

# Tacoma Eastern Railroad Company

AND

## Chicago, Milwaukee and Puget Sound Railway

---

---

# No. 2 TIME TABLE No. 2

---

TAKING EFFECT SUNDAY, SEPT. 18, 1910, AT 12:01 O'CLOCK A.M.

Pacific or 120th Meridian Time.

---

FOR THE GOVERNMENT AND INFORMATION OF EMPLOYEES ONLY.

---

P. C. HART,  
General Superintendent.

W. B. FOSTER,  
Superintendent.

F. E. WILLARD,  
Trainmaster.

E. G. FOWLER  
Chief Dispatcher.

# TACOMA EASTERN RAILROAD

## MAIN LINE

### TRAINS GOING WEST

### TRAINS GOING EAST

TRAINS GOING WEST						Station Numbers	Distance From Morton	STATIONS	Distance From Tacoma	Water-Coal Wyes-Scales	TRAINS GOING EAST							
Third Class	Second Class	First Class	First Class	First Class	First Class						First Class	First Class	First Class	Second Class	Third Class			
No. 17	No. 9	No. 7	No. 5	No. 3	No. 1						No. 2	No. 4	No. 6	No. 10	No. 18			
Way Freight	G. H. Mixed	Passenger	Passenger	Passenger	Passenger						Passenger	Passenger	Passenger	G. H. Mixed	Way Freight			
Except Sunday	Except Sunday	Daily	Daily	Daily	Daily													
					1.45 PM De	-67	0 0	D MORTON	67.3		1.10 PM Ar							
					2.25	54	12.0	EAST CREEK JCT	54.4	Y	12.30 De							
				12.15 PM De		K57	15.9	LADD	57.4		12.01 PM Ar							
				12.30 Ar			12.9	EAST CREEK JCT	54.4	Y	11.45 Ar							
7.30 AM De					6.30 AM De	2.28	53	D MINERAL	53.7	WC	11.42	6.05 PM Ar		5.30 PM Ar				
					6.42 Ar	2.40	49	PARK JCT	49.6	Y		5.50 Mt 7 De						
		5.35 PM De			7.10 De		F55	D ASHFORD	55.1	Y		5.25 Ar	6.57 Ar					
		5.50 Mt 4 Ar			7.25 De		49	PARK JCT	49.6	Y	11.30	6.10 Ar	6.42 AM De					
7.50					7.25 De		49	PARK JCT	49.6	Y	11.30	6.10 Ar	6.42 AM De	4.50				
8.05					7.33	2.47	47	D ELBE	47.2	W	11.22	5.08		4.30				
8.10					7.35	* 2.50	46	WILLIAMSON	46.2		* 11.18	5.00		4.00				
9.00					7.50	3.09 Mt 18	41	ALDER	41.2		11.00	4.45		3.09 Mt 1				
					* 8.10	* 3.29	37	LAGRANDE	36.6		* 10.40	* 4.25						
10.25 Mt 2					8.23	3.45	32	D EATONVILLE	32.6	WY	10.25 Mt 17	4.14		1.45				
10.55					* 8.32	* 3.56	28	OHOP	29.2		* 10.11	* 4.08		1.15				
11.00					* 8.35	* 4.00 Mt 4	28	CLAY CITY	28.3		* 10.07	* 4.00 Mt 1		1.10				
					8.41	* 4.07	26	HOLZ	26.4		* 10.02	3.57						
11.20					8.45	* 4.12	25	LAKEHEAD	25.0		* 9.57	3.54		12.40				
11.30 Mt 18					8.53	4.20	23	D KAPOWSIN	23.0	WC	9.50	3.47		11.30 Mt 17				
1.00 PM					* 9.00	4.28	21	TANWAX JCT	21.0		* 9.42	* 3.39		10.50				
1.25					* 9.11	* 4.40	17	THRIFT	17.2		* 9.30	* 3.27		10.20				
2.05					* 9.18	* 4.48	15	HARDING	15.0		* 9.24	* 3.20		10.05				
2.25					9.22 Mt 2	* 4.52	14	KIRBY	14.2		* 9.22 Mt 3	3.18		10.00				
2.35					9.26	4.57	12	BERKELEY	12.7		9.15	3.14		9.45				
2.55					9.30 Mt 18	5.02	A 11	FREDERICKSON	11.3		9.10 P 18	3.10 Mt 17		9.30 Mt 3				
3.10 Mt 4														9.00 2 P				
3.15	2.00 PM De				9.31	5.03	11	SALSICH JCT	11.0		9.09	3.09		8.15 AM Ar				
														8.55				
4.00	2.25				* 9.47	* 5.22	5	MIDLAND	5.5		* 8.53	* 2.53		7.55				
4.30	2.45 Mt 4				9.55	5.30	3	D BISMARCK	3.1	WC S	8.45	2.45 Mt 9		7.45				
5.00 PM Ar	3.00 PM Ar				10.10 AM Ar	5.45 PM Ar	0	DN TACOMA	0.0	WC S	8.30 AM De	2.30 PM De		7.15 AM De				
											Daily	Daily	Daily	Except Sunday				
														Except Sunday				

### SPECIAL RULES

\*Trains stop only on signal.  
 †Train stops for refreshments.  
 ‡Trains do not stop for passengers.  
 D—Day  
 N—Night } Telegraph Office.  
 S—Scales.  
 Y—Wyes.  
 C—Coal.  
 W—Water.

Trains going East will have absolute right of track over those of the same class running in the opposite direction.

Trains will take their dates at starting points.  
 Trains will register at Tacoma, Salsich Junction, Park Junction, Ashford, Mineral, East Creek Junction, Ladd, Morton, Portola, Cosmopolis and South Aberdeen.  
 Standard time is kept in Dispatcher's office at Tacoma.  
 Freight trains will not carry passengers.  
 Observe special rules and instructions in back of this time-table.  
 West Bound Trains between Bismarck and Tacoma and all trains between Lagrande and 3 1/2 miles east of Lagrande will not exceed ten (10) miles per hour.

