

SOUTHERN PACIFIC COMPANY

(PACIFIC LINES)

TIME TABLE

FOR THE

SACRAMENTO AND SHASTA DIVISIONS

163

To Take Effect Wednesday, July 9, 1941, at 12:01 A. M.

PACIFIC STANDARD TIME (120th MERIDIAN)

For the government and information of employees only.

L. B. McDONALD,
General Manager.

C. F. DONNATIN,
Assistant General Manager.

W. B. KIRKLAND,
Superintendent of Transportation.

W. L. HACK,
Superintendent Sacramento Division.

E. F. NASSOIY,
Superintendent Shasta Division.



EASTWARD

SACRAMENTO SUBDIVISION

Capacity of Sidings in car lengths	THIRD CLASS							SECOND CLASS			FIRST CLASS								Distance from San Francisco	Time Table No. 163 July 9, 1941	
	488	486	484	482	478	470	442	606	423	421	28	88	102	14	16	290	210	10		STATIONS	A. H. Z.
	Freight	Freight	Freight	Freight	Freight	Portland Freight	Mdse.	Mixed	Freight	Freight	San Francisco Overland Limited	Challenger	Streamliner City of San Francisco	Pacific Limited	West Coast	Mixed	Sierra	Fast Mail			
Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Monday	Leave Daily Ex. Sunday and Monday	Leave Daily Ex. Sunday	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sunday & Holidays	Leave Daily	Leave Daily	TO-R SACRAMENTO	TO-R SACRAMENTO		
				8.30 AM	6.00 AM	1.15 AM				11.45 PM	11.20 PM	5.53 PM	11.30 AM	10.00 AM	1.20 AM	1.00 AM	12.50 AM	89.0	TO-R SACRAMENTO		
								11.20 AM	1.10 AM	11.52	11.27	6.00	11.37	10.07	1.44	1.07	12.57	88.9	2.9		
																		91.8	ELVAS		
																		93.6	1.7		
																		94.9	SWANSTON		
																		99.9	1.4		
																		102.8	BENALI		
																		106.6	7.9		
																		108.6	ANTELOPE		
																		110.6	3.8		
																		112.2	TO-R ROSEVILLE		
																		120.2	4.0		
																		124.2	ROOKLIN		
																		129.1	9.6		
																		134.3	TO NEWCASTLE		
																		137.6	4.0		
																		141.7	AUBURN, NEVADA ST.		
																		146.0	4.9		
																		146.1	BOWMAN		
																		152.2	5.2		
																		156.8	EAST APPLEGATE		
																		160.7	3.3		
																		164.8	N. E. MILLS		
																		165.5	4.1		
																		166.6	TO-R COLFAX		
																		168.2	4.4		
																		171.8	CAPE HORN		
																		177.9	6.2		
																		180.3	TO GOLD RUN		
																		184.8	4.6		
																		185.6	TOWLE		
																		186.7	3.9		
																		188.3	MIDAS		
																		192.0	4.1		
																		196.8	KNAPP		
																		198.2	0.7		
																		202.9	BLUE CANON		
																		208.0	5.2		
																		218.1	TO EMIGRANT GAP		
																		222.4	6.1		
																		232.4	CRYSTAL LAKE		
																		242.9	2.4		
																		245.5	OISCO		
																		246.2	5.2		
																		248.5	TROY		
																		251.2	6.5		
																		256.18	TO NORDEN		
																		32.96	4.8		
																		26.18	EDER		
																		26.18	4.7		
																		27.74	STANFORD		
																		27.74	5.1		
																		27.74	TO-R TRUCKEE		
																		27.74	10.1		
																		27.74	HINTON		
																		27.74	4.3		
																		27.74	FLORISTON		
																		27.74	10.0		
																		27.74	VERDI		
																		27.74	10.5		
																		27.74	RENO		
																		27.74	2.6		
																		27.74	SPARKS (PSGR. STA.)		
																		27.74	0.7		
																		27.74	TO-R SPARKS (DSP.OFF.)		
																		27.74	154.9		

*Note—No. 102 leave and arrive 2nd, 5th, 8th, 11th, 14th, 17th, 20th, 23rd, 26th and 29th of each month.

RULES S-71, D-71, 72, S-72, 85, 86, 87, and 93: No. 101 is superior to ALL trains; No. 102 is superior to ALL trains except No. 101.

First-class trains must clear the time of Nos. 101 and 102 not less than 10 minutes. Second and inferior class trains, extra trains and engines must clear the time of Nos. 101 and 102 not less than 15 minutes.

RULE 5. At Emigrant Gap—Time of first-class schedules applies at Passenger Station and time in train orders applies at siding.

No. 210 stop at Boca to exchange mail by locker.

Additional Stations:

Planehaven, M.P. 97.5	Dutch Flat, M.P. 154.1	Boca, M.P. 216.3
Walerga, M.P. 99.4	Alta, M.P. 156.0	Wickes, M.P. 221.9
Lincoln Ave.,	Smart, M.P. 173.3	Mystic, M.P. 225.5
Penryn, M.P. 115.5	Yuba Pass, M.P. 176.1	Calvada, M.P. 228.5
Clipper Gap, M.P. 131.4	Soda Springs, M.P. 190.4	Mogul, M.P. 235.7
Magra, M.P. 148.5	Andover, M.P. 200.6	Lawton, M.P. 237.1

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS

Train	At	Receive or Discharge	Passengers to (or beyond)	Passengers from (or beyond)
14	Alta	Discharge Rev. Passengers	Any Station	Sacramento
14	Soda Springs	Receive and Discharge		
28	Any Station	Receive Revenue	Ogden	Any Station
88	Any Station	Passengers		
88	Any Station	Receive Revenue	Sparks	Berkeley
88	Any Station	Passengers		
88	Auburn, Nev. St.	Discharge	Any Station	Any Station
210	Troy	Thursdays		
210	Andover	Sundays and Tuesdays	Any Station	Any Station
210	Eder	Tuesdays and Saturdays		
210	Dutch Flat	Receive and Discharge	Any Station	Any Station
210	Soda Springs	Receive and Discharge		

SACRAMENTO SUBDIVISION

WESTWARD

Time Table No. 163

July 9, 1941

Capacity of Sidings in Car Lengths

Capacity of Sidings in Car Lengths
 Sacramento yard
 BKWO ITP
 IYP
 WP
 P
 South 92 M 86
 M 60 P
 BKWO TYP
 P
 83 P
 49 P
 Yard Limits 59 WP
 68 P
 52 WP
 M 90 P
 P No Siding
 51 P
 Spur P 60
 Yard Limits BKW YP
 C 57 P
 67 WOYP
 P Spur 5
 M 82 P
 M 76 WP
 Yard Limits M 76 WITP
 Summer 79 P
 M 84 WP
 P
 M 60 WP
 Summer 71
 E BKWITP
 P(Upper) 62
 (Lower) 80
 88 P
 M 68 WP
 Yard Limits BKWOYP
 47 P
 M 105 P
 WP
 M 130 P
 P
 Sparks yard
 BKW OTP

STATIONS

Distance from Sparks	FIRST CLASS									SECOND CLASS		THIRD CLASS		
	101	289	295	21	15	9	27	87	605	420	481	483	471	
	Streamliner City of San Francisco	Sierra	Sierra	Pacific Limited	West Coast	Fast Mail	San Francisco Overland Limited	Challenger	Mixed	Freight	Freight	Freight	Oakland Freight	
STATIONS	Arrive *See Note	Arrive Daily Ex. Sundays and Holidays	Arrive Sundays and Holidays	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	
156.4	s 7.10 AM	s 3.10 PM	s 3.30 PM	s 6.10 PM	s 7.10 PM	s 1.55 AM	s 3.55 AM	s 4.40 AM					5.45 PM	
153.5	7.02	3.01	3.21	6.00	6.55	1.45	3.45	4.30		9.10 PM			5.30	
151.8		f	f											
150.4	6.58	2.54	3.14	5.52	6.41	1.39	3.39	4.24						
142.5	6.50	2.46	3.06	5.43	6.33	1.30	3.30	4.15						
138.7	6.44	s 2.37 s 2.30	s 2.57 s 2.50	s 5.35 s 5.27	6.25 PM	s 1.20 s 1.10	s 3.20 s 3.10	s 4.05 s 3.55		8.30 PM	11.00 AM	3.30 AM	5.00 PM	
134.7							2.55	f						
131.4	6.34	s 2.14	s 2.34	5.13		12.58	2.44	f 3.33						
128.7		f 2.07	f 2.27				2.36	f 3.24						
125.7	6.24	s 2.00	s 2.20	f 5.01		12.47	2.27	f 3.15		10.10	2.40			
121.7														
120.8	6.15	s 1.48	s 2.08	f 4.51		12.37	2.12	f 3.02						
116.9	6.08	1.37	1.57	4.43		12.29	2.00	f 2.50						
114.4								f						
111.4	5.58	f 1.25	f 1.45	4.32		12.18	1.44	f 2.36						
108.2	5.52	f 1.17	f 1.37	4.25		12.12	1.35	f 2.27						
103.2	5.43	s 1.05	s 1.25	s 4.15		s 12.02 AM	s 1.20	s 2.15		8.45	1.20			
98.9	5.34	12.52	1.12	4.03		11.50 PM	1.05	1.56						
92.7	5.23	f 12.39	f 12.59	3.50		11.37	12.51	f 1.43		8.10	12.40 AM			
88.1	5.15	f 12.27	f 12.47	3.41		11.28	12.40	f 1.30						
84.2	5.08	f 12.17	f 12.37	3.33		11.20	12.30	f 1.20						
80.1	5.00	12.07 PM	12.27	3.24		11.12	12.20	1.10						
74.1	4.49	f 11.54 AM	f 12.14	3.12		11.00	12.07 AM	f 12.56		6.30	11.00 PM			
69.8		11.43	12.03 PM	3.03		10.52	11.57 PM	12.46						
68.0	4.36	11.39	11.59 AM	2.58		10.48	11.53	12.41						
65.6		f 11.34	f 11.54				11.47	f 12.36						
60.3	4.22	11.21	11.41	2.43		10.33	11.35	12.23						
53.8	4.11	s 11.05	s 11.25	2.30		10.20	11.20	s 12.08 AM		5.00	9.30			
52.9														
49.8	4.01	10.52	11.12	2.18		10.10	11.05	11.53 PM						
47.7														
43.0	3.48	10.38	10.58	2.02		9.56	10.45	11.37						
37.9	3.39	s 10.27	s 10.47	s 1.50		s 9.45	s 10.30	s 11.25		3.39	8.00			
29.7	3.27	f 10.09	f 10.29	1.32		9.28	9.53	f 11.00						
27.9	3.24	10.05	10.25	1.29		9.25	9.49	10.56						
23.6	3.17	f 9.58	f 10.18	1.22		9.18	9.40	f 10.48						
13.7	3.02	f 9.42	f 10.02	1.07		9.03	9.20	f 10.29						
3.3	s 2.46	s 9.25	s 9.45	s 12.50		s 8.47 s 8.37	s 9.00 s 8.52	s 10.10 s 9.53		s 6.50 PM				
0.7		s 9.08	s 9.28					s 9.45		f 6.40				
0.0	2.40 AM	9.05 AM	9.25 AM	12.30 PM		8.27 PM	8.40 PM	9.40 PM		6.30 PM	1.30 AM	6.00 PM		
	Leave *See Note	Leave Daily Ex. Sundays and Holidays	Leave Sundays and Holidays	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sunday	Leave Daily	Leave Daily	Leave Daily	Leave Daily	
	(4.30)	(6.05)	(6.05)	(5.40)	(0.45)	(5.28)	(7.15)	(7.00)	(0.20)	(0.40)	(9.30)	(9.30)	(0.45)	
	34.76	25.71	25.71	27.63	23.60	28.61	21.57	22.34	9.90	22.20	14.51	14.51	23.60	

*No. 101 leave and arrive 4th, 7th, 10th, 13th, 16th, 19th, 22nd, 25th, 28th, 31st and 1st.

Rules S-71, D-71, 72, S-72, 85, 86, 87, and 93: No. 101 is superior to ALL trains; No. 102 is superior to ALL trains except No. 101.

First-class trains must clear the time of Nos. 101 and 102 not less than 10 minutes. Second and inferior class trains, extra trains and engines must clear the time of Nos. 101 and 102 not less than 15 minutes.

RULE 5. At Loomis—Time applies at Passenger station.

At Emigrant Gap—Time of first-class schedules applies at Passenger Station and time in train orders applies at siding.

Westward trains receiving orders moving eastward trains from Loomis to Newcastle on No. 1 track, must not pass east crossover switch at Newcastle until opposing trains on No. 1 track have arrived, and eastward trains authorized to use No. 1 track Loomis to Newcastle, proceed on No. 1 track to first crossover switch, east of station at Newcastle.

Westward trains must stop east of east crossover switch at Newcastle unless train-order signal indicates "proceed."

No. 27 stop at the following stations to exchange mail by locker: Alta, Dutch Flat.

No. 21 stop at Boca when requested by postal clerk to dispatch registered postal supplies and reduce speed, or stop if necessary, at Norden and Auburn for mail exchange.

ADDITIONAL STATIONS

Lawton.....	M.P. 237.1
Mogul.....	M.P. 235.7
Calvada.....	M.P. 228.5
Mystic.....	M.P. 225.5
Wickes.....	M.P. 221.9
Andover.....	M.P. 200.6
Soda Springs.....	M.P. 190.4
Smart.....	M.P. 173.3
Blue Canon.....	{M.P. 165.5 M.P. 166.6
Alta.....	M.P. 156.0
Dutch Flat.....	M.P. 154.1
Magra.....	M.P. 148.5
Walerga.....	M.P. 99.4
Planhaven.....	M.P. 97.5

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS

Train	At	Receive or Discharge	Passengers to (or beyond)	Passengers from (or beyond)
21	Norden	Receive	Sacramento	
21	Any Station	Discharge Revenue Passengers		Sparks
289 295 87	Soda Springs Blue Canon Dutch Flat Alta			
289 295 87	Any Station	Discharge		Sparks
27	Any Station	Receive Revenue Passengers	Sacramento	
27	Any Station	Discharge		Reno

.....Time over District.....
Average Speed per Hour.....

EASTWARD

SACRAMENTO SUBDIVISION

Capacity of Sidings in Car Lengths	THIRD CLASS				SECOND CLASS				FIRST CLASS						Distance from San Francisco	Time Table No. 163		
	514 Local Freight				498 Freight	496 Manifest	600 Manifest	494 Freight	20 Klamath	8 Shasta	18 Oregonian	12 Beaver	24 Cascade	16 West Coast		July 9, 1941		
	Leave Daily Ex. Sunday				Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily		STATIONS		
Yard Limits BKWIYP	4.05 AM						5.45 AM			11.30 PM	11.10 PM	9.17 PM	8.30 PM	7.53 PM	75.6	TO-R DAVIS 5.1		
105 P							5.55			11.37	11.17	9.24	8.37	8.00	80.7	MERRITT 2.5		
17															83.2	MULLEN 1.7		
Yard Limits 38 BKWIP	4.40						6.05			s 11.50	11.23	9.31	8.43	8.05	84.9	TO-R WOODLAND S. N. R. R. Crossing 5.0		
41 P	5.20						6.14			11.57 PM	11.29	9.37	8.49	8.11	89.9	TO YOLO 5.9		
31 P	5.45						6.23			12.03 AM	11.36	9.43	8.55	8.17	95.8	ZAMORA 2.2		
19 P															98.0	BRETONA 5.2		
31 WP	6.15						6.35			12.11	11.45	9.51	9.03	8.25	103.2	DUNNIGAN 3.2		
48 P															106.4	HERSHEY 1.9		
81 112 YP	6.35						6.43			12.17	11.51	9.57	9.09	8.31	108.3	HARRINGTON 5.2		
42 P	6.52						6.52			f 12.23	11.57 PM	10.03	9.15	8.37	113.5	TO ARBUCKLE 4.1		
31 P							6.59								117.6	GENEVRA 6.6		
48 P	8.00						7.10			s 12.43	12.09 AM	10.15	9.26	8.48	124.2	TO WILLIAMS 4.9		
43 P	8.10						7.18			12.49	12.14	10.21	9.31	8.53	129.1	CORTENA 3.9		
56 WP	8.53						7.25			f 12.54	12.19	10.25	9.35	8.57	133.0	TO MAXWELL 5.3		
39 P	9.31						7.34			1.00	12.26	10.31	9.41	9.03	138.3	DELAVAN 3.8		
47							7.40			1.04	12.30	10.35	9.45	9.07	142.1	NORMAN 2.2		
32 P	10.09														144.3	LOGANDALE 5.6		
Yard Limits 60 BKWOYP	10.30 AM						7.53			s 1.25	12.40	f 10.47	f 9.53	9.16	149.9	TO-R WILLOWS 6.9		
44 P							8.08			1.34	12.48	10.56	10.02	9.24	156.8	ARTOIS 3.9		
49							8.16			1.38	12.52	11.00	10.06	9.28	160.7	GRAPIT 1.3		
34 P															162.0	GREENWOOD 3.4		
Yard Limits 29 BKWP 38 YP							8.26			s 1.52	12.58	11.07	10.12	9.33	165.4	TO-R ORLAND 1.6		
28 P							8.30			1.54					167.0	WYO 6.4		
42 P							8.48			2.01	1.08	11.17	10.21	9.41	173.4	KIRKWOOD 5.1		
44 P							8.58			s 2.15	1.15	11.25	10.28	9.47	178.5	TO COORNING 3.1		
110 YP							7.50 PM	11.25 AM	9.19	3.25 AM	2.25	1.23	11.35	10.38	9.55	1.40 PM	181.6	RICHFELD 4.7
Gerber Yard BKWOYP							8.00 PM	11.35 AM	9.30 AM	3.35 AM	s 2.35 AM	s 1.30 AM	s 11.40 PM	s 10.45 PM	s 10.00 PM	s 1.50 PM	186.3	R TEHAMA 2.1
	Arrive Daily Ex. Sunday				Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	188.4	TO-R GERBER	
	(6.25) 11.58				(0.10) 12.60	(0.10) 12.60	(3.45) 30.08	(0.10) 12.60		(3.05) 36.58	(2.20) 48.34	(2.23) 47.33	(2.15) 50.13	(2.07) 53.29	(0.10) 12.60		(112.8)	
																	Time over District.....	
																	Average Speed per Hour.....	

