

NORTHWESTERN PACIFIC RAILROAD CO.

TIME-TABLE

21

To Take Effect Sunday, July 5, 1942, at 7:30 P. M.

PACIFIC STANDARD TIME

For the government and information of employees only.

C. A. VEALE,
Vice President and General Manager

Eastward

SOUTHERN DIVISION
SANTA ROSA SUBDIVISION

Westward

Capacity of Sidings in car lengths, and location of Fuel, Water and Turning Stations.	FIRST CLASS		Distance from San Francisco	Time-Table No. 21 July 5, 1942		Distance from Santa Rosa	FIRST CLASS	
	Yard	Eureka Express		STATIONS	Eureka Express		Yard	
								Leave Daily	Arrive Daily
Yard WTOPBK	8.10 PM	6.5	TO-R TIBURON 3.6	45.7	s 8.05 AM			
13	8.25	10.1	REED (Spur-E) 1.3	42.1	7.50			
6		11.4	MEADOWSWEET (Spur-E) 1.3	40.8				
YP Yard Limits	8.30	12.7	DETOUR 2.7	39.5	7.45			
WYPBK Yard Limits	s 8.35	14.3	TO-R SAN RAFAEL (Double Track) 1.7	36.8	s 7.30			
20 P	9.04	17.0	CERRO 2.4	35.1	6.51			
28		21.1	GALLINAS (Spur-E) 0.6	32.7				
30 P	9.10	21.7	MILLER 0.3	32.1	6.45			
26		22.0	ST. VINCENT (Spur-E) 2.9	31.8				
71 WYOPK Yard Limits	9.17	24.9	TO IGNACIO 2.9	28.9	6.39			
38 P	s 9.27	27.8	TO NOVATO 3.5	26.0	s 6.32			
44 P	9.33	31.3	BURDELL 5.4	22.5	6.22			
Yard Limits 49	9.42	36.7	HAYSTACK 1.8	17.1	6.12			
98 WP	s 10.00	38.5	TO PETALUMA 0.7	15.3	s 6.07			
37		39.2	PARK SIDING 1.8	14.6				
8		41.0	CROWN (Spur-W) 1.0	12.8				
31	10.07	42.0	ELY 1.3	11.8	5.49			
		43.3	PENN GROVE 2.8	10.5				
52 WP	10.14	46.1	COTATI 2.6	7.7	5.40			
19		48.7	WILFRED 2.6	5.1				
23	10.22	51.3	BELLEVUE 2.5	2.5	5.30			
WPBK Yard Limits	s 10.27 PM	53.8	TO-R SANTA ROSA	0.0	5.25 AM			
	Arrive Daily				Leave Daily			

No. 3 and No. 4 stop on flag at any station to receive and discharge passengers.

No. 3 turn train at Detour.

Passengers to and from San Francisco will use Pacific Greyhound Lines between San Rafael and San Francisco.

PACIFIC STANDARD TIME

Eastward

SOUTHERN DIVISION
SANTA ROSA SUBDIVISION

Westward

Capacity of Sidings in car lengths, and location of Fuel, Water and Turning Stations.	FIRST CLASS		Distance from San Francisco	Time-Table No. 21 July 5, 1942		Distance from Detour	
	Yard	Eureka Express		STATIONS	Eureka Express		Yard
Yard WOPBK	0.0		TO SAN FRANCISCO 6.5	14.3			
	6.5		SAUSALITO	7.8			
14	6.5	6.5	TO SAUSALITO 3.4	7.8			
	9.9		ALMONTE 1.6	4.4			
	11.5		SOUTH PORTAL 0.7	2.8			
	12.2		NORTH PORTAL 0.4	2.1			
5	12.6		CORTEMADERA (Spur-E) 0.4	1.7			
Yard Limits YP	13.0		BALTIMORE PARK 1.3	1.3			
	14.3		DETOUR	0.0			

Eastward

SOUTHERN DIVISION
SANTA ROSA SUBDIVISION

Westward

Capacity of Sidings in car lengths, and location of Fuel, Water and Turning Stations.	FIRST CLASS		Distance from San Francisco	Time-Table No. 21 July 5, 1942		Distance from Glen Ellen	
	Yard	Eureka Express		STATIONS	Eureka Express		Yard
Yard Limits 71 WYOPBK	24.9		TO IGNACIO 3.6	26.4			
19 P	28.5		BLACK POINT 2.3	22.8			
19	30.8		RECLAMATION 2.6	20.5			
8	33.4		SEARS POINT (Spur-W) 1.8	17.9			
8 P	35.2		FAIRVILLE (Spur-E) 5.2	16.1			
Yard Limits 30 YWP	40.4		TO SCHELLVILLE 4.4	10.9			
20 P	44.8		SONOMA 6.5	6.5			
11	51.3		GLEN ELLEN	0.0			

For the government and information of employees only.

Junction switch main track and Schellville Branch is located opposite station Ignacio.

C. A. YEHR
Traffic Manager

Eastward		SOUTHERN DIVISION		Westward	
SANTA ROSA SUBDIVISION					
Capacity of Sidings in car lengths, and location of Fuel, Water and Turning Stations.	Distance from San Francisco	Time-Table No. 21 July 5, 1942 MILL VALLEY BRANCH		Distance from Mill Valley	
		STATIONS			
14		9.9	ALMONTE 1.3	1.8	
P		11.7	MILL VALLEY	0.0	

Eastward		SOUTHERN DIVISION		Westward	
SANTA ROSA SUBDIVISION					
Capacity of Sidings in car lengths, and location of Fuel, Water and Turning Stations.	Distance from San Francisco	Time-Table No. 21 July 5, 1942 LARKSPUR BRANCH		Distance from Larkspur	
		STATIONS			
		13.0	BALTIMORE PARK 0.4	0.4	
4		13.4	LARKSPUR (Spur-E)	0.0	

Eastward		SOUTHERN DIVISION		Westward	
SANTA ROSA SUBDIVISION					
Capacity of Sidings in car lengths, and location of Fuel, Water and Turning Stations.	Distance from San Francisco	Time-Table No. 21 July 5, 1942 FAIRFAX BRANCH		Distance from Fairfax	
		STATIONS			
WYPBK Yard Limits		17.0	SAN RAFAEL 2.5	4.4	
4 Yard Limits		19.5	SAN ANSELMO 1.9	1.9	
14 Yard Limits		21.4	FAIRFAX	0.0	

