

NORTHERN PACIFIC RAILWAY COMPANY.

PUGET SOUND DIVISION.

TIME 48 TABLE

In Effect at 12:01 A. M. Pacific or 120th Meridian Time

SUNDAY, JULY 2, 1922.

For the Government of Employees only. The Company reserves the right to vary therefrom at pleasure. Be positive that you have the Current Time Table and destroy all previous numbers. Read carefully the Special Instructions and always have for reference a copy of TRANSPORTATION RULES.

A. V. BROWN,
Acting General Manager.

T. H. LANTRY,
Acting General Superintendent.

I. B. RICHARDS,
Superintendent of Transportation.

J. J. McCULLOUGH,
Superintendent.

P. H. McCAULEY,
General Superintendent of Transportation.

FIRST SUB-DIVISION

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

TRACK BETWEEN SEATTLE AND STADIUM, VIA HEAD OF BAY AND BETWEEN TACOMA AND SOUTH TACOMA.

LOCK BETWEEN HOLGATE STREET, SEATTLE, AND RESERVATION; AND BETWEEN TACOMA AND SOUTH TACOMA.

STAFF SYSTEM BETWEEN STADIUM AND McCARVER STREET.

SPECIAL INSTRUCTIONS, PAGES 5, 6 and 7.

FIRST SUB-DIVISION.

SPECIAL INSTRUCTIONS, PAGES 5, 6 and 7.

FIRST SUB-DIVISION

EASTWARD.