Passenger trains will not stop at any place where track is rough or view obstructed, unless it is necessary to insure safety. Maximum speed will be limited to ten and two miles east.  
 Freight trains will not stop at any place where slides or rock are liable to occur.  
 All trains will run slow over cuts.

Trains Nos. 1 and 2, 3 and 4 will stop on flag at Headworks, Flynn, Mentzers, Carlson, Camp 21. Trains Nos. 1 and 2 stop on flag at Dukes. Trains Nos. 3 and 7 will stop on flag at National. The yard limits at Mineral are extended to include East Creek Junction.  
 Trains cannot meet or pass at Midland, Lakehead, Holz, Ohop, or Lagrande.

# TACOMA EASTERN RAILROAD

## GRAYS HARBOR LINE

TRAINS GOING WEST										Station Numbers	Distance From Tacoma	STATIONS	Distance From South Aberdeen	Water—Coal Wyes—Scales	TRAINS GOING EAST											
															Second Class											
															<b>No. 11</b>											
															Mixed											
										Except Sunday 8.15 AM De	11	11.0	SALSICH JCT 4.0	90.0		2.00 PM Ar										
										8.30	\$15	15.0	LOVELAND 2.2	86.0		1.30										
										8.38	\$17	17.2	HEWITT 1.8	83.8		1.15										
										8.45	\$19	19.0	GREENDALE 3.7	82.0	W	1.00										
										9.00	\$22	22.7	ROY 4.5	78.3		12.40										
										10.00	\$27	27.2	D. MC KENNA	73.8	Y S	12.15 PM										

### CHICAGO, MILWAUKEE & PUGET SOUND RAILWAY

										10.00	\$27	27.2	D. MC KENNA 7.4	73.8	Y S	12.15 PM										
										10.35	\$35	34.6	RAINIER 7.8	66.4		11.45										
										11.10 M 12	\$42	42.4	OFFUTT 8.9	58.6	W ½ mile w	11.10 M 11										
										11.45	\$51	51.3	LITTLE ROCK 6.8	49.7		10.35										
										12.12 PM	\$58	58.1	ROCHESTER 1.9	42.9		10.08										
										12.20 PM Ar	\$60	60.0	PORTOLA	41.0		10.00 AM De										
												61.5	INDEPENDENCE 8.3	39.5	W											
												69.8	LORAIN 4.6	31.2												
												74.4	CEDARVILLE 6.0	26.6												
												80.4	SOUTH ELMA 10.1	20.6												
												90.5	WYNOOCHE 1.2	10.5												
												91.7	MELBOURNE	9.3												
										3.00		99.0	D. COSMOPOLIS 2.0	2.0	W Y C	7.30										
										3.15 PM Ar		101.0	SOUTH ABERDEEN	0.0		7.15 AM De Except Sunday										

This time-table conveys no rights to trains between Portola and Cosmopolis. Between these points trains will run over Joint C. M. & P. S. and G. H. & P. S. Ry. tracks, and will be governed by G. H. & P. S. time-tables and rules.

This time-table conveys no rights to trains between Cosmopolis and Portola. Between these points trains will run over Joint C. M. & P. S. and G. H. & P. S. tracks, and will be governed by G. H. & P. S. time-tables and rules.

### SPECIAL RULES

Trains going East will have absolute right of track over trains of the same class running in the opposite direction.

- \*Trains stop only on signal.
- †Train stops for refreshments.
- ‡Trains do not stop for passengers.
- W—Water.
- C—Coal.
- Y—Wyes.
- S—Scales.

Second and third class and irregular trains will have the right to run ahead or pass and run ahead of second and third class and irregular trains without special orders. Trains moving under this rule must be governed by General Rule No. 59.

Trains cannot meet or pass at Loveland, Hewitt, Greendale, or Roy.  
All trains will come to full stop before crossing Port Townsend Southern Ry. 1.3 miles west of Offut and Northern Pacific Ry. at Rochester.

Junction switch at Portola must be left set for Grays Harbor and Puget Sound tracks leading to Centralia.

# Special Rules and Instructions.

## FOR TRAIN AND ENGINE MEN.

1. Conductors and Engineers, before starting on their runs, must examine Bulletin Boards and Train Registers. All intermediate Bulletin Boards and Train Registers must be thoroughly examined by the Conductor.

Bulletin Boards are at the following stations:  
Tacoma, Bismarck, Mineral.

A train laid up at a non-registering station, must, before starting, procure an order in the following form:

"To Conductor and Engineer:

"Trains due at.....up to.....

(A. M. or P. M.).....(date) have arrived and departed."

(Signed by the dispatcher, to be answered and O. K'd in the usual manner.)

If any regular train due has not arrived, the order should read "except No....." (giving number).

2. When orders are issued per form "B" ONLY the trains moving BETWEEN the points named in the order will have the right to avail themselves of it.

3. When trains are run with double headers, the air brakes of the leading engine must be connected through the second engine with the train, and the train controlled by engineer of leading engine.

4. Approaching drawbridges and railroad crossings, engineers must make a slight application of air to insure the proper working of the brakes. Trainmen must station themselves at the hand brakes a sufficient distance from these points prepared to stop the train upon whistle signal from the engineer.

5. During the prevalence of severe storms, fog, smoke or forest fires, trains will run with reference to safety and without regard to making schedule time.

When any of the above conditions are encountered, conductors must report the fact to the Chief Dispatcher at the first opportunity.

6. When flag signals are not answered, as called for in General Rule No. 26 the train sounding flag signals must be brought to an immediate stop and cause of failure to answer ascertained and reported to the Superintendent.

7. A brakeman must be stationed on the rear of all trains when moving or while standing at stations, or at other places where the track is such that by letting off brakes the cars would run back. Conductors must know that a competent man is so stationed and remains there while the train is in such position.

No train must be left at any station without at least one man on the engine and one competent man in charge of the rear of the train.

8. When passing green flags set out by section men, the engineer will give a station whistle signal and trainmen will immediately get train under control.