Eastward		SOUTHERN DIVISION		Westward	
WILLITS SUBDIVISION					
Capacity of Sidings in car lengths, and location of Fuel, Water and Turning Stations.	Distance from San Francisco	FIRST CLASS		Distance from Willits	FIRST CLASS
		Time-Table No. 21 July 5, 1942			
		4 Eureka Express Leave Daily			3 Eureka Express Arrive Daily
Yard Limits WPKB		10.37 PM	53.8	TO-R SANTA ROSA 0.6	85.7 s 5.14 AM
109 YP			54.4	WYE SIDING 4.1	85.1
53 WP		10.45	58.5	FULTON 1.3	81.0 5.04
28			59.8	MARK WEST 3.1	79.7
13 P		10.52	62.9	WINDSOR 3.5	76.6 4.57
Yard Limits 7			66.4	GRANT 0.6	73.1
40			67.0	BAILHACHE 1.0	72.5
33 WTPK		s 11.04	68.0	TO HEALDSBURG 3.9	71.5 s 4.47
45 P		11.11	71.9	LYTTON 3.9	67.6 4.34
Yard Limits 36 P		11.17	75.8	TO GEYSERVILLE 3.0	63.7 s 4.27
7			78.8	CHIANTI 2.5	60.7
Yard Limits 36 P		11.26	81.3	ASTI 3.9	58.2 4.17
61 WOP Yard Limits		s 11.34	85.2	TO OLOVERDALE 1.9	54.3 s 4.10
25		11.38	87.1	PRESTON 2.7	52.4 4.03
22 P		11.44	89.8	ECHO 2.8	49.7 3.57
17 P			92.6	THORN 2.7	46.9
59 P		11.58 PM	95.3	PIETA 4.8	44.2 3.43
Yard Limits 58 WP		s 12.08 AM	100.1	TO HOPLAND 3.8	39.4 s 3.33
48 P		12.16	103.9	LARGO 2.0	35.6 3.22
18			105.9	HENRY 3.7	33.6
13		12.27	109.6	EL ROBLE 4.4	29.9 3.12
44 WOTPBK Yard Limits		s 12.45	114.0	TO UKIAH 6.1	25.5 s 3.05
21 P		12.55	120.1	CALPELLA 2.0	19.4 2.49
Yard Limits 40 WYP		1.03	122.1	REDWOOD VALLEY 1.9	17.4 2.45
26 P		1.08	124.0	LAUGHLIN 3.9	15.5 2.41
8 P		1.20	127.9	HILPASS 3.5	11.6 2.28
Yard Limits 14 TWP		1.33	131.4	RIDGE 8.1	8.1 s 2.16
Yard Limits WYOPBK		s 1.55 AM	139.5	TO-R WILLITS	0.0 1.55 AM
		Arrive Daily			Leave Daily

No. 3 and No. 4 stop on flag at any station to receive and discharge passengers.

4 Eastward		NORTHERN DIVISION SOUTH FORK SUBDIVISION				Westward	
Capacity of Sidings in car lengths, and location of Fuel, Water and Turning Stations.	FIRST CLASS		Distance from San Francisco	Time-Table No. 21 July 5, 1942	Distance from South Fork	FIRST CLASS	
	4 Eureka Express	Leave Daily				3 Eureka Express	Arrive Daily
Yard Limits WYOPBK	2.10 AM	139.5	TO-R	WILLITS 4.2	97.8	s	1.30 AM
53 P	2.19	143.7		OUTLET 5.0	93.6		1.19
55 P	2.29	148.7		ARNOLD 3.8	88.6		1.08
60 WP	2.37	152.5		LONGVALE 5.7	84.8		12.59
44 P	2.47	158.2		FARLEY 3.6	79.1		12.45
41 WP	2.54	161.8		TATU 4.7	75.5		12.37
47 WOP	s 3.08	166.5	TO	DOS RIOS 4.6	70.8	s	12.25
35 P	3.17	171.1		WOODMAN 4.4	66.2		12.07 AM
41 P	3.26	175.5		NASHMEAD 4.5	61.8		11.57 PM
63 P	3.36	180.0		SPYROCK 4.3	57.3		11.45
54 WOP	3.46	184.3		BELL SPRINGS 5.0	53.0		11.35
24 P	3.58	189.3		RAMSEY 5.2	48.0		11.23
54 WOTP	4.12	194.5	TO	ISLAND MOUNTAIN 5.8	42.8	s	11.11
32 WP	4.27	200.3		KEKAWAKA 5.2	37.0		10.54
15 P		205.5		OAIN ROCK (Spur-E) 3.6	31.8		
54 P	s 4.47	209.1	TO	ALDERPOINT 7.5	28.2	s	10.34
53 WOP	5.02	216.6		FORT SEWARD 4.9	20.7		10.15
42 P	5.12	221.5		BROCK CREEK 3.6	15.8		10.04
43 P	5.20	225.1		EEL ROCK 5.0	12.2		9.55
21 P	5.30	230.1		SEQUOIA 2.1	7.2		9.44
52 WP	5.34	232.2		MCCANN 5.1	5.1		9.39
Yard Limits WYOPBK	s 5.44 AM	237.3	TO-R	SOUTH FORK	0.0		9.28 PM
	Arrive Daily						Leave Daily

Eastward		NORTHERN DIVISION EUREKA SUBDIVISION				Westward	
Capacity of Sidings in car lengths, and location of Fuel, Water and Turning Stations.	FIRST CLASS		Distance from San Francisco	Time-Table No. 21 July 5, 1942	Distance from Eureka	FIRST CLASS	
	4 Eureka Express	Leave Daily				3 Eureka Express	Arrive Daily
Yard Limits WYOPBK	5.47 AM	237.3	TO-R	SOUTH FORK 4.4	46.8	s	9.24 PM
24 P	5.56	241.7		LARABEE 3.9	42.4		9.14
15 P	6.04	245.6		SHIVELY 4.4	38.5		9.05
27 P	6.13	250.0		ELINOR 5.6	34.1		8.55
Yard Limits 43 PKW	s 6.26	255.6	TO	SCOTIA 3.4	28.5	s	8.44
21 P	6.40	259.0		STONE 2.0	25.1		8.28
36 P		261.0		DINSMORE 1.7	23.1		
Yd. Limits { 29 WP	6.47	262.7		ALTON 1.8	21.4		8.20
41 P		264.5		ROHNERVILLE 1.6	19.6		
21 P	s 6.55	266.1	TO	FORTUNA 2.6	18.0	s	8.13
Yard Limits 19 P	s 7.07	268.7	TO	FERNBRIDGE 2.3	15.4	s	8.06
16 P	7.13	271.0	TO	LOLETA 1.5	13.1	s	7.59
9 P		272.5		TABLE BLUFF (Spur-W) 1.4	11.6		
23 P	7.20	273.9		BEATRICE 3.9	10.2		7.52
Yard Limits 30 WP	7.28	277.8		SOUTH BAY 3.0	6.3		7.44
Yd. Limits { 23 P		280.8		B. & E. R. CROSSING 1.2	3.3		
WYO PBK	7.38	282.0		BUCKSPORT 2.1	2.1		7.35
	s 7.45 AM	284.1	TO-R	EUREKA	0.0		7.30 PM
	Arrive Daily						Leave Daily

