conductors and enginemen, and at all times to conductors and enginemen of other railroads, newly employed or promoted men, and to men from other subdivisions, a '19' train order reading, 'Acceptance of this order is acknowledgment of receipt of time-table No. . . . . taking effect. . . . . M. . . . . 19. . . . .'"

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

8 (A). Electric lanterns may be used for displaying white light only. Their use for displaying colored lights for signaling purposes is not permitted.

9 (R). Switch lights will not be used on following branch lines:  
Tekoa-Ayer Branch, between Seltice and Winona via Thornton;  
Tucannon-Pendleton Branch, except main track switches in Walla Walla yard;  
Pomeroy Branch;  
Dayton Branch;  
Connell Branch;  
Wallace Branch;  
Enaville Branch;  
Sierra Nevada Branch.

Trains and engines must approach facing point switches on these branches prepared to stop if switch is not in normal position.

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

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

10 (j). Rule 10(f) is hereby amended as follows:

Color	Indication
Purple.	Stop. (Night indication for derail switches on sidings.)

10 (k). That part of Rule 10(g) of the Rules and Instructions of the Transportation, Maintenance of Way, and Signal Departments, reading, "unless a different speed is specified by train order, bulletin or time-table", is changed to read as follows: "unless a different speed is specified by train order, bulletin or Special Rules".

14 (w). Relative to Rules 14(l) and 14(u), instead of starting the first of the long sounds at the whistling post, as required by Rule 14(u), the first of the long sounds will be started at such a point, depending on the speed of the train or engine, that the signal will be completed by ending the last sound immediately before reaching the crossing. The last sound may be prolonged, if necessary, and there must not be too much space between the sounding of the blasts. The duration of the complete signal must not be less than 10 seconds and not much more than 15 seconds.

The sounds of the whistle should be no louder than necessary to give adequate warning to traffic in vicinity of the crossing, thus avoiding unnecessary annoyance to residents.

The engine-bell must be ringing continuously until the engine has passed over the crossing.

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

In yards where yard engines are employed and at stations where switching is being done;

At meeting points, until the train to be met is clear of the main track;

When standing;

On two or more tracks when approaching trains running in opposite direction.

These instructions do not supersede or modify those contained in Rules 17 and D-17.

19 (F). When passenger trains are being switched, the markers must be removed to prevent obscuring the view of the engine men.

26 (A). Blue flag or blue light must in all cases be displayed on the same side of train at each end.

26 (B). When necessary to protect against the moving or coupling into, of certain bad order cars on repair tracks with other cars, some of which it may be necessary to move, a red flag by day and a red light by night must be displayed on such cars to indicate that they must not be moved or coupled into under any circumstances.

These instructions do not change or modify Rule 26 in any way.

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

28 (A). A white indicator board displayed at a station will indicate to trains doing local work that there are cars or LCL freight to be moved.

32 (R). Ordinance of the City of Spokane makes it unlawful for any person operating a locomotive within the city limits to sound the whistle thereof except to prevent accident not otherwise avoidable, or to signal an interlocking plant or to communicate with flagman.

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

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

At Walla Walla, by all trains;

At Spokane, by all westward trains originating at West Spokane;

At Wallula, by all eastward Yakima Branch trains originating at Attalia.

Trains are not required to receive clearance card (Form 2643) as per Rule 83 (A) as follows:

At Attalia, all westward trains;

At N. P. Crossing, all eastward S. I. trains;

At Tucannon, all trains;

At Bolles, all trains;

At Midvale, all trains;

At Turner, all westward trains;

At Enaville, all trains;

At Prichard, all westward trains.

When there is no operator on duty, trains are not required to receive clearance card (Form 2643) as per Rule 83 (A) as follows:

At Hooper Junction, all trains;

At Colfax, Nos. 76 and 378;

At LaCrosse, all trains;

At Sunnyside, all eastward trains;

At Connell, all eastward trains;

At Moscow, No. 379;

At Burke, all eastward trains.

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

At N. P. Crossing, all eastward S. I. passenger trains, but may proceed N. P. Crossing to Spokane Union Station on clear interlocking signal indication at N. P. Crossing, and run with current of traffic, being governed by Special Rule 152 (T).

Trains must register by registering ticket (Form 2642) as follows, when operator is on duty:

At Marengo, Nos. 11 and 12;

At Hooper Junction, Nos. 11 and 12, 251 and 252 or their extras;

At Ayer Nos. 11, 12 and 78;

At Manito, Nos. 77, 78, 90, 91, 92 and 93.

Train registering exceptions:

At Wallula, train register will also serve as train register at Attalia for eastward Yakima Branch trains;

At Zillah, only regular first class trains will register.

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

83 (U). Westward Sixth Subdivision trains and engines may move Attalia to Wallula against or ahead of Yakima Branch first class trains when Signal 2131 at Attalia changes to proceed position.

Westward Yakima Branch trains and engines may move Attalia to Wallula against or ahead of first class trains when Signal 2129 at Attalia changes to proceed position after junction switch is opened.

Westward first class trains at or seen to be approaching the junction at Attalia will have precedence over other westward trains and engines from Attalia to Wallula.

83 (V). Joint Operation of Umapine Spur. Between Prunedale and Umapine and between Prunedale and Johns Spur all trains, engines and motors of the O. W. R. & N. and the W. W. V. Ry. have equal rights in their movement and shall be governed by the following rules:

Between Prunedale and Umapine, O. W. R. & N. conductors will ascertain from agent at Milton whether or not track is occupied. Conductors of trains of either company will pick up staff and register time of departure from Prunedale and upon returning register time of arrival, and leave staff at Prunedale, and no train shall leave Prunedale for movement over the spur when the train register and the absence of the staff show that another train is occupying the track. O. W. R. & N. conductors must notify agent at Milton time of departure and return after each trip.

Between Prunedale and Johns Spur, all trains, yard engines, light engines, electric motors, etc., must proceed under control in both directions at all times. Under control means to be able to stop within one-half distance track is seen to be clear. Should any collision occur in this territory responsibility will rest with the train not under control.

Trainmen must not ride on top of cars while on Umapine Spur.

84 (B). Rule 84(A) of the "Rules and Instructions of the Transportation Department" is changed as follows:

"On freight trains approaching sidings, if everything is all right, the conductor will, if practicable, signal the engineman to proceed. This will be answered by 14(b)."

84 (C). Passenger conductors must get on the ground at all stops, including flag stops and blind sidings, and the conductor must give the proceed signal.

90 (R). At Walla Walla passenger station, No. 78 will use No. 1 side track, daily except Sunday, instead of the main track.