9. When it becomes necessary to back up a train, engineers will first give proper whistle signal, but must not move train until they receive signal from trainmen. Conductor will see that a competent man is stationed at the rear end of the rear car.

10. In cases where trains part, engineers must side-track their head end before starting back for rear portion, except in cases where they can see the rear end and know positively that it has been stopped.

11. In approaching stations, engines or cars must not be cut off train before rear end is stopped, and in no case must rear portion be allowed to run into station with engine detached therefrom.

12. During the season of snow, trainmen must carefully examine and if necessary, thoroughly clean all main line split switches before and after using. Brooms and shovels will be provided for this purpose. Engineers will allow sufficient time for this rule to be complied with.

13. Work trains must, under no circumstances, work under flags against delayed passenger trains. When necessary to work under flags against delayed freight trains, it must be done under the protection of torpedoes in addition to flags.

14. Conductors and engineers handling work trains must note on the back of time slips the nature of the work done and report on Form 193.

15. Turn tables must be locked when not in use.

16. Station employes will not open or close switches for trainmen, except to prevent accident.

17. After a passenger train has made a stop at any station, train must not be moved to take coal, water or do other work, until the passengers have alighted, and the conductor signifies by the usual signal that the train can be moved.

Each train must have at least 85 per cent. of air brake cars up for service. Air brakes must be tested before connecting and after cars have been separated, conductor or brakeman must examine each car when air is applied to see that the brakes are properly set, also that they are fully released. Engineer must be present in service.

Engineers will have an understanding on each train where the hand brakes are to be used. At

other places the train should be controlled by air brakes by the engineer and hand brakes not used except in case of emergency, or when called for by whistle signal.

When hand brakes are used, air brakes once applied must not be released until hand brakes have been released and engineer receives proper signal from rear end.

When backing, a sufficient number of hand brakes must be applied on rear end to hold the slack and prevent damage when air brake is used.

19. Dead locomotives hauled in freight trains may be moved with either side rods connected or disconnected. If the side rods are connected, the train may be moved at 15 miles per hour. If the side rods are disconnected, train must not exceed 10 miles per hour at any place whether engine is being towed or is working steam and hauling train. There must be at least 3 cars between locomotives so moved.

20. All closets must be kept locked in trains within the limits of Cedar River Water Shed, indicated by sign boards, 2.67 miles east of Dryden, and 0.13 miles east of west switch, Moncton. Refuse must not be thrown from private, dining or other cars within these limits.

Conductors will be held responsible for a strict observance of this rule.

21. When conductors arrange meeting points with each other the arrangement shall be written on manifold paper, signed by the conductors, and each conductor shall give one copy to his engineer and retain one himself.

When a flagman is instructed to hold a train at a specified place or until a specified time, such instructions shall be in writing on manifold paper, signed by the conductor giving the instructions, and he shall give one copy to the flagman, one to his engineer and retain one himself.

Conductors of passenger trains, when approaching stations where they are to meet a train of the same class, or when meeting point is made by train order with a train of any class, must pull the air whistle signal immediately after engineer has whistled for the station, and engineer must answer this signal as per fourth paragraph of general time table rule No. 26. Conductors and brakemen must give their attention to the matter when approaching the station that in case the engineer fails to sound the whistle his attention will be called to the meeting point by trainmen pulling the air signal.

Tall-hose must be in place and ready for use on the rear platform of all passenger trains, regardless of whether back-up movement is being made or not.

## FOR TRAINMEN.

50. When making couplings it is often necessary for cars to strike quite hard. Trainmen must take the necessary precautions in such cases to prevent injury to persons or teams that may be passing the rear end of the train, when the end of said train is near to or standing in a public street or highway, or any other traveled way or path.

51. When taking into train, cars loaded with long timber, telegraph poles, etc., where one load is carried on two cars, conductor will be careful to see that the coupling is properly made between these two (2) cars, and should continue this inspection from time to time.

52. Any brasses which may be removed from cars must be delivered to Car Inspector at end of run, together with written statement showing the number and initials of car from which removed. Car foreman will furnish new brasses to replace those removed. When you have occasion to make light repairs, such as applying knuckles, air hose, brasses, etc., to foreign cars, a report of same must be made in writing to Car Repairer immediately upon arrival; the defective part so removed must be turned in with your report. C. M. & St. P. cars to be treated as foreign.

53. When fuses are used, they must not be deposited on bridges or any place where there is danger of fire.

54. When trainmen are at a switch waiting for a train to pass, they will station themselves on the opposite side of the track from the switch stand and remain there until the expected train has passed.

55. The rear brakeman on every train carrying passengers will be known as flagman, and must wear a badge while in service. His first duty will be to protect the rear of his train from following trains. Such employes must pass an examination as to their knowledge of General Rules 62, 63, 64 and 66, concerning the protection of the rear of trains, and must act under the rules, without instructions from the conductor. Conductors must see that the flagman performs his duty as per the rules. When it becomes necessary or the flagman to go back to protect the rear of his train, the next brakeman will immediately take the flagman's position on the train and remain there until relieved by the flagman, and on passenger trains the baggage man must take the place of the forward brakeman when necessary.

56. Conductors and brakemen must examine their trains whenever there is an opportunity to do so, looking particularly for hot boxes and defective draft and brake rigging.

57. Accident reports on proper forms, 142 and 171, must be made promptly, no matter how insignificant the accident may appear. In case of accident to persons, care must be exercised to secure the names and addresses of all witnesses, particularly those not employes of the company.

58. Conductors will report when short of equipment to seat passengers, steam pipes loose or out of order, defective steam hose, lamps, etc., or anything necessary to be done to improve the service.

59. Conductors will see that wheel blocks and derailing switches are replaced after using sidings, whether there are cars on sidings or not.

60. When draft gear is pulled out it should be taken to the point where car is left. So far as possible, broken parts of a car should be placed in the car to which they belong.