Distance from McCarver St.	Time Table 48 July 2, 1922. Succeeding No. 47D.		Car Capacity of Stations	FIRST CLASS																				
	STATIONS			402	408		412	414	416	418	422	428	430	436	438	440	446	450	456	458	466	562	564	592
	Telegraph Offices and Calls			Passenger Daily	Passenger Daily		Passenger Daily	Passenger Daily	Passenger Daily	Passenger Daily	Passenger Daily	Passenger Daily	Passenger Daily	Passenger Daily	Passenger Daily	Passenger Daily	Passenger Ex. Sun.	Passenger Daily	Passenger Daily	Passenger Daily	Passenger Daily	Passenger Daily	Passenger Daily	Passenger Daily
				Portland Seattle Express	Portland Seattle Express		No. 2's connection	No. 1 North Coast Limited	No. 41 Puget Sound Limited	No. 42's connection Mississippi Valley Limited	Grays Harbor Limited	No. 337 Grandview	G. N. No. 2	No. 333 Spokane	334's Connection Spokane	No. 3 Northern Pacific Express	North Bend accommodation	No. 4's connection	Gt. Nor. Portland	Gt. Nor. Portland	Puget Sound Express	O-W R & N Seattle Passenger	O-W R & N Seattle Express	Willapa Harbor
42.8	UD SEATTLE King Street Station 0.8 Cross over	DN		A 6.45AM	A 2.45PM			A 8.10AM	A 9.30AM		A 9.50PM	A 6.10AM	A 6.50PM	A 10.00PM		A 9.25PM	A 10.40AM		A 7.40PM	A 4.40PM	A 2.15PM			
42.0	SECOND AVE. YD 2.4 Cross over	P																						
39.6	ARGO Cross over O. W. R. & N. and P. C. R. R. Crossings Interlocked 6.8 Track conn.	P		6.35	2.35			7.58	9.19		9.40	5.59	6.40	9.49		9.15	10.32		7.30	4.30	2.05			
32.8	C. M. & St. P. R. R. CROSSING Interlocked 0.8 Track con. Cross over.	DN																						
32.0	BI BLACK RIVER 1.4 Cross over	DN	20	6.25	2.25			7.40	9.03		9.29	5.45	6.27	9.35		9.00	L 10.18AM		7.18	4.19	1.51			
30.6	ORILLIA 2.0		5 Spur																		f 1.48			
28.6	O'BRIEN 2.1		3 Spur																		f 1.45			
26.5	KN KENT 1.9 Cross over	D	90	6.15	2.15			7.27	f 8.52		f 9.18	s 5.35	6.19	s 9.25		8.50			s 7.07	4.08	f 1.41			
24.6	THOMAS 1.4		8 Spur																		f 1.37			
23.2	CHRISTOPHER 1.9		4 Spur																		f 1.34			
21.3	AU AUBURN 0.9 Cross over	DN	70	s 6.02	s 2.05			s 7.15	s 8.42		s 9.06	s 5.24	6.10	s 9.14		s 8.39			f 6.55	3.56	s 1.30			
22.2	QR EAST AUBURN 0.9	DN	35					s 9.50AM	L 7.09AM	L 8.35AM	A 4.10PM		L 5.19AM		L 9.09PM	A 12.50AM	L 8.34PM		A 7.40PM					
21.3	AU AUBURN 4.9 Cross over	DN	70	s 6.02	s 2.05			s 9.44			s 4.05	s 9.06		6.10		s 12.45		s 7.33	f 6.55	3.56	s 1.30			
16.4	DIERINGER 2.6			5.51	1.57			f 9.34			3.55	8.56		6.02		f 12.38		f 7.24	6.45	3.46	f 1.21			
13.8	SN SUMNER 1.6 Cross over	D		s 5.47	1.52			s 9.29			s 3.50	s 8.52		5.57		s 12.33		s 7.19	s 6.40	3.42	s 1.16			
12.2	MEEKER 1.3	P	70	5.43	1.49			9.24			3.45	8.48		5.54		12.28		7.14	6.35	3.38	1.13			
10.9	PY PUYALLUP 6.4 Cross over	DN	70	s 5.40	s 1.47			s 9.21			s 3.41	s 8.45		f 5.52		s 12.25		s 7.11	s 6.32	s 3.35	s 1.10			
4.5	RN RESERVATION 0.2 Cross over	DN		5.29	1.35			9.10			3.30	8.34		5.40		12.14		7.00	6.20	3.24	12.59	A 9.30PM	A 5.05AM	
4.3	O-W. R. & N. Co. CROSSING Interlocked 0.5																							
3.8	RIVER STREET 1.1 Cross over	P	500																					
2.7	Q TACOMA 2.3 Cross over	DN		s 5.25 5.05				L 9.05AM			L 3.25PM			L 5.35PM		L 12.10AM		L 6.55PM		Via Drawbridge Line	Via Drawbridge Line	12.55 12.48	s 9.25 9.18	s 5.00 4.50
0.4	NX STADIUM 0.4	DN																	Via Drawbridge Line	Via Drawbridge Line	12.37	9.07	4.37	
0.0	McCARVER ST.	DN		L 4.55AM																	L 12.35PM	L 9.05PM	L 4.35AM	
6.7	RN RESERVATION 0.2 Cross over	DN			1.35						8.34								6.20	3.24				
6.5	O-W. R. & N. Co. CROSSING 0.3 Track conn.																							
6.2	O-W. R. & N. Co. CROSSING 1.6 Track conn.																							
4.6	Q TACOMA 4.6 Cross over	DN		s 1.30 1.20							s 8.30 8.20								s 6.15 6.05	s 3.20 3.10				A 12.40PM
0.0	SU SO. TACOMA Cross over	DN	70	L 1.05PM							L 8.05PM								L 5.50PM	L 2.55PM				L 12.25PM
				Daily	Daily			Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Ex. Sun.	Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily
	Time Over Subdivision			1.30	1.30			.45	1.01	.55	.45	1.35	.51	1.15	.51	.40	.51	.22	.45	1.40	1.35	1.30	.15	.20
	Average Speed Per Hour			28.5	32.3			26.0	22.0	24.4	26.0	23.4	26.4	32.3	26.4	29.2	26.4	29.4	26.0	27.1	28.4	28.5	18.0	13.5

EASTWARD TRAINS ARE SUPERIOR TO TRAINS OF THE SAME CLASS IN THE OPPOSITE DIRECTION.

DOUBLE TRACK BETWEEN SEATTLE AND STADIUM, VIA HEAD OF BAY AND BETWEEN TACOMA AND SOUTH TACOMA.

AUTOMATIC BLOCK BETWEEN HOLGATE STREET, SEATTLE, AND RESERVATION; AND BETWEEN TACOMA AND SOUTH TACOMA.