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

Spokane	Thornton	Pendleton	Hooper Jct. (On
West Spokane	St. John	Yakima	Connell Br.)
Cheney	Winona	Zillah	Moscow
Marengo	LaCrosse	Midvale	Pullman
Ayer	Riparia	Sunnyside	Albion
Attalia	Tucannon	Grandview	Olmstead
Wallula	Pataha	Benton City	Watt
Umatilla	Rifton	Kennewick	Plummer
East Spokane	Starbuck	Lowden	Chatcolet
Dishman	Alto	Touchet	Harrison
Manito	Bolles	Pomeroy	Bradley
Fairfield	Prescott	Dayton	Sierra Nevada Spur
Tekoa	Walla Walla	Huntsville	Kellogg-Wardner
Seltice	Milton	Waitsburg	Wallace
Colfax	Bade	Connell	Burke
Endicott	Blue Mountain	Hooper	
Oakesdale	Athena		

93 (S). Joint Operation between Walry and Tausick. Within yard limits extending between Walry and Tausick, all trains, engines and motors of the O. W. R. & N. and W. W. V. Ry. have equal rights in their movement and shall be governed by following rule:

All trains, yard engines, light engines, electric motors, etc., must proceed under control in both directions at all times between Walry and Tausick. Under control means to be able to stop within one-half distance track is seen to be clear. Should any collision occur in this territory, responsibility will rest with the train not under control.

93 (T). Joint Operation at Zillah, Wallula and Huntsville. Tracks of O. W. R. & N. and N. P. within yard limits at Zillah, Wallula and Huntsville are used jointly by both companies for switching purposes. While using N. P. tracks be governed by N. P. Rule 93, which reads as follows:

"Within yard limits the main track may be used, protecting against first class trains. Second and third class and extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear."

93 (U). O. W. R. & N. trains are authorized to cross over N. P. main track at Athena to make switching movements to and from track serving Preston-Shaffer Elevator, and while using N. P. tracks will be governed by N. P. Rule 93, which reads as follows:

"Within yard limits the main track may be used, protecting against first class trains. Second and third class and extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear."

93 (V). Joint Operation at Burke. All trains, yard engines, light engines, etc., of the O. W. R. & N. and N. P. in using joint tracks, must proceed under control in both directions at all times. Under control means to be able to stop within one-half distance track is seen to be clear.

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

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

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

98 (B). Where a train is required to stop at a railroad crossing at grade not protected by interlocking plant or automatic crossing signals, and the view from either side is obstructed more than 200 feet, a member of the crew must precede the train and give proceed signal from the crossing, if safe to proceed, and the train must not proceed over the crossing until the proceed signal has been received.

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

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

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

Location	Railroad Crossed, or, Junction With	Trains Which Have Precedence	How Governed
Pendleton.	Oregon Division.		Westward movements from Washington Division may be made on Oregon Division between junction and depot without protecting against first class trains, provided Home Block Signal 2165 changes to proceed position after junction switch is opened. When Home Block Signal 2165 fails to so change, Oregon Division main track must not be occupied until flagman has been sent in each direction on that track a sufficient distance to insure full protection.
Umatilla. (M.P. 183.9)	Oregon Division.		Oregon Division trains will stop clear of the junction switch connecting east leg of wye and Washington Division main track, until it has been ascertained whether all Washington Division trains due which are superior or of the same class have arrived or left. If a train is seen approaching in either direction on the Washington Division main track, switch must not be opened or Washington Division main track occupied until approaching train has stopped or passed.
Attalia. (M.P. 212.2)	N. P.	N. P. except passenger trains have precedence over all freight trains.	Automatic Crossing Signals.
Attalia. (M.P. 212.8)	N. P.	N. P. except passenger trains have precedence over all freight trains.	Automatic Crossing Signals.
Ayer. (M.P. 264.0)	Sixth Sub-division and Tekoa-Ayer Branch.	Westward first class trains seen to be at or approaching junction will have precedence over other westward trains or engines from junction to depot.	Westward trains and engines are not required to comply with Rule 83 at junction, and movement from junction to depot may be made if signal governing the route being used indicates "proceed". When such signal fails to indicate "proceed", movement may be made under protection of flagman as required by the rules.

Location	Railroad Crossed, or, Junction With	Trains Which Have Precedence	How Governed
Spokane. (M.P. 163.3)	N. P. S. C. & P.		Interlocking plant.
Farmington. (M.P. 103.2)	N. P.	N. P. except passenger trains have precedence over all freight trains.	Gates. Set normally against N. P.
Garfield. (M.P. 95.3)	N. P.	O. W. R. & N.	All trains and engines stop before crossing.
Colfax. (M.P. 77.1)	S. C. & P.	O. W. R. & N.	Gates and automatic crossing signals. Gates set normally against S. C. & P. Automatic crossing signal will change to "proceed" on approach of train or engine if track is clear.
Oakesdale. (M.P. 91.58)	S. C. & P.	O. W. R. & N.	All trains and engines stop before crossing.
Oakesdale. (M.P. 91.55)	N. P.	O. W. R. & N.	All trains and engines stop before crossing.
Thornton. (M.P. 82.5)	S. C. & P.	O. W. R. & N.	Gates.
Riparia. (M.P. 17.3)	N. P.	O. W. R. & N. except passenger trains have precedence over all freight trains.	Gates. Set normally against N. P.
Walla Walla. (M.P. 47.9)	N. P.	O. W. R. & N.	All trains and engines stop before crossing.
Walla Walla. (M.P. 47.3)	W. W. V. Ry.	O. W. R. & N.	Gate.
Walry. (M.P. 44.2)	W. W. V. Ry.	O. W. R. & N.	Gates.
Milton. (M.P. 37.0)	W. W. V. Ry.	O. W. R. & N.	Gates.
Parker. (M.P. 91.3)	N. P.	N. P. except passenger trains have precedence over all freight trains.	Automatic Crossing Signals.
Parker. (M.P. 89.4)	N. P.	O. W. R. & N. except passenger trains have precedence over all freight trains.	All trains and engines governed by automatic block signals.
Villard. (M.P. 7.3)	N. P.	N. P.	All trains and engines stop before crossing.
Auker. (M.P. 28.9)	W. W. V. Ry.	O. W. R. & N.	Gate.
Long. (M.P. 8.9)	N. P.	O. W. R. & N.	All trains and engines stop before crossing.
Dayton. (M.P. 12.90)	N. P.	O. W. R. & N.	Gate.
Dayton. (M.P. 13.10)	N. P.	O. W. R. & N.	All trains and engines stop before crossing.

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Location	Railroad Crossed, or, Junction With	Trains Which Have Precedence	How Governed
Dayton. (M.P. 13.11)	N. P.	O. W. R. & N.	All trains and engines stop before crossing.
Pullman. (M.P. 19.3)	N. P.	O. W. R. & N.	All trains and engines stop before crossing.
Wallace. (M.P. 80.4)	N. P.	O. W. R. & N.	All trains and engines stop before crossing.
Wallace. (M.P. 80.6)	N. P.	O. W. R. & N.	All trains and engines stop before crossing.
Gem. (M.P. 84.1)	N. P.	O. W. R. & N.	Gate.
Frisco. (M.P. 84.5)	N. P.	O. W. R. & N.	Gate.

98 (U). When a train is stopped by a signal at a railroad crossing protected by automatic signals, if it can be seen that there is no conflicting train movement, a trainman must proceed to the crossing and operate the clock work time release located at the crossing.

If operation of the time release does not clear the signal, the trainman may signal his train to proceed over the crossing if there is no train approaching on the conflicting route. If a train or engine is standing between the home signals on the conflicting route, the proceed signal must not be given until after a thorough understanding has been had with the crew of the train or engine on the conflicting route.