61. Whenever a train parts, account of draft irons pulling out, conductors will send a man back until draft iron is found and removed, or next station is reached, from which he must report the fact to the Chief Dispatcher.

62. In case of wrecks caused by defective rolling stock, broken parts causing them must be preserved by Conductor and sent to Superintendent of Motive Power with explanation. In case of injury to persons in coupling or otherwise, Conductors will carefully inspect such cars, make a memorandum of condition of same, and report full particulars to the Superintendent with report on Form 171.

63. In case a split switch is run through, Conductors will notify the Chief Dispatcher, Station Agent and Section men, and will not leave said switch, except in care of Section men or by order from Chief Dispatcher.

64. Conductors must keep way-bills locked in desk in caboose unless they carry them on their person.

65. Minors will not be employed as brakemen or switchmen without first having executed a minor's release. Conductors and Yardmasters will see that this rule is observed.

66. Cars must not be set out on passing tracks—unless Conductor is so instructed by Chief Dispatcher.

67. Blanks for telegraphic reports of accidents, Form 250, W. K. Report, are kept in all telegraph offices. In case of accident, Conductors must promptly fill out one of these blanks, being particular to make a full statement. It is of the greatest importance that this is fully and exactly complied with.

68. Conductors will examine way-bills carefully and see that notations thereon are complied with so far as they are concerned.

69. Conductors will keep a complete seal record of cars in their train, and cars not properly sealed should be sealed at the first opportunity, and a report sent to the Superintendent.

Cars loaded with rails, coke, lumber, brick, sand, ties, bulk lime, stone, iron ore, coal, pig iron, steel blooms, ice, sewer pipe, water pipe and iron channels, need not be sealed, but doors must be closed and fastened.

70. When cars containing freight are damaged in wrecks, conductors will protect same against pilfering until relieved therefrom by trainmaster, roadmaster or party in charge of clearing track. It is not intended that this provision shall interfere in any way with work of clearing track before arrival of wrecking outfit.

71. Conductors of trains hauling U. S. Mail must know that the mail for their train is loaded, or mail shortage slip delivered before leaving a station at which their train receives mail.

72. For the protection of baggage and express in transit, conductors will not permit any except authorized persons to ride in the baggage or express cars. Doors must be kept locked.

73. When cars are set out in bad order, the fact must be plainly noted on way-bill and report sent to Chief Dispatcher from first telegraph station. When loads on cars, in your judgment, are improperly secured, they should be treated as bad order cars.

74. Yard and trainmen must not adjust the air-brake leverage. If they notice cars on which brakes are not working properly, they must report such cars to the car inspector at the end of their run.

75. On account of the danger from fire, parties in charge of cars loaded with emigrant movables and stock must not be permitted to smoke therein.

76. In case of accident to a train, conductors will send to the President's office direct all passes collected on such train.

77. Empty foreign cars must not be moved except upon regular or slip bills. Agents are required to place destination cards on such cars.

78. Yardmasters and conductors must not allow boys, or any outsiders to assist in doing switching at stations, and must make every effort to keep such persons off their trains.

79. Conductors are charged with the responsibility of seeing that General Notice No. 21 is displayed conspicuously in cabooses and baggage cars under their charge, and to call the attention of all employes under their charge to this notice, and see that they read and understand it. They will take a record of the name of each employe, and the date upon which his attention was called to the same. Yardmasters will be charged with the responsibility of seeing that this notice is displayed in all switchmen's houses, or places where it is customary for switchmen to receive their instructions. They will be required to call the attention of switchmen and other employes under their charge to this notice, and take a record of the name, and the date upon which all employes are so instructed.

80. Trainmen must not step on cushions and seat frames to reach lamps. Conductors will see that they use boards provided for that purpose.

81. Conductors of trains setting out or picking up cars at Junction points where car inspectors are not employed, or are not on duty, will make a record in their train book of any defects in car or shortage of air-brake attachment, etc.

82. During cold weather conductors of passenger trains will see that brakemen open steam trap and feed valve on arrival at terminal stations, to prevent water freezing therein. When steam hose are uncoupled, they must be hung in place provided therefor in car from which removed.

83. Conductors of trains carrying live stock will consult the wishes of the stockmen in matters pertaining to the care and comfort of the stock. Especial attention must be given to stock unaccompanied by drovers. In warm weather trainmen will water hogs as often as may be necessary.

84. A careful examination of refrigerator cars must be made by Conductors to see if properly iced, and Chief Dispatcher advised when re-icing is required.

85. When hauling special trains, such as circus trains, etc., or special cars for which a charge is made, make a report on Form 8 and send in promptly.

86. Conductors must fill out the movement blank on back of way-bills, and when movement record blank is attached to the bill care must be used to fill it out completely.

87. When cars are to be set out or put in passenger trains, no couplings will be broken until the train has been stopped at the point where the change is to be made.

88. Whenever it becomes necessary to take brake wheels off, in order to couple cars to vestibule cars, conductors must see that washers and nuts are securely placed on brake staff, and wheel hung thereon. When wheels are replaced, conductors must know that they are securely fastened.

89. Switching must not be done with passenger cars or caboose between engine and cars.

90. Conductors running freight trains which are scheduled to carry passengers, must send an envelope, Form E, to Return Ticket Agent, Chicago, whether any tickets or mileage is collected or not. Tickets or mileage collected must be sent, as above, by express, and a receipt taken from the express company's agent.

91. When it is necessary to haul a car behind a caboose for any reason, it must be chained thereto, in addition to coupling to prevent breaking off, and markers displayed on each side of such car.

92. Conductors of time and stock freights will report delays of over ten minutes to Chief Dispatcher.

93. Conductors of freight trains having coaches for cabooses will report same to car department on Form 77.

94. In coupling steam heating hose together for heating trains, trainmen will commence at rear end of train to make the couplings.

95. When Automatic Couplings are made, be particular to see that lock pin and lift lever are down in proper position.

96. The following cars should be hauled next to the caboose, giving preference to the order shown: Bad Order, Outfit, Emigrant Movables, Flats, Coal Cars, Empty Oil Tanks.