STAFF SYSTEM BETWEEN STADIUM AND McCARVER STREET.

SPECIAL INSTRUCTIONS, PAGES 5, 6 and 7.

EASTWARD

SPECIAL INSTRUCTIONS, PAGES 5, 6 and 7.

Ten miles per hour within the corporate limits of Puyallup, Sumner, Auburn and Kent.

SPECIAL INSTRUCTIONS—Continued

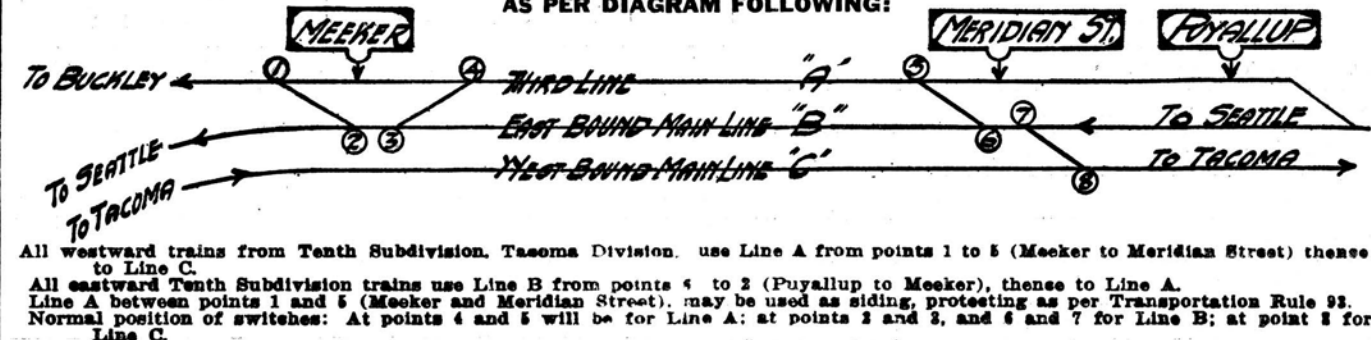
FIRST SUBDIVISION—Continued.

14. **Bridge Restrictions**—Speed will be restricted over bridge 39, Tacoma waterway as follows: Engines Class W, W-1 and W-2 eight (8) miles per hour. W-3 and heavier engines not permitted. Double headers not permitted. Bridge 12.3 on what is known as the Dempsey or Tide Flat Branch (Tacoma Terminal). Heavier than Class Q engines not permitted. Speed of other engines over this bridge eight (8) miles per hour.
15. **Special stops, connections, etc.**—No. 401 stop at Kent for passengers for Tacoma and points South.
No. 421 stop on flag at Kent for Grays Harbor business west of Lakeview.
No. 423 stop on flag at Orillia and Thomas for receipt and delivery of Parcel Post mail.
No. 598 connect with No. 423 at Puyallup.
No. 450 connect with No. 597 at Puyallup.
Nos. 411 and 449 stop on flag at Kent for passengers holding tickets for Spokane and east.
No. 408 stop at Sumner and Kent to let off passengers from points west of St. Clair.
Nos. 414, 416 and 440 stop at Kent to let off passengers from points east of Auburn.
Nos. 417 and 437 stop on flag at Kent to pick up passengers for points east of Auburn.
No. 456 connect with No. 597 at Puyallup.
No. 436 stop on flag at Thomas and Kent for express shipments.
No. 459 stop on flag at stations between Seattle and Tacoma to discharge passengers from points north and east of Everett, and to receive passengers for points south of Tacoma.
No. 458 stop on flag at Sumner for passengers Seattle and beyond and stop on flag at Auburn and Kent to discharge passengers from points south of Tacoma and receive passengers for points Everett and beyond.
No. 430 (G. N. No. 2) stop on flag at Sumner, Auburn and Kent to receive passengers for points Everett and beyond.
16. **Register Stations**—Seattle (King Street Station and Middle Yard) Auburn, East Auburn, Auburn Yard, Puyallup; Tacoma (Union Station) (Stadium) (15th Street Tower. For Tacoma Division Fourth Subdivision trains only) (South Tacoma) (River Street. For freight trains only.)
17. **Register Exceptions**—At Auburn, East Auburn, Puyallup, Tacoma (Stadium) (15th Street Tower) and (South Tacoma) all trains register by ticket form 608. Tacoma Division 4th Sub. Div. Trains outbound must obtain clearance at 15th Street Tower.
18. **Clearance Exceptions**—Clearance will not be issued at East Auburn to westward trains; at Stadium and South Tacoma to eastward trains unless stop or caution signal is displayed.
19. **Bulletin Stations**—Seattle (King Street Station) and (Middle Yard office) Auburn Yard Office, Tacoma (Union Station) and (River Street Yard).
20. **Standard Time Clocks**—Seattle, King Street Station; Auburn Yard Office; and Tacoma, Union Station.
21. **Railroad Crossings at Grade, on Switching tracks, Seattle**—C. M. & St. P. crossing just east of overhead bridge on Colorado Avenue Line.
P. C. R. R. and O.-W. & N. crossing at Atlantic Street on Colorado Avenue Line.
G. N. Crossing at Washington Street on Waterfront.
G. N. Crossing at Bell Street on Waterfront.
P. C. R. R. and C. M. & St. P. crossing at Spokane Street on Colorado Avenue Line, interlocked.