RULE 5. At Tehama, schedule time and time in train orders apply at the junction switch.

Trains meeting at Tehama: If eastward train holds main track, it should not pass overlap post located 2475 feet east of junction switch until westward train has arrived, to a void "stop" signal indication at Gerber for westward train.

No. 20 not exceed 25 MPH passing Richfield Sundays.

Additional Stations:
 Dufour, M.P. 92.1
 Delphos, M.P. 126.8
 Riz, M.P. 146.0

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS				
Train	At	Receive or Discharge	Passengers to (or beyond)	Passengers from (or beyond)
8	Any Station	Receive	Black Butte	
18	Woodland Williams Orland Corning	Discharge		Davis

SACRAMENTO SUBDIVISION

WESTWARD

Time Table No. 163

JULY 9, 1941

FIRST CLASS

THIRD CLASS

STATIONS	Distance from Gerber	FIRST CLASS							THIRD CLASS					
		19 Klamath	7 Shasta	291 Mixed	23 Cascade	11 Beaver	17 Oregonian	15 West Coast	495 Freight	515 Local Freight	497 Manifest	601 Manifest	499 Freight	
		Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday & Holidays	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily	Arrive Daily	
TO-R DAVIS 5.1	112.8	s 4.55 AM	s 5.45 AM	s 10.25 AM	s 10.45 AM	s 11.28 AM	s 5.00 PM			12.30 PM		3.55 PM		
MERRITT 2.5	107.7	4.45	5.36	f 10.15	10.35	11.18	4.51			12.15 PM		3.45		
MULLEN 1.7	105.2			f										
TO-R WOODLAND S. N. R. R. Crossing 5.0	103.5	4.40	s 5.30	s 10.07	10.30	11.13	s 4.45			11.55 AM		3.35		
TO YOLO 5.9	98.5	4.31	5.20	f 9.55	10.22	11.06	4.33			11.06		3.25		
ZAMORA 2.2	92.6	4.25	5.14	f 9.45	10.16	11.00	4.27			10.38		3.16		
BRETONA 5.2	90.4			f										
DUNNIGAN 3.2	85.2	4.17	5.06	f 9.35	10.08	10.52	4.19			10.08		3.04		
HERSHEY 1.9	82.0			f										
HARRINGTON 5.2	80.1	4.12	5.00	f 9.27	10.03	10.47	4.13			9.40		2.56		
TO ARBUCKLE 4.1	74.9	4.06	4.54	s 9.20	9.57	10.42	4.07			9.20		2.48		
GENEVRA 6.6	70.8	4.02	4.48	f 9.13			4.01			8.55		2.41		
TO WILLIAMS 4.9	64.2	3.55	s 4.40	s 9.05	9.46	10.31	s 3.53			8.40		2.28		
OORTENA 3.9	59.3	3.50	4.33	f 8.58	9.41	10.26	3.43			8.10		2.12		
TO MAXWELL 5.3	55.4	3.46	4.29	s 8.53	9.37	10.22	3.39			7.55		2.06		
DELAVAN 3.8	50.1	3.40	4.22	f 8.45	9.31	10.16	3.33			7.34		1.58		
NORMAN 2.2	46.3			f										
LOGANDALE 6.6	44.1	3.33	4.15	f 8.37	9.24	10.09	3.26			7.15		1.49		
TO-R WILLOWS 6.9	38.5	s 3.25	s 4.08	s 8.30 8.20	9.16	10.01	s 3.18			7.00 AM		1.40		
ARTOIS 3.9	31.6	3.13	3.55	f 8.08	9.07	9.52	3.05					1.28		
GRAPIT 1.3	27.7	3.09	3.51	f 8.02	9.03	9.48	3.01					1.21		
GREENWOOD 3.4	26.4			f										
TO-R ORLAND 1.6	23.0	3.04	s 3.45	s 7.55	8.58	9.43	s 2.54					1.11		
WYO 6.4	21.4	3.01	3.40	f 7.43	8.55	9.40	2.48					1.08		
KIRKWOOD 5.1	15.0	2.54	3.33	f 7.33	8.48	9.33	2.41					12.58		
TO CORNING 3.1	9.9	2.48	s 3.27	s 7.25 7.05	8.42	9.27	s 2.34					12.50		
RICHFIELD 4.7	6.8			f			2.25					12.44		
R TEHAMA 2.1	2.1	2.39	3.14	6.50 AM	8.34	9.19	2.19	s 3.09 PM		12.13 AM		8.13 AM	12.37	4.13 PM
TO-R GERBER	0.0	2.35 AM	3.10 AM		8.30 AM	9.15 AM	2.15 PM	3.05 PM		12.05 AM		8.05 AM	12.30 PM	4.05 PM
(112.8)		Leave Daily	Leave Daily	Leave Daily Ex. Sunday & Holidays	Leave Daily	Leave Daily	Leave Daily	Leave Daily		Leave Daily	Leave Daily Ex. Sunday	Leave Daily	Leave Daily	Leave Daily
Time over District.....		(2.20)	(2.35)	(3.35)	(2.15)	(2.13)	(2.45)	(0.04)		(0.08)	(5.30)	(0.08)	(3.25)	(0.08)
Average Speed per Hour.....		48.34	43.66	30.89	50.13	50.89	41.02	31.50		15.75	13.51	15.75	33.01	15.75

RULE 5. At Tehama, schedule time and time in train orders apply at the junction switch.

Trains meeting at Tehama: If eastward train holds main track, it should not pass overlap post located 2475 feet east of junction switch until westward train has arrived, to avoid "stop" signal indication at Gerber for westward train.

No. 19 reduce speed to 10 MPH at Orland to permit picking up U. S. mail.

Additional Stations:

Dufour, M.P. 92.1
Delphos, M.P. 126.8
Riz, M.P. 146.0

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS				
Train	At	Receive or Discharge	Passengers to (or beyond)	Passengers from (or beyond)
291 7 17	Dufour Arbuckle Arbuckle	Receive Receive Receive	Davis Berkeley	

EASTWARD

SACRAMENTO SUBDIVISION

WESTWARD

Capacity of Sidings in Car Lengths	THIRD CLASS					SECOND CLASS			FIRST CLASS		Distance from San Francisco	Time Table No. 163 July 9, 1941	Distance from Tehama	FIRST CLASS			THIRD CLASS			FOURTH CLASS	
	502		500		498	496	494	16		290				15			495	497	499	501	503
	Local Freight	Local Freight	Freight	Manifest	Freight		West Coast	Mixed		West Coast				Freight	Manifest	Freight	Local Freight	Local Freight			
Leave Daily Ex. Sundays	Leave Daily Ex. Sundays	Leave Daily	Leave Daily	Leave Daily		Leave Daily	Leave Daily Ex. Sundays and Holidays		Leave Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Sundays	Arrive Daily Ex. Sundays							
Roseville yd. BKWOTYP		1.00 AM	4.05 PM	8.05 AM	12.05 AM		10.30 AM	2.10 AM	106.6	TO-R ROSEVILLE 6.2	105.1	s 6.22 PM		3.40 AM	11.40 AM	7.40 PM		11.20 PM			
105 P		1.25	4.20	8.20	12.20		10.43	2.35	112.8	WHITNEY 4.2	98.9	6.10		3.26	11.26	7.26		10.55			
114 WP		2.45	4.28	8.28	12.28		s 10.49	s 2.45	117.0	TO LINCOLN 4.0	94.7	s 6.03		3.18	11.18	7.18		10.45			
34 P									121.0	EWING 1.1	90.7										
101 P		3.09	4.37	8.37	12.37		10.57	2.58	122.1	BROOK 2.7	89.6	5.52		3.09	11.09	7.09		9.20			
29							11.01	f 3.04	124.8	SHERIDAN 3.3	86.9	5.48		3.04	11.01	7.04		9.10			
130 WP		3.45	4.48	8.48	12.48		f 11.07	s 3.10	128.1	TO WHEATLAND 6.1	83.6	f 5.42		2.57	10.55	6.57		8.55			
96 P		4.00	4.59	8.59	12.59		11.15	3.20	134.2	OSTROM 5.6	77.5	5.32		2.46	10.44	6.46		8.20			
Yard Limits BKW OYYP		5.45	5.22	9.12	1.12		s 11.35	s 3.33 4.00	139.8	DANTONI JCT. 1.0	71.9										
									140.8	TO-R MARYSVILLE 1.0	70.9	s 5.22		2.34	10.32	6.34		8.00			
106 WP		5.55	5.32	9.22	1.22		11.42	4.08	141.8	W. P. R. R. Crossing 2.9	69.9										
38		6.10	5.38	9.28	1.28		11.46	4.13	147.7	BERG 3.0	67.0	5.07		2.24	10.24	6.24		6.24			
36									149.8	LOMO 2.1	64.0	5.03		2.18	10.18	6.18		6.05			
48 IP		6.30	5.47	9.35	1.35		f 11.53 AM	s 4.23	151.5	SUNSET 1.7	61.9										
110 P		7.10	5.59	9.47	1.47		s 12.02 PM	s 4.35	158.0	TO LIVE OAK S. N. R. R. Crossing 6.5	60.2	s 4.57		2.11	10.11	6.11		5.47			
43 WBP	10.00 AM	7.20 AM	6.10	9.53	1.53		f 12.11	s 4.50	161.4	TO GRIDLEY 3.4	53.7	s 4.47		1.59	9.59	5.59		5.30			
44 P	10.20		6.25	10.04	2.04		s 12.22	f 5.02	167.4	TO BIGGS 6.0	50.3	s 4.39		1.53	9.53	5.53		4.55 PM 5.00 PM			
96 P	10.40		6.35	10.11	2.11		s 12.28	f 5.10	171.5	RICHVALE 4.1	44.3	s 4.28		1.40	9.40	5.40		4.28			
93 P	11.05		6.47	10.23	2.23		f 12.39	f 5.23	178.1	NELSON 6.6	40.2	f 4.21		1.33	9.33	5.33		4.10			
Yard Limits BKWOYP	11.25 AM		6.59	10.34	2.34		s 12.55	s 5.35 6.00	184.2	TO DURHAM 6.1	33.6	s 4.11		1.21	9.21	5.21		3.50			
28 P			7.12	10.47	2.47		1.06	6.12	191.3	S. N. R. R. Crossing 6.5	27.5	s 4.00		1.09	9.09	5.09		3.30 PM			
105 P			7.16	10.51	2.51		1.09	6.16	193.6	TO-R CHICO 7.1	20.4	3.42		12.55	8.55	4.55					
17									196.0	NORD 2.3	18.1	3.39		12.51	8.51	4.51					
140 WP			7.32	11.07	3.07		f 1.23	f 6.32	203.0	ANITA 2.4	15.7										
15									204.6	OANA 7.0	8.7	f 3.26		12.35	8.35	4.35					
45 P			7.44	11.19	3.19		f 1.34	f 6.45	209.7	VINA 1.6	7.1										
110 YP			7.50 PM	11.25 AM	3.25 AM		f 1.40 PM	s 6.50 AM	211.7	COPELAND 5.1	2.0	f 3.15		12.23	8.23	4.23					
	Arrive Daily Ex. Sundays	Arrive Daily Ex. Sundays	Arrive Daily	Arrive Daily	Arrive Daily		Arrive Daily	Arrive Daily Ex. Sundays and Holidays		TO LOS MOLINOS 2.0	0.0	3.09 PM		12.13 AM	8.13 AM	4.13 PM					
	(1.25) 16.09	(6.20) 8.65	(3.45) 28.03	(3.20) 31.53	(3.20) 31.53		(3.10) 33.19	(4.40) 22.52		TEHAMA		Leave Daily		Leave Daily	Leave Daily	Leave Daily		Leave Daily Ex. Sundays 1.25 16.09			
										(105.1)								Leave Daily Ex. Sundays (6.20) 8.65			
										.....Time over District.....										
										.....Average Speed per Hour.....										

RULE 5. At Roseville, schedule time and train orders for eastward trains on Roseville-Tehama line, apply at west switch of crossover, leading from No. 2 to No. 1 tracks, 400 feet west of Lincoln Street crossing.

At Tehama, schedule time and time in train orders apply at the Junction Switch. Trains meeting at Tehama: If eastward train holds main track, it should not pass overlap post located 2475 feet east of junction switch until westward train has arrived, to avoid "stop" signal indication at Gerber for westward train.

No. 15 Stop at Sheridan when necessary for U. S. Mail or newspapers.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS				
Train	At	Receive or Discharge	Passengers to (or beyond)	Passengers from (or beyond)
16	Sheridan	Sundays & Holidays		

Additional Stations:
 Clayton, M. P. 118.4
 Jester, M. P. 126.0
 Rupert Spur, M. P. 138.9
 Binney Junction Tower, M. P. 141.8
 Sullivan, M. P. 146.4
 Fagan, M. P. 155.9
 Riceton, M. P. 164.1
 Faulkner, M. P. 181.9
 Gimbal, M. P. 189.1

Capacity of Sidings in Car Lengths	EASTWARD									Distance from San Francisco via Marysville	BLACK BUTTE SUBDIVISION							Distance from Klamath Falls	WESTWARD					
	THIRD CLASS			SECOND CLASS			FIRST CLASS				Time Table No. 163 July 9, 1941								FIRST CLASS			THIRD CLASS		
	624	638	622	16	20	8	18	12	24		STATIONS	23	11	17	15	19	7		631	635	649	623		
	Freight	Manifest	Manifest	West Coast	Klamath	Shasta	Oregonian	Beaver	Cascade		Cascade	Beaver	Oregonian	West Coast	Klamath	Shasta	Manifest	Manifest	Manifest	Freight				
	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily				
Dunsmuir yard	BKP 7.20 PM	11.30 PM	4.15 PM							321.2	TO-R DUNSMUIR YARD 0.9						12.45 PM	6.55 PM	3.25 AM	9.10 PM				
	BKW 7.25	11.35	4.20	6 25 PM	7.20 AM	5.55 AM	3.45 AM	3.00 AM	1.40 AM	322.1	TO-R DUNSMUIR (Pass Sta) 3.3	4.50 AM	5.35 AM	10.10 AM	10.50 AM	10.15 PM								
	P									325.4	SHASTA SPRINGS 0.7													
84 P	7.37	11.47 PM	4.32	6.35	7.30	6.05	3.56	3.10	1.50	326.1	SMALL 1.5	4.39	5.25	9.58	10.40	10.02	10.40	12.27	6.35	3.10	8.48			
26 Spur P										327.6	CANTARA 3.8													
81 P	7.56	12.07 AM	4.52	6.52	7.45	6.20	4.11	3.25	2.04	331.4	TO MOTT 2.1	4.24	5.11	9.43	10.25	9.45	10.25	12.10 PM	6.18	2.52	8.31			
125 P	8.03	1.214	4.59	6.57	7.50	6.25	4.19	3.30	2.09	333.5	AZALEA 2.3	4.19	5.06	9.38	10.20	9.40	10.20	11.58 AM	6.12	2.45	8.23			
106 WYP	8.13	12.27	5.12	7.08	8.01	6.34	4.29	3.38	2.16	336.7	TO MOUNT SHASTA 2.4	4.12	4.59	9.30	10.12	9.32	10.13	11.48	6.02	2.35	8.13			
89 P	8.18	12.32	5.17	7.12	8.05	6.38	4.32	3.42	2.19	339.1	UPION 2.9	4.09	4.56	9.24	10.07	9.26	10.08	11.43	5.57	2.29	8.07			
67 P	8.24	12.37	5.22	7.16	8.09	6.42	4.36	3.46	2.23	342.0	DEETZ 2.9	4.05	4.52	9.20	10.03	9.21	10.04	11.37	5.51	2.23	8.01			
E-102 Yd. Lmt. W-106 WYP	8.35 PM	12.56	5.41	7.24	8.16	6.50 AM	4.45	3.58	2.30	345.2	TO-R BLACK BUTTE 7.0	3.58	4.45	9.13	9.56	9.13	9.55 PM	11.27	5.41	2.13	7.50 PM			
80 P		1.15	6.00	7.37	8.29		5.00	4.12	2.42	352.2	HOTLUM 5.0	3.46	4.32	9.00	9.43	9.00		11.07	5.21	1.53				
111 P		1.25	6.10	7.46	8.38		5.09	4.22	2.50	357.2	BOLAM 3.5	3.38	4.22	8.52	9.34	8.50		10.56	5.10	1.43				
81 P		1.34	6.19	7.52	8.46		5.14	4.28	2.55	360.7	ANDESITE 4.1	3.33	4.15	8.46	9.29	8.43		10.45	4.59	1.34				
81 P		1.44	6.29	7.59	8.55		5.20	4.34	3.01	364.8	COUGAR 3.7	3.28	4.10	8.41	9.24	8.36		10.31	4.45	1.19				
123 WYP		1.57	6.45	8.07	9.03		5.28	4.42	3.08	368.5	TO GRASS LAKE 4.6	3.23	4.05	8.36	9.19	8.29		10.16	4.30	1.04				
101 P		2.05	6.53	8.17	9.12		5.35	4.48	3.17	373.1	ERIKSON 4.1	3.17	3.58	8.29	9.12	8.17		10.01	4.10	12.49				
79 P		2.12	7.00	8.25	9.20		5.40	4.53	3.25	377.2	PENOYAR 3.4	3.11	3.52	8.22	9.04	8.07		9.46	3.55	12.34				
YP				8.31	9.26					380.6	TO LEAF 1.3					7.59								
107 WP		2.20	7.08	8.38	9.31		5.45	4.58	3.31	381.9	TO BRAY 4.1	3.05	3.44	8.16	8.56	7.52		9.31	3.40	12.20				
80 P		2.27	7.15	8.44	9.36		5.50	5.03	3.36	386.0	KEGG 4.0	2.59	3.36	8.10	8.50	7.44		9.21	3.30	12.07 AM				
59 P		2.34	7.22	8.49	9.41		5.55	5.08	3.42	390.0	JEROME 4.0	2.54	3.26	8.05	8.44	7.37		9.13	3.23	11.59 PM				
Yard Limits 93, 98 WYP		2.41	7.31	8.54	9.47		6.00	5.13	3.47	394.0	TO MT. HEBRON 2.7	2.49	3.20	8.00	8.38	7.31		9.06	3.16	11.51				
59 P		2.46	7.36	8.59	9.51		6.03	5.16	3.50	396.7	TO MACDOEL 1.6	2.46	3.17	7.57	8.35	7.24		9.01	3.11	11.46				
107 P		2.50	7.39	9.02	9.55		6.05	5.18	3.52	398.3	SOMERSET 4.3	2.44	3.15	7.55	8.33	7.20		8.58	3.08	11.43				
58 P		2.57	7.46	9.07	10.00		6.10	5.23	3.57	402.6	MAY 4.5	2.39	3.10	7.50	8.28	7.15		8.51	3.01	11.36				
107 BKP		3.05	7.53	9.12	10.05		6.15	5.28	4.02	407.1	TO DORRIS 4.5	2.34	3.05	7.44	8.22	7.09		8.44	2.54	11.29				
59 P		3.12	8.00	9.20	10.15		6.21	5.34	4.08	411.6	CALOR 4.0	2.28	2.59	7.38	8.13	7.00		8.36	2.46	11.21				
107 P		3.19	8.07	9.25	10.21		6.25	5.39	4.13	416.6	WORDEN 2.6	2.23	2.54	7.33	8.08	6.55		8.29	2.39	11.14				
58 P		3.24	8.12	9.28	10.26		6.28	5.42	4.17	418.2	ADY 4.1	2.20	2.50	7.30	8.05	6.50		8.23	2.33	11.08				
102 P		3.31	8.19	9.33	10.32		6.33	5.47	4.22	422.3	MIDLAND 3.9	2.15	2.45	7.25	8.00	6.45		8.16	2.26	11.01				
Klamath Falls Yd. 79 P		3.38	8.25	9.38	10.37		6.38	5.52	4.27	426.2	TEXUM 3.3	2.10	2.40	7.20	7.55	6.40		8.10	2.20	10.55				
BKW OTYP		3.50 AM	8.35 PM	9.45 PM	10.45 AM		6.45 AM	6.00 AM	4.35 AM	429.5	TO-R KLAMATH FALLS	2.05 AM	2.35 AM	7.15 AM	7.50 AM	6.35 PM		8.00 AM	2.10 PM	10.45 PM				
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		(108.0)	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily			
	(1.15)	(4.20)	(4.20)	(3.20)	(3.25)	(0.55)	(3.00)	(3.00)	(2.55)		Time over District	(2.45)	(3.00)	(2.55)	(3.00)	(3.40)	(0.55)	(4.45)	(4.45)	(4.40)	(1.20)			
	18.97	24.93	24.93	32.13	31.24	24.85	35.70	35.70	36.72		Average Speed per Hour	38.96	35.70	36.72	35.70	29.18	24.85	22.73	22.73	23.14	17.62			