97. Trainmen are positively prohibited from carrying tall lights, etc., through coaches, sleeping cars or private cars.

98. Conductors will examine all way-bills for carload freight, and if no weighing stamp or other evidence that the freight has been weighed appears, they will call attention thereto of Agent at first station having track scales and have car weighed, unless otherwise instructed by Chief Dispatcher. Said Agent will correctly weigh car and contents and note gross, tare and net weight on way-bill.

99. In cases of heavy rain storms or high water, trains must be brought to a stop, and a man sent out to examine bridges, trestles, culverts and other points liable to damage, before passing over. If found safe for trains to pass, but in danger of becoming unsafe for following trains, flagman must be left for the protection of such trains, and Chief Dispatcher notified by wire from the next telegraph station.

100. During high winds, when cars are liable to be blown out on the main track, trains must approach side tracks carefully, especially where there are no agents or operators.

## FOR ENGINEMEN.

150. Enginemen should avoid, as much as possible, blowing off steam when standing opposite or passing passenger trains; and will not sound whistles under such circumstances, unless to prevent accident.

151. Engineers will not scatter cinders along the track, nor dump them at or near switches. In dumping front end cinders where there are no pits, have the fireman level cinders to flush with the rail so that the pilots of other engines will not strike them. Front dampers must be closed while running. If necessary to clean ash pan away from cinder pits, fire in cinders must be carefully extinguished.

152. Engineers will not drop sand on split switches, derailing points or detector bars at interlocking switches.

153. Refuse coal must not be thrown off except at cinder pits or coaling stations.

154. Spouts at water tanks must be pushed up as far as they will go.

SPECIAL RULES AND INSTRUCTIONS REGARDING THE OPERATION OF TRAINS ON MOUNTAIN GRADES.

Location will be Specified on Time-Tables.

ASCENDING.

1. When no helper power on rear, the last car must be one that is equipped with a good hand brake and a trainman stationed upon it at all times. Conductors are responsible for having trainmen properly stationed.
2. When helper power is to accompany the train beyond the summit, it will be used to double-head the train down grade.
3. When power is used on rear of freight trains, it must be in advance of boarding outfits, empty flat cars or cars of insufficient strength to safely resist the push of such engines.

DESCENDING.

4. Before commencing descent, engineers and conductors will be held responsible for thoroughly ascertaining condition of brakes and train and determining the method that will be followed in controlling its descent. They will not start until it is positively known that the train can be handled safely. To afford the engineer an opportunity to recharge and retain maximum air pressure at all times, conductors will confer with engineers as to the number of retaining valves to be turned up and will be responsible for the number required in service. When retainers are used, they will be turned up, commencing at the head end of the train. As a rule, all available retainers should be used on freight trains. On passenger trains every other retainer should be used, alternating them to avoid heating of wheels.

5. An air brake test will be made before commencing descent, which must be carefully supervised by the conductor. Such tests shall be made by setting the brakes and leaving them set while a trainman walks from each end of the train toward the middle, who must observe that the piston travel is properly adjusted, not less than four inches nor more than eight inches, that retainers are in good condition and that hand brakes are ready for operation. If any of the air-brake apparatus is out of order, the air will be cut out on such cars. Conductor must notify engineer when air is cut out on a car, or any change made in the brake equipment, and see that proper test is made after every such change.

6. Same rule to apply before commencing ascent.

7. Approach and commence descent at slow speed, applying retainers before starting and keep them applied until the actual foot of grade is reached.

8. Brake resistance decreases as speed increases; speed, therefore must be controlled from the start.

9. Immediately after starting, engineers will apply air, ascertaining at once, and while speed is slow, as to the holding power of the brakes. Speed of trains will be governed by local conditions and must in no instance exceed that at which they can be quickly brought to a stop.

10. Should air hose burst while descending, sand must be used and train stopped as quickly as possible. When stopped the engineer will reverse his engine and use steam enough

to hold it against the train and trainmen will set a sufficient number of hand brakes to insure holding the train should the air release. Hand brakes must remain set until the train is again fully charged with air. The engineer will notice by the air gauge that train pipe is empty and occasionally move the handle of engineer's valve quickly from "lap" to full release and back to "lap" to show trainmen by escape of air the location of damaged hose or pipe. While an air hose is being changed train pipe cocks must not be closed on account of danger of forward brakes releasing.

11. Use air brake facilities to full extent, supplementing them with hand brakes only when necessary for the safe handling of the train. When necessary to use hand brakes, do so with judgment, avoid flattening wheels and make full use of them when called for by signal from the engineer.

12. Trainmen must watch closely for excessive heating of wheels, and if any are found the train must be brought to a stop and remain standing a sufficient length of time to allow them to cool.

13. Pushing cars ahead of engines on descending grades is prohibited.

14. Brakemen are required to ride on top of freight trains on descending grades between Keeechelus and Moncton.

GENERAL.

16. Air will be operated from the leading engine, and will, if continuous, be cut through to helper and include

such air cars as may be in the rear of it, making air continuous from leading engine as far back as conditions will permit.

17. When two or more locomotives are handling a train, the cut-out cock in brake pipe underneath the engineer's brake valve must be closed and the brake valve handle carried in running and straight air release position on all locomotives except the one from which the brakes are operated.

18. If for any reason it becomes necessary to cut off road engine from train, it shall be known positively before doing so that the train is properly secured with hand brakes or blocks. The engine shall not be uncoupled until the conductor so directs. This is a matter that must be handled personally by the conductor and engineer, who will be held equally responsible for safety of train.

19. When cars are placed on sidings on mountain or maximum grades, they shall be left on the down-hill end of same as near derail as practicable, the air released, hand brakes securely applied and wheels blocked before detaching engine from cars.

20. When a freight train is to stop, all trainmen will remain on the train until it comes to a stop and has been properly secured by hand brakes. In the case of a descending train the air should be released after the train is secured by hand brakes, to enable the engineer to recharge the train before starting.