SECOND SUBDIVISION.

1. **At Seattle**—North Portal of tunnel. Westward N. P. trains from tunnel are governed by lower arm of semaphore located about 150 feet east of tower building Eastward N. P. trains to the tunnel and to the waterfront are governed by semaphore signal located about 350 feet west of tower. Upper arm governs route to the tunnel; lower arm to the waterfront. Westward trains from the waterfront are governed by semaphore located about 300 feet east of the tower. Upper arm governs movement, lower arm stationary in stop position. The dwarf signal at the base of this semaphore governs G. N. trains. At night and during foggy weather eastward trains will give one long blast of whistle for tunnel and three shorter blasts for waterfront. Westward trains from waterfront will give three blasts of whistle for N. P. main line.
Westward trains are governed by the semaphore block signal located about 50 feet south of the south portal of the King Street tunnel.
Eastward trains are governed by the semaphore block signal located 250 feet north of the portal of this tunnel.
Interlocking plant at South portal of King Street tunnel—Signals are of the dwarf type (low semaphores) and are located to the right of track governed; where two arms are on one post, higher arm governs trains along main tracks and lower arm trains diverging from main track.
2. **Logs**—Freight trains containing cars loaded with logs must not be run via King Street tunnel.
3. **At Fremont**—Depot is located one-half mile west of passing siding.
Yard Limit rules will govern between location of yard limit board 2500 feet west of Fremont to end of double track.

22. SPECIAL RULES FOR MOVEMENTS OF TACOMA DIVISION TRAINS BETWEEN MEEKER AND PUYALLUP: AS PER DIAGRAM FOLLOWING:



4. **Salmon Bay Bascule Drawbridge, between Interbay and Fremont**—Distant signal 45 degrees upward indicates route is clear for Ballard. Distant signal 90 degrees upward indicates route clear for Fremont. Home signal located east of Drawbridge is equipped with two arms; upper arm controls movement to Fremont, lower arm, movements to Ballard.
Approaches to Drawbridge from west and from Ballard line are controlled by home signals only.
5. **Speed Restrictions**—Six (6) miles per hour over public Road crossing leading to G. N. dock at Smith Cove. Fifteen (15) miles per hour over the crossing on Northlake Avenue located between yard limit board and Gas Works west of Fremont.
Twenty (20) miles per hour over Bascule bridge about one mile east of Fremont.
Six (6) miles per hour between Clay and Bell Streets.

ALL SUBDIVISIONS.