No. 3 and No. 4 stop on flag at any station to receive and discharge passengers.

Eastward		NORTHERN DIVISION EUREKA SUBDIVISION				Westward	
Capacity of Sidings in car lengths, and location of Fuel, Water and Turning Stations.	FIRST CLASS		Distance from San Francisco	Time-Table No. 21 July 5, 1942	Distance from Samoa	FIRST CLASS	
	4 Eureka Express	Leave Daily				3 Eureka Express	Arrive Daily
Yard Limits WYOPBK	284.1	TO-R	EUREKA 5.4	16.6			
21	289.5		BRAINARD 2.3	11.2			
	291.8		A. & M. R. CROSSING 0.7	8.9			
Yd. Limits { WYPK	292.5	TO-R	AROATA 7.3	8.2			
6 WY	299.8		SAMOA YARD 0.9	0.9			
	300.7		SAMOA	0.0			

Eastward		NORTHERN DIVISION EUREKA SUBDIVISION				Westward	
Capacity of Sidings in car lengths, and location of Fuel, Water and Turning Stations.	FIRST CLASS		Distance from San Francisco	Time-Table No. 21 July 5, 1942	Distance from Carlotta	FIRST CLASS	
	4 Eureka Express	Leave Daily				3 Eureka Express	Arrive Daily
Yard Limits 29 WP	262.7		ALTON 5.0	5.0			
Yard Limits P	267.7		CARLOTTA	0.0			

SPECIAL INSTRUCTIONS

Employees whose duties are prescribed by Rules and Regulations of the Transportation Department, effective June 15, 1930, must each obtain a book containing these Rules and Regulations.

RULE 2. Designated Watch Inspectors:

S. A. Pope, Manager Time Service.....	.65 Market Street, San Francisco
I. S. Preston.....	.210 Phelan Bldg., San Francisco
G. F. Davidson, Traveling Watch Inspector.....	Sausalito
C. R. Ellis.....	San Rafael
W. F. Rohrer.....	Petaluma
A. H. Ross.....	Santa Rosa
L. M. Britton.....	Ukiah
P. H. Joseph.....	Willits
A. B. Guslander.....	Eureka
Ernest Mueller.....	Eureka
J. C. Tario.....	Eureka
W. J. Thomas.....	Eureka

RULE 4. Designated Holidays:

- New Year's Day.
- Washington's Birthday.
- Decoration Day.
- Independence Day.
- Labor Day.
- Thanksgiving Day.
- Christmas Day.

When a holiday falls on Sunday, the following Monday is recognized as the holiday.

RULE 5. At the following stations, sidings are located as shown:

- Ignacio.** On east side of main track; from west switch to east crossover switch.
- Fulton.** On west side of main track; from west switch to east switch of scale track.
- Windsor.** On east side of main track.
- Geyserville.** On east side of main track; from first switch east of depot to east switch.
- Ukiah.** On west side of main track; from west switch to first switch east of depot.
- Glynn.** Time and train orders will apply at the west switch of the crossover leading into Pacific Lumber Company yard located at M.P. 254.0.
- Scotia.** On west side of main track; from west switch to switch opposite station.
- Fernbridge.** On west side of main track; from west switch to first switch east of depot.
- South Bay.** On west side of main track; from first switch west of depot to first switch east of water tank.

RULE 10 (J). Signs, oval in shape, govern maximum speeds of trains on curves requiring slower movement than speeds specified by time-table. The higher number is that for passenger trains, the lower for all other trains, and but one number is for all trains.

Sign is located one-half mile in advance of curve. Speed shown must not be exceeded from one-half mile beyond this sign to one-half mile before reaching sign of same kind on opposite side of track. One set of signs may govern speed on one curve or two or more curves and intervening tangents.

Speeds indicated are the maximum speeds permitted. Slower speeds must be run when otherwise provided for and when conditions make a slower speed necessary.

RULE 14. Trackman's Call:

Four long, followed by four short blasts of whistle (— — — — o o o o) is Trackman's Call. This signal may be used when necessary to summon trackmen. It must not be used unnecessarily. Upon hearing this signal, by day or night, trackmen must immediately respond. Foremen must keep their men posted as to this signal.

RULE 21 (C). Passenger engines to handle trains from Tiburon, Willits or Eureka will display indicators before leaving roundhouse.

Indicators of engines on trains arriving Tiburon, Willits or Eureka will be displayed until engine reaches roundhouse, but must be removed immediately after arrival at roundhouse.

Rule 21 (D). Will not apply to Southern Pacific engines.

RULE S-72. Westward trains are superior to trains of the same class in the opposite direction.

RULE 83 (E). A train may check the register against an extra when authorized by train order in the following form: "... may check register at ... against Extra ... on Order No.". A train so authorized to check the register must also register.

An extra when instructed by train order in the following form: "Extra ... register at ... on Order No." will register, and place this order number and date in column captioned "Signals."