The Following Table Should be Used in Estimating Train Tonnage.

	30 ft. Cars	33 ft. Cars	36 ft. Cars	36 ft. D.D. Cars
Weight of Empty Stock Car	24,500 lbs	27,500 lbs	29,500 lbs	29,500 lbs
Weight of Cattle	20,000 lbs	23,000 lbs	23,000 lbs	
Gross Weight	44,500 lbs	50,500 lbs	52,500 lbs	
Weight of Hogs	14,500 lbs	18,000 lbs	18,000 lbs	26,000 lbs
Gross Weight	39,000 lbs	45,500 lbs	47,500 lbs	55,500 lbs
Weight of Sheep	10,000 lbs	12,000 lbs	12,000 lbs	22,000 lbs
Gross Weight	34,500 lbs	39,500 lbs	41,500 lbs	51,500 lbs
Weight of Horses	20,000 lbs	23,000 lbs	23,000 lbs	
Gross Weight	44,500 lbs	50,500 lbs	52,500 lbs	

When the way-bill does not show scale weight for shipments, the capacity of car should be used in reporting tonnage on train report, form No. 105.

When figuring tonnage of empty cars on which weight is not stenciled, use following figures:

Box cars (28 to 31 feet)	11 tons
Box cars (33 feet and L. L.)	13 tons
Box cars (33 to 34 feet)	15 tons
Box cars (Standard 36 feet)	15 tons
Box cars (40 feet)	15 tons
Furniture cars (36 to 38 feet)	15 tons
Furniture cars (40 feet)	17 tons
Carriage cars (50 feet)	18 tons
Beer and vegetable cars	18 tons
Refrigerator cars	20 tons
Stock cars (double deck)	15 tons
Stock cars (36 to 38 feet)	15 tons
Stock cars (less than 36 feet)	13 tons
Coal cars (all steel)	20 tons

Coal cars (100,000 capacity)	21 tons
Coal cars (60,000 capacity)	15 tons
Coal cars (40,000 capacity)	11 tons
Ore cars (100,000 capacity)	15 tons
Flat cars (short plain)	10 tons
Flat cars (long plain)	12 tons
Roger ballast cars	15 tons
U. T. L. cars	20 tons
Caboose (four-wheel)	10 tons
Caboose (31 feet common)	15 tons
Caboose (36 feet, drovers)	18 tons
Milk Express (44 and 45 feet)	25 tons
Milk Express (35 and 40 feet)	22 tons
Baggage cars (40 feet)	23 tons
Baggage cars (50 feet)	30 tons
Baggage cars (60 feet)	35 tons
Postal cars (60 feet)	46 tons
Postal cars (50 feet)	35 tons
Coaches (50 feet)	28 tons
Coaches (60 feet)	45 tons
Coaches (70 feet)	48 tons
Chair cars (50 feet)	38 tons
Buffet cars (70 feet)	50 tons
Dining cars (60 feet)	48 tons
Dining cars (70 feet)	60 tons
Parlor cars (60 feet)	37 tons
Parlor cars (70 feet)	56 tons
Sleeping cars (60 feet)	36 tons
Sleeping cars (70 feet)	55 tons

MILWAUKEE HOSPITAL ASSOCIATION.

Company Surgeons.

Dr. A. I. Bouffleur, Chief Surgeon, Chicago, Ill.

Dr. H. Eugene Allen, Division Surgeon, Seattle. Office: Lumber Exchange Bldg.; hours 2 to 4 P. M.; telephones, Sunset Main 4561; Independent 4646. Always reachable through Pacific Hospital; telephones, Sunset Main 1406; Independent 1399.

Dr. C. T. Cooke, Oculist, Seattle, Washington.

Dr. W. N. Keller, Local Surgeon, Tacoma. Office: Berlin Bldg.; hours 2 to 4 P. M.; telephones, Sunset Main 7740, Independent A-3456. Always reachable through Fanny Paddock Hospital; telephones, Sunset Main 48, Independent A-6008.

Dr. L. L. Love, Assistant Surgeon, Tacoma. Office: Bank of California Bldg., 13th and Pacific Ave.; telephones: Office, Sunset Main 848; Residence, Sunset Main 1115.

Dr. Sidney McLean, Assistant Local Surgeon, Tacoma. Office: K. P. Bldg., 11th and C Sts.; telephones: Office, Sunset Main 6783; Residence, Sunset Main 2560.

Dr. F. A. Scott, Oculist, Tacoma, Washin. ton.

Dr. D. O. Kearby, Local Surgeon, Cle Elum, Washington.

Association Hospitals.

Pacific Hospital, corner First Avenue and Vine Street, Seattle; telephones, Sunset Main 1406, Independent 1399.

Fanny Paddock Hospital, "J" Street, between South Third and Fourth Streets, Tacoma; telephones, Sunset Main 48, Independent A-6008.

Roslyn-Cle Elum Hospital, Cle Elum, Washington.

COMMERCIAL SPURS

Harvard	1.3 miles East of Bismarck
Independent	.2 miles West of Midland
Allison	1.5 miles East of Midland
Electric	1.8 miles West of Salsich
Davis	1.1 miles East of Harding
Graham	1.0 miles West of Thrift
Hunts	.6 miles West of Thrift
Babler	.8 miles East of Thrift
Calpenham	.9 miles East of Kapowsin
Skewis	.5 miles West of Clay City
Reidel	.8 miles East of Ohop
McMurray	.7 miles East of Eatonville
Headworks	1.7 miles West of Alder
Kings	1.2 miles West of Alder
Duke's	1.9 miles East of Alder
Flynn	2.0 miles West of Mineral
Mentzers	2.2 miles West of Mineral
Carlson	1.3 miles East of East Creek Jct.
Lockhart	1.1 miles East of East Creek Jct.
Camp 21	4.1 miles East of East Creek Jct.
Petermans	4.6 miles East of East Creek Jct.
Electron	2.2 miles East of Kapowsin
Selle	1.3 miles East of Park Junction
National	3.5 miles East of Park Junction
Johnson Creek Lbr. Co.	.9 miles East of Rainier
Des Chuttes Lbr. Co.	.9 miles East of Offutt
Lundeen	1.3 miles West of Offutt
McIntosh Swan	4.0 miles West of Offutt

## GENERAL RULES.

The safety of Passengers and Trains is of the first importance, and all operations of working and repairing the road must be subservient thereto. To this, with the regularity and punctuality of the trains, and the comfort and convenience of passengers, all work must be entirely subordinate.