98 (V). Train movement over Columbia River Bridge 7.44 Yakima Branch, is governed by a derail and semi-automatic interlocking signal located 600 feet east of east end of bridge and a derail and semi-automatic interlocking signal located just east of N. P. crossing, Villard. Normal position of these signals is "stop", and signal will change to proceed position on approach of train if block is clear. When signal is seen to be in proceed position train may proceed without stopping for drawbridge, observing existing speed restrictions. When stopped by a signal, after waiting five minutes, if signal fails to change to a clear signal, persons in charge of train or engine must send a flagman ahead to the drawbridge before passing over it with train. If derail switch at signal, and draw span, are found properly closed, proceed signal will be given by flagman and acknowledged, and train may then proceed at slow speed, looking out for broken rail, obstruction, derail switches not properly set or draw span not properly closed. Wire report must be made to chief dispatcher at first available point of communication covering signal failure. Eastward trains stopped by signal governing this bridge must stand clear of N. P. crossing, Villard.

98 (W). Yakima River Bridge 89.35, one mile west of Parker, is used jointly with N. P. Automatic block signals govern movement of trains in both directions through gauntlet track over Yakima River Bridge. All trains must approach gauntlet track under control and must not exceed 15 miles per hour through gauntlet track. When a train is stopped by home signal at approach to gauntlet track, it may proceed when signal clears or by sending flagman ahead sufficient distance to insure full protection. When passenger and freight trains approach at same time, freight trains must stop before passing home signal about 600 feet from bridge, giving passenger trains precedence.

98 (X). All trains and engines must stop at stop boards before crossing drawbridge 23.45 over St. Joe River one-half mile west of Chatcolet and must not proceed until they have called for, received and acknowledged proceed signal from bridge tender. After a stop of five minutes, if proceed signal is not received, flagman must be sent ahead, and if draw span is found closed and locked, proceed signal will be given by flagman and acknowledged by the engineman and train may then proceed.

98 (Y). All trains must stop before crossing drawbridge 17.23 over Snake River at Riparia, and may then proceed if draw span is seen to be closed.

99 (E). The duty of flagmen on passenger, freight and mixed trains is to enable prompt and immediate compliance with transportation rules 99, 99 (A), 99 (C) and other flagging rules. While train is in motion or is standing at point where flag protection is or may be required, this man must not be called upon to perform any other duties than the protection of his train in compliance with the rules unless specific arrangement is made in each instance with the conductor under which the conductor definitely states at that time that he or one of the brakemen will afford necessary protection of rear end of train. Within yard limits when unnecessary to protect or when clear of the main track on sidings, flagman may be called upon to perform duties the same as those of brakemen.

99 (R). When a train order is received reading, "All eastward (or westward) extra trains wait at . . . . . until . . . . .", the train addressed is relieved from protecting its rear end against following extra trains until the time named in the order.

On Washington Division use of this train order is authorized only on all branch lines.

101 (G). When a train encounters any dangerous defect in roadway or track, or is stopped by a block signal under circumstances which would indicate a defect in track or signal apparatus (see Rules 101, 101(A), 509, 510 and 808), the fact must be reported to the train dispatcher from the first point of communication, telephone booth, or telegraph office.

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

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

103 (A). Cars must not be handled ahead of engine between stations, except as follows:

When necessary to take cars to or from a spur;

On work trains.

When this is done, it must be for no greater distance than necessary and the movement must be at slow speed, with air brakes cut in and operative on cars ahead of the engine.

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

When the switches to be passed over can be plainly seen to be properly lined;

Where the movement is over a crossing protected by a crossing watchman on duty. See Rule 802 (A).

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

On engine footboard between engine and cars when cars are being pushed or pulled, except when necessary to make cut between engine and first car;

On leading footboard while coupling engine to cars;

On engine pilots;

On deadwood, drawbars, brake beams, journal boxes, or brake wheels;

On end of cars containing loads which may shift.

103 (B). Engines must not be run under any coal mine tipple, nor over hoppers at coal chutes. Air must be working on all cars when putting up coal.

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

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

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

104 (G). Roadway machines, such as ditchers, pile drivers, rail loaders, bridge derricks and the like, must not be dropped, either alone or with other cars, but must be shoved to a stop.

Cars of any kind must not be "poled" or "staked" by yard or road crews when it can be avoided.

104 (H). Relative to Transportation Department Rule 104(A) and Maintenance of Way Department Rule 104(E), on all cross-overs between a main track and any other track, both switches must be equipped with switch locks and they must be locked while trains are passing over them and must be left locked after they have been used.

104 (K). While being used, derail switches equipped with a switch stand must be locked. See Rule 104(D).

104 (R). Switches will be set normally:

- At Hooper Jct. (Connell Branch), for line via Park;
- At Seltice, for line via Colfax;
- At Winona, for line via Colfax;
- At Tucannon, for line via Pataha;
- At Walla Walla Passenger Station, east switch to No. 2 track for No. 2 track when passenger equipment is set out on No. 1 track;
- At Yakima, Walnut Street, for the Seattle main switching lead;
- At Standard High Line between Wallace and Gem, for High Line.

104 (S). Main track derails are located at following points:

- Pomeroy —Opposite water tank. This derail will not be used except when cars are left standing on main track above it.
- Dayton —100 feet east of depot. This derail will not be used except when cars are left standing on main track above it.
- Wallace —350 feet east of depot. This derail will not be used except when passenger train is standing on main track at the depot west of derail.
- Gem —M. P. 84. Derail will normally be set in non-derailing position, but must be set in derailing position while switching is being done above it.
- Burke —M. P. 86.3 and M. P. 86.4. These derails must be set in derailing position while switching is being done above them, and must normally be set in derailing position.
- Sierra Nevada Spur—300 feet east of refinery track switch. This derail must be set in derailing position while switching is being done above it.
- Sierra Nevada Spur—West of No. 1 track switch at Zinc Plant. Derail will not be used except when cars are left standing on main track above it.

D-151 (R). In Spokane yard, trains and engines may move against the current of traffic between cross-over switches at Spokane Union Station and cross-over near coal chute at West Spokane without being preceded by a flagman, except when on the time of a first class train.

152 (C). Snow plows must not be operated through drifts when trains are seen approaching or are passing on an adjacent track. Flangers must be raised when passing over bridges, highway crossings, railroad crossings, frogs and switches, and through interlocking limits.

152 (R). THE SPEED SHOWN BELOW MUST NOT BE EXCEEDED:

(The speed shown under heading of "Psgr." includes mail and express trains, and under heading of "Frt." includes mixed trains and light engines with or without caboose. Freight engines used in passenger service on branches, must not exceed the speed specified for those engines in freight service.)

152 (R). Continued.