RULE 5. At Klamath Falls schedule time and train orders of first-class trains apply at Passenger Station.

At Grass Lake, first-class trains with orders to meet or pass, train required to take siding will use passenger siding, located on right side of main track in movement of direction eastward.

At Black Butte schedule time and train orders of trains going to the Siskiyou line apply at east switch Eastward siding. Trains from the Siskiyou line apply at Junction switch.

No. 17 reduce speed at Dorris for U. S. Mail or newspapers.

Additional Stations: Pioneer Spur M. P. 335.1
Barnard Spur M. P. 335.4
Graham Industrial Track M. P. 356.0
Kegg Pit M. P. 386.9

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS

Train	At	Receive or Discharge	To (or beyond)	From (or beyond)
16	Shasta Springs	May 15, to Sept. 30	Klamath Falls	Gerber
16	Black Butte		Klamath Falls	Sacramento
19	Kegg Pit.....MP 386.9	Mon., Wed. and Fri.		
19	Black Butte		Davis	Klamath Falls
19	Shasta Springs		Davis	Klamath Falls
20	Shasta Springs		Klamath Falls	Davis
20	Macdoel		Eugene	Gerber

EASTWARD

KIRK SUBDIVISION

WESTWARD

Capacity of Sidings in Car Lengths	SECOND CLASS			FIRST CLASS					Distance from San Francisco via Marysville	Time Table No. 163 July 9, 1941	Distance from Crescent Lake	FIRST CLASS					THIRD CLASS			
	642	626	386	16	20	18	12	24				11	17	15	19	23	621	387	647	643
	Manifest	Manifest	G. N. Ry. Time Freight	West Coast	Klamath	Oregonian	Beaver	Cascade				Beaver	Oregonian	West Coast	Klamath	Cascade	Manifest	G. N. Ry. Time Freight	Manifest	Manifest
	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily				Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		
	10.40 PM	7.45 AM	12.50 AM	10.00 PM	11.00 AM	7.00 AM	6.10 AM	4.45 AM	429.5	TO-R KLAMATH FALLS	99.1	s 2.25 AM	s 7.00 AM	s 7.35 AM	s 6.20 PM	s 1.55 AM	8.30 AM	2.20 PM	3.55 PM	12.05 AM
	10.50	7.55	12.58	10.05	11.05	7.05	6.15	4.50	481.9	CHELSEA	96.7	2.20	6.55	7.30	6.15	1.50	8.24	2.14	3.49	11.59 PM
	10.55	8.00	1.08	10.10	11.10	7.10	6.19	4.54	484.1	WOCUS	94.5	2.16	6.50	7.26	6.10	1.46	8.19	2.09	3.44	11.54
	11.03	8.10	1.16	10.17	11.17	7.17	6.25	5.00	488.9	TO ALGOMA	89.7	2.10	6.42	7.17	s 6.02	1.40	8.10	2.00	3.35	11.45
	11.10	8.17	1.23	10.23	11.22	7.23	6.32	5.05	442.6	OUBY	86.0	2.05	6.32	7.08	5.55	1.35	8.03	1.52	3.28	11.38
	11.17	8.24	1.30	10.29	11.27	7.28	6.38	5.10	447.2	TO MODOC POINT	81.4	1.59	6.24	7.03	s 5.49	1.30	7.56	1.45	3.21	11.31
	11.24	8.32	1.37	10.35	11.33	7.33	6.43	5.15	451.8	LOBERT	76.8	1.53	6.19	6.58	5.42	1.25	7.48	1.38	3.14	11.24
	11.33	8.42	1.47	s 10.46	s 11.43	7.40	6.51	5.21	456.7	TO OHIOQUIN	71.9	1.47	s 6.12	s 6.51	s 5.35	1.19	7.40	1.30	3.05	11.14
	11.35	8.44	1.49	10.48	11.46	7.43	6.55	5.23	458.0	PINE RIDGE	70.6	1.45	6.09	6.45	5.28	1.17	7.35	1.17	2.52	11.01
	11.43	8.52	1.59	10.55	11.52	7.49	7.01	5.28	461.1	BRAYMILL	67.5	1.40	6.05	6.41	5.23	1.13	7.29	1.11	2.46	10.55
	11.58 PM	9.07	2.15	11.01	11.58 AM	7.55	7.07	5.34	465.3	CALIMUS	63.3	1.35	6.00	6.36	5.18	1.08	7.22	1.04	2.39	10.48
	12.11 AM	9.19	2.30	f 11.07	12.04 PM	8.01	7.14	5.40	470.3	TO KIRK	58.3	1.29	5.54	6.30	f 5.11	1.02	7.14	12.56	2.31	10.40
	12.18	9.26	2.37	11.14	12.09	8.06	7.19	5.49	474.5	FUEGO	54.1	1.24	5.49	6.25	5.05	12.57	7.00	12.49	2.24	10.33
	12.25	9.33	2.44	11.20	12.15	8.11	7.24	5.57	478.6	TO OHINHALO	50.0	1.19	5.43	6.20	5.00	12.52	6.52	12.42	2.17	10.26
	12.33	9.41	2.56	11.26	12.21	8.16	7.29	6.02	483.4	LENZ	45.2	1.14	5.38	6.15	4.54	12.47	6.44	12.35	2.10	10.19
	12.42	9.49	3.05	11.32	12.26	8.21	7.34	6.07	488.2	MAZAMA	40.4	1.09	5.33	6.07	4.48	12.42	6.36	12.26	2.02	10.11
	12.49	9.57	3.13	11.38	12.32	8.26	7.39	6.13	492.6	YAMSAY	36.0	1.04	5.28	5.57	4.43	12.37	6.28	12.18	1.54	10.03
	12.58	10.05	3.21	11.44	12.38	8.32	7.45	6.19	498.0	DIAMOND LAKE	30.6	12.58	5.22	5.51	4.37	12.31	6.19	12.08 PM	1.45	9.54
	1.06	10.13	3.30 AM	f 11.52	s 12.45	8.38	7.51	6.25	503.3	TO-R OHEMILT	25.3	12.52	s 5.16	s 5.44	s 4.30	12.25	6.10	11.55 AM	1.36	9.45
	1.13	10.20		11.58 PM	12.51	8.43	7.56	6.30	507.2	PAUNINA	21.4	12.47	5.11	5.37	4.23	12.20	6.03		1.28	9.37
	1.25	10.32		12.11 AM	f 1.00	8.51	8.05	6.38	514.8	MOWIOH	18.8	12.39	5.03	5.28	f 4.14	12.11	5.51		1.16	9.25
	1.33	10.40		12.19	1.08	8.59	8.11	6.44	519.5	KOTAN	9.1	12.34	4.57	5.22	4.08	12.06	5.43		1.08	9.17
	1.40	10.47		12.28	f 1.16	9.05	8.17	6.52	524.0	UMLI	4.6	12.28	4.51	5.16	f 4.02	12.01 AM	5.35		1.00	9.09
	1.50 AM	10.55 AM		s 12.40 AM	s 1.25 PM	s 9.12 AM	s 8.25 AM	s 7.00 AM	528.6	TO-R ORESCENT LAKE	0.0	12.20 AM	4.45 AM	5.10 AM	3.55 PM	11.55 PM	5.25 AM		12.50 PM	9.00 PM
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		(99.1)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
	(3.10) 31.29	(3.10) 31.29	(2.40) 28.50	(2.40) 37.16	(2.25) 41.69	(2.12) 45.03	(2.15) 44.04	(2.15) 44.04		Time over District		(2.05) 47.57	(2.15) 44.04	(2.25) 41.69	(2.25) 41.69	(2.00) 49.55	(3.05) 32.68	(2.25) 30.54	(3.05) 32.68	(3.05) 32.68
										Average Speed per Hour										

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS				
Train	At	Receive or Discharge	Passengers to (or beyond)	Passengers from (or beyond)
16	Algoma Modoc Point Chiloquin		Eugene	Klamath Falls
18	Chemult Paunina Diamond Lake Mazama	/Receive (Monday)	Eugene	Davis
19	Chinchalo Fuego	/Receive (Saturday)	Klamath Falls	Eugene
20	Lenz Algoma Modoc Point Kirk		Eugene	Gerber
20	Chinchalo Mazama Lenz		Eugene	Klamath Falls

Additional Stations:
Gilchrist.....M.P. 513.2

RULE 5. At Klamath Falls schedule time and train orders of first-class trains apply at Passenger Station. Schedule time of No. 386 and No. 387 apply at train order office.

At Crescent Lake Shasta Division first-class schedules and train orders referring to such schedules apply at the west switch of the passenger siding. Portland Division first-class schedules and train orders referring to such schedules apply at the east switch of the passenger siding. The main track at Crescent Lake between the east and west switches of the passenger siding may be used by any first-class train if track is known to be clear. Passenger siding is track between main track and station building.

No. 16 stop, if necessary, at Algoma and Modoc Point for U. S. Mail or newspapers.

EASTWARD

BLACK BUTTE SUBDIVISION

WESTWARD

Capacity of Sidings in Car Lengths	THIRD CLASS		Distance from San Francisco Via Marysville	Time Table No. 163 July 9, 1941	Distance from Ashland	FIRST CLASS		THIRD CLASS	
	624	8				7	623		
	Freight	Shasta				Shasta	Freight		
	Leave Daily	Leave Daily		STATIONS		Arrive Daily	Arrive Daily		
E102 Yd. Lmt. W106 WYP	9.05 PM	6.51 AM	345.2	TO-R BLACK BUTTE 1.8	85.1	s 9.54 PM	7.30 PM		
Spur 4			347.0	IGERNA 2.6	83.3				
Yard Limits 56 BKWOYP	9.35	s 7.07	348.4	TO-R WEED 5.0	80.7	s 9.35	7.05		
46 WYP	10.07	s 7.20	353.4	EDGEWOOD 7.8	75.7	s 9.22	6.45		
70 P	10.22	s 7.35	361.0	TO GAZELLE 3.1	68.1	s 9.04	6.24		
64 P	10.37	s 7.47	369.1	TO GRENADA 6.4	60.0	s 8.49	6.10		
Yard Limits 65 P	10.50	s 8.07	375.5	TO-R MONTAGUE 6.2	53.6	s 8.35	5.56		
66 YP	11.00	f 8.16	380.7	SNOWDON 3.5	48.4	f 8.21	5.46		
53 P	11.17	f 8.28	386.2	AGER 2.2	42.9	f 8.09	5.29		
			388.4	THRALL 4.7	40.7				
Yard Limits 75 WYP	11.40 PM	s 8.50	393.1	TO-R HORN BROOK 4.4	36.0	s 7.52	5.07		
P			397.5	ZULEKA 4.3	31.6				
50 P	12.20 AM	s 9.15	401.8	TO HILT 1.0	27.3	s 7.28	4.32		
			402.8	COLE 4.6	26.3				
60 P	12.44	f 9.30	407.4	GREGORY 4.8	21.7	f 7.14	4.15		
48 TP	1.10	s 9.45	412.2	SISKIYOU 3.4	16.9	s 7.00	3.40		
P			415.6	WALL CREEK 3.7	13.5				
57 WP	1.50	10.06	419.3	STEINMAN 3.6	9.8	6.39	3.10		
71 P	2.05	f 10.15	422.9	MISTLETOE 6.2	6.2	f 6.30	2.55		
Ashland Yard BKWOTP	2.30 AM	s 10.30 AM	429.1	TO-R ASHLAND	0.0	6.15 PM	2.30 PM		
	Arrive Daily	Arrive Daily		(85.1)		Leave Daily	Leave Daily		

(5.25) 15.74 (3.39) 23.36 Time over District..... (3.39) 23.36 (5.00) 17.16
..... Average Speed per Hour.....

RULE 5. At Black Butte schedule time and train orders of trains going to the Siskiyou line apply at east switch eastward siding, from the Siskiyou line at Junction switch.

At Ashland Shasta Division first-class schedules and train orders referring to such schedules apply at the west switch of siding. Portland Division first-class schedules and train orders referring to such schedules apply at the east switch of siding. The main track at Ashland between the east and west switches of the siding may be used by any first-class train if track is known to be clear. Siding is first track to right of main track going east and extends from switch opposite 7th Street 262 feet east of section house to switch 150 feet east of freight house.

ADDITIONAL FLAG STOPS TO RECEIVE AND DISCHARGE PASSENGERS				
Train	At	Receive and Discharge	To (or Beyond)	From (or Beyond)
7 and 8	Colestin MP 409		Any Station	Any Station

EASTWARD

MERRILL SUBDIVISION

WESTWARD

Capacity of Sidings in Car Lengths	SECOND CLASS		Distance from San Francisco	Time Table No. 163 July 9, 1941	Distance from Klamath Falls	SECOND CLASS	
	628	625					
	Freight	Freight					
	Leave Daily	Leave Daily		STATIONS		Arrive Daily	
Yard Limits 66 P	10.15 AM	10.20	457.3	TO-R ALTURAS 1.6	97.5	7.35 PM	
76 P	10.45	11.00	458.3	JUNIPER 10.7	95.9	7.25	
81 WYP	11.00	11.25	469.9	FLETCHER 7.1	86.2	7.00	
79 WP	11.25	11.35	470.6	TO CANBY 7.7	78.1	6.40	
77 P	11.35	11.45 AM	477.7	AMBROSE 4.4	70.4	6.05	
Yard Limits 85 WP	11.45 AM	12.05 PM	485.4	BOLES 3.8	66.0	5.25	
77 P	12.05 PM	12.20	498.6	HACKAMORE 7.2	62.2	5.10	
84 WYP	12.20	12.55	500.8	MEARES 6.3	56.0	4.40	
77 P	12.55	1.15	506.1	TO PEREZ 9.3	49.7	4.10	
77 WP	1.15	1.55	524.8	CORNELL 8.9	40.4	3.40	
I		2.04	525.4	STRONGHOLD 1.1	31.5	3.15	
32 P	1.55	2.45	529.7	Great Northern Ry. Crossing 4.3	30.4		
100 P	2.04	3.05	533.2	TO TULE LAKE 3.5	26.1	3.05	
77 P	2.45	3.30 PM	537.9	HATFIELD 4.7	22.6	2.57	
77 P	3.05	3.30 PM	547.1	TO MERRILL 9.2	17.9	2.45	
Klamath Falls Yard BKWOTYP	3.30 PM	555.8	555.8	STUKEL 8.7	8.7	2.23	
	Arrive Daily	Arrive Daily		TO-R KLAMATH FALLS	0.0	2.00 PM	
				(97.5)		Leave Daily	

(5.15) 18.57 Time over District..... (5.35) 17.46
..... Average Speed per Hour.....