1. Every person accepting a position with this company does so with the full knowledge of the perils incident to the operation of railways, and agrees to exercise due care in the performance of his duties to prevent accident to himself or others. Before using machinery or tools employes must see that they are in a safe condition to perform the services required.

2. Every employe of this company whose duties are in any way prescribed by these rules, must always have a copy of them in his possession when on duty, and must make himself perfectly acquainted with every rule, and be prepared to stand an examination at any time. No employe will be permitted to run a train or engine without first passing a thorough examination on the rules by the Superintendent. The head of each department will see that his subordinates are supplied with current time tables.

3. The fact that any one enters or remains in the service of the company will be considered as an expression of willingness to obey these rules. He will not be excused for the violation of any of them, though they may not be included among those applicable to his department.

4. Special rules shall supersede general rules and be fully observed while in force. These rules are all deemed important, and a strict observance of each and all of them is absolutely required. In all cases of doubt take the safe course.

5. Employes must wear the prescribed badges or uniforms while on duty.

Mail agents, express messengers, parlor and sleeping car conductors and porters, news agents and persons in charge of individual cars, are subject, while on duty, to the rules governing the employes of the company.

6. Incivility to patrons of the road will not be tolerated, whatever the provocation may be. Boisterous, profane or vulgar language on trains, or on the premises of the company, is strictly forbidden.

7. Any employe knowing of the violation of the rules by another employe, and who fails to report the same to the Superintendent, becomes equally censurable.

8. The use of intoxicating drinks has proven a most fruitful source of trouble to railways as well as to individuals. The company will exercise the most rigid scrutiny in reference to the habits of employes in this respect, and any employe who has been dismissed on this account will not be re-employed. Drinking when on duty or frequenting saloons will not be tolerated, and preference will be given to those who do not drink at all.

9. If any one is in doubt as to the meaning of any rule or special instruction, application must be made at once to the Superintendent or other proper division officer, for an explanation. Ignorance of the rules will not be accepted as an excuse for neglect of duty.

10. All former rules that conflict with these rules are abolished, and all former time tables are to be destroyed.

## STANDARD TIME.

11. Standard time will be telegraphed daily at 10 o'clock A. M. The clocks at stations indicated in special rules will be regulated to "Standard time."

Each conductor and engineer must have a reliable watch. Conductors must compare and correct their watches before starting on their runs, and register in a book provided for that purpose, that such comparison and correction has been made.

Conductors and engineers must compare time with each other before starting on their runs.

Conductors and engineers not having access to clocks that are regulated to Standard time will call for and receive correct time from the Train Dispatcher before starting on their runs.

Conductors and engineers must compare time with each other immediately on receipt of orders from the Train Dispatcher.

Conductors and engineers must compare time with Train Dispatcher's office at 9 P. M.

## TIME TABLES.

13. Each time table, at the moment it takes effect, supercedes the preceding time table. All regular trains on the road running according to the preceding time table shall, unless otherwise directed, assume the time and rights of trains of corresponding numbers on the new time table.

14. When new time tables are issued, blank receipts will be sent with them, which receipts must be signed by all Conductors, Enginemen, Round House Foremen, Yard Masters, Road Masters, and Chief Carpenters, and promptly forwarded to the Train Dispatcher. If there is not sufficient time to get these receipts in the ordinary way before the taking effect of the time table, the acknowledgement must be secured by telegraph.

15. Where but one time is shown, it shall be regarded as leaving time. Where two times are shown, the earlier will be the arriving time and the later the departing time. Trains will not leave stations before the time specified unless so directed.

16. Full faced figures denote regular meeting and passing points of trains.

## STANDARD SIGNALS.

17. All employes whose duties require them to give signals must provide themselves with the proper appliances, and keep them in good order and always ready for immediate use.

Flags of the proper color must be used by day and lamps by night, or whenever from fog or other cause the day signals cannot be clearly seen.

18. Red signifies danger, and is a signal to stop. Green signifies caution, and is a signal to go slow. It is also a signal to stop trains at Flag Stations.

White signifies safety.

19. A torpedo placed on the rail is a signal to be used in addition to the regular danger signals. The explosion of one or more torpedoes is a signal to stop immediately. Torpedoes must not be placed near stations or road crossings, where persons are liable to be injured by them.

A fusee is an extra danger signal to be lighted and placed on the track in case of accident, or when a train reduces speed so as to endanger its rear from trains that may be following.

20. A flag or lamp swung across the track, a hat or any object waved violently signifies danger, and is a signal to stop.

## LAMP SIGNALS.

21. A lamp swung across the track is the signal to stop. A lamp raised and lowered perpendicularly is the signal to move ahead.

A lamp swung in a half circle over the head, when the train is standing, is the signal to back.

A lamp swung in a circle at arms length, when the train is running, is the signal that the train has parted.

A flag or the hand moved in any of the directions given above will indicate the same signal as given by a lamp.

If signal is given quick, move quick; if slow, move slow.

## FIXED SIGNALS.

22. Fixed signals are placed at Junctions, Railroad Crossings, Draw Bridges, Stations and other points that require special protection. Special instructions will be issued indicating their position and use.

23. A signal imperfectly displayed or the absence of a signal at a place where usually shown, must be regarded as a danger signal and the fact reported to the Superintendent.

24. Switch lights and train order signal lights must be kept burning all night.

## BELL-CORD SIGNALS.

25. One tap of the signal bell when the train is standing is the signal to call the engineer's attention to the rear of the train.