Location	Maximum Speed Miles Per Hour		Remarks
	Psgr.	Frt.	
At any point	60	40	
At any point.	50	40	With Mikado class engines with 63-inch drivers.
At any point.	45	40	With Mikado class engines with 57-inch drivers.
At any point.	45	40	With 2-10-2 class engines.
At any point.	40	40	With Consolidation class engines.
At any point.	40	40	With Mallet engines.
At any point.	50	40	With C. M. St. P. & P. Class N-3-S engines.
At any point.	20	20	Engines backing up.
At any point.	35	35	Light engines.
At any point.		25	Trains handling locomotive cranes, pile drivers, steam shovels, rotary snow plows, ditchers and steam derricks.
At any point.		20	Trains handling logs.
At any point.	Main Line.	30	Trains handling scale test car.
	Br. Lines.	20	
Through truss bridges.		6	Trains handling logs.
Within yard limits on Sixth Subdivision and between Spokane and Manito.	40	25	Speed must be as much slower as conditions may require.
Within yard limits except on Sixth Subdivision and between Spokane and Manito.	30	15	Speed must be as much slower as conditions may require.
On sidings.	15	15	
Interlocking plants.	15	15	
Railroad crossings at grade.	15	15	
On 4 degree curves.	50	40	
On 5 and 6 degree curves.	40	30	
On 7 and 8 degree curves.	35	25	
On 9 and 10 degree curves.	30	20	
On curves of 7 degrees and over.	25	20	With 2-10-2 class engines.
Over spring switches.	15	15	When using turnouts.
Over spring switches.	20	20	When not using turnouts, but where switch points will be caused to oscillate under such movement.
Over spring switches.	20	20	When not using turnout, but when movement is over facing point switch.
Spokane.	10	10	Through Union Station yard limits.
Sixth Subdivision.			
Over bridge 367.13.	10	10	
Over bridge 365.32.	25	15	
Cheney.	15	15	Over street crossings at grade.
Between Mack and Joso.	45	25	Through tunnels.
Over bridge 271.70.	25	15	

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Location	Maximum Speed Miles Per Hour		Remarks
	Psg.	Frt.	
<b>Spokane-Tekoa Branch.</b>			
At any point.	50	35	
Spokane.	15	10	Through tunnel.
N. P. Crossing, Spokane.	10	10	Over slip switches.
Between N. P. Cross- ing and Mission Ave., Spokane.	12	12	Over street crossings at grade on line through old yard.
Between N. P. Cross- ing and City Limits, Spokane.	20	20	Over street crossings at grade.
Between Chester and Mica.		20	On descending grade.
Between Manito and Tekoa.		30	
Fairfield.	6	6	Over street crossings at grade.
<b>Tekoa-Ayer Branch.</b>			
At any point.	50	30	
McGoldrick's Spur, Tekoa.		10	Trains handling logs.
Elberton.	25	25	Over street crossings at grade.
Colfax.	12	12	On streets and over street crossings at grade.
Between Colfax and Crest.	25	12	On descending grade.
Between Mockonema and Thera.	40	25	
Between Seltice and Winona via Thorn- ton.	35	25	
St. John.	6	6	Over street crossings at grade.
Riparia.	5	5	Over Snake River Bridge 17.23.
Between Tucannon and Ayer.	35	25	
<b>Tucannon-Pendleton Branch.</b>			
At any point.	50	30	
Between Tucannon and Downing.	40	25	
Between Starbuck and Alto.	30	12	On descending grade.
Walla Walla.	12	12	Over street crossings at grade.
Milton.	15	15	Over street crossings at grade.
Umapine Spur.	15	15	
Between Barret and Downing.	30	15	On descending grade.
Athena.	15	15	Over street crossings at grade.
Pendleton.	6	6	Over street crossings at grade.
<b>Yakima Branch.</b>			
At any point.	45	30	
Yakima.	6	6	Over Yakima Ave. and Walnut St.
Yakima.	10	10	Over other street crossings at grade.
Yakima River Bridge 89.35.	15	15	Through gauntlet track.
Zillah.	25	25	Over street crossings at grade.
Kennewick.	8	8	Over street crossings at grade.
<b>Wallula Branch.</b>			
At any point.	40	25	
Trains 45 and 46.		25	Within yard limits.
<b>Pomeroy Branch.</b>			
At any point.	25	20	

Location	Maximum Speed Miles Per Hour		Remarks
	Psg.	Frt.	
<b>Dayton Branch.</b>			
At any point.	35	25	
Dayton.	6	6	Over street crossings at grade.
Between Dayton and Turner.	15	15	
<b>Connell Branch.</b>			
At any point.	35	30	
Between mile posts— 16 and 27.	30	20	
27 and 53.	15	15	
<b>Moscow Branch.</b>			
At any point.	35	25	
Moscow.	12	12	Over street crossings at grade.
Pullman.	6	6	Over street crossings at grade.
<b>Wallace Branch.</b>			
At any point.	50	30	
Between Lovell and Chatcolet.	30	20	On descending grade.
Between Chatcolet and Harrison.	40	25	
Wallace.	6	6	Over street crossings at grade.
Between Wallace and Burke.	20	20	Westward trains.
Between Wallace and Burke.	20	10	Eastward trains.
<b>Sierra Nevada Branch.</b>			
At any point.	10	10	
<b>Enaville Branch.</b>			
At any point	15	15	
Note.—While crossing Bridge 365.32 over Spokane River and Latah Creek between West Spokane and Cowles, and Bridge 271.70 over Snake River between Joso and Chew, trainmen and engine-men must watch train and track closely and be prepared to stop should an emergency arise.			
Note.—Figure on stake at beginning of curve indicates degree of curvature.			

152 (T). All trains and engines must be under control through sidings, interlocking plants and yard limits. Under control means to be able to stop within one-half the distance track is seen to be clear.

211 (C). Rule 211 (B) of the "Rules and Instructions of the Transportation Department" is changed as follows:

"A '19' train order must not be used for restricting the superiority of a train except in block signal limits, and the '31' form must be used there in the following cases: as required in Rules 208 (A), 217 and 219; when a train order is sent to a train at a point within block signal limits, restricting its superiority at a point not protected by block signals; when moving trains against the current of traffic, as per train order Form D-R and when using a section of double track as single track, as per train order Form D-S."

221 (R). Trains will be governed by indication of train order signal and will not sound whistle signal as required by Rule 221 (A) as follows:

Ayer	—all trains;
Wallula	—all trains;
Tekoa	—all trains;
Winona	—All westward trains via Thornton;
Riparia	—all trains;
Starbuck	—all trains.

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

302 (C). Double heading cocks on engines equipped with automatic train control will be sealed in cut-in position and enginemen will inspect seal before departure to determine that it is unbroken.

When necessary to break seal to use double heading cock for any reason, engine-men will make report on ATC Report, Form 7483, stating why seal was broken. At end of trip broken seal must be delivered to roundhouse foreman together with suitable written report.

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

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

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

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

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

509 (S). At Manito, westward trains to move over C. M. St. P. & P. tracks will, after passing station whistling post, sound one long, one short and one long blasts of engine whistle. If junction switch is opened and proceed signal is given by switch tender, and engineman of train to use the route can see that junction switch is properly set, such train may proceed onto C. M. St. P. & P. track with caution without stopping for Home Block Signal 1437 displaying stop indication.

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

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

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

At N. P. Crossing, Spokane:

For Spokane Union Station.....	o	o	o
For old yard.....	o	o	o o
For East Spokane.....	o	o	o o
For N. P. Transfer.....	o	o	o
For S. C. & P. Transfer.....	—	—	—

703 (A). Each employe governed by Hours of Service Law must notify superior officer of the time the law requires him to be off duty early enough that he may be relieved, if necessary, before exceeding the hours of service permitted by law.