RULE 93. Yard limits are established at the following stations:

Sausalito includes Waldo	Cloverdale
San Anselmo	Hopland
Fairfax	Ukiah includes Asylum
Tiburon	Redwood Valley
Detour	Ridge
San Rafael	Willits
Ignacio	

Schellville	South Fork
Petaluma includes Haystack	Scotia Alton includes Rohnerville
McNear and Park Siding	Fernbridge
Santa Rosa includes Wye Siding	South Bay
Fulton	Eureka includes B. & E.R. R.R. crossing
Healdsburg includes Grant,	Bucksport and Russ
Bailhache, Finlayson and Oliveto	Arcata includes Korblex
Geyserville includes Tosca and Omus	Samoa includes Samoa Yard
Asti	Carlotta

RULE 98. RAILROAD CROSSINGS AT GRADE NOT INTERLOCKED:

M.P. 40.5	Schellville, S. P. R. R.
M.P. 53.3	Santa Rosa, P. & S. R. R. R.
M.P. 280.8	B. & E. R. R. R., STOP.
M.P. 282.2	B. & E. R. R. R., Holmes Eureka Log Dump track, STOP.
M.P. 291.8	Arcata, A. & M. R. R. R.
M.P. 292.5	Arcata, Calif., Barrel Co., West leg wye.
M.P. 292.9	Arcata, A. & M. R. R. R.

DRAWBRIDGES INTERLOCKED

M.P. 20.9	Gallinas.....Gallinas Slough
M.P. 28.8	Black Point.....Petaluma Creek
M.P. 37.8	Wingo.....Sonoma Creek
M.P. 37.2	McNear.....Petaluma Creek
M.P. 285.6	Eureka.....Eureka Slough

RULE 103 (A). In general, highway crossing signals are so designed that they will not operate for trains or engines making a reverse movement after having passed over the crossing. Trains or engines making such reverse movements must protect the crossing unless it is known that signals are operating.

At Tiburon train and engine movements on siding over highway crossing M.P. 7.26, 449 feet north of water tank, must be protected by flagman. Engines or cars must not be left on this siding within 100 feet of crossing.

No train, engine, motor or car must be operated over 13th Street crossing Santa Rosa or Toll Road crossing San Rafael-San Anselmo route, unless vehicular traffic is protected by member of train crew or other competent railroad employe acting as flagman.

At Petaluma switching movements must not be made upon or over streets named below, without protection of flagman. Under no circumstances must cars be kicked or a "drop" or "run" be made upon or over such streets:

- Adams Street, also known as east D Street; first street west of passenger depot.
 - Copeland Street; first street west of passenger depot.
 - Washington Street; first street east of passenger depot.
- Before switching over railroad crossings, protection by flagman must be given.

RULE 221. Engineer in approaching a train-order office, after whistling for station, if train-order signal can be seen, will sound four short blasts of whistle (14-j) for "proceed" signal, and if "proceed" signal is given will acknowledge it by two short blasts of whistle (14-g).

RULE 221 (A).

Trains must not leave Arcata, Eureka or San Rafael without a clearance.

RULE 509. Train movements through Tunnel No. 27 (Island Mountain) are protected by signals.

Automatic block signals must not be depended upon to protect trains. When necessary, trains must be protected by flagman.

OIL BUFFER SPRING SWITCHES

When making trailing point movement and train is stopped on switch a reverse movement must not be made, nor the slack taken until the switch has been thrown by hand. When movement has been completed through switch, reverse movement must not be made until point closes.

Running switches are prohibited and sand, blow-off cocks and injectors must not be used while passing over these switches.

Switches are located as follows:

- Greenbrae: End of Double track.
- Detour: West Wye switch to main track Tiburon Line.
- West Wye switch to Sausalito Branch.

San Rafael. End of double track at Mission Street.

Light signal, indicating position of switch for facing point movement, is located in advance of switch. Signal at Mission Street is 115 feet distant from switch; signals at other points are from 25 to 55 feet from switch.

SAN RAFAEL

Derails located on Cheda Spur, 436 feet east of switch and on Grady Spur, 530 feet east of switch are connected with floodlights which illuminate track and highway and derails must be kept on rail and locked except when movements are being made over crossing. And no train, engine, motor or car shall be operated over these crossings except with caution and under control, movement to be protected by member of train crew acting as flagman.

Double track extends to Mission Street. Normal position of switch is for westward track.

REDWOOD VALLEY AND RIDGE

Telephone Semaphore Signal: Two standard semaphore blades and electric lamps for night indications.

Electric lighting for night indications controlled by track circuit, illuminate only when main track circuit occupied 1000 feet either side of signals.

The normal position is PROCEED.

When signal indicates STOP Conductor (or engineer in case of light engine), will immediately communicate with train dispatcher by telephone.

TRAIN AND AIR INSPECTION

On freight trains, when conditions are favorable and in the judgment of conductor it is safe to do so, run may be made without stopping for inspection from one water stop to the next water stop, except that a distance of 70 miles must not be exceeded between inspections (Rule 827).

AIR BRAKE RULE 20. Attention is directed to Safety Appliance Act which requires that whenever any train is operated with power or train brakes, not less than 85 per cent of cars of such train shall have their brakes used and operated by engineer of engine drawing such train; and all power-brake cars in every such train which are associated together with 85 per cent, shall have their brakes so used and operated.

AIR BRAKE RULE 23. Air brake inspection at points where no car inspectors are on duty, and motive power and/or engine crew or train crew is changed on a freight train shall be made as follows:

After train is made up and engine attached and train has been charged to standard pressure, engineer will apply brakes with 20 pound service reduction and leave them applied. Trainmen will then pass along train to determine that brake is applied on each car. Numbers of any cars found with inoperative air brake must be reported on form 2809, and such cars assembled and switched to rear of train, next ahead of caboose before leaving that station. After this inspection has been made, brakes have been released, and trainmen have noted that normal brake pipe pressure has been restored as indicated on caboose gauge, and have given signal to engineer, latter must comply with last part of Rule 23 to avoid brakes sticking from an overcharge of the brake system, etc.

If necessary to switch any cars to rear account brakes being inoperative, Rule 23 must be complied with before departure.

Rule 23 must be observed to determine by rolling inspection that each brake releases properly.

AIR BRAKE RULE 24. Rear end air test must be made by westward trains and eastward freight trains at Ridge; also eastward freight trains at Redwood Valley.

AIR BRAKE RULE 33. Westward trains and eastward freight trains will stop at Ridge for inspection (Rule 827).

Freight trains descending grade Ridge to Redwood Valley must not exceed average of 110 Ms per operative brake; retaining valves will be turned up before leaving Ridge and must be turned down when stop is made at Redwood Valley.

Passenger trains descending grade Ridge to Laughlin; retaining valves will be turned up before leaving Ridge and must be turned down when train reaches Laughlin.