Additional Stations:

Spring Lake..... M.P. 550.3	Malone..... M.P. 536.0
Gem..... M.P. 548.1	Tuber..... M.P. 527.7
Hosley..... M.P. 543.8	Homestead..... M.P. 525.6
Lost River..... M.P. 541.0	Copic..... M.P. 520.3

EASTWARD

MERRILL SUBDIVISION

WESTWARD

Capacity of Sidings in Car Lengths	SECOND CLASS		Distance from San Francisco	Time Table No. 163 July 9, 1941	Distance from Lakeview	SECOND CLASS	
	628	625					
	Freight	Freight					
	Leave Daily	Leave Daily		STATIONS		Arrive Daily	
Yard Limits 66 P	10.15 AM	10.20	457.3	TO-R ALTURAS 1.6	55.5		
76 P	10.45	11.00	458.3	MATTES 7.2	52.6		
81 WYP	11.00	11.25	469.9	SURPRISE 11.7	45.4		
79 WP	11.25	11.35	470.6	DAVIS CREEK 2.7	33.7		
77 P	11.35	11.45 AM	477.7	GARRET 9.9	31.0		
Yard Limits 85 WP	11.45 AM	12.05 PM	485.4	TO WILLOW RANCH 3.9	21.1		
77 P	12.05 PM	12.20	498.6	JOFFRE 2.7	17.2		
84 WYP	12.20	12.55	500.8	FAIRPORT 5.7	14.5		
77 P	12.55	1.15	524.8	SNELLING 8.8	8.8		
I		1.55	529.7	TO-R LAKEVIEW	0.0		
32 P	1.55	2.45	537.9				
100 P	2.04	3.05	547.1				
77 P	2.45	3.30 PM	555.8				
77 P	3.05	3.30 PM	555.8				
Klamath Falls Yard BKWOTYP	3.30 PM	555.8	555.8				
	Arrive Daily	Arrive Daily		(55.5)			

..... Time over District.....
..... Average Speed per Hour.....

Siding at Fairport located 1525 feet East of Station.

SACRAMENTO SUBDIVISION

EASTWARD		Time Table No. 163 July 9, 1941	WESTWARD	
Capacity of Sidings in Car Lengths	Distance from San Francisco		Distance from Lake Tahoe	
Lake Tahoe Branch				
STATIONS				
Yard Limits BKWOYP	208.1	TO-R TRUOKEE 6.6	14.5	
18 P	214.7	BIG CHIEF 7.9	7.9	
Yard Limits KP	222.6	R LAKE TAHOE	0.0	
(14.5)				
.....Time over District.....				
.....Average Speed per Hour.....				

EASTWARD		Time Table No. 163 July 9, 1941	WESTWARD	
Capacity of Sidings in Car Lengths	Distance from San Francisco		Distance from Josephine	
Sutter Basin Branch				
STATIONS				
P	96.3	R GRACE 0.4	20.8	
31 P	96.9	MARCHANT 1.5	20.4	
31	98.4	MAOKERT 2.0	18.9	
49 WP	100.4	ROBBINS 1.3	16.9	
31 P	101.7	SEYMOUR 3.4	15.6	
52 P	105.1	SUBACO 2.1	12.2	
31	107.2	PELGER 2.1	10.1	
52 P	109.3	EVERGLADE 1.9	8.0	
43 YP	111.2	HINSDALE 2.1	6.1	
34	113.3	TISDALE 1.9	4.0	
17 Spur	115.2	PROGRESS 2.1	2.1	
17 Spur	117.3	JOSEPHINE	0.0	
(20.8)				
.....Time over District.....				
.....Average Speed per Hour.....				

EASTWARD		Time Table No. 163 July 9, 1941	WESTWARD	
Capacity of Sidings in Car Lengths	Distance from San Francisco		Distance from Isleton	
Walnut Grove Branch				
STATIONS				
Sacramento yard BKW OTP P 37 55 55 55 34 Yard Limits 42 BWYP Yard Limits BYP	88.8	TO-R SACRAMENTO 0.5	32.4	
	89.3	S. N. R. R. Crossing 0.3	31.9	
	89.6	JOT. SWITCH, R STREET 2.2	31.6	
	91.8	BATHS 2.4	29.4	
	94.2	DEL RIO 3.3	27.0	
	97.5	FREPORT 7.1	23.7	
	104.6	HOOD JOT. 3.3	16.6	
	107.9	LAMBERT 3.3	13.3	
	111.2	MOFUBA 2.2	10.0	
	113.4	TO WALNUT GROVE 7.8	7.8	
121.2	TO-R ISLETON	0.0		
(32.4)				
.....Time over District.....				
.....Average Speed per Hour.....				

Additional Stations: Charles M.P. 93.0, Locke M.P. 112.6.

EASTWARD		Time Table No. 163 July 9, 1941	WESTWARD	
Capacity of Sidings in Car Lengths	Distance from San Francisco		Distance from Wyo	
Colusa Branch				
STATIONS				
Yard Limits YP	108.3	R HARRINGTON 4.0	72.1	
37	112.3	COLLEGE CITY 3.7	68.1	
31	116.0	GRAINO 4.8	64.4	
65 W	120.8	TO GRIMES 3.6	59.6	
28	124.4	SYOAMORE 8.6	56.0	
61	133.0	TO COLUSA 10.2	47.4	
Spur	143.2	STEGEMAN 2.7	37.2	
37 W	145.9	PRINCETON 4.5	34.5	
31	150.4	OODORA 5.2	30.0	
61	155.6	GLENN 6.5	24.8	
37	162.1	ORDBEND 3.8	18.3	
31	165.9	ROTAVELE 4.1	14.5	
60 W	170.0	TO HAMILTON 10.4	10.4	
44 YP	180.4	WYO	0.0	
(72.1)				
.....Time over District.....				
.....Average Speed per Hour.....				

EASTWARD		Time Table No. 163 July 9, 1941	WESTWARD	
Capacity of Sidings in Car Lengths	Distance from San Francisco		Distance from Karnak	
Sutter Basin Branch				
STATIONS				
32 P	96.9	MARCHANT 0.7	2.5	
25	97.6	ENSLEY 1.8	1.8	
5 P	99.4	KARNAK	0.0	
(2.5)				
.....Time over District.....				
.....Average Speed per Hour.....				

EASTWARD		Time Table No. 163 July 9, 1941	WESTWARD	
Capacity of Sidings in Car Lengths	Distance from San Francisco		Distance from Hood	
Walnut Grove Branch				
STATIONS				
63 P	104.6	HOOD JOT. 0.7	0.7	
	105.3	HOOD	0.0	
(0.7)				
.....Time over District.....				
.....Average Speed per Hour.....				

EASTWARD		Time Table No. 163 July 9, 1941	WESTWARD	
Capacity of Sidings in Car Lengths	Distance from San Francisco		Distance from Fruto	
Fruto Branch				
STATIONS				
Yard Limits 64 BKWOYP	149.9	TO-R WILLOWS 2.7	17.0	
9 Spur	152.6	LOSA 3.2	14.3	
18	155.8	KURAND 3.8	11.1	
8	159.6	MILLSHOLM 4.0	7.3	
8	163.6	ATHENA 3.3	3.3	
17 PT	166.9	R FRUTO	0.0	
(17.0)				
.....Time over District.....				
.....Average Speed per Hour.....				

EASTWARD		Time Table No. 163 July 9, 1941	WESTWARD	
Capacity of Sidings in Car Lengths	Distance from San Francisco		Distance from Boyer	
River Farms Branch				
STATIONS				
18 Spur	93.5	KNIGHTS LDG. JOT. 2.8	13.8	
24	96.3	EASTHAM 2.9	11.0	
70 Spur	99.2	AYRSHIRE 3.2	8.1	
19 Y	102.4	TYNDALL 3.7	4.9	
19 Y	106.1	JIMENO 1.2	1.2	
16 Spur	107.3	BOYER 0.9	0.0	
END OF TRACK				
(13.8)				
.....Time over District.....				
.....Average Speed per Hour.....				

EASTWARD		Time Table No. 163 July 9, 1941	WESTWARD	
Capacity of Sidings in Car Lengths	Distance from San Francisco		Distance from Stirling City	THIRD CLASS
Stirling City Branch				
STATIONS				
Yard Limits BKWOYP	10.00 AM	TO-R OHIOO 2.4	31.2	10.40 AM
		S. N. R. R. Crossing 2.7	28.8	
		DREDGE 8.9	26.1	10.20
19 WP	11.05	PARADISE 5.0	17.2	9.30
11	11.35	MAGALIA 6.8	12.2	9.05
12 Spur WP	12.15 PM	DOON 5.4	5.4	8.30
Yard Limits WYP	12.45 PM	R STIRLING CITY	0.0	8.00 AM
(31.2)				
.....Time over District.....				
.....Average Speed per Hour.....				
THIRD CLASS 526 Local Freight Leave Mon., Wed., Fri. Arrive Mon., Wed., Fri. (2.45) 11.35		THIRD CLASS 527 Local Freight Arrive Tues., Thurs., Sat. (2.40) 11.70		

Additional Stations: Oakdale Farms M.P. 196.6, Optimo M.P. 202.2, Luce M.P. 207.1

SACRAMENTO SUBDIVISION

Table with columns: EASTWARD, WESTWARD, Capacity of Sidings in Car Lengths, Distance from San Francisco, Time Table No. 163 July 9, 1941, Knights Landing and Oroville Branches, STATIONS, Distance from Oroville.

SACRAMENTO SUBDIVISION

Table with columns: EASTWARD, WESTWARD, Capacity of Sidings in Car Lengths, Distance from San Francisco, Time Table No. 163 July 9, 1941, Fair Oaks Branch, STATIONS, Distance from Fair Oaks.

Table with columns: EASTWARD, WESTWARD, Capacity of Sidings in Car Lengths, Distance from San Francisco, Time Table No. 163 July 9, 1941, Placerville Branch, STATIONS, Distance from Folsom.

Table with columns: EASTWARD, WESTWARD, Capacity of Sidings in Car Lengths, Distance from San Francisco, Time Table No. 163 July 9, 1941, Dantoni Branch, STATIONS, Distance from Dantoni.

Additional Stations—Knights Landing-Oroville Branches: Laugenour, M. P. 89.4; Coranco, M. P. 92.4; Cunard, M. P. 96.1; Lee, M. P. 102.7; Wilson, M. P. 109.2; Binney Junction Tower, M. P. 122.7; Mello, M. P. 126.5.

EASTWARD

SACRAMENTO SUBDIVISION

WESTWARD

Table with columns: Capacity of Sidings in Car Lengths, Distance from San Francisco, Time Table No. 163 July 9, 1941, Placerville Branch, STATIONS, Distance from Placerville, THIRD CLASS 521 Local Freight, 519 Local Freight, Arrive Daily Ex. Sun., Mon. and Holidays, Via Elvas, Leave Daily Ex. Sunday.

Additional Stations: Ramona, M. P. 95.5; Prattrock, M. P. 111.4; Cothrin, M. P. 123.1; Brela, M. P. 128.1; Brandon, M. P. 129.8; Bullard, M. P. 131.7; Bennett, M. P. 134.0; Apex, M. P. 147.7.

SACRAMENTO SUBDIVISION

SACRAMENTO YARD—OUTBOUND, VIA ELVAS TO BRIGHTON

SACRAMENTO YARD—INBOUND, VIA ELVAS FROM BRIGHTON

Table with columns: SECOND CLASS 420 Freight, 518 Local Freight, FIRST CLASS 60 West Coast, 231 Passenger, Time Table No. 163 July 9, 1941, STATIONS, Distance from End of Division, FIRST CLASS 59 West Coast, 232 Passenger, SECOND CLASS 421 Freight, 423 Freight, THIRD CLASS 521 Local Freight, 519 Local Freight, Arrive Daily, Leave Daily.

Trains moving from Brighton to Elvas are Eastward, and Elvas to Sacramento, Westward. Trains moving from Sacramento to Elvas are Eastward, and Elvas to Brighton, Westward.

RULE 2. Watch Inspectors:
 San Francisco, S. A. Pope, Manager of Time Service, 65 Market St.
 Sacramento, H. T. Harger, 1026 K St. Chico.....J. R. Dupen
 Roseville.....D. B. Farnsworth Red Bluff....G. C. Wilkins & Son
 Colfax.....H. O. Grenier Redding.....F. R. Dobrowsky
 Sparks.....W. R. Adams & Son Dunsmuir.....H. E. Voorhies
 Placerville.....Leo C. Burger Dunsmuir.....Marion Dayley
 Woodland.....O. D. Payne Weed.....W. Martineau
 Willows.....Robt. E. Boyd Ashland.....F. Slade Songer
 Orland.....L. Schnell Klamath Falls....F. W. Bertram
 Oroville.....R. A. Williams Alturas.....Wm. Mayben
 Marysville.....Milton Haney

RULE 4. Designated Holidays:
 New Year's Day, January 1st.
 Washington's Birthday, February 22nd.
 Decoration Day, May 30th.
 Independence Day, July 4th.
 Labor Day, First Monday in September.
 Thanksgiving Day, Last Thursday in November.
 Christmas Day, December 25th.

RULES 10 (G) and 10 (H). On double track between Sparks and east end of tunnel No. 41, east of Norden, signals, except fixed signals used by trackmen, will be placed on right of track in direction of movement.

RULE 10 (J). Round yellow slow boards indicate by black figures the speed restrictions applying to Diesel-powered stream-lined trains "CITY OF SAN FRANCISCO." Speeds indicated by oval white slow boards apply to those trains unless a round yellow slow board authorizing a higher speed is displayed on same post below the oval slow board.

The following slow boards are located less than 1/4 mile, prescribed by Rule 10(J), from the restricted point:

Location	Speed	restricted point	Distance from
Sacramento, 9th Street... Westward movement	8 MPH	45 car lengths	
Sacramento, Front Street... Eastward movement	8 MPH	46 car lengths	
Sacramento, 3rd Street... Westward movement	20 MPH	32 car lengths	
Sacramento, 2nd Street... Westward movement	20 MPH	8 car lengths	
Live Oak, east end of yard. Eastward movement	30 MPH	60 car lengths	

RULE 11. Between Gold Run and Truckee from Nov. 1st to May 1st, train finding a fusee burning along or near track must stop, and then proceed with caution not exceeding 15 M. P. H. for a distance of one-half mile.

This restriction will not apply to the track on which train is running if displayed beyond the first rail of an adjoining main track.

RULE 14. Light engines arriving Dunsmuir from east, desiring to enter roundhouse lead, will sound whistle signal as follows, "o—o—o."

RULE 14 (d). As specified below, _____ o, will be indication that flagman may return from west as prescribed by Rule 99.

Tehama on Davis-Gerber Line.
 Siskiyou Line trains to recall flagman between Junction Switch Black Butte and Weed, and Modoc Line trains to recall flagman between Stukel and Klamath Falls.

RULE 14 (e). As specified below, _____ will be indication that flagman may return from east as prescribed by Rule 99.

Roseville on Roseville-Tehama Line.
Brighton on Sacramento-Placerville Line.
Davis on Davis-Gerber Line.
Oroville on Swayne Lumber Co. Logging Road.

Siskiyou Line trains to recall flagman between Junction Switch Black Butte and Weed, and Modoc Line trains to recall flagman between Stukel and Klamath Falls.

RULE 14 (k). Also sound signal when passing rear of train, to be acknowledged by trainman by signal 12 (c).

RULE 14 (l). Westward trains will sound crossing whistle signal immediately after emerging from west portal of Tunnel No. 6, west of Donner.

RULE 17. Night signals will be displayed through tunnels and sheds.

RULE 17 (C). For identification purposes, headlight may be dimmed when passing the head end and rear end of trains on adjoining tracks, except when nearing street or highway crossings.

RULE 26. When necessary for any member of the crew in Streamliner service to go underneath any part of the train, chains will be used for blocking and one placed securely on either side of a traction wheel. In addition, an understanding will be had with the engineer-operator to the effect that he will not move the train until the employee in charge of the work personally reports back to him. A 90 pound brake application must be maintained during the progress of the work.

RULE 72. Trains between Elvas and Sacramento, and between Elvas and Brighton, and eastward trains via Elvas from Brighton to Roseville, will move irrespective of time-table superiority when moving with the current of traffic.

Eastward trains will move Norden to Truckee irrespective of time-table superiority when moving with the current of traffic.

RULE S-72. Westward trains are superior to trains of the same class in the opposite direction, except as noted on pages 2 and 3.

RULES 83 and 83 (A). Westward trains, except first-class, passing Sacramento will not comply with Rules 83 and 83 (A) at Sacramento. A proceed signal from switchtender at Front St., Sacramento, green flag by day or green light by night, and in addition proceed indication displayed in Signal S.A. 887, will be authority to move irrespective of timetable superiority from Sacramento to Davis, train order office.

RULE 83 (A). At the following stations, only the trains indicated will register:

Sacramento, 12th Street—Trains terminating.
 Brighton—Regular trains via Placerville Branch.
 Truckee—First-class trains and trains originating and terminating.
 Woodland—Regular trains except No. 19.
 Black Butte—Regular trains and trains originating and terminating.
 Colfax, Harrington, Dunsmuir } Trains originating
 Chico, Willows, (Psg. Station) } and terminating.
 Marysville, Orland, Chemult

Dunsmuir Yard—Two train registers will be maintained, one for the Redding and one for the Black Butte subdivisions.

Registration arrival of westward first-class trains and departure of eastward regular trains originating at Dunsmuir (psgr station) will be transmitted by telephone by the operator at Dunsmuir (psgr station) to the operator at Dunsmuir Yard, who must enter same on the Black Butte subdivision register. Operators will use care in proper transmission and entry, which must be verified by the operator at Dunsmuir Yard repeating the registration to operator at Dunsmuir (psgr station).

RULE 83 (B). At open train-order offices, trains may register by ticket as follows:

Truckee—First-class trains.
 Davis—Nos. 11, 17, 23 and 24.
 Woodland—Nos. 8, 11, 12, 18, 23, 24, 600, 601.
 Crescent Lake—Nos. 11, 17 and 23.
 Klamath Falls—Westward Great Northern R.R. trains.
 Black Butte—Regular trains.