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

714 (B). The use of alcohol or oil lamps or other heating devices not a part of car equipment, by passengers or employes in passenger train cars, is strictly prohibited under all circumstances.

720 (A). Stockmen must be given an opportunity to board cabooses and drover cars without necessity of doing so while trains are in motion.

720 (B). When practicable, outfit cars should be moved on local or mixed trains, and women or children occupants thereof should ride in the place provided for passengers on those trains. When it is necessary to move occupied outfit cars on through freight trains, if there are women or children with those cars whom it is not practicable to move in any other way, they may remain in the outfit cars during such movement when requested by foreman and authorized by the superintendent.

720 (R). Passengers may be carried on freight trains between stations at which the trains stop, as follows:

Persons in charge of livestock or other freight when provided with proper transportation.

Employes with trip passes when traveling on company business.

Passengers with revenue tickets when presented for passage on:

Trains	Between Stations
251-252	Spokane and Umatilla.
365-366	Dayton and Bolles.

Passengers must not be loaded on freight trains until work is completed and train ready to leave.

Agents and conductors must notify passengers that local freight or mixed trains will stop with caboose opposite platform for them to get on or off.

722 (A). Dead engines, disabled engines, or engines with one or more rods taken down must not be hauled in fast freight trains when it is possible to avoid it.

With side rods or main rods down a speed of fifteen miles an hour must not be exceeded.

With side rods and main rods in place the maximum speed may be increased to twenty-five miles an hour unless otherwise restricted.

Geared engines of the Shay, Climax, Heisl and similar types, when not in gear, may be handled at whatever speed is permitted for freight trains over the district upon which being handled, unless waybill specifies a lower speed, or attendant in charge requests in writing a lower speed.

802 (A). When one or more cars are being switched or pushed over a road crossing not protected by a watchman or employe assigned as such, or, when a road engine, with or without cars, is backing over such a crossing at a station, a member of the crew must precede the movement and act as crossing watchman, and he must not get on front end of the leading car or on rear of tank until it has passed over the crossing.

When a train is parted to clear a public crossing, or is standing near such crossing, a trainman must act as crossing watchman when a train or engine is approaching on a siding or main track.

When a crossing watchman is on duty, trainmen must not give signal for high-way traffic to come ahead.

802 (R). The following will govern trains, engines and motors at the public crossings named below:

Location	Instructions
Spokane—Monroe Street.	Normal position of gates—across track. Movement across street must not be made until gates are open and proceed signal given from middle of street by a trainman or yardman. Gates must be closed promptly after each movement.
Spokane—Division Street.	Instructions for Monroe Street apply also at Division Street, and in addition, unless absolutely necessary, movements across street must not be made between 6:00 a. m. and 8:00 a. m., 11:30 a. m. and 1:30 p. m., 5:00 p. m. and 7:00 p. m. Between the hours of 6:00 a. m. and midnight, the number of movements across the street is limited to twenty, and the street must not be crossed when to do so would interrupt vehicle or street car traffic.
Spokane—At the following streets: Green, Madelia, Hamilton, Cincinnati, Division, Washington, Howard, Monroe, Ash, Cannon.	While switching, if crossing watchman is not on duty, a trainman or yardman must go ahead of train and engine and hold all traffic.
Tekoa—County road at junction switch to McGoldrick's Spur.	Flagman must be on ground and hold all highway traffic, before any movement is made over the crossing.

Note.—Hours of crossing watchmen at Spokane are as follows:

Green Street.....	{ 7:30 a. m. to 12:01 p. m.
	{ 1:00 p. m. to 6:30 p. m.
Madelia Street.....	6:30 a. m. to 10:30 p. m.
Hamilton Street.....	6:00 a. m. to 10:00 p. m.
Washington Street.....	7:00 a. m. to 11:00 p. m.

803 (A). Before occupied outfit cars or drover cars are coupled into, the occupants must be notified. When such occupied cars are being switched, either in yards or on road, the air must be coupled through.

803 (B). Before placing cars at coal chutes, the engine foreman or conductor must consult with the coal chute foreman or employe in charge, and it must be known positively that there are no men about the cars where they might be injured, before permitting any move to be made.

805 (A). Cars must not be left on, nor foul of, what are known as "Lead Tracks" in the various yards when it can be avoided. When it is necessary to do so, the yardmaster, agent, or operator, must be immediately advised and he will notify trains entering or leaving the yard. This does not relieve trainmen, yardmen, or enginemen, from proper observance of yard rules, and they will be held strictly accountable for yard accidents on lead tracks, as well as on any other track in yard, whether such notice is received or not.

807 (A). When a train is delayed, trains following must be allowed to pass as promptly as possible, and the conductor and engineer of the delayed train will be held jointly responsible for delay resulting from failure to comply with these instructions.

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

	For each empty or loaded car weighing less than 40,000 pounds. (Including light wt. of car)	For each empty or loaded car weighing between 40,000 and 50,000 pounds. (Including light wt. of car)
Spokane and Tekoa	3000 lbs.	
Tekoa and Ayer	3000 "	
Tucannon and Pendleton	3000 "	
Starbuck to Pomeroy	3000 "	
Turner and Bolles	3000 "	
Connell to LaCrosse	3000 "	
Colfax to Moscow	3000 "	
Tekoa and Burke	3000 "	
Enaville to Prichard	3000 "	
All Others	6000 "	3000 lbs.

820 (S). The maximum gross weight of cars that may be handled between stations is shown below:

	Limit
Umatilla to Manito, via Ayer, Marengo and Spokane	No Limit
Between Riparia and Tucannon	170,000 lbs.
Between Hooper Jct. and Connell	170,000 "
All others	200,000 "

824 (A). When a break-in-two occurs, after the train is again together and ready to move, trainmen must make inspection as the train pulls by them, looking for possible draft rigging and coupler defects and at first stop they should carefully inspect entire train.

824 (B). Trains setting out cars account hot box will remove packing from box which was running hot. Brasses and oil soaked waste removed from cars on road must be retained and exchanged for new, leaving old waste in bucket, and brasses on caboose platform.

824 (C). When necessary to remove keys from brake heads, or when working on brake rigging, cut-out cock in branch pipe must be closed and reservoirs bled. Where cut-out cock is located in cylinder pipe, the latter only need be closed. All keys must be replaced before brakes are cut in, to avoid personal injury.

824 (D). Conductors must report by wire to superintendent and trainmaster from first open telegraph office where train stops, cases of brakes sticking, giving car numbers and initials.

824 (R). In addition to making inspection of train as often as practicable as per Transportation Rules 824 and 827, and Air Brake Rule 1059 (A), all freight trains must stop and be given walking inspection by train crews at the following points:

Simmons	—Eastward and Westward;
Marengo	—Eastward and Westward.

When No. 252 or its extra meets No. 11, or lets No. 12 by at Ash, Page or Scott, inspection may be made at the meeting or passing point, instead of Simmons.

When necessary for No. 251 or its extra to take water at Walker Pit, inspection may be made at that point, instead of Simmons.

825 (R). When storing cars at stations or on sidings, all cars except flat cars and cars of all-steel construction, must be stored in cuts of five with a clear space of 100 feet between each cut and must not be placed alongside of warehouses or other wooden buildings when it can be avoided.