Two taps of the signal bell when train is running, is the signal to stop at once. When given after the whistle signal

for approaching a station, it will signify that the train is to stop at the station.

Three taps of the signal bell is the signal to back up. When one tap of the signal bell is heard while a train is running the engineer must immediately ascertain if the train has parted, and be governed accordingly.

## WHISTLE SIGNALS.

26. One short blast of the whistle, thus, —, is the signal to apply the brakes.

One long blast of the whistle, of five seconds' duration, thus, ———, is the signal for approaching stations, railroad crossings, junctions and draw bridges.

Two short blasts of the whistle, thus, — —, is the signal to release brakes, and must also be given before starting, after stop has been made for railroad crossings.

One long and one short blast of the whistle, thus, — — —, must be given in answer to all signals to stop.

Three short blasts of the whistle, thus, — — —, when train is standing, to be repeated until answered by trainmen, is the signal that the train will back.

One long and two short blasts of the whistle, thus, — — — —, is the signal for highway crossings.

Three long blasts of the whistle, thus, — — — — —, when train is running, to be repeated until answered by signal from trainmen, is the signal that train has parted.

Four short blasts of the whistle, thus, — — — — —, is the engineer's call for signals from switch tenders, watchmen, trainmen and others.

One long and three short blasts of the whistle, thus, — — — — —, is the signal that train is carrying signals for a following train, and is to call attention of trains they meet or pass to that fact. Trains thus notified must answer by giving the same signal, — — — — —.

One long, two short and one long blast of the whistle, thus, — — — — —, will be given by engineers when they find it necessary to stop between stations and to notify conductor, thus enabling him to drop off and send back a flagman.

Release brakes signal repeated three times, thus, — — — — —, is the signal to call in flagman.

## TRAIN SIGNALS.

27. All trains must display one green flag by day and one light showing red to the rear and green to the front and side at night on each side of the rear car as markers. All trains running after sunset or when obscured by fog or other cause must display the headlight in front and two or more red lights in the rear. Engines running without cars when backing must carry the markers on the rear of the tender.

28. Signal cords shall be used on all passenger trains, and shall extend from the rear car to the whistle or signal bell on the engine, and shall not be detached while the train is in motion.

29. Two green flags by day, and in addition two green lights by night, displayed on the front of an engine, denote that the train is followed by another train.

30. When two or more engines are coupled together, the leading engine only shall display the signals as provided by rules governing the carrying of signals and shall answer all signals.

31. Two white flags by day and in addition two white lights by night, displayed on the front of an engine, denote that the train is an irregular one. These signals must be displayed by all irregular trains.

32. One flag or light displayed as a classification signal will be regarded the same as if two were displayed. Conductors and Enginemen will be held responsible for the proper display of all signals.

33. When freight trains are standing on side track, all red lights on rear of train must be removed as soon as main track is clear. The red lights must again be displayed before returning to main track.

34. White signals must be used by watchmen on public and street crossings to prevent persons and teams from crossing when trains are approaching. Danger signals must be used only when necessary to stop trains.

35. A red flag by day or a red light by night placed on the end of a car denotes that car inspectors are at work under or about the car or train. The car or train so protected must not be coupled to or moved until the red signal is removed by the car inspectors. When a car or train standing on a siding is protected by a red signal, other cars must not be placed in front of it so that the red signal will be obscured, without first notifying the car inspector that he may protect himself.

36. All signals must be used in accordance with the rules, and trainmen and enginemen must keep a constant lookout for signals.

## CLASSIFICATION OF TRAINS.

37. All trains shall be designated as regular or irregular. Regular trains are those represented on the time table, and may consist of one or more sections. Irregular trains are those not represented on the time table. An engine without cars, in service on the road, shall be considered a train.

38. Trains are classified on the time table as to their right to the track. Trains of the first class being superior to those of the second and all succeeding classes, and so on indefinitely. The terms Passenger, Freight, or Mixed are descriptive, and do not refer to class.

39. Irregular trains will be designated as follows: Irregular passenger trains shall be designated as Special Trains. Irregular freight trains shall be designated as Extra Trains. Working and construction trains shall be designated as Work Trains.

40. Irregular trains are of inferior class to regular trains.

## TRAIN RIGHTS.

41. Trains in a specified direction will have the absolute right to track over trains of similar or inferior class, moving in the opposite direction. This will be indicated on the different divisions by special rule on face of time card.

42. Trains of inferior class must keep out of the way of trains of a superior class.

43. Regular trains, twenty-four hours or more behind their time-table time, lose all their rights.

44. No train shall assume the rights of any other train without orders. Should a train be delayed so that another train of the same class overtakes it, the train overtaking the delayed train shall not have the right to pass it without orders.

45. No train having the right to the road must leave any station where, by the time table, it should meet a train of the same class until five (5) minutes after its time, and this must be observed at every succeeding station until it shall have met the expected train. The five (5) minutes are allowed for the variation of watches and must not be used by either train.

46. When there is more than one train running on the time of a regular train, the leading section or sections will carry *Green Signals* and the following section or sections will have precisely the same *Time Table* rights as the leading section and *no more*.

47. Conductors of trains carrying signals for following sections must note in each train register that they are carrying signals, and state from, and to what points, and will not leave the station where the signals are to be taken in, without orders, unless the following train has arrived.

48. At meeting points, the train having the right of the road shall occupy the main track, when practicable. Trains taking siding must enter from nearest end and not run by to back in, except in cases of emergency, and then only under cover of signals. Great care must be used approaching all stations. *Special caution* must be observed when the view is obscured. *Main track must be kept clear for passenger trains, especially for those which do not stop.*

49. No train shall leave a station preceding a station where it is to meet or be passed by a train of a superior class, unless it shall be able to reach such station and take siding five (5) minutes before such train is due.

## INSTRUCTIONS TO TRAIN AND ENGINEMEN.

50. Train and enginemen will be held equally responsible for the violation of any of the rules governing the safety of trains, and they must take every precaution for the protection of trains even if not provided for by the rules.