Dunsmuir Yard—First-class trains and eastward trains terminating at Dunsmuir Yard and tied up at Dunsmuir (psgr station).

Folsom—Register at Folsom Junction. Trains required to go to Folsom will, on return to Folsom Junction, register the same information as shown on register at Folsom.

RULE 83 (C). Regular trains appearing on Black Butte subdivision register at Dunsmuir Yard need not be again checked at Dunsmuir (psgr station).

RULE 83 (D). Western Division trains, via Sacramento or Brighton (except first-class), originating Roseville, will obtain separate Sacramento and Western Division clearances and receive their train orders applying to Western Division at Roseville, and will not comply with Rule 83 (D) at Sacramento. Eastward extra trains and trains originating at Sacramento obtain clearance at Sacramento General Telegraph office located on second floor of psgr. station.

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 in which the provisions of Rule 93 will apply are established at the following points:

East	West
M. P. 247.60	Sparks.....M. P. 241.63
M. P. 209.89	Truckee.....M. P. 207.28
M. P. 208.49	Lake Tahoe Branch
M. P. 222.80	Lake Tahoe.....M. P. 221.72
M. P. 172.12	Emigrant Gap.....M. P. 169.75
M. P. 142.94	Colfax.....M. P. 140.03
	Auburn
M. P. 125.60	Westward Track.....M. P. 122.66
	Newcastle
M. P. 120.82	Eastward Track.....M. P. 119.34
M. P. 120.15	Westward Track.....M. P. 118.74
M. P. 110.83	Roseville (East).....M. P. 102.04
M. P. 110.86	Roseville (West).....M. P. 102.04
M. P. 110.95	Roseville, No. 4 Track
M. P. 107.71	Roseville-Tehama Line
M. P. 95.35	Sacramento.....M. P. 85.8
M. P. 93.09	Walnut Grove Branch
M. P. 94.93	Placerville Branch
M. P. 136.33	Main-Folk.....M. P. 131.60

East	West
M. P. 111.38	Folsom.....M. P. 109.86
M. P. 112.05	Folsom Branch.....M. P. 111.05
	Placerville.....M. P. 148.19
M. P. 113.90	Walnut Grove.....M. P. 110.64
M. P. 122.32	Isleton.....M. P. 121.05
M. P. 124.59	Golden State
M. P. 76.94	Davis
M. P. 85.82	Woodland.....M. P. 83.66
M. P. 85.78	Knights Landing Branch
M. P. 150.84	Willows.....M. P. 147.96
M. P. 151.82	Fruto Branch
M. P. 167.72	Orland.....M. P. 164.48
	Colusa Branch.....M. P. 177.62
M. P. 185.36	Chico.....M. P. 182.61
M. P. 187.06	Stirling City Branch
M. P. 143.94	Marysville.....M. P. 138.75
M. P. 122.69	Knights Landing Branch.....M. P. 119.76
M. P. 124.44	Oroville Branch
M. P. 147.95	Oroville.....M. P. 146.40
M. P. 216.08	Gerber.....M. P. 211.84
M. P. 224.63	Red Bluff.....M. P. 222.04
M. P. 259.23	Redding.....M. P. 256.10
M. P. 326.60	Dunsmuir Yard.....M. P. 317.91
M. P. 347.70	Black Butte.....M. P. 342.63
M. P. 346.50	Siskiyou Line
M. P. 395.46	Mt. Hebron.....M. P. 392.15
M. P. 432.43	Klamath Falls.....M. P. 425.67
	Modoc Line.....M. P. 552.04
M. P. 459.24	Chiloquin.....M. P. 455.10
M. P. 471.62	Kirk.....M. P. 469.08
M. P. 530.16	Crescent Lake.....M. P. 526.60
M. P. 350.08	Weed.....M. P. 345.64
M. P. 376.34	Montague.....M. P. 374.66
M. P. 394.80	Hornbrook.....M. P. 392.26
M. P. 430.79	Ashland.....M. P. 427.08
M. P. 460.90	Alturas.....M. P. 454.87
M. P. 460.19	Lakeview Branch
M. P. 495.22	Hackamore.....M. P. 492.33
M. P. 513.05	Lakeview.....M. P. 510.63

Second and third paragraphs of Rule 93 apply to all tracks within yard limits.

Eastward freight trains entering Roseville yard must not pass Dry Creek without receiving proceed signal (green flag by day, green light by night).

Trains, except regular passenger trains, arriving Roseville, from the east via Tehama-Roseville line, must not pass Lincoln Street, Roseville, without receiving proceed signal (yellow flag by day, yellow light by night).

Freight trains from Sacramento Division enter Sparks freight yard at crossover switch just west of 17th Street and must approach this switch prepared to stop unless route lined and signals indicate proceed.

Klamath Falls—Movements of Great Northern R.R. trains and engines between initial switch east end of yard and Junction switch of Great Northern R.R. will be directed by yardmaster.

Dunsmuir Yard—Westward trains, except first-class, must not pass switch located at Signal 3225 east end of Dunsmuir unless proceed signal from yardman received; eastward trains, except first-class, must not pass switch located at Signal 3202 west end of Dunsmuir yard, unless letter "M" is displayed in Take Siding Indicator on mast of Signal 3198, or proceed signal from yardman received; and westward trains, except first-class, must not pass switch located at Signal 3213 just east of yard office east end of Dunsmuir yard without instructions from Yardmaster, or proceed signal from yardman, green flag by day or green light by night.

RULE D-97 (A). Applies between Sacramento and Sparks and Brighton and Elvas.

RAILROAD CROSSINGS AT GRADE AND DRAWBRIDGES NOT INTERLOCKED

RULE 98. Southern Pacific trains must approach Western Pacific R. R. crossing at Front and R Streets, Sacramento, with caution, expecting to find crossing occupied. Southern Pacific yard engines must stop and ascertain that crossing is clear before proceeding.

Trains and yard engines must ascertain that all switch and industry track crossings in the vicinity of Front and R Streets are clear before using.

Trains must stop within 200 feet of Sacramento Northern R. R. crossing Front and R Streets Sacramento before crossing.

Movements of trains, engines or cars in switching over crossing of the Southern Pacific tracks and the electric lines at Front and M Streets, Sacramento, will be governed as follows:

Southern Pacific trains moving on Front St., Sacramento and yard engines switching on Front Street must stop before reaching the crossings

SPECIAL INSTRUCTIONS

at Front and M Streets, and proceed on hand signal from flagman on the ground at the crossing, a green flag by day and a green light by night. Sacramento Northern R. R. trains must stop before reaching the crossing and proceed on signal from the flagman on platform of watchman's shelter, yellow flag by day and yellow light by night.

Eastward trains approaching Sacramento finding distant signal, located just east of the spur known as Washington Spur, used in connection with home signal just west of Sacramento River Bridge, in caution position will stop west of the Fifth Street crossing unless the home signal at bridge indicates clear position.

Trains and engines must stop before crossing Sacramento Northern R. R. tracks at 31st and "R" Streets, Sacramento.

Trains must stop within 200 feet of Sacramento Northern R. R. crossing at Yuba City.

Trains must pass over Southern Pacific crossing at Grace and Sacramento Northern R. R. crossing 9th Street, Chico, with caution.

Trains must stop within 200 feet of Sacramento Northern R. R. crossing on Chico-Stirling City line before crossing.

RULE 99. When torpedoes are used between Blue Canon and Stanford, and at any point during snow storm or when snow on rails, each torpedo placed will be duplicated on opposite rail.

When roadway machines (ditchers, pile drivers, power shovels, crane and derrick cars) are operated on double track or on tracks immediately adjacent to the main track, or off track adjacent to main tracks, boom or other parts of the machine must not be operated to foul main track, without proper flag protection. Such equipment must be at rest and clear of main tracks when trains are passing.

Flag protection must be provided on adjacent main tracks which closely parallel track on which ballast or other material is being loaded or unloaded. Operations must be stopped when trains on main track are passing.

RULE 102. Following instructions govern handling of a passenger train which has parted on grade between Black Butte and Ashland: On ascending grade, when train has parted, angle cock must be closed at opening, and immediately all hand brakes set on detached portion starting at rear and head end, turning up retainers on all cars as hand brakes are being set. Air brakes must immediately be fully charged on detached portion by using air hose carried in baggage car for that purpose. If for any reason detached portion cannot be recharged immediately, or if necessary to leave rear portion standing, rear truck of detached portion must be chained to rail in such manner as to derail cars should they start. Attempt must not be made to couple to detached portion until brake pipe has been fully charged and chain removed. After train has been coupled, air must be applied from engine before hand brakes and retainers are released.

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.

Trains and engines must stop and be preceded by flagman before crossing highway at

- Isleton Wharf.
- Clayton.
- Marysville—Old Cannery Track—4th St.
- Wilson—Wilson Road.
- Woodland—Main St., House track.

RULE 104. The normal position of switches at end of double track and junctions will be as follows:

- Sacramento R St. . . . For Walnut Grove Branch.
- Verdi Crotch switch at east end of Verdi center siding will be mechanically locked by the derail which must be open before crotch switch can be operated.
- Tehama Junction switch, for movement via Willows. This is a spring switch.
- Black Butte Junction switch 1700 feet west of east water column, for Cascade line.
- Klamath Falls Great Northern R. R. Junction switch M.P. 428.4—2773 feet east of west switch of yard, for Southern Pacific main track.
- Cascade line and Modoc line Junction switch 1000 feet west of M.P. 428, for Cascade line. Modoc line main track parallels south side of Cascade line main track from a point at Cascade line M.P. 427.023 and Modoc Line M.P. 553.2 to Cascade line M.P. 427.786.
- Chemult Junction switch Great Northern R. R. in siding 130 feet east of west switch, for Southern Pacific track.
- Alturas Junction switch of Lakeview Branch and Modoc Line main track 480 feet west of M.P. 458 for Modoc Line.

RULE 104 (A). Conductors and engine foremen must personally know that main track switches used by them are left locked when clearing main track for Streamliner "CITY OF SAN FRANCISCO" Nos. 101 and 102.

RULE 105. Following tracks are designated for use as sidings: Spur located one mile east of east switch Hackamore on north side of track. Capacity 30 cars. Trailing switch for westward trains. Engines must not go beyond derail.

Weed—Siding located east of station building on opposite side of main track.

Black Butte—Track located on north side of main track extending from west end of yard to connection with Siskiyou Line main track, 200 feet east of east water column will be known as Eastward siding. Track located on north side of main track from east end of yard to connection with Siskiyou Line main track 780 feet east of east water column will be known as Westward siding. Eastward trains required to take siding will use Eastward siding, and westward trains required to take siding will use Westward siding unless otherwise instructed. Operators will restore switches to normal position for trains leaving the sidings at train order office and Siskiyou main track located between Eastward and Westward sidings.

Grass Lake—Westward freight trains taking siding, stop east of west switch house track. East and west house track switches normally lined for legs of wye.

Siskiyou—When a westward train is holding main track to meet an eastward train and switch is open for train to enter siding, conductor of train holding main track will arrange to protect the eastward train against light engines or other trains occupying siding, and will give the eastward train sufficient room to avoid stopping engines in tunnel. Westward trains receiving an order to meet an opposing train on track known as turntable lead at Siskiyou (this track is on south side of main track used by helper engines moving to and from turntable) must not pass Signal 4125 until it is known that opposing train has passed Signal 4112 at west end of tunnel 13. Eastward trains or engines will leave turntable lead at east switch located 200 feet west of Signal 4124.

Midas—Normal position west switch siding lined for lead to No. 1 track.

Elvas—Westward trains via Brighton having cars to set out at Elvas will use east end of center siding, using crossover switch near road crossing. Eastward trains from Brighton having cars to set out at Elvas will use west end of center siding and set cars in at crossover switch near road crossing.

Harrington—West end of siding west of cross-over is westward siding and east end east of cross-over is eastward siding. Junction switch at cross-over.

Wyo—Second track of the two tracks paralleling main track, is siding.

Marysville—Eastward trains taking siding will use crossover just west of west water column.

Loomis—That portion of No. 4 track from crossover, M.P. 113, to Signal 1138 will be used as a siding of 83 cars capacity.

RULE D-152. Does not apply between 15th Street and Sacramento River Bridge, Sacramento, and between Yosemite Street first road crossing east of Roseville passenger station and crossover at Dry Creek west of Roseville.

RULE 206 (A). It will not be necessary for No. 291 to obtain clearance at Tehama, No. 527 at Stirling City, No. 521 at Placerville, No. 606 at Reno and regular trains from Western Division at Brighton.

RULE 221. Train order signal at Emigrant Gap and Norden are light type signals identified by an illuminated sign (Train Order Signal) on the signal mast.

When a train reaches a point approximately 200 feet from signal, if no train orders, indication will change from "stop" to "proceed."

If signal is first seen at "proceed" indication, clearance must be obtained.

No. 518 and No. 519 must go to train-order office Folsom and obtain clearance when operator is on duty.

First-class trains will not obtain clearance at Dunsmuir Yard. Eastward trains originating at Dunsmuir Yard need not obtain clearance at Dunsmuir (psgr station).

Light will be displayed in train-order signal at Willow Ranch only when train orders are to be delivered.

RULE 824.

INSTRUCTIONS FOR SETTING HAND BRAKES AT: DUNSMUIR AND DUNSMUIR YARD

- Passenger Trains {Two brakes on east end.
Three brakes on west end.
- Freight Trains {Ten brakes on west end.
Ten brakes in center of train.
Five brakes on east end.

ASHLAND

- Passenger Trains {Two brakes on east end.
- Freight Trains {Five brakes on east end.
Five brakes on west end.

KLAMATH FALLS

- Passenger Trains {Two brakes on west end.
Two brakes on east end.
- Freight Trains {Five brakes on west end.
Five brakes on east end.

Hand brakes on freight trains must be set with the assistance of a brake club after train has stopped. Any employee releasing any of these brakes, must set as many others to replace them.

Engines must not be cut off freight trains at Dunsmuir, Dunsmuir Yard, Klamath Falls or Ashland until sufficient hand brakes are set to secure train and yard air must not be coupled into train until engine is cut off.

On arrival at Siskiyou, on westward trains, sufficient hand brakes must be set to hold rear of train before cutting off helper engine, and on rear portion of train when backing down to cut out helper.

Westward freight trains cutting all helpers at Siskiyou will take siding and use braking power track to run around rear portion of train. Cars must not be left standing on main track with engine detached.

RULE 825. Outfit cars must not be left next to oil or gasoline loading or unloading locations; warehouses; storehouses; lumber yards; or other buildings.

Track between station and Stirling City main track at Chico must be kept clear of cars.

House track at Bray, new team track Redding and passenger siding Grass Lake must be left clear for meeting or passing of trains.

RULE 829. Westward freight trains stopping at Chico to perform switching or to take water, must stop east of Sacramento Avenue, or cut train at that point to permit the passage of traffic over tracks.

Trains using siding at Glade will afford a two-hundred-foot clearance east of road crossing approximately seven car lengths west of east switch.

RULE 834. Tank cars or open-top cars loaded with rail, pipe, structural steel, lumber, poles or mounted wheels, when lading projects above sides and end walls of car, must not be placed in train next to cab of AC class engines. Does not apply to trains consisting entirely of logs.

RULE 836. Cars will not be handled ahead of engine at any point between Stirling City and Chico on westward trip.

RULE 862. Trainmen arriving Gerber on first-class trains will remain on duty and protect their train until outgoing brakemen have inspected train and assumed their proper positions, at which time incoming brakemen will be relieved.

RULE 869. Freight brakemen must be on top of train descending steep grades between Edgewood and Black Butte, Snowdon and Ashland, Grass Lake and Delta, Ambrose and Canby, Truckee and Loomis except between Andover and Emigrant Gap.

On freight trains between Truckee and Loomis, Black Butte and Edgewood, Snowdon and Ashland, Grass Lake and Redding, member of train crew will observe track from rear of caboose so train may be stopped in event of derailment. Two Dietz lanterns placed on rear of caboose will be used at night to assist in observing track.

RULE 883. Engines under steam must not be stored or left unattended on tracks that are not protected by derails against entry to main track. When chains or blocking available, wheels must be blocked.

AUTOMATIC BLOCK SYSTEM

RULE 509. When making a reverse movement on main track after movement out of siding or other track, in block system limits, train or engine will, unless movement be completed beyond the governing signal, proceed as if signal be in stop position.

Block signals in addition to those included within the brackets shown on schedule pages are as follows:

On westward freight track from Signal 891 at 7th Street to Sacramento River Drawbridge. On eastward freight track 300 feet east of drawbridge to drawbridge. On eastward and westward passenger tracks 300 feet east of drawbridge to drawbridge. On Front Street 350 feet each side of eastward and westward main track.

At Sacramento, the two center tracks, for entering and leaving Sacramento psgr station, are equipped with automatic signals between 6th and 7th Street switchtender's stations. Rule 509 as applied to single track governs. Signal 889 will display green indication for direct movement to 6th Street switchtender's station, and yellow indications for crossover movement to 6th Street switchtender's station.

Signal 886, located 100 feet east of Sixth Street crossing, controls eastward movements on Tracks 2, 3, 4 and 5, Sacramento psgr station, but does not indicate position of switch located 20 feet east of Signal 886.

Eastward freight track between automatic signal 350 feet east of Sacramento River Drawbridge to Signal 890 at 7th Street is not protected with block signals. All trains will proceed with caution.

On No. 1 track between Newcastle and Loomis double track rules will apply except when moving against the current of traffic. On No. 4 track between Rocklin and Loomis, Rule 509, single track will apply.

Light type dwarf signal governing eastward movement on No. 1, Signal 1136, located at clearance point of east end of siding.

Normal position of semaphore Signal 1138 governing eastward movement from siding "stop". Proceed indication will be given after main track switch is lined and block unoccupied. Should this Signal fail to indicate "proceed" wait four minutes. After expiration of that time if signal fails to indicate "proceed" Rules 509 and 99 apply.