- In the State of Washington, conductors of passenger trains consisting of four or more cars, and freight trains consisting of 25 or more cars, must know that brakeman has had at least one year's experience in train-service before assigning him to flagging duties.
- To insure personal safety operators in double track territory, having train orders or messages for passing trains must stand on the right side of the train and never between the tracks.
- Trains pulling into side tracks or leaving the main line at junction points must pull entirely into clear main line before stopping to pick up the man attending the switch.
- Lap Sidings—Unless otherwise instructed, trains taking siding must head in at the lap.
- Siding blocked by occupied outfit cars must not be used to meet or pass trains.
- Conductors of work trains will issue instructions to their flagmen in writing, except when flagman goes back immediately to stop an approaching train.
- When necessary to take slack of freight trains with helper engine on the rear it should be done by the helper engine.
- Before moving a work or wrecking train, the whistle signal (14-b) or (14-h) must be sounded for the protection of men working about such trains.
- Except as otherwise provided, or when running light without conductor, engine-men will only be required to consult register at initial or starting points.
- Brakemen will ride on top of freight trains descending mountain grades, except in case of inclement weather.

COMMERCIAL SPURS

Distance from King Street Station, Seattle				Distance from Interbay				
STATIONS	Miles	How Connected	Car Capacity	STATIONS	Station Number	Miles	How Connected	Car Capacity
Edgewater....	7.2	1 E	8	Ballard.....	B-5	2.7	50
Latona.....	8.7	1 E	4	Ballard to Fremont...	...	2.3
Wood Spur...	11.2	1 W	16					
Flaherty.....	11.6	1 W	7					

11. **Speed Restrictions**—Passenger trains must not exceed a speed of one minute or sixty seconds per mile.
Passenger trains with helper engines on rear thirty (30) miles per hour.
When Mallet engine is used, fifteen (15) miles per hour.
Class Q-5 engines fifty-five (55) miles per hour.
Class W engines thirty (30) miles per hour and Class W-3 engines twenty-five (25) miles per hour.
All trains thirty (30) miles per hour over interlocked crossings and fifteen (15) miles per hour through crossovers, turnouts and gauntlets.
Fifteen (15) miles per hour passing telegraph offices where orders are received.
Light engines backing up twenty (20) miles per hour.
12. The following signs when placed in columns provided indicate:
W—Water.
C—Fuel.
O—Track Scales.
T—Turntable.
Y—Wye.
D—Day office only.
DN—Day and night office.
P—Tepephone.
X—Yard limits.

SPEED TABLE

Time Per Mile	Miles Per Hour	
	Mins.	Secs.
1	..	60
1	1	59
1	2	58
1	3	57.1
1	4	56.2
1	5	55.3
1	6	54.5
1	7	53.7
1	8	52.9
1	9	52.1
1	10	51.4
1	12	50
1	15	48
1	20	45
1	25	42.3
1	30	40
1	40	36
1	45	34.3
1	50	32.7
2	..	30
2	10	27.6
2	15	26.6
2	20	25.7
2	30	24
2	40	22.5
2	45	21.8
2	50	21.2
3	..	20
3	9	19
3	21	18
3	31	17
3	45	16
4	..	15
5	..	12
6	..	10
7	30	8
10	..	6

MAXIMUM CLEARANCES

		LIMIT OF LOAD—MEASUREMENT																			Max. Height	Max. Width
		HEIGHT ABOVE TOP OF RAIL																				
		1 ft. Wide	2 ft. Wide	3 ft. Wide	4 ft. Wide	5 ft. Wide	6 ft. Wide	7 ft. Wide	7 ft. 6 in. Wide	8 ft. Wide	8 ft. 6 in. Wide	9 ft. Wide	9 ft. 6 in. Wide	10 ft. Wide	10 ft. 2 in. Wide	10 ft. 6 in. Wide	11 ft. Wide	11 ft. 6 in. Wide				
1st Subdivision...	Main Line (Seattle-Reservation).....	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	11' 6"	
2nd Subdivision...	Seattle (Middle Yard) to Keith.....	18' 7"	18' 7"	18' 7"	18' 7"	18' 7"	18' 0"	17' 0"	16' 6"	16' 0"	15' 6"	15' 0"	14' 4"	13' 7"	13' 5"	12' 6"	11' 0"		18' 7"	11' 0"		
2nd Subdivision...	Seattle (King Street Station) to Bell Street.....	23' 11"	23' 7"	23' 2"	22' 9"	22' 5"	21' 11"	21' 5"	21' 2"	20' 9"	20' 7"	20' 3"	19' 11"	19' 6"	19' 5"	19' 2"	18' 8"	18' 3"	23' 11"	11' 6"		
.....	West Seattle Line.....	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 3"	21' 1"	20' 9"	20' 7"	20' 3"	20' 2"	20' 0"	19' 9"	19' 7"	21' 3"	11' 6"		
.....	Lake Union Line.....	20' 9"	20' 9"	20' 9"	20' 9"	18' 3"	18' 3"	16' 4"	15' 10"	15' 4"	14' 10"	14' 5"	14' 0"	13' 5"	13' 3"	12' 11"	12' 4"	11' 11"	20' 9"	11' 6"		
.....	Reservation-McCarver St.....	17' 2"	17' 2"	17' 2"	17' 2"	17' 2"	17' 2"	17' 0"	16' 9"	16' 6"	16' 4"	16' 2"	16' 0"	15' 9"	15' 8"	15' 7"	15' 5"	15' 2"	17' 2"	11' 6"		
.....	Reservation to South Tacoma (via Draw Bridge Line).....	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 3"	20' 2"	20' 2"	20' 1"	19' 8"	19' 3"	19' 1"	18' 11"	18' 11"	18' 9"	18' 7"	17' 11"	20' 3"	11' 6"		