Freight trains, Ridge to M.P. 136: retaining valves must be turned up before leaving Ridge and must be turned down when train reaches M.P. 136.

When retaining valves are turned down while train is in motion, speed of train must not be more than 10 miles per hour. If, in the judgment of conductor, it is necessary to stop train to turn down retaining valves, train will be stopped.

AIR BRAKE RULE 39. Running air brake test must be made by passenger trains at Ridge.

In making running air brake test trainmen use communicating signal 16 (h) instead of hand or lamp signals.

MISCELLANEOUS

Engines are not permitted on Beet Spur at Ignacio.

Engines heavier than 114 Class are not permitted on spur track at McGill and siding at Wingo.

Engines are not permitted on spur at Cain Rock.

Engines are not permitted on Carsons siding, Samoa Branch.

Passenger trains passing station after picking up will stop at station before leaving.

Engines on passenger trains when coupling to equipment containing passengers will stop 50 feet from cars before coupling.

Engines on freight trains of 30 cars or over must be cut off at water or fuel stops.

No helper engine will be placed behind wooden underframe cars or cabooses.

In no case will more than one helper engine be placed behind steel underframe cabooses.

SPEED RESTRICTIONS

Trains must not exceed the following maximum speeds (shown in miles per hour).

	BETWEEN	Passenger	Freight
Tiburon and Detour.....		35	20
Detour and Willits.....		50	30
Willits and Eureka.....		40	25
Almonte and Mill Valley.....		35	25
Baltimore Park and Larkspur.....		35	30
San Rafael and Fairfax.....		35	30
Sausalito and Detour.....		35	30

except that maximum speeds shown on following page must not be exceeded.

SPECIAL INSTRUCTIONS—Continued

SPEED RESTRICTIONS—Continued

Page	BETWEEN	Passenger	Fr.
2	Hilarita, highway crossing, M.P. 7.9	10	10
2	Through Tunnel No. 1, M.P. 11.9	25	25
2	Corte Madera, road crossing east of station platforms*	20	20
2	Greenbrae, bridge and trestle approaches, M.P. 14.6	25	25
2-3	San Rafael, within city limits*	10	10
2	Cerro and M.P. 19.6	35	25
2	Gallinas Drawbridge, M.P. 20.9	25	25
2	Petaluma Drawbridge, M.P. 37.2	6	6
2	Petaluma, within city limits*	10	10
2-3	Santa Rosa, within city limits	25	25
2	Ignacio and Glen Ellen	20	20
2	Black Point Drawbridge, M.P. 28.8	10	10
2	Black Point Drawbridge trestle approaches	15	15
2	Wingo Drawbridge, M.P. 37.8	10	10
2	Sonoma, within city limits*	10	10
3	Healdsburg, within city limits*	10	10
3	Cloverdale, within city limits	25	25
3	M.P. 87.6 and Fountain	30	20
	Curves	40	25
	Tangent	35	25
3	Fountain and El Roble	45	25
	Curves	25	25
	Tangent	25	25
3	Ukiah, within city limits	35	..
3	M.P. 118 and M.P. 120	..	..
3	Redwood Valley and Laughlin	..	18
3	Redwood Valley and M.P. 136.7 (Ascending grade)	..	15
3	Redwood Valley and M.P. 136.7 (Descending grade)	..	..
3	Laughlin and M.P. 136.7 (Ascending grade)	22	..
3	Laughlin and M.P. 136.7 (Descending grade)	18	..
3	M.P. 136.7 and Willits	45	..
4	M.P. 190.25 between switches	10	10
4	North portal Tunnel 27 and 1000 feet east thereof	25	15
4	M.P. 196 and M.P. 196 pole 4	18	15
4	Willits and M.P. 231.5—Curves	30	20
4	M.P. 231.5 and M.P. 240—Curves	35	20
4	M.P. 240 and M.P. 256.3—Curves	30	20
4	M.P. 258 and Eureka—Curves	35	20
4	Scotia Bluff, M.P. 256.3-M.P. 258.2	15	15
4	Elk River, Bulkhead	20	20
4	Holmes Eureka Bucksport Mill Yard crossing at Gregg Street	30	20
4	"A" and "L" Streets, Eureka*	10	10
4	"L" Street, Eureka and west end Eureka Slough Drawbridge*	18	18
4	Eureka Slough Drawbridge, M. P. 285.6	6	6
4	Eureka and Arcata	25	20
4	A&MR R. R. Crossing M. P. 291.8	10	10
4	A&MR R. R. Crossing M. P. 292.9	10	10
4	Arcata and Samoa	15	15
4	Alton and Carlotta	15	15
	Curves	20	20
	Tangent	20	20

*Maximum speeds fixed by city ordinance.

The speeds shown are maximum speeds allowed on straight track. Good judgment and care must be used on sharp curves and trains must be moved at lower speeds as may be necessary.

Trains moving steam shovels, ditchers, cranes, spreaders, pile drivers, and derricks, must not exceed 25 miles per hour.

Maximum speed of disabled engines hauled in train or running under own steam must not exceed 20 miles per hour.

Through crossovers and turnouts: 10 miles per hour, except that trains and engines must not exceed 25 miles per hour through switch of Pacific Lumber Co.'s connection at Yoder.

Trains must approach and pass over drawbridge at Wingo with caution maintaining lookout for pedestrians and vehicles.

Trains approach road crossing east end of depot at Vineburg with caution. Maximum speed of engines running backward between Laughlin and M.P. 136.7, 12 miles per hour; other locations, 20 miles per hour, except where slower speeds are specified.

Between M.P. 271.76, 1000 feet west of west portal tunnel No. 40, and M.P. 272.52, 1000 feet east of east portal tunnel No. 40, trains must not exceed the following speeds:

- Passenger.....20 miles per hour
- Freight.....15 miles per hour
- Trains handling logs.....10 miles per hour

Trains loaded with logs must not exceed a maximum speed of 20 miles per hour between Eureka and McCann, 15 miles per hour between Alton and Carlotta and east of Eureka, except that at the following locations a maximum speed of 10 miles per hour must not be exceeded:

- Tunnel No. 38.....M.P. 243.7

SPEED RESTRICTIONS—Continued

Tunnel No. 39.....M.P. 247.0
 Van Duzen Bridge.....M.P. 261.8
 Tunnel No. 40.....M.P. 271.9

Maximum speeds for freight trains apply to log trains having no cars loaded with logs.