At Sparks, semaphore Signal 2452 on signal bridge governs main track movements on eastward main track. Lower arm of semaphore Signal 2452 on signal bridge governs diverging route movement from eastward main track across westward track into freight yard. Dwarf light Signals 2453 and 2459 govern main track movements on westward main track.

Eastward main track Sparks, from 400 feet east of engine lead switch to dispatcher's office not protected by block signals. From dispatcher's office to dwarf Signal 2459 on westward main track, not protected by block signals.

Dwarf light Signal 2455 governs movement from engine lead to eastward main track. When this signal indicates "stop," engine, after stopping at signal, may proceed on hand signal from herder, who must not give signal to engineman until trains moving on eastward main track have stopped or crossover switches are lined from eastward main track into freight yard, protecting movement.

Westward trains required to take siding at Redding, unless otherwise instructed, will stop clear of Signal 2587SA and request operator by telephone to line switches.

Trains or engines stopped by Signals 2134 or 2141 at Gerber; 3208, 3209 or 3210 at Dunsmuir Yard; 3216, 3218, 3222 or 3223 at Dunsmuir; 4288, 4293 or 4297 at Ashland; 4292, 4293 or 4295 at Klamath Falls, may proceed with caution, not exceeding 12 MPH.

Routing arm in proceed position on Signal 4112 west of Siskiyou, authorizes train to proceed and enter siding.

Special slide signal, light type, located on westward track opposite Floriston station indicates condition of slide fence only, not connected with track.

RULE 509. The following block signals, equipped with triangular number plate displaying the letter "P", have included in their control limits some special protective device. When these signals indicate "stop", in addition to complying with Rule 509, careful inspection must be made of track or structure as indicated below, and it must be known that they are safe for passage of train before proceeding.

Eastward Trains Signals	SPARKS-ROSEVILLE	Westward Trains Signals
P-2220	Track opposite slide fence Floriston.....	P-2239
P-2146	Track opposite slide detector fence.....	
P-2164	875 feet in length at First signal.....	P-2165
	Bridge east of Boca M.P. 216.5.....	P-2181
P-2012	Snow shed Andover M.P. 201.2.....	P-2015
P-2010	Fire protection.....	P-2013
P-2000	Snow shed west end Tunnels 13 and 42.....	P-2003
P-2002	M.P. 200 west of Andover—Fire protection.....	P-2005
P-1780	Track opposite slide fence between old Highway cross-	P-1805
P-1783	ing and west end Butte Canyon Bridge.....	P-1789
P-1438	Track opposite slide fence around Tunnels 33 and 34..	

ROSEVILLE-TEHAMA

P-1344	Bridge over Clark's slough M.P. 135.8 east of Ostrom.	P-1371
P-1420	Fire protection—Trestle—M.P. 142.7.....	P-1437
P-1906	Bridge at M.P. 191.83 east of Nord.....	P-1927

TEHAMA-DAVIS

P-1756	Bridge over Rice Creek M.P. 176.21 west of Corning.	P-1781
P-1354	Bridge at M.P. 137.44 west of Delavan.....	P-1381
P-1178	Bridge at M.P. 118.88 east of Geneva.....	P-1201

GERBER-DUNSMUIR

P-2240	Spring switch.....	P-2249
P-3014	Slide detector fence at M.P. 302.7 between Gibson and Lamoine.....	P-3031

DUNSMUIR-KLAMATH FALLS

P-3294	Rock detector fence east of Tunnel 12 M.P. 329½....	P-3299
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KLAMATH FALLS-CRESCENT LAKE

P-4430	2400 feet of track protected by rock detector fence...	P-4453
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Movements over crossing at Front Street, just east of the Sacramento River drawbridge, are controlled by derails and light type signals, as follows:

On westward freight track, by derail located 300 feet from Front Street crossing and two-indication light type signal located 50 feet from derail.

On eastward freight track, by two-indication light type signal, located 350 feet from Front Street crossing.

On westward passenger main track by three-indication light type signal, 350 feet from crossing.

Green indication governing movement of westward trains straight through on westward main track.

Yellow indication governing movement through crossover to eastward passenger main track.

Movements on Front Street across eastward and westward main tracks are governed by derails located approximately 90 feet from main

track and by two-indication light type signals located ten to thirty feet back of derail.

Signal governing movement on Pioneer Mill track also governs movement on store lead, but does not indicate position of store lead switch, which is 45 feet south of signal.

Signal governing movement on track No. 4 also governs movement on track No. 5, but does not indicate position of switch 60 feet north of signal.

Signal governing movement on track No. 6 also governs movement on track No. 7, but does not indicate position of switch 60 feet north of signal.

Derails and signals, except derail on westward freight track (which is operated by signal operator on drawbridge) are operated and controlled by switch tender at Front Street crossing.

Signals on Front Street tracks governing movement over Front Street crossing do not indicate position of switches or condition of track between signals and crossing. Trains and engines on Front Street moving on proceed indication of light signals will see that switches are lined for them and that track on which they are moving is not obstructed by other cars or engines.

If signals do not indicate Proceed, Rule 663 will apply.

Light signals govern movement against the current of traffic on No. 2 track from crossover Emigrant Gap to west limits Norden interlocking plant and from east limits Norden interlocking plant to Andover. On No. 1 track from Andover to east limits Norden interlocking plant and from west limits Norden interlocking plant to crossover Emigrant Gap, M.P. 171.5.

When these signals indicate "stop," trains moving against the current of traffic on No. 1 or No. 2 track Rule 509, single track, will apply.

Light type dwarf signals and switch indicators governing westward movement from center sidings to No. 1 track are located at

- West End Center Siding Troy (Signal 1857).
- " " " Crystal Lake (Signal 1779).
- " " " Midas (Signal 1603).

Normal indication of these signals "dark." Stop indication will be displayed after derails are closed. Proceed indication will be displayed when derails and switches are lined for movement and block is unoccupied.

Should these signals fail to indicate proceed, wait four minutes for time element relay to function, which will be effective when main track approach circuit is occupied. After operation of time element relay, if signals fail to indicate proceed, Rules 509 and 99 apply.

Light signal at yardmen's station opposite yard office Roseville is used by yardmen to give signal to westward freight trains from Sparks-Roseville line. Aspects and indications as follows:

- No light—Stop and stay clear of Yosemite Street crossing.
- Flashing yellow light—Proceed, stopping clear of Lincoln Street crossing unless proceed hand signal is received (green flag by day, green light by night).

Light signals and switch indicators governing movements from Great Northern R. R. connections and Modoc Line main track to Cascade Line main track are located as follows:

- Junction of Great Northern R. R. to Modoc Line (Signal 4276).
- Junction of Modoc Line to Cascade Line (Signal 4280).
- Junction of Great Northern R. R. to Cascade Line (Signals 4284-4283).

Normal indication of these signals "stop." Proceed indication will be displayed after switches and derails are lined for movement and block unoccupied. Should these signals fail to indicate proceed after switches are lined wait four minutes for time element relay to function, which will be effective when approach circuit to junction switch is occupied. After operation of time element relay, if signals fail to indicate proceed, Rules 509 and 99 apply.

Normal position of Signal 5031, governing movement from Great Northern R. R. connection at Chemult, and Signal 5025, governing movement from interchange track Chemult, "stop." Proceed indication will be displayed after switches and derails are lined for movement if block clear. Should these signals fail to indicate proceed after switches are lined, Rules 509 and 99 apply.

Signal 3218 at Dunsmuir governs movement from work track through cross-over and on main track to Signal 3222. Dwarf light Signal 3214 at derail east end of drill track Dunsmuir yard governs movement from drill track to work track and will indicate proceed only when both derail and switch to work track are lined for movement to main track and block clear. Signal 3222 at Dunsmuir governing eastward trains is located on left side of main track.

RULE 509 (e). When necessary to send flagman through tunnel 13, at Siskiyou, train must wait until flagman calls on telephone from opposite end of tunnel.

RULE 512 (A). Where switch indicators and dwarf signals are used, movements to main track will be as follows: If indicator indicates "block unoccupied," switches may be lined. When first switch or derail is lined, signal will indicate "stop." When second switch or derail is lined, signal will indicate "proceed" if block is unoccupied. When signal indicates "stop" after proper lineup has been made, a train must not move to main track except as prescribed by Rules 509 and 99.

RULE 516. Overlap posts are located at:

- Eastward Trains:**
- Live Oak—100 feet west of station.
- Tehama—2475 feet east of junction switch.
- Red Bluff—300 feet west of east switch. Eastward trains holding main track at Red Bluff will cause westward signal at west end of Glade siding to indicate stop when they pass onto the preliminary overlap extending 1300 feet west of Red Bluff station. This preliminary overlap is cut off after time interval and signal at Glade will, after remaining in stop position two and one-half minutes, change to proceed providing eastward train at Red Bluff remains west of permanent overlap post.
- Dunsmuir Yard—515 feet west of Signal 3210.
- Mott—Left side of track near middle of siding.
- Leaf—Fouling point west switch.
- Westward Trains:**
- Pine Ridge—Near middle of siding.
- Ady—Opposite clearance point east end of siding.
- Somerset—Near middle of siding.
- Wyo—1000 feet west of east switch of siding.

SPRING SWITCHES

When a block signal in advance of a facing point spring switch indicates "stop", careful examination of switch must be made before passing over it.

When making trailing point movement and train is stopped on switches, 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 or boosters started while engine is standing on or passing over such switches.

Spring switches are located at the following points, and the indicated speed must not be exceeded while trains are passing over them.

Roseville—Trailing from siding to eastward main track 15 MPH.

Spring switch located at M.P. 107.38 normally lined for main track. Eastward trains moving from drill track will run through this switch when in normal position. To avoid making reverse movement through switch when leaving drill track trains must stop at clearance point on drill track when Signal 1074 located 350 feet east of switch is in stop position. Eastward trains moving from drill track and trailing through this switch will not exceed 15 MPH. Westward movement on main track must not be made over this switch without first stopping and inspection made of switch.

Tehama—Trailing from Roseville line, 25 MPH. Junction switch equipped with spring switch normally lined for movement via Willows.

Between Signals 2119SA and 2116SA on Davis line and Signals 2119SA and 2118SA on Roseville line, interlocking rules apply.

Eastward trains stopped by Signal 2116SA or 2118SA will send flagman to operate clock work time release located on Signal 2116SA.

Time release must not be operated when trains or engines are within interlocking limits or seen approaching on opposite line.

To operate clock work time release push button for signal desired and hold until light above push button becomes illuminated. After four minutes signal should change from "stop" to "proceed" or "caution."

If signal does not change to proceed after operating release, train will not proceed (Rules 663-672) until inspection is made of spring switch and see that switch is properly lined for movement.

When Signal 2118SA governing movements of eastward trains on Roseville line is in "stop" position, spring switch must be lined by hand before movement is made and restored to normal position by hand after movement has been completed.

Eastward inferior trains stopped at Tehama to allow eastward superior trains on converging route to proceed, will, when the semi-automatic signal governing their movements is found in proceed position, promptly operate time release, which will then change signal on route of inferior train to stop position and one on converging route to proceed position, thereby reducing delay to both trains.

Glade—Facing point lock trailing from siding to main track eastward normally lined for main track. Speed restricted to 15 MPH.

INTERLOCKING

Sacramento River Drawbridge—Nineteenth Street, Sacramento—At crossing of R Street track with Western Pacific R. R.

Yard engines using industry spurs will give following signal from push button located on home signal 400 feet west of crossing.

- To Valley Grocery spur, o _____.
- To Bekins spur, _____.

Elvas—Limits on Sacramento-Roseville line extend from interlocking home signal 1,400 feet west of tower to interlocking home signal 1,200 feet east of tower, and on Elvas-Polk line to interlocking home signal at west switch Polk siding; and on Placerville Branch line to interlocking home signal 600 feet east of Junction switch.

SPECIAL INSTRUCTIONS

Following switches and derails within interlocking limits are hand operated and must not be thrown until permission has been obtained from signal operator.

American Can Company spur switch and derail. Derail is electrically locked.

Cross-over, middle siding, Elvas, to westward track, Elvas-Polk line.

Cross-over, middle siding, Elvas, to eastward track, Polk-Elvas line.

West switch and derail, middle siding, Elvas.

Hopfen spur switch and derail.

Meister's spur switch and derail. Derail is electrically locked.

Permission must be obtained for each movement into or out of American Can Company and Meister spurs.

Hand signals as required by Rule 628 may be given from the tower instead of from the ground.

Whistle Signals governing routes as follows:

To Roseville, ——— o o o o.

To Sacramento, o o o ———.

To Polk, ——— o o o.

To Elvas Siding, o o o ———.

To Third Track, o o ———.

To American Can Spur, ——— o ———.

To Meister's Spur, o ———.

Eastward passenger trains will not be required to make running test approaching interlocking plant at Elvas, except when brake pipe has been separated.

To operate a dual control switch by hand, trainman must secure permission from the signal operator. When permission, including the time and working limits is granted, he must first move selector lever to the "hand-throw" position and lock it in that position. When the time limit has expired or work is completed, the selector lever must be restored to the "switch machine" position, selector lever and "hand-throw" lever locked, and so reported to the signal operator, at the same time he must report the location of train or engine. If the main track is cleared and selector lever restored to "switch machine" position before expiration of the time limit new authorization must be obtained before again using the dual control.

The selector and hand-throw levers must never be forced. They will move easily when properly in mesh, although some manipulation of first one and then the other may be necessary to get them in proper mesh. If the switch was lined for siding when dual control use was started, it must be again lined for siding before selector lever is restored to "switch machine" position.

When selector lever is placed in the "hand-throw" position, all signals immediately adjacent to the switch governed will indicate "stop." Under these conditions the train or engine authorized to use switch may pass these signals without stopping and make movements over the switch within the limits authorized as necessary during the time the selector lever is in the "hand-throw" position and locked. Trainmen must notify engineman when the selector lever is in the "hand-throw" position, and when it is returned to the "switch-machine" position, so he may be governed by interlocking signals adjacent to the switch.

Emigrant Gap—Limits as follows:

On No. 1 Track from interlocking signal located 100 feet west of house track spur to Signal 1711, 500 feet west of turn-table.

On No. 2 Track from clearance of crossover to Signal 1716, 60 feet east of east switch of crossover.

Electrically operated derail located 60 feet west of interlocking signal west of house track spur switch on No. 1 Track.

East switch of crossover equipped with electric lock.

Derail located at clearance on east lead of turn-table and equipped with electric lock.

Trains passing interlocking signals as provided by Rule 663 (b) will be preceded by flagman to next home signal or clear distant signal.

When instructed to operate derail by hand, be governed by instructions on sign at derail.

Trainmen or enginemen will not unlock or throw the west switch of crossover when making crossover movement, until the east switch of crossover has been lined.

Trainmen or enginemen will not unlock or throw switch to east lead of turn-table until derail has been closed.

Westward movement from west lead of turn-table or from fire-train crossover will not be made until permission is given by operator.

Norden—Limits as follows:

No. 1 Track from interlocking home signal at west switch of siding Donner to signal bridge 775 feet west of Norden office.

No. 2 Track from signal bridge 775 feet west of Norden office to westward interlocking home signal opposite Signal 1975 west of cross-over Eder.

Fire Train Spur—Switch and derail hand operated, derail electrically locked and must not be thrown until permission has been obtained from signal operator.

Run-around Tracks—Enginemen on helpers left on run-around track must obtain permission from signal operator before lining switch to siding.

Spur track switches must not be lined for movement to siding without first obtaining permission from signal operator.

Trains passing interlocking signals as provided by Rule 663 (b) will be preceded by flagman to next home signal or clear distant signal.

When permission is given by signal operator to eastward trains to pass interlocking signals located on main track and on siding east end of Norden, trains must wait ten minutes and then be preceded by flagman according to rules and follow flagman 10 minutes to next home signal or clear distant signal.

When interlocking home signal located approximately 300 feet west of west switch at Donner indicates "stop," westward trains will stop to clear west switch of Donner siding.

Additional light signals mounted on the masts of the following interlocking signals at Norden.

On signal mast of eastward signal located at Norden station on No. 2 track governing movement into eastward siding.

On signal mast of eastward signal located on eastward siding at east end of concrete shed governing movement over switch to turn-table.

On signal mast of eastward signal located on eastward siding at west switch of crossovers governing movement on crossover.

On mast of interlocking signal governing westward movement on siding Norden just east of cross-over near old Summit station.

Normal indication of these signals "DARK." Proceed with caution indication will be given by flashing yellow light. This will indicate that interlocking signals are in stop position, that switches are lined and movement may be made to couple to cars or engines on siding without calling operator on telephone.

Two indication light signal installed on westward turn-table lead to No. 2 track, Norden. Signal is located on left side of track and 92 feet east of Signal 48-a, and is a repeater signal used in connection with Signal 48-a, governing westward movement from turn-table lead to No. 2 track.

Georgiana Slough—Drawbridge.

Snodgrass Slough—Drawbridge.

9th and K Streets Tower, Marysville.

Following switches and derails on Western Pacific R. R. within interlocking limits are hand operated and electrically locked, and must not be thrown until permission has been obtained from towerman when on duty:

Switch and derail, Western Pacific-S. P. transfer track.

Switch and derail, Western Pacific high line track.

Derail on Western Pacific stock corral track.

During hours towermen are off duty, trains desiring to move on Western Pacific main track from transfer track, high line and corral track, will first proceed to derail, electric lock, and unlock the door. After door has been opened, and no trains are seen approaching on Western Pacific track, Signal 4 located on Western Pacific track 464 feet west of crossing, and Signal 15, 2-arm signal located on Western Pacific track 1624 feet east of crossing will immediately go to stop position, releasing electric locks. Electric locks are released when indicator in lock is in proceed position, then move lever directly below indicator to the right which will permit operation of switches. When switches are again restored to normal position, lever should be moved to left position before closing door.

Western Pacific switch key will be found in hand release box on pole near junction switch.