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825 (R). Continued.

Cars spotted on tracks other than warehouse tracks, must clear street line of public crossings not less than 60 feet. If possible, when a train is parted to clear a public crossing, or is standing near such crossing, a clear space of 60 feet will be left on each side of the crossing.

On Washington Division, cars may be placed for loading and storage on all industrial tracks and on all passing tracks equipped with derails, except passing tracks between Umatilla and Spokane on Sixth Subdivision and passing tracks between Spokane and Darknell.

826 (A). When employes, passengers, or others are injured, call the nearest railroad surgeon. If the persons injured are not employes, they should be sent to their homes or placed in charge of local relief authorities, after immediate necessary attention has been given by the railroad surgeon.

When necessary to call surgeons, other than those regularly employed by the railroad, it should be with the distinct understanding that their services will not be required after arrival of the railroad surgeon.

835 (A). Passengers in coaches or chair cars are permitted to place packages, traveling bags, etc., in the racks provided for that purpose when they can be safely carried there, but when not, they must be placed on floor, but not in aisle of car where they might cause someone to fall. The reason for this requirement must be explained to the owner.

837 (A). Gate at front end of first coach next to baggage or mail cars must be closed at all times in order to prevent possibility of personal injury to passengers, account buffers between these two cars not being protected by curtains.

When occupied passenger equipment is being switched, or while standing uncoupled, open ends of cars must be protected by closed gates. Also, rear gate must be closed on moving trains.

The vestibule curtains must be drawn across the diaphragms on deadhead and active passenger equipment while being handled in passenger, mail and express trains.

847 (A). When passenger train cannot be properly heated, wire report thereof must be made to superintendent.

During snow storm or extremely cold weather, engine must not be detached from passenger train if it can be avoided; if it becomes necessary to do so, or if train is separated for any reason, trainmen and enginemen must exercise care, drain steam line and disconnect steam hose between cars, if necessary, to prevent freezing.

Engine or detached portions of train must be recoupled and steam line again connected as quickly as possible to avoid discomfort to passengers.

847 (B). As a precaution against personal injuries to passengers, trainmen will use the words "Please Watch Your Step", when passengers are boarding or alighting from train.

847 (C). When engines equipped with track sprinklers are used on trains carrying passengers, sprinklers are to be operated day or night when speed of train is in excess of 20 miles an hour, over and approximately 100 feet on each side of open road crossings at grade, entering and leaving station grounds, at known dusty locations, passing trains on adjacent tracks, and as indicated by sprinkler signs.

Sprinklers must not be operated when passing depots if there are any persons on the station platform, and are not to be operated on station platforms when train is making a station stop.

Enginemen must handle in such a way as to result in comfortable condition to passengers on observation platform.

849 (A). Trainmen must use every effort to keep unauthorized persons off their trains, and when unable to do so peaceably, chief dispatcher must be notified by wire so that officers may be called to assist.

860 (R). In freight train service, head brakeman is not permitted to ride in caboose regardless of number of cars in train. This does not apply to mixed trains.

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

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

Between points where separate trains are operated for freight service only, cars containing explosives must not be handled in a train that carries passengers. (BE 676).

Between points where only mixed train service is operated, or where passengers are carried in the caboose of a freight train, a car containing a freight shipment of explosives, or a tank car placarded "Inflammable" may (unless otherwise instructed) be hauled, but such cars must not be placed next to a car carrying passengers. (BE 676).

Cars placarded "Explosives" must be placed in through freight trains near the middle of the train and must be not nearer than the 16th car from the engine, electric locomotive, or motor car, nor the 11th car from the caboose, or other cars carrying passengers, if the length of the train will permit. (BE 677-a).

Cars placarded "Explosives" may be placed in local freight, local pick-up, and local set-out trains not nearer than the second car from the engine, electric locomotive, motor car, caboose or other cars carrying passengers, when placing them near the middle of the train would require additional switching at way stations. (BE 677-b).

Cars placarded "Explosives" must have hand and air brakes in service and must not be placed next to cars placarded "Inflammable" or "Corrosive Liquid", nor next to empty or loaded tank cars, wooden frame flat or gondola cars, nor next to carloads of pipe, lumber, poles, iron, steel, or similar articles liable to shift and break through end of placarded car; nor next to cars containing lighted heaters, stoves or lanterns, or occupied by attendants. (BE 676-677c-677d).

Placarded tank cars must not be placed in trains next to cars placarded "Explosives" nor next to cars containing lighted heaters, stoves or lanterns, nor next to gondola or flat cars with lading such as logs, lumber, rails or pipe that is likely to shift, and when practicable must be placed not nearer than the sixth car from the engine, electric locomotive, motor car, caboose, or other cars carrying passengers. (BE 677-e).

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

When placards become detached in transit, conductor must see that they are replaced upon arrival at the next terminal, if in through trains, or at first station stop if in local freight trains. (BE 675).

BE numbers shown above refer to correspondingly numbered regulations of the Bureau of Explosives, Interstate Commerce Commission.

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

- Drover cars, occupied or unoccupied;
- Scale test cars;
- Cars with emergency drawbars;
- Outfit cars;
- Emigrant movables (except steel underframe cars may be placed near head end when so requested by attendant in charge);
- All wooden underframe cars;
- Any car tagged with Form 4725 reading, "Handle only at rear end of train".

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

When a helper engine is used, it must be cut in ahead of drover cars. (See Special Rules 865-C, 865-R and 865-S).

Switching must not be done with drover cars, except in handling to or from trains.

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865 (B). Continued.

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

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

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

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

Rotary snow plows handled in freight trains will be handled next to the caboose with the rotary wheel to the rear.

865 (C). When not used on head end of train, helper engine must be cut in ahead of caboose, and when there are wooden underframe cars or drover cars on the rear end, the helper engine must be cut in ahead of them.

865 (R). Engines must not be double headed over Snake River Bridge 17.23 at Riparia.

865 (S). Engines equipped with pilot plow which requires extension of drawbar, must not be used as helpers unless placed at head end of train.

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

881 (A). When engines under steam are standing, whether coupled to other equipment or not, the engineman must personally see that the throttle is closed and latched, cylinder cocks opened and reverse lever latched in center notch; and that straight air is applied on engines so equipped.

882 (A). The engineman or fireman must not move the engine or any part of its machinery, unless he knows that it can be done without injury to anyone.

882 (B). Due to the extremely high temperatures developed in cylinders, superheated locomotives cannot be drifted with tightly closed throttle without serious damage to lubrication, cylinder packing, rod packing, building up carbon deposits, and seriously injuring the service of the engine. It is therefore necessary to keep a certain amount of steam in the cylinders of superheated engines while they are moving.

The following rules must be observed on all superheated engines:

On all drifting grades the main throttle of all engines must be partly open or cracked a sufficient amount to prevent a vacuum in the cylinders. Mallet engines when descending heavy grades may be drifted with closed throttles after moving a sufficient distance with the drifting throttle to permit cylinders to cool below the flash point of the oil.