Speeds shown are the maximum speeds permitted. Slower speeds must be run when otherwise provided for and when conditions make a slower speed advisable.

It is particularly important in the movement of log trains before reaching tunnel No. 40, at M.P. 271.9, and in passing through this tunnel that every precaution be taken against moving an improper load, logs being displaced or falling from car, derailment or an accident of any nature because of the character of construction of the tunnel.

Eastward trains hauling cars loaded with logs must be inspected at Carlotta, Alton, Fernbridge and Eureka. Doubling trains will double from Loleta and must be inspected at that point instead of Fernbridge.

Rear car on train and on cut in doubling must be equipped with Conductor's valve or tail hose.

Trainmen and enginemen must maintain sharp lookout over train and stop train if necessary to do so.

Special attention must be given to inspection of loads and chocks. If there is any doubt as to whether a load will move safely it must not be moved, and if it is in train it must be set out.

ADDITIONAL SIDINGS, SPURS AND FLAG STOPS

Location	Mile Post	Switch Connection	Car Capacity
TIBURON TO KORBLEX			
Greenbrae	14.0	West	4
De Witt	23.5	West	110
San Antonio	33.1	..	..
McNear	37.1	West	54
Finlayson	69.1	Siding	13
Oliveto	69.2	West	6
Simi	70.5	Siding	10
Nervo	73.9	West	3
Tosca	76.5	West	5
Omus	77.0	West	9
Cumiskey	91.8	East	7
Fountain	96.8	East	10
Clemhorst	108.8	West	3
Asylum	113.2	Siding	17
Holzhauser	122.0	West	6
Lahm	133.7	West	4
Maple	145.3	West	5
Ali	146.7	East	5
Peterson	148.8	West	3
Sarnas	163.9	West	2
Indian Springs	168.0	..	..
Deer Lodge	169.0	West	2
Camp Rest	174.4	..	..
Spur Track	195.7	East	11
Golden Spike	206.4	..	..
Steelhead	211.6	West	8
Tanoak	228.3	West	4
Camp Grant	234.8	West	25
Perrott Creek	238.5	East	..
Larabee Ranch	242.4	..	..
Bryan	243.1	..	..
Glynn	254.0	West	48
Yoder	256.1	East	50
Spur Track	256.7	East	8
Nanning Creek	257.0	West	2
Newberg	265.6	Siding	24
Worswick	268.2	East	27
Zerus	275.0	West	3
Eureka Tallow Company	280.7	East	3
B. & E. R. Connection	280.9	East	4
Associated Oil Company	281.3	West	18
Press	281.7	East	16
Standard Oil Company	281.8	West	10
Holmes Eureka Lumber Co.	282.0	East	8
Russ	282.5	East	3
Korblex	295.2	West	20
SAUSALITO TO DETOUR			
Waldo	8.4	East	69
Alto	11.0	East	14

ADDITIONAL SIDINGS, SPURS AND FLAG STOPS—Continued

Location	Mile Post	Switch Connection	Car Capacity
IGNACIO TO GLEN ELLEN			
McGill	36.7	West	21
Wingo	37.8	Siding	13
Vineburg	42.2	Siding	16
Batto	42.6	West	7
Bonilla	43.1	West	3
Buena Vista	43.5	Siding	7
Stando	43.9	East	3
Sebastiani	44.3	West	26
Verano	46.1	Siding	10
Boyes Springs	46.8	West	3
Fettters Springs	47.4	East	2
Agua Caliente	47.7	West	7
Watriss	48.5	..	..
Yulupa	49.1	Siding	11
Eldridge	49.8	Siding	6
Pagani	50.6	East	4

HOSPITAL DEPARTMENT

NAME	TITLE	LOCATION
Dr. C. A. Walker	Chief Surgeon & Manager	General Hospital, 1400 Fell St., San Francisco
Dr. O. E. Eklund	Division Surgeon	Medical Bldg., 909 Hyde St., San Francisco (G.Raystone 0274)
Dr. O. D. Hamlin	District Surgeon	Oakland
Dr. C. F. Larson	District Surgeon	Sausalito
Dr. L. Michael	Emergency Surgeon	San Leandro
Dr. G. M. Landrock	District Surgeon	Sausalito
Dr. C. W. Clark	District Surgeon	San Anselmo and Tiburon
Dr. O. W. Jones	District Surgeon	San Anselmo
Dr. Leo J. McMahon	Dental Surgeon	San Anselmo
Dr. D. C. Fowler	District Surgeon	Mill Valley
Dr. H. O. Hund	District Surgeon	San Rafael
Dr. C. A. DeLancey	District Surgeon	San Rafael
Dr. L. L. Stanley	District Surgeon	San Rafael
Dr. E. J. Finnerty	District Surgeon	Sonoma
Dr. F. O. Butler	District Surgeon	Eldridge
Dr. R. J. Weseman	District Surgeon	Novato
Dr. H. S. Rogers	District Surgeon	Petaluma
Dr. H. L. Lorentzen	Associate District Surgeon	Petaluma
Dr. F. H. Phillips	Dental Surgeon	Petaluma
Dr. A. B. Herrick	District Surgeon	Santa Rosa
Dr. Elmer T. Noall	Assistant District Surgeon	Santa Rosa
Dr. E. T. McMannis	Dental Surgeon	Santa Rosa
Dr. B. B. Bacheider	District Surgeon	Sebastopol
Dr. W. N. Makaroff	District Surgeon	Guerneville
Dr. F. E. Sohler	District Surgeon	Healdsburg
Dr. K. J. Dunlavy	Associate District Surgeon	Healdsburg
Dr. M. F. Clark	District Surgeon	Cloverdale
Dr. H. O. Cleland	District Surgeon	Ukiah
Dr. Raymond Babcock	District Surgeon	Willits
Dr. Rupert Hauser	District Surgeon	Scotia
Dr. H. W. Comfort	District Surgeon	Fortuna
Dr. J. F. Walsh	District Surgeon	Eureka
Dr. J. A. Lane	District Surgeon	Eureka
Dr. W. W. Dolfini	Oculist and Aurist	Eureka
Dr. E. L. Walsh	Dental Surgeon	Eureka
Dr. B. Cooper	District Surgeon	Arcata

HOSPITALS: Southern Pacific General Hospital, Baker and Fell Streets, San Francisco. Phone Fillmore 8781.