If necessary to make this movement when a train is approaching on Western Pacific main track, opening the door of any electric lock will not put signals in stop position, but electric lock can be released by first proceeding to junction switches and operating time hand release located in box on pole, marked hand release, which will automatically put signals in stop position. After time hand release has been restored to normal position, a white light will indicate electric locks are released.

Switches and derails must be immediately returned to normal position after train has passed over them.

Trains desiring to cross Western Pacific R. R. tracks on Knights Landing Branch, when towermen are off duty, will call Chief Train Dispatcher at Sacramento and be governed by his instructions.

Binney Junction Tower—Junction with Woodland-Oroville line and crossing Western Pacific R. R.

Whistle signals governing routes as follows:

Main track to or from Gerber, ——— o o o o.

Main track to or from Oroville, o o ———.

Siding to or from Gerber, o ———.

Siding to or from Oroville, ——— o.

Siding to or from west leg of wye, o o o ———.

Main track to or from west leg of wye, ——— o o o.

Main track to or from east leg of wye, o ———.

To spur, o ———.

Switches to east and west legs of wye hand thrown. Normal position of switch for Knights Landing line.

Woodland—Crossing Sacramento Northern R. R.

Whistle signals governing routes as follows:

For Tehama to or from siding, ——— o o o o.

For Tehama to or from house track, ——— o.

For Knights Landing to or from siding, o ———.

Hand signals as required by Rule 628 may be given from the tower instead of from the ground.

No towerman on duty between 12 midnight and 6.30 a.m.

Signals on the Sacramento Northern R. R. will be placed in "stop" position and Southern Pacific signals will be lined clear for westward movement after No. 20 passes.

In the event it is necessary to use the plant between the hours of 12.00 midnight and 6.30 a.m. for other than westward movements, crew should promptly get in touch with the Chief Train Dispatcher at Sacramento who will make the necessary arrangements.

Redding Remote Control—Cross-over switches east end siding controlled by operator at telegraph office.

Trains passing interlocking signals as provided by Rule 663 (b) will be preceded by flagman through interlocking limits.

When instructed to operate switches by hand, be governed by sign on relay housing opposite west switch of cross-over.

AUTOMATIC INTERLOCKING

Live Oak—Crossing Sacramento Northern R. R. one-half mile east of Live Oak.

Stronghold—Crossing Great Northern R. R. one-half mile east of Stronghold.

Speed of trains must not exceed 30 MPH between home signal and crossing.

When trains are stopped by signals governing the use of automatic interlocking plants, flagman must be sent to crossing to operate clock-work time release. Release must not be operated when trains are between home signals or seen approaching on intersecting line.

After release has been operated, a red indicator light should be displayed over release and home signal should indicate proceed or red indicator on home signal must be displayed. Trains may then proceed.

If red indicator lights are not displayed, trains may proceed over crossing as provided by Rule 663.

Instructions for operating clock-work time release are posted on door of box.

TAKE SIDING INDICATORS

RULES 705 to 708. Emigrant Gap—Located on mast of Signal 1706 at west switch of center siding of eastward track controlled by operator.

Dunsmuir Yard—Located on mast of distant Signal 3198 west of west switch.

Mount Shasta—Located on mast of Signal D 3360 west of Mount Shasta.

TRAIN INSPECTION

Trains containing carload shipments of T.N.T., bombs, loaded projectiles, and other such articles of a highly sensitive nature should be stopped for inspection at intervals of not to exceed 50 miles, provided any car in the train containing articles of this nature is loaded in excess of 65 per cent of its marked capacity.

Page	Location	
All		Freight trains, and light engines not equipped with tire coolers except mallets, on descending grades will stop 10 minutes between switches at the following stations, to permit wheels to cool. Trainmen will make careful inspection of all cars and enginemen inspect engines.
2	Stanford.....	Engine stop west of Culvert 202-E, 1879 feet west of west switch.
2	Norden.....	On No. 2 track.
2	Truckee.....	Exception—five minutes.
3	Summit.....	On No. 1 track.
3	Troy.....	
3	Yuba Pass.....	
3	Knapp.....	Exception—five minutes.
3	Midas.....	
3	Gold Run.....	
3	Colfax.....	
3	Crystal Lake... ..	During stormy weather and when snow on ground, instead of Yuba Pass.
3	Emigrant Gap... ..	During stormy weather and when snow on ground, five minutes for heat radiation, in addition to Knapp.
3	Flint.....	Train to clear highway crossing at west end (except westward freight trains that stop at Auburn, inspect at Auburn instead of Flint).
11	Latrobe.....	
12	Doon.....	
12	Paradise.....	(Also passenger trains) stop 5 minutes, cool wheels.

- 12 Crouch.....
- 10 Steinman.....
- 10 Gregory.....
- 10 Hilt.....Exception—five minutes.
- 10 Weed or Edgewood
- 8 Mott or Azalea...Exception—five minutes.
- 8 Andesite.....Freight trains that have stopped at Cougar not less than 5 mins., may go to Bolam for inspection without stopping at Andesite, in which event, must make 10 min. stop at Bolam.
- 10 Canby.....
- 10 Hackamore.....When using retainers.

AC Class engines running light on descending grade stop sufficient length of time to inspect engine.

Light engines equipped with tire coolers descending grade, stop at Truckee, Emigrant Gap and Colfax to inspect engine.

At points between Roseville and Sparks where freight trains stop for inspection, enginemen will drain water from main reservoirs on engines.

In addition to the designated stops for inspection, no freight train will make a continuous run of more than fifty miles without a stop for inspection, except when conditions favorable, freight trains may go to Biggs, eastward freight trains Klamath Falls to Lenz, and Kirk to Crescent Lake, westward freight trains Crescent Lake to Kirk and Klamath Falls to Grass Lake, if, in the judgment of conductor and engineer no stops are necessary.

At points where freight trains stop for inspection, they will do so between switches to permit light engines to pass.

Trains handling logs must stop and inspection made by crew of load and chains before entering Klamath Falls Yard, passing through tunnels and over Sprague River Bridge west of Chiloquin, Dry Canyon Viaduct between Hotlum and Bolam, Klamath River Bridge west of Hornbrook, and all crossings except 2nd, 4th, 5th, 14th, 15th, 17th and 18th over Sacramento River.

Between sunset and sunrise, two Dietz lanterns must be placed on rear of caboose and trainmen must observe track for fallen logs.

When a train handling logs takes siding to meet a train or to allow a train to pass, train must be thoroughly inspected to insure proper clearance for safe passage of trains, and no move made until expected train has been met or passed.

Light engines descending grade between Hornbrook and Ashland, stop sufficient time at designated freight train inspection stations for inspection of engine and to permit heat of tires to equalize.

AIR BRAKE RULES

RULE 3. Maintain brake pipe pressure of 80 pounds on freight and mixed trains.

RULE 16. Emergency hose must be used on freight trains between Sparks and Roseville applied at most accessible location approximately every 20th car from engine.

On westward freight trains plugs will be fastened on east end of car and on eastward freight trains on west end of car.

Emergency hose will be handled by carmen at Sparks, but must be applied and removed when necessary by trainmen at intermediate stations.

Trainmen will wait until passenger trains are made up at Gerber before coupling steam and air hose.

RULE 24.

Page Location Rear end test on freight trains must be made immediately prior to leaving:

- 10 Siskiyou.....All trains.
- 8 Grass Lake....Westward freight trains.
- 10 Hornbrook.....Eastward trains.
- 8-10 Black Butte....Siskiyou Line freight trains.
- 10 Ambrose.....Westward freight trains.
- 3 Summit.....Westward trains.
- 2 Norden.....Eastward and westward trains.
- 11 Stirling City....All trains.
- 12 Placerville.....All trains.
- 3 Truckee and Summit.....Westward trains make brake pipe test.

RULE 39.

Page Location Running test on passenger trains must be made at:

- 10 Snowdon.....Eastward trains.
- 8-10 Black Butte....Siskiyou Line trains.
- 8 Grass Lake....Westward trains.
- 10 Ambrose.....Westward trains.
- 3 Tunnel 6, west of Donner.....Westward trains. (Just before entering tunnel.)

FREIGHT TRAINS

RULE 33. One operative retainer for the amount of Ms shown below must be turned up:

Page	Ms per Operative Brake	TERRITORY
2	120	Norden to Truckee.
3	140	Summit to Yuba Pass.
3	100	Yuba Pass to Loomis.
7	250	Dunsmuir Yard to Gibbon.
8	100	Azalea to Dunsmuir yard.
8	150	Grass Lake to Azalea.
10	100	Black Butte to Edgewood. Ambrose to Canby.
10	150	Snowdon to Hornbrook.
10	90	Siskiyou to Ashland.
10	90	Siskiyou to Hornbrook. Placerville Branch
12	120	M.P. 148 to M.P. 146. M.P. 145 to M.P. 138.
12	140	M.P. 136 to M.P. 130. M.P. 129 to M.P. 122.
12	150	M.P. 117 to M.P. 112.
11	80	Stirling City to M.P. 188.

RULE 46.

PASSENGER TRAINS

Page	Number of Retainers	TERRITORY
2	All	Norden to Truckee.
3	All	Summit to Long Ravine Bridge and N. E. Mills to Loomis.
8	Accessible	Azalea to east switch Dunsmuir.
8	.....	Shasta Springs or west, if stop is made, retainers may be turned down.
10	All	Siskiyou to Ashland.
10	All	Siskiyou to M.P. 403.6.
10	All	M.P. 400 to Hornbrook.
10	Accessible	Black Butte to Edgewood.
10	Accessible	Ambrose to Canby.
10	.....	M.P. 403.6 to M.P. 400, retainers on head end cars must be left turned up, but should be turned down momentarily if stop is made at Hilt.
10	Accessible	Ashland, will be turned down after passing yard limit board.
11	All	Stirling City to M.P. 188.

Whenever passenger equipment is handled on freight trains and a plug test is made, considerable time must elapse before brake pipe pressure will build up sufficiently to release the brakes on passenger equipment.

Conductor will advise engineman when they have such passenger equipment on the rear of train so he may allow a sufficient length of time for brakes to release before attempting to start train.

Diesel propelled train, "CITY OF SAN FRANCISCO", carries 110 lb. brake pipe pressure and has graduated release; when necessary to use a steam locomotive to handle this train, such locomotive must also carry 110 lb. brake pipe pressure instead of the 90 lb. ordinarily carried when handling passenger trains. The high pressure side of the air compressor governor of the steam locomotive must be set for 140 lb. and the low pressure side for 130 lb.

As piping of air brake system on Streamliner, "CITY OF SAN FRANCISCO," will not permit of compliance with Rule 24 the following will govern when coupling engines to or cutting them off this train:

Couple helper engine on in order to hold the train from running away and before cutting in automatic air; release the straight air set up from the power cars; then close the double heading cock.

The automatic brakes may then be applied and released from the helper engine without delay or difficulty, if proper brake pipe and main reservoir pressure is carried. No rear end test is required. The application and release of the brakes should be checked by an inspector or trainman from rear car.

When helper engine is to be cut off train, the automatic brake should be applied and left applied until helper is detached. Engineman on power car should then open the double heading cock and apply electric pneumatic brake. Release of brake on the last car in the train is a check that the brake is operative and the train is ready to proceed.

Speed of freight trains will be reduced at points where trainmen are required to handle retainers.

If tonnage exceeds amount of Ms specified for each retainer, trains may be handled between Azalea and Dunsmuir Yard, Black Butte and Edgewood, Ambrose and Canby, up to 120 Ms, and between Ashland and Hornbrook up to 100 Ms per operative retainer.

Sufficient retainers will be turned up, in the judgment of engineman, to properly control trains handling logs descending grade between Kirk and Chiloquin, Ambrose and Perez.

Retainers must be turned down momentarily ascending grade M.P. 403.6 to Hilt. Retainers must be turned down if stop is made between Thrall and Hornbrook. The maximum retaining pressure must be used from Siskiyou to Ashland and Siskiyou to Hornbrook on loaded cars, except refrigerators, equipped with the 10-20 and 15-30 pound retainers.

Freight trains consisting of not more than 60 cars and not more than 65 Ms per operative brake may be handled Snowdon to Hornbrook and Grass Lake to Azalea with no retainers provided engineman can properly control speed of train and charge brake pipe to standard pressure between applications. If necessary to use retainers to control speed of train, engineman will instruct train crew number of retainers required.

The tonnage of any freight train between Hornbrook and Ashland must not exceed 100 Ms per operative brake when handled on descending grade by AM, F or SP class engines. When other class engine used 90 Ms per operative brake will govern. Westward trains must not be moved out of Ashland in excess of this tonnage per operative brake. The tonnage of any freight train descending grade between Mount Shasta and Dunsmuir, Black Butte and Edgewood, and between Ambrose and Canby must not exceed 120 Ms per operative brake.

The tonnage of freight trains between Stirling City and Chico must not exceed 80 Ms per operative brake, between Placerville and Folsom and between Summit and Loomis, 100 Ms per operative brake, and between Norden and Truckee 120 Ms per operative brake.

Train crews on freight trains from Roseville will not release hand brakes until engine is coupled to train or yard air is through train.

MISCELLANEOUS

1 Water columns at stations listed below are equipped with locking devices which hold column (when not in use) parallel to track.

Mount Shasta, Black Butte, Grass Lake, Bray, Mt. Hebron, Pine Ridge, Kirk, Lenz, Stronghold, Perez, Hackamore, Canby, Alturas, Lakeview, Emigrant Gap.

After taking water, firemen must push column around until locking device engages, which will be known by fact that column cannot then be moved in either direction unless it is unlocked by engaging tank hook in unlocking lever located just above outer end of column spout.

Engines of freight trains on descending grades of one per cent or over, also westward at Cottonwood, Chiloquin and Lenz, must be detached to take water. Engines of freight trains, except eastward at Morley, must be detached to take oil.

Do not take water at east tank Morley except when necessary to take siding.

Helper engines coupled in middle or rear of train must be cut off from forward portion before taking water, and where lead engine cannot handle forward portion without assistance of helper, latter must not be cut off until forward portion has been pushed beyond water tank.

Take water only in emergency at following points:

Blue Canon, Woodland, Maxwell, Robbins, Tudor, Stronghold, Hackamore and Orcal tank.

Water supply—Cantara—Three-fourths mile east.
Grenada—One-fourth mile east.
Klamath Tank—M.P. 390.5.
Whittier Tank—M.P. 485.8 Lakeview Branch.
Orcal Tank—M.P. 403.6 Siskiyou Line.

When a blue signal or an authorized sign is displayed at one or both ends of an engine, indicating that workmen are under or about it, or engine has been spotted to take oil or water, reverse lever must be placed in center, throttle valve closed, cylinder cocks opened and independent air brakes applied.

Leading and helper engines must not cut off from head and rear portion of train at the same time at Steinman when taking water. When leading engine is coupled to train, after taking water, engineman will place automatic brake valve on lap, then sound one long whistle signal. Helper engineman will then make fifteen pound reduction of brake pipe pressure, leading engineman noting fall of brake pipe pressure will release brakes and after brake pipe has been charged, helper engine may then be cut off. Trainmen will not cut off helper engine until advised by helper engineman that brake pipe has been recharged.

In Valley territory engines may take oil and water without cutting off train at all points, except Marysville.

On ascending grades between Roseville and Sparks, engines on freight trains may take oil and water without cutting off train at all stations except Gold Run and Colfax.

Do not take oil at Gold Run except in emergency.

Eastward freight trains stopping at Colfax for water with helper engines in train, lead engine should stop with pilot just west of water column, cut off and take water. This to avoid possibility of accident at highway crossing.

Water at Mystic on No. 1 track only.

Trains handling empty express refrigerators will take water at Blue Canon so tie sprinklers will operate at full efficiency.

Westward passenger trains from Sparks should take water at Truckee in preference to other water stations.

SPECIAL INSTRUCTIONS

2 Eastward passenger trains making stop at Reno, will do so clear of Virginia Street.

Eastward trains will approach crossing at Colfax very carefully when westward trains are in the vicinity of the crossing.

3 If unable to handle train account storm conditions on mountain, reduce to ninety per cent of engine ratings, advising chief train dispatcher fully of action taken.

4 Helper service: No helper engine will be placed behind wooden underframe cars or cabooses.

Engines weighing more than 210,000 pounds on the drivers will not be placed behind cabooses.

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

Not more than one F or AC class engine shall be placed on head end of freight trains except on trains consisting entirely of logs between Leaf and Grass Lake, Canby and Ambrose. Two GS or Mt, or one GS and one Mt class engines must not be coupled on descending grade where maximum curvature exceeds 10 degrees. F or AC class engines must not be coupled ahead of engines smaller than consolidation when tonnage behind such engine is in excess of time table rating. Between Ashland and Hornbrook, helpers must be placed in rear of train.

Two engines must not be coupled on Stirling City Branch. Helper engines must be cut back in train.

4a Pushing trains out of yards: No engine will be placed behind a wooden underframe caboose or other wooden frame equipment.

Engines weighing more than 210,000 pounds on the drivers will not be placed behind steel underframe cabooses.

Air will not be coupled through the pusher engine.

Yard engines regularly so used will be equipped with Russell-Jordan device to hold the coupler pin from dropping, thus making it unnecessary for employes to uncouple the pusher engine when cutting off.

In no case shall the knuckle be removed, or closed, or cutting lever temporarily fastened in release position on a pusher engine, as means of preventing coupling being made.

Unless local conditions require, it will not be necessary to stop trains to detach pusher engines.

5 S. P. track to Swayne Lumber Co. Yard at Oroville passing under W. P. trestle will not be used or switching performed thereon during time W. P. trains are passing over trestle.

When necessary to occupy McCloud River R. R. Company's tracks at Mount Shasta, including the west leg of wye, it must be under protection of flag.

Tracks except main track at Leaf are used by engines and motor cars of the Long Bell Lumber Company, and all movements over these tracks including both legs of wye, and to Long Bell siding must be made with caution.

When using siding at Delavan beet chute at beet loading dump must be raised to proper clearance.