In approaching a stop, a small amount of steam should also be worked through the cylinders. The throttle should never be entirely closed but the pressure gradually reduced with the throttle until freight engines are down to approximately 4 miles an hour when throttle should be closed. On engines in passenger train service, the throttle may be closed approximately one train length before the stop when this is necessary in order to make a satisfactory stop. However, it is permissible when conditions are favorable, such as working slowly to a stop up heavy grades, to work steam to an entire stop.

While drifting, the reverse lever should be in the highest cut-off consistent with proper cushioning of the moving parts.

On engines approaching or stopping at passenger stations and working a light throttle, the reverse lever should be moved towards the corner sufficiently so that the engine will drift smoothly and without pounding in the rods and boxes; the drifting pressure can be controlled in this way with the reverse lever as well as with throttle. These rules do not apply to emergency stops.

Mallet engines must not be cut into simple except to assist in starting train.

883 (A). Blow-off cocks must not be opened on either side of engine at any point where liable to cause personal injury or damage to property.

884 (A). Enginemen going on duty must know that the stoker lubricators and oil cups are filled and feeding, and that stokers are operating properly. First slide over conveyor may be opened before engine leaves ash pit and stoker should be operated sufficiently to know that it will run properly.

When standing on sidings or drifting on long grades, stoker engines and jets must be shut off and engine hand-fired except when coal is out of reach of fireman or when necessary to comply with safety instructions.

All except the first slide over conveyor trough must be closed while taking coal and descending designated grades. All slides must be closed when approaching terminals where engine is to be removed from train, and elevator screw must be emptied of coal before necessity for firing ends, except where tank is full of coal and it is almost impossible to close first slide. Steam to stoker lubricator must be shut off in time for lubricator to cool at points where it is to be filled. Stoker valve at steam turret, coal control lever, and crusher cover must be closed when leaving engine.

Report must be made if stoker or steam jets use an excessive amount of steam, or when there are defects in connection with the conveyor trough and slides.

886 (A). Conductors must report promptly by wire to the proper officer, all cases of rough handling of trains in their charge between terminals, also all rough handling of trains by road or yard engines at terminals that may come to their attention, and all cases of excessive whistling or other noise made by trains going by or around passenger trains, or at passenger stations.

When a passenger train is roughly handled, the conductor must call the engineman's attention to the fact at the first stop and explain to him just what occurred. Conductor will be held responsible for failure to make report of any improper handling of the train.

886 (B). Enginemen on passenger and freight trains, when making maximum speed, must make application of air brakes approaching curves and on heavy curves keep brakes applied sufficient length of time around curve to steady train.

This is modified to the extent that on passenger trains, in order to avoid surging or rough riding of cars on curves, where operating conditions will permit, speed of train will be controlled so that brakes will be released while train is passing around curves, and where conditions will permit, the train should be pulled around curves with brakes released.

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

883 (B). Train and engine men must not wash up or change clothes while on duty going into terminals. They must be ready to handle any emergency which might arise, and washing up and changing clothes must not be started until after the train has been tied up or they are relieved from duty.

889 (A). Rule 889 of the "Rules and Instructions of the Transportation Department" is changed as follows:

"See that engine is supplied with twelve torpedoes, not less than three red fuses and equipment for proper hand and train signals. While running at night, have in cab, where it cannot be seen by passing trains, a red light, and, in case of danger, signal approaching trains".

891 (A). Enginemen on freight engines which are equipped with smoke deflectors, must test deflectors before entering tunnels and if it is found they are inoperative by air pressure, train must be stopped, and deflectors raised by hand.

Continued on page 12.

891 (A). Continued.

Such cases of inoperative deflectors must be reported to superintendent and master mechanic by wire from first open telegraph office at which stop is made, and in addition thereto, must be reported on arrival at terminal.

893 (A). On double track, whenever a train is stopped for any reason other than an ordinary stop made by the engineman, or when livestock, vehicles, or any other object has been struck by a train, it must be known that the opposite main track is not obstructed before permitting a train to pass on that track.

894 (B). Enginemen, before starting each trip with coal burning engines, must inspect ashpan and when pans are found to be defective, must not leave a point where repairs can be made, without written authority from roundhouse foreman regardless of delay to any train.

Before leaving any point where ashpan doors have been opened, enginemen must know that they have been tightly closed and securely fastened.

When fire is observed falling from ashpans, report must be made by wire to superintendent and master mechanic from first open telegraph office where stop is made, and attention must be called to it on work report at end of run.

Enginemen on engines equipped with ashpan sprinklers must, except in freezing weather, use the sprinkler before starting trip, and each time after the grates are shaken or at any time when there are live coals in the ashpan. During freezing weather the use of ashpan sprinkler must be regulated by necessity in such manner as to avoid freezing up sprinkler or ashpan doors.

895 (A). Engines must not take coal while passenger trains are standing or passing on opposite track. Lumps of coal are liable to fall through windows of passenger cars, causing personal injury.

Enginemen must not move engines from coaling stations until they are sure that employes are off the tank.

895 (R). Water should not be taken at Chard unless absolutely necessary, due to limited supply.

896 (R). 700 class and heavier engines (except 1733-1741 inclusive) must not go on the following tracks:

Tekoa	—East switch elevator track; McGoldrick Lumber Company spur;
Walla Walla	—Eureka mill track; Rose Street crossover; Pacific Fruit spur; Gardners' Association track; Cannery spur; Garden City Mill track; Jones Scott bunker track;
Walry	—Walla Walla Valley Railway Yellowhawk Branch;
Yakima	—East of Cherry Street; when switching with this class engine between Walnut and Cherry Streets, engine will hold onto sufficient cars to make it unnecessary to put engine through lead tracks connecting with the Seattle main;
Sunnyside	—Trailing point movement only through east switch run-around track, at N. P. Transfer;
Wallace	—Wallace Feed and Fuel Company track.

2100 class and heavier engines must not go on the following tracks:

Riparia	—Depressed ice track.
Walla Walla	—Switches at east end of tracks 2 and 3; Northern Pacific transfer track; All industry tracks;
Kennewick	—Wye track; Washington Early Crops track; Mill spur; Big "Y" track;

5400 class and heavier engines must not go on the following tracks:

Hooper Jct.	—West leg of wye;
Walker Pit	—On crossover and curve, east end of Pit track;
Walla Walla	—West leg of wye.

Engines must not be placed on or moved over the high-line ore bins of the Hecla Mining Company at Gem nor the Bunker Hill and Sullivan overhead scale at Kellogg.

898 (A). Enginemen must give two long and two short sounds of engine or motor whistle when approaching a train which is stopped on opposite track on double track, and when approaching a train which is on a siding on single or double track. On double track special care must be taken to sound warning signals, and particularly when trains or engines are approaching highway crossings from opposite directions at the same time.

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

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

899 (A). Jordan spreaders, or other spreaders of that class, when handled in freight trains, must be headed in the direction train is moving. When handled in work train service, the wings must be thoroughly secured.

977. White bands painted on telegraph or signal line poles indicate car length distance from switch of siding as follows: One band, 45 cars; two bands, 60 cars; three bands, 75 cars; four bands, 100 cars.

#### AIR BRAKES

1014 (R). Engines in freight or mixed train service will carry 90 pounds air brake pipe pressure on the Enaville Branch, Sierra Nevada Spur, between Wallace and Burke and on descending grades between Crest and Colfax, Starbuck and Bolles, Barrett and Weston, Lovell and Chatcolet.