St. Joseph Hospital.....Eureka
 Emergency Hospitals.....San Rafael, Petaluma, Santa Rosa and Willits

NOTE:—Emergency surgeons should be summoned only for temporary treatment when prompt attention is required and when patients cannot be sent to or await arrival of District Surgeon.

ADDITIONAL WATER STATIONS

Stony Creek	M.P. 169.6	Steelhead	M.P. 211.6
Hamann Gulch	M.P. 204.3	Water Tank	M.P. 224.5
		Water Tank	M.P. 248.2

LOCATION OF ADDITIONAL TELEPHONES

Waldo	Slide, M. P. 190.25
De Witt	North Portal Tunnel 27, M. P. 195.2
Ignacio Wye	Slide, M. P. 201
Wingo	Hamann Gulch, M.P. 204.3
Vineburg	Steelhead
Fulton (Scale house)	Perrott Creek
Black Point Drawbridge	Glynn
Petaluma Drawbridge	Nanning Creek
South End Petaluma Yard	North Switch, Scotia
Sebastopol Ave., Santa Rosa	Palmer Creek
Third Street, Santa Rosa	Eureka Slough Drawbridge M.P. 285.6
Ukiah Freight House	

ADDITIONAL FUEL STATIONS

Santa Rosa—emergency only.

LOCOMOTIVE TONNAGE RATING IN Ms BACK OF TENDER

CLASSIFICATION	ENGINE	Boiler Pressure	TIBURON and SAN RAFAEL	SAN RAFAEL 4th Street to MILLER	SAN RAFAEL Irwin St. to MILLER	PETALUMA to HEALDSBURG	HEALDSBURG to CLOVERDALE	CLOVERDALE to REDWOOD VALLEY	REDWOOD VALLEY to RIDGE	WILLITS to RIDGE	REDWOOD VALLEY to MILLER	MILLER to SAN RAFAEL	SAN RAFAEL and SAN ANSELMO	DETOUR and SAUSALITO	WILLITS to LOLETA	LOLETA to BEATRICE	BEATRICE to EUREKA	EUREKA to BEATRICE	BEATRICE to LOLETA	LOLETA to WILLITS
			Ms.	Ms.	Ms.	Ms.	Ms.	Ms.	Ms.	Ms.	Ms.	Ms.	Ms.	Ms.	Ms.	Ms.	Ms.	Ms.	Ms.	Ms.
T 57-19/28-110	108	180	1750	890	930	2750	2270	1750	540	920	3680	1475	1000	1400	3650	2200	3650	3650	1750	2480
T 57-19/28-108	109	180	1750	890	930	2750	2270	1750	540	920	3680	1475	1000	1400	3650	2200	3650	3650	1750	2480
T 57-19/28-110	111-114	180	1750	890	930	2750	2270	1750	540	920	3680	1475	1000	1400	3630	2200	3630	3630	1730	2460
T 63-20/28-135-s	139-143	200	2000	1000	1070	3200	2720	2000	600	1050	4400	1735	1100	1680	4300	2800	4300	4300	2300	2900
T 57-21/28-142	170-172	190	2000	1080	1160	3200	2720	2000	660	1130	4500	1885	1100	1680	4580	2800	4580	4580	2500	3120
T 63-21/28-141-s	178	200	2210	1140	1220	3535	3005	2210	700	1190	4830	1925	1215	1855	4800	3250	4800	4800	2240	3250
T 63-20/28-142-s	179	200	2000	1000	1070	3200	2720	2000	600	1050	4400	1735	1100	1680	4300	2800	4300	4300	2300	2900
T 57-21/28-148-s	180-184	200	2630	1190	1280	3900	3315	2630	730	1250	4900	2200	1340	2045	5040	3250	5040	5040	2900	3500
P 68-24/28-157-s	SP 3104-3108	180	2210	1140	1220	3535	3005	2210	660	1190	4830	1925	1215	1855	4800	3250	4800	4800	2240	3250
C 57-22/30-194-s	SP 2514-2819	210	3261	1475	1587	4838	4110	3261	905	1550	6076	2728	1661	2535	6250	4030	6250	6250	3750	4550
T 63-22/28-162-s	SP 2318-2339	210	2761	1250	1344	4095	3480	2762	767	1313	5145	2310	1407	2147	5292	3413	5292	5292	3045	3675
Allowance for Empty and Underloaded Cars..... Ms.	Less than 40 Ms. 40 to 50 Ms.		6 Ms. 3 Ms.	3 Ms. 0	3 Ms. 0	6 Ms. 3 Ms.	6 Ms. 3 Ms.	6 Ms. 3 Ms.	3 Ms. 0	3 Ms. 0	6 Ms. 3 Ms.	3 Ms. 0	6 Ms. 3 Ms.	6 Ms. 3 Ms.	6 Ms. 3 Ms.	6 Ms. 3 Ms.	6 Ms. 3 Ms.	6 Ms. 3 Ms.	3 Ms. 0	6 Ms. 3 Ms.

CLEARANCE LIMITS FOR CAR LOADING

BETWEEN	HEIGHT ABOVE TOP OF RAIL AT WIDTHS STATED											MAXIMUM HEIGHT	MAXIMUM WIDTH
	WIDTH	2' 6"	5'	7'	8' 6"	9' 6"	10'	10' 6"	11'	11' 6"	12'		
Sausalito and Corte Madera.....	HEIGHT	15' 3"	15' 3"	15' 3"	14' 7"	14' 2"	13' 11"	13' 6"	12' 11"	12' 3"	11' 3"	15' 3"	12'
Tiburon and Cerro.....	HEIGHT	19' 10"	18' 11"	18' 1"	17' 3"	16' 8"	16' 4"	16'	15' 8"	15' 2"	14' 10"	19' 10"	12'
Cerro and Ignacio.....	HEIGHT	22'	22'	22'	22'	21' 9"	21' 6"	21' 3"	21'	20' 10"	20' 8"	22'	12'
Ignacio and Petaluma.....	HEIGHT	20' 6"	20' 6"	20' 6"	19' 9"	19' 3"	19' 1"	18' 10"	18' 7"	18' 4"	18' 2"	20' 6"	12'
Ignacio and Glen Ellen.....	HEIGHT	22'	22'	21' 11"	21' 1"	20' 7"	20' 4"	20'	19' 9"	19' 6"	19' 2"	22'	12'
Fulton and Thorn.....	HEIGHT	20' 3"	20' 3"	19' 10"	19' 3"	18' 10"	18' 9"	18' 6"	18' 4"	18' 1"	17' 11"	20' 3"	12'
Thorn and Willits.....	HEIGHT	16'	15' 8"	15' 6"	14' 10"	14' 1"	13' 7"	13'	12' 8"	12' 3"	11' 8"	16'	12'
Willits and Shively.....	HEIGHT	19' 10"	19' 10"	19' 4"	18' 6"	18' 2"	17' 10"	17' 6"	17' 3"	16' 10"	16' 7"	19' 10"	12'
Shively and Loleta.....	HEIGHT	18' 5"	18' 3"	17' 6"	17'	16' 7"	16' 5"	16' 3"	16' 1"	15' 10"	15' 3"	18' 5"	12'
Loleta and Eureka.....	HEIGHT	18' 10"	18' 10"	18' 6"	17' 8"	17' 2"	16' 10"	16' 7"	16' 3"	16' 0"	15' 9"	18' 10"	12' 0"
Eureka and Arcata.....	HEIGHT	22'	22'	22'	22'	21' 10"	21' 7"	21' 3"	21'	20' 9"	20' 6"	22'	12'
Arcata and Samoa.....	HEIGHT	22'	22'	22'	22'	22'	22'	22'	22'	22'	22'	22'	12'