WATCH INSPECTORS

E. DE BARTHE, Auburn
HOUGHTON & SON, 215 Yealer Way, Seattle
RICHARD VAETH, 924 Pacific Ave., Tacoma

FREDERICK ADAMS, Oculist, Seattle
P. W. WILLIS, Seattle
E. C. GROSS, Seattle
DR. I. J. D. SHULER, Seattle
Seattle Yard Office (S)
King St. Station, Seattle (S)
G. McGREGOR, Kent

AUTHORIZED SURGEONS, PUGET SOUND DIVISION.

Location of Stretchers (S).

P. A. REMINGTON, Chief Surgeon, Western Div., Tacoma.
Dr. A. H. BUIS, Assistant Surgeon.
Dr. M. ALLISON, "

B. E. HOYE, Auburn
WM. H. BRANDT, Auburn
Auburn Yard Office (S)
Auburn Station (S)
W. M. KARSHNER, Puyallup (S)

DR. W. B. MITCHELL, Sumner.
C. E. JUDD, Sumner
WM. H. LUDWIG, So. Tacoma.
E. L. CARLSON, So. Tacoma.
W. G. CAMERON, Specialist, Tacoma
A. E. HILLIS, Oculist, Tacoma.
N. P. B. A. Hospital, Tacoma (S)

Baggage Room, Tacoma (S)
Round House, Tacoma (S)
Head-of-Bay Yard Office, Tacoma (S)
Half Moon Yard Office, Tacoma (S)
Tool Car, Tacoma (S)
Wharf, Tacoma (S)

Note.

Surgeons will attend, when called upon officially, to all cases of ACCIDENT occurring to employees or passengers. In cases of SICKNESS it is the intention to limit medical service to the locality or town where a surgeon resides, unless some urgent necessity exists for which distinct official authority must be had in accordance with established regulations.

Railway Officials are required to call on the nearest authorized surgeons whenever practicable, when surgical or medical services are needed. When such are accessible, the Association will not be responsible for bills for medical services rendered by any other physician. In the event of a sudden emergency, arising from accident, if necessary, proper surgical aid should be procured until the arrival

of a regularly appointed surgeon, when the case should be placed in his charge and in no case should the services of any but an authorized company surgeon be continued at the expense of the Railway Company or of the Association after such surgeon is able to assume charge of the case.

Boarding and Nursing are furnished ONLY AT OUR OWN HOSPITALS. We are not responsible for bills incurred elsewhere unless specially authorized or approved by the Chief Surgeon, and then only in critical cases of injury or illness occurring in the discharge of duty.

AUTHORIZED SURGEONS, G. N. RY.

DR. J. C. MOORE, Seattle.

DR. J. A. LA GASA, Tacoma.

FRED BRASTRUP,
Trainmaster, Seattle.

J. S. DEAN,
Asst. Supt., Tacoma.

E. H. FRIBERG,
Chief Dispatcher, Seattle.

J. F. COLEMAN,
Chief Dispatcher, Tacoma.