Engines in passenger service between Spokane and Pendleton, Moscow and Ayer and Lewiston and Ayer will carry main line standard air brake pipe pressure.

Engines in passenger service between Tekoa and Wallace will carry standard branch line air brake pipe pressure.

1044 (R). Road train brake test as prescribed in Rule 1044 (A) of Operating Rules Governing Air Brakes effective December 1, 1925, must be made on all freight trains before descending grade Weston to Barrett, Alto to Starbuck, Crest to Colfax, Watt to Chatcolet, Burke to Wallace, Sierra Nevada Mine to Bradley, and this test must also be made at intermediate points on these grades either ascending or descending, whenever engine is changed, cars picked up or set out, air hose parted, angle cock turned or train has been standing for 30 minutes or more.

Before descending grade Jerita to Hay, Mica to Chester and Watt to Lovell, after stop has been made, brakes must be fully applied and before proceeding it must be known that brake pipe pressure is restored as indicated by caboose gauge, and that rear brakes are released. In the absence of caboose gauge, test must be made as prescribed in Rule 1040.

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

1050 (G). Locomotive and tender brakes on engines helping or pushing trains will be operated in conjunction with the train brake.

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

- Spokane-Tekoa Branch, eastward trains at Darknell and Mica;
- Tekoa-Ayer Branch, westward trains at Jerita; eastward trains at Crest;
- Tucannon-Pendleton Branch, eastward trains at Weston; eastward and westward trains at Alto;
- Wallace Branch, eastward and westward trains at Watt; eastward trains at Burke;
- Sierra Nevada Branch, eastward trains at Sierra Nevada Mine.

1051 (S). At Spokane Union Station passenger trains will make running air test only after leaving the elevated structure.

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

1063 (B). That portion of Rule 1063 (A) of "Operating Rules and Instructions Governing Air Brakes", reading as follows:

"If the train has not more than 8 cars, release brakes so that they will be about off when the stop is completed, this being called 'pre-release'. With longer trains hold the brakes applied until stopped."

is modified as follows:

"If the train has not more than 12 cars and stop is being made except on a downward grade of 1% or more, the brakes should be released so that they will be about off when the stop is completed, this being called 'pre-release'. With longer trains hold the brakes applied until stopped."

1064 (B). Rule 1064 (A) of "Operating Rules and Instructions Governing Air Brakes" is amended as follows:

"After release of brakes, do not try to start train until ample time has been allowed for all brakes to release."

"Keep engine at very slow and uniform speed for three car lengths, as less distance may not have started entire train; except in starting on heavy descending grades move engine forward one or two feet and then by use of engine brakes stop the engine a sufficient length of time for slack to run gently and start entire train. If first movement fails to run slack sufficiently to start entire train, repeat this movement until entire train is started."

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

1077 (R). Retaining valves must be used on descending grades as follows:

BRANCHES	PASSENGER TRAINS	FREIGHT TRAINS
Spokane-Tekoa.....	.....	Mica and Chester.
Spokane-Tekoa.....	.....	Darknell and Rockford.
Tekoa-Ayer.....	Crest and Colfax.....	Crest and Colfax.
Tekoa-Ayer.....	.....	Jerita and Hay.
Tucannon-Pendleton.....	Alto and Relief.....	Alto and Starbuck.
Tucannon-Pendleton.....	.....	Alto and Menoken.
Tucannon-Pendleton.....	Weston and Bade.....	Weston and Barrett.
Dayton.....	.....	Turner and Dayton.
Wallace.....	.....	Lovell and Chatcolet.
Wallace.....	Burke and Wallace.....	Burke and Wallace.
Sierra Nevada.....	Sierra Nevada Mine and Bradley..	Sierra Nevada Mine and Bradley.

On freight trains, trainmen will patrol top of train where retainers are used.

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

- Relief —Eastward;
- Blue Mountain or Bade—Eastward.

## RATING OF ENGINES IN FREIGHT SERVICE, IN TONS OF 2,000 POUNDS.

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

TYPE OF ENGINE	NUMBERS (INCLUSIVE)	SPOKANE-UMATILLA						SPOKANE-TEKOA				
		Westward			Eastward			Westward				Eastward
		Spokane to Ayer	Ayer to Wallula	Wallula to Umatilla	Umatilla to Humorist	Humorist to Ayer	Ayer to Spokane	Spokane to Chester	Chester to Fairfield	Fairfield to Latah	Latah to Tekoa	Latah to Freeman
MC 57 $\frac{26-41}{32}$ 464SD	3620 to 3664 3803 to 3805		6000	6000	6000	6000						
TTT 63 $\frac{29\frac{1}{2}}{30}$ 292SB 300SB	5400 to 5414	4000	5920	4800	4800	5920	4000					
P 77 $\frac{25}{28}$ 178S	3226 to 3227											
P 77 $\frac{25}{28}$ 167S	3218 to 3225	1785	2545	1960	1960	2675	1785	1165	710	1005	1605	1025
P 77 $\frac{22}{28}$ 149S	3200 to 3217	1380	1970	1520	1520	2075	1380	900	550	855	1245	795
MK 63 $\frac{26}{30}$ 211SB	2168 to 2171	3020	4140	3360	3360	4140	3020	1720	1120	1635	2375	1510
MK 63 $\frac{26}{30}$ 211SD	2166 to 2167	2730	3750	3030	3030	3750	2730	1555	1010	1475	2140	1370
MK 57 $\frac{23\frac{3}{4}}{30}$ 207S	2100 to 2165 Except S. D. B. Enggs.	2700	3700	3000	3000	3700	2700	1540	1000	1460	2120	1355
MK 57 $\frac{23\frac{3}{4}}{30}$ 207SDB	2103, 2138, 2147, 2149, 2151, 2152, 2154	2970	4070	3300	3300	4070	2970	1695	1100	1605	2330	1490
T 63 $\frac{22}{28}$ 162S	1755 to 1760	1690	2405	1850	1850	2530	1690	1100	670	1045	1520	970
T 69 $\frac{22}{28}$ 159 161S	1742 to 1754	1540	2205	1690	1690	2315	1540	1005	615	955	1385	890
T 57 $\frac{20}{26}$ 126	1737 to 1741	1360	1940	1500	1500	2040	1360	890	540	845	1225	780
T 57 $\frac{20}{26}$ 119	1733 to 1735	1290	1840	1420	1420	1935	1290	840	515	800	1160	740
T 64 $\frac{22}{26}$ 145S	1730 to 1731	1540	2205	1690	1690	2315	1540	1005	615	955	1385	890
C 57 $\frac{22}{30}$ 187 190S	730 to 768	2000	3000	2400	2400	3200	2200	1305	840	1240	1800	1150
C 57 $\frac{22}{30}$ 179	725 to 729	2000	2850	2300	2300	3000	2000	1305	795	1240	1800	1150

### EXPLANATION

"P"—Pacific Type  
"T"—Ten Wheelers

"C"—Consolidation Engines  
"MK"—Mikado Type

"T-T-T"—2-10-2 Type  
"MC"—Mallet

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

C 57      22      187  
            — 30