Clearances are figured with side clearances 6 inches margin (each side) overhead clearance 6 inches margin.

SPEED TABLE

Miles per Hour	1 Mile in Min. Sec.	Miles per Hour	1 Mile in Min. Sec.	Miles per Hour	1 Mile in Min. Sec.	Miles per Hour	1 Mile in Min. Sec.
6	10	21	2.51	31	1.56	41	1.27
8	7.30	22	2.43	32	1.52	42	1.25
10	6	23	2.36	33	1.49	43	1.23
12	5	24	2.30	34	1.45	44	1.21
15	4	25	2.24	35	1.42	45	1.20
16	3.45	26	2.18	36	1.40	46	1.18
17	3.31	27	2.13	37	1.37	47	1.16
18	3.20	28	2.8	38	1.34	48	1.15
19	3.9	29	2.4	39	1.33	49	1.13
20	3	30	2.0	40	1.30	50	1.12

MAXIMUM LOCOMOTIVE WEIGHTS AND CAR LOADING PERMISSIBLE OVER DISTRICTS SHOWN

DISTRICT	LOCOMOTIVE	Gross Carload Pounds
Sausalito to Detour.....	Any Locomotive	188,000
Tiburon to Willits.....		
Ignacio to Sonoma.....	NWP Locomotives	169,000
Almonte to Mill Valley.....		
Baltimore Park to Larkspur and San Rafael to Fairfax.....		
Sonoma to Glen Ellen.....		
Willits to Eureka.....	114	169,000
Eureka to Arcata.....	Any Locomotive	188,000
Alton to Carlotta.....	142	188,000
Arcata to Samoa.....	170	188,000
	142	188,000

Train Dispatchers

W. P. VANNOY W. M. BALDOCK
 W. V. HARDESTY G. E. NIVISON
 Sausalito, Cal.

WEIGHT OF PASSENGER CARS

CLASS	NUMBERS	WOOD	STEEL
Baggage.....	608	85,000	.....
".....	*613-615	.....	91,900
".....	*625-626	.....	86,400
".....	675-680	.....	96,400
Business.....	06	.....	124,800
Chair.....	550-553	.....	107,200
Coach.....	76	83,500	.....
".....	450-457	.....	102,600
".....	459-467	.....	104,300
Mail and Express.....	616-617	88,800	.....
".....	640-645	.....	103,200

*Steel Underframe.

SOUTHERN PACIFIC AND PULLMAN

Class	All Steel	Steel Underframe	Wood
Baggage 60 ft.....	93,070	.....	.....
Baggage 66 ft.....	127,610	.....	.....
Baggage 70 ft.....	122,620	.....	.....
Baggage.....	.....	87,120	81,120
Baggage (Dynamo).....	98,730	.....	.....
Baggage and Mail 60 ft.....	103,620	.....	.....
Baggage and Mail 69 ft.....	124,760	.....	.....
Baggage and Mail 70 ft.....	129,140	.....	.....
Baggage and Mail.....	.....	103,590	99,200
Baggage and Passenger.....	108,675	112,640	76,320
Express, Horse.....	133,050	.....	81,033
Postal.....	112,120	.....	.....
Postal Storage 40 ft.....	74,530	.....	.....
Postal Storage 60 ft.....	105,120	.....	.....
Club.....	146,210	122,300	.....
Official.....	170,700	155,370	109,370
Chair.....	100,620	.....	84,740
Coaches 60 ft.....	98,130	.....	.....
Coaches 70 ft.....	137,640	.....	.....
Coaches 72 ft.....	139,660	.....	.....
Coaches 73 ft.....	148,040	.....	.....
Coaches 72 ft., Interurban.....	120,000	.....	.....
Coaches.....	.....	.....	81,210
All-Day Lunch, Chair.....	105,970	.....	.....
All-Day Lunch, Coach.....	103,875	.....	.....
Cafe-Coach.....	.....	138,600	.....
Diner 70 ft.....	.....	135,930	131,040
Diner 72 ft.....	155,330	146,930	134,530
Diner 77 ft.....	157,240	165,530	.....
Diner 79 ft.....	169,100	.....	.....
Cafe-Parlor.....	148,950	.....	128,550
Observation.....	157,280	.....	.....
Pullman Observation.....	164,600	153,000	.....
Pullman Parlor.....	155,600	147,500	.....
Pullman Standard Sleeper.....	164,600	144,000	.....
Pullman Tourist.....	140,600	133,000	.....

P. G. MATSON,
 Chief Train Dispatcher,
 Sausalito, Cal.

R. D. SHUGRUE,
 Trainmaster,
 Sausalito, Cal.

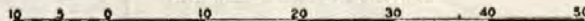
J. F. LAUX,
 Trainmaster,
 Santa Rosa, Cal.

A. C. HENNINGSEN,
 Trainmaster and Road Foreman of Engines,
 Eureka, Cal.

MAP OF THE LINES OF THE NORTHWESTERN PACIFIC RAILROAD COMPANY

RMH

SCALE IN MILES



PACIFIC OCEAN



SAUSALITO AND ADJACENT TERRITORY
SCALE IN MILES