Stop sign at Roseville on circuit drive where switch leads into car repair tracks. All engines must stop at this sign and proceed with caution.

Capacity of sidings between clearance points is based on an average car length of 47 feet not including engines and cabooses.

8 At points where engine is to be changed or cars set out or picked up on passenger trains, trainman will open train heat valve on rear of train at station one mile board and engineman will shut off train heat one-half mile from station.

9 Westward freight trains having pick up or set out at Colfax will, when possible, leave train east of east crossover while work is being performed.

10 Storage tanks of Standard Oil Company near tracks at M. P. 107.9 between Roseville and Rocklin, flues of engines must not be sanded until engine has passed this point.

Underground gasoline tanks installed opposite house track at a point 300 feet west of station Colusa. Engines must not be stopped in front of unloading spot when oil or gasoline cars are being unloaded.

Page	Class of Engine	Restricted Tracks
2	F-AC-	Auburn, Nev. St.. Spurs.
2-3	Mk-Mt-	Clipper Gap..... Team, east of road crossing.
2-3	GS	Colfax..... Material spur, west yard.
2-3	AC-4-5-6-7-8	Colfax..... Corral track, west of corral, bunk spur, house and house lead east of freight house. Team, beyond east end of freight house platform. Scale.

Page	Class of Engine	Restricted Tracks
2-3	F-AC-Mk-Mt-GS	Rocklin..... Siding, House.
3		Loomis..... House track and tracks 1, 2 and 3 and Pacific Spur.
3		Penryn..... Fruit spurs west of station.
3		Newcastle..... Tracks 3-4 and No. 7 beyond end of curve or switch leading to lumber spur.
3		Flint..... Standard Oil spur.
3		Auburn..... High line.
3		W. N. E. Mills... Spur, west of tool house.
2-3	F-AC-Mk-Mt-GS	Magra..... Spur. Towle..... Spur. Blue Canon..... Dump spur, oil spur, Greek spur east of oil column. Yuba Pass..... Spur switches. Crystal Lake.... Spur, south side of No. 2 track. Cisco..... Outfit spur, Campbell's spur east of corral chute. Summit..... Lumber spur switch.
4-5	All	Wyo..... Stoney Creek gravel pit. Engines must not go beyond a point three car lengths beyond gravel bin.
4-5	AC-4-5-6-7-8	Merritt..... Warehouse.
4-5	All	Sugarfield..... Southern Pacific crews and power must not operate on track 5 in Sugarfield yard beyond a point 50 ft. west of west end of beet dump constructed under that track.
4-5	AC-4-5-6-7-8	Dunnigan..... Standard Oil. Arbuckle..... Warehouse. Cortena..... Warehouse, house. Maxwell..... House, corral, loading, warehouse. Riz..... Warehouse Spur.
4-5	Heavier than T	
4-5	AC-4-5-6-7-8	Willows..... Union Oil, Union Ice, team, warehouse, pump house, engine spur, set-out. Artois..... House, warehouse. Orland..... Engine spur, oil spur. Wyo..... East leg of Wye. Corning..... Heinz spur. Tehama..... House, beet, warehouse.
6	F-AC-Mk-Mt-GS	Biggs..... Doty warehouse spur, west end of yard. Brick warehouse spur, east end of yard. Durham..... Warehouse track. Barber Yard.... No. 1 track from west switch to point 400 feet west of east switch. Barber Yard.... No. 2, 3 and 4 tracks. Chico..... Priol warehouse spur. Reynolds warehouse spur. Standard Oil spur.
		Copeland..... Siding. Lomo..... Siding. Marysville..... Team, mill spur, Earl Fruit spur. Marysville..... High line track west of the east line of Third Street.
	All	
	F-AC	Clayton..... Spur serving Stockton Fire Brick Co., across highway.
	Mk-Mt-GS	Dantoni Jct. and Dantoni.
6	All	Marysville..... Rio Grande Oil spur off "E" St., use reach.
6	Heavier than 210 Ms	Ostrom..... Corral Track off siding, use reach.
6	All	Barber..... Diamond Match Co.'s track at wye.
7	AC-4-5-6-7-8	Castella..... Dirigo Industrial tracks. Kennet..... Trestle to slag pit, use reach.
7-8-9-10	Heavier than 210 Ms on Drivers	Red Bluff..... Pioneer Fruit spur. Redding..... Hoefers and Sterling Lumber Co.'s spurs. Kennet..... Slag pit beyond clear point on either track east of switch on east end of bridge across Backbone Creek.

Page	Class of Engine	Restricted Tracks
7-8-9-10	Heavier than 210 Ms on Drivers	Pollock..... Spur. Lamoine..... Little Slate Creek Bridge. Gibson..... Spur. Igera..... Spur. Weed..... Long Bell Lbr. Co., docks 1 and 2 in lumber shed, shed spur, block spur, factory 2, factory 3, No. 6 lumber yard. Industrial tracks between Bray and Klamath Falls except C, AC 1, 2 and 3 class engines as follows: Dorris..... All spurs. MacDoel..... Lumber spur back of stock corral. Industrial tracks between Klamath Falls and Kirk except engines not heavier than 275 Ms on drivers as follows: Algoma..... Log spur and track to box factory. Chiloquin..... Chiloquin Lumber Co. track extending off stem of wye. Speed restricted to 6 MPH. Modoc Point.... Lamm Lumber Co., spur. Lakeview Branch.
8	F and AC 4-5-6-7-8	Pioneer
8	AC-4-5-6-7-8	Mt. Shasta..... Pacific Fruit & Produce Co.'s spur, or on house track, beyond west end of freight platform. Penoyar..... Spurs, use reach.
7-8-9-10	All	Morley..... Engines turning on wye use west leg for initial movement. Pollock..... 100 feet each side of pit, Clifford's Industry track. Mt. Shasta..... McCloud River R. R. main track from Clearance with interchange east end of yard to point opposite station building. Algoma..... Spur leading to Algoma Lbr. Co. machine shop. Ager..... Spur beyond signal east of road crossing. Willow Ranch.... Crane Creek Lumber Co. shed. Perez..... Spur. Stronghold..... Spur-Pit.
10	GS, AC	Siskiyou line between Hornbrook and Ashland. Flint hoppers and box cars must not be placed on spur serving El Dorado Lime and Mineral Co. at Bullard, to or beyond rock chute which does not clear this class of equipment. Engines must not exceed 10 MPH from Bullard Jct. to Lime Quarry, and must not go beyond 60 feet east of bunker switch.
12	C	Placerville..... Weber spur.
12	Mk-F-AC Mt-GS	Knights Landing Branch, except between Woodland and switch to Swanston Corral spur.

MAIN TRACKS

11 Tracks between Sacramento and Roseville numbered, and unless otherwise authorized, will be used as follows:

No. 1 Westward trains. No. 2 Eastward trains.

Tracks between Roseville and Sparks numbered and used as follows:

No. 1 westward trains, via Auburn.

No. 2 eastward trains, via Auburn Nevada Street.

No. 4 between Rocklin and Loomis; diverges from No. 2 at Rocklin and runs on south side of No. 1, one-half mile east of Rocklin to Loomis, connecting with No. 1 at Loomis.

End of No. 4 track at Loomis is located at clearance point west of crossover to No. 1 track at M.P. 113.

At Chico, Stirling City Branch main track originates at switch on Stirling City Branch leading to engine house at Chico. Trains to and from Stirling City Branch use yard tracks between passenger station and Stirling City Branch main track.

At Willows, Fruto Branch main track originates at yard limit board on Fruto Branch. Trains to and from Fruto Branch use yard tracks between passenger station and Fruto main track.

SPECIAL INSTRUCTIONS

Remove rail locks before attempting to move table.

Properly line table and reset rail locks before moving engine on or off table and enginemen must know that it is properly lined before attempting to move engine on table.

Release brake before moving turn-table and do not apply brake unless control handle is in the "off" position.

To Move Turn-table: Turn controller handle around to the third or fourth point allowing about one second on each point.

To Stop Turn-table: Turn controller rapidly to "off" position.

Allow turn-table to come to stop before reversing motor.

In case of trouble notify operator at Norden office, who will call maintainer.

Turn-table must be left lined and locked for east lead to eastward track.

Normal position turn-tables on Truckee District will be as follows:

Emigrant Gap... East approach, with motor on east end.
Norden..... East approach to eastward track.

Trainmen and enginemen using these turn-tables must leave them lined as shown above.

SPEED RESTRICTIONS
SPEED TABLE

SPEED PER HOUR	1 MILE IN MINUTES SECONDS	SPEED PER HOUR	1 MILE IN MINUTES SECONDS	SPEED PER HOUR	1 MILE IN MINUTES SECONDS	SPEED PER HOUR	1 MILE IN MINUTES SECONDS	SPEED PER HOUR	1 MILE IN MIN. SEC.
6	10.00	25	2.24	39	1.33	53	1.08	68	0.53
8	7.30	26	2.18	40	1.30	54	1.06	69	0.52
10	6.00	27	2.13	41	1.27	55	1.05	70	0.51
12	5.00	28	2.08	42	1.25	56	1.04	72	0.50
15	4.00	29	2.04	43	1.23	57	1.03	74	0.49
16	3.45	30	2.00	44	1.21	58	1.02	75	0.48
17	3.31	31	1.56	45	1.20	59	1.01	76	0.47
18	3.20	32	1.52	46	1.18	60	1.00	78	0.46
19	3.09	33	1.49	47	1.16	61	0.99	80	0.45
20	3.00	34	1.45	48	1.15	62	0.98	82	0.44
21	2.51	35	1.42	49	1.13	63	0.97	84	0.43
22	2.43	36	1.40	50	1.12	64	0.96	85	0.42
23	2.36	37	1.37	51	1.10	65	0.95	90	0.40
24	2.30	38	1.34	52	1.09	67	0.94	95	0.38

Speed restrictions for engines are shown in speed restriction table; however, attention is called to the following maximum speeds at which tenders may be operated:

Tenders having water capacity 7,000 gallons or less, except classes 70-R-1 and 70-SC-1, maximum speed 50 MPH.

Following engines are cross counter-balanced and are permitted a maximum speed of 75 MPH.

GS-1, 2, 3. Mt 1, 2, 3, 4, 5.

P-7, 8, 10, 12; 2461, 2462, 2463, 2464, 2465, 2467, 2469, 2471, 2472, 2473, 2474, 2475, 2476, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 3120, 3121, 3122, 3123, 3124, 3126, 3127, 3128, 3129.

Following engines are cross counter-balanced and are permitted a maximum speed of 55 MPH when handling passenger trains.

F-1, 3, 4, 5; 3619, 3625, 3627, 3634, 3636, 3652, 3656, 3658, 3665, 3666, 3676, 3677, 3681, 3685, 3687, 3692, 3706, 3709, 3711, 3716, 3727, 3728, 3732, 3737, 3742, 3752, 3765.

AC-4, 5; 4100, 4101, 4102, 4103, 4104, 4105, 4107, 4109, 4110, 4111, 4112, 4113, 4114, 4115, 4116, 4117, 4118, 4119, 4120, 4121, 4122, 4123, 4124, 4125.

AC-7, 8.

Where mail, papers, or ice are to be dispatched from passenger trains at points where train does not stop, slow down sufficiently to permit safe dispatch without hazard, and will stop at such stations for this purpose if train is moving on adjoining track between passenger train and point of exchange.

Engines operated coupled tender to tender must not exceed speed permitted engines running backward.

Streamliner "CITY OF SAN FRANCISCO" must not exceed maximum speed authorized by Streamliner slow boards when operating on single track or with the current of traffic on double track and must not exceed speed allowed other passenger trains when operating against the current of traffic.

Speed prescribed by slow boards or special instructions must not be exceeded unless authorized by Streamliner slow boards and speed prescribed by bulletin or train order for steam passenger trains must not be exceeded.

SPEED OVER STREET CROSSINGS WITHIN CITY LIMITS

	MPH
Reno.....	20
Lincoln.....	35
Woodland, Main and Court Sts.....	12
Willows.....	40
Orland, Walker St. (Passenger.....)	35
(Freight.....)	25
Corning.....	40
Roseville, Lincoln St.....	12
Red Bluff.....	25
Redding.....	25
Chiloquin.....	25

Page	Class of Engine	Station-Territory-Structure	MPH
All	S & SE	On curves.....	15
All	Motors	Backing thru yards and over highway crossings...	10
All	All	Freight trains on descending grades, while passing passenger trains.....	15
All	...	Locomotive cranes moving in trains with flexible or swivel truck trailing.....	18
All	...	Trains entering or moving thru controlled sidings, or when running against the current of traffic on double track under authority of dwarf signals.....	25
2	All	Eastward trains: From M.P. 102.6 to M.P. 104.14 Streamliner diesel power unit.....	50
		Passenger trains.....	40
		Freight and mixed trains.....	35
		From M.P. 104.14 to M.P. 104.6 Streamliner diesel power unit.....	40
		Passenger trains.....	30
		Freight and mixed trains.....	20
2	All	From M.P. 104.6 to M.P. 108 on Roseville-Sparks line Passenger trains.....	20
		Freight and mixed trains.....	15
2	All	Eastward trains between Signal bridge just west of Sparks Psgr station and Sparks Yard office.....	12
2-3	AC-1-	On curves between Truckee and Loomis.....	20
2-3	All	Flangers, between Lawton and Loomis and be governed by other speed restrictions.....	30
2-3	All	Fire Trains, with water cars full.....	25
2-3	All	Fire Trains with water cars less than three-quarters full. Water cars must be kept full when possible..	20
2-3	All	Trains handling loaded Flint hoppers.....	25
3	All	Waiting room Norden just east of telegraph office..	10
3	All	Trains of empty express refrs. exclusively between Emigrant Gap and Loomis.....	25
4-5	All	Trains using track to Swanston feed yard Woodland Cache Creek, between Woodland and Yolo...89-A	10
4-5	AC-4-5-6-7-8	Stoney Creek, bet. Orland and Wyo...166-D, 166-E Thomas Creek, bet. Richfield and Tehama...182-A	25
6	AC-4-5-6-7-8	Bear River bridge, 1.2 Miles west of Wheatland.....126-C	
		Yuba River bridge, 2000 Feet west of Marysville.....140-C	
		Deer Creek bridge, .8 Miles east of Vina....203-E	
6	All	Sacramento River bridge at Tehama.....210-C	25
7	All	Eastward and westward trains moving over Roseville-Gerber line over Junction Switch at Tehama	25
7-8	All	Engines moving west over spur switch east end Lamoine siding.....	10
7-8	All	Between Signals 3208 and 3225 Dunsmuir Yard...	15
7-8-10	AC-1-2-3	Between Middle Creek and Mt. Shasta, Black Butte and Grass Lake, Ambrose and Canby, where slow boards show 25 MPH.....	20
8-9	All	Klamath Falls, between G. N. R. R. crossover to main track at M.P. 427.8 to Sixth Street viaduct M.P. 429.1.....	30
		Between Sixth St. viaduct M.P. 429.1 and signal at underpass M.P. 429.9.....	15
7-8-9-10	All	Trains handling logs thru tunnels and over following bridges and crossings:.....	
		Sprague River bridge, west of Chiloquin.....	
		Drv Canyon viaduct between Hotlum and Bolam	
		Klamath River bridge, east of Klamathon.....	
		All crossings Sacramento river, except 2nd, 4th, 5th, 14th, 15th, 17th and 18th.....	5
9	All	Passenger trains on house track at Algoma.....	8
9	All	Chiloquin, from stem of wye to log pond.....	6
10	All	Hornbrook, engines using wye, enter on west leg and leave on east leg.....	8

Page	Class of Engine	Station-Territory-Structure	MPH
10	All	On curves Alturas and Lakeview freight and mixed	25
12	All	Trains having cars loaded with ore or high loads of lumber on curves 7 degrees or over, on Placerville Branch.....	12
12	All	Mather Field spur.....	10
11	All	Engines on balloon track Lake Tahoe.....	8
12	All	Over RR Crossing, Bridge St., east of Yuba City Station.....	12
12	All	Trains handling logs, thru Tunnel No. 1.....	5

(UNLESS OTHERWISE FURTHER RESTRICTED BY TIME-TABLE, SLOW BOARDS OR TRAIN-ORDER)

Trains handling wooden pile-drivers; locomotive cranes with boom disconnected and heavy end forward; steam shovels and ditchers, transported on their own wheels:

On tangent main tracks..... 35
except S.P.M.W. 4044 and 4048..... 25
On tangent branch tracks..... 25

On all curves—5 MPH less than speed authorized. Where slow boards in place 5 MPH less than shown on slow boards, except when speed indicated is 15 MPH or less be governed by slow boards.

Trains handling locomotive cranes with boom disconnected and light end forward (must not be handled in this manner except in emergency):

On tangent main tracks..... 20
On curves and on branch tracks..... 15

Trains handling locomotive cranes with boom in place, either end forward (to be handled in work trains when practicable):

On tangent main tracks..... 25
On curves and on branch tracks..... 15

Trains handling steel pile-drivers may make maximum freight train speed.

Trains handling relief outfit with steam derrick:

On tangent main tracks..... 35
On tangent branch tracks..... 25

On all curves—5 MPH less than speed authorized. Where slow boards in place 5 MPH less than shown on slow boards, except when speed indicated is 15 MPH or less be governed by slow boards.

Maximum speed of disabled engines hauled in train, or running under own steam, must not exceed:

When pilot removed..... 20 MPH
When main rod only removed..... 30 MPH
When side rods only removed..... 30 MPH
When both main and side rods removed..... 20 MPH
When hauled in train, all rods on..... 30 MPH
SP 1, 2 and 3 when inside main rod removed..... 30 MPH
S and SE engines, and all other classes of engines when not equipped with engine trucks..... 20 MPH
When all weight has been removed from any one pair drivers, speed must not exceed 20 MPH.

When all weight has been removed from one wheel of any pair drivers, speed must not exceed 30 MPH.

Blocking of leading drivers of an engine, in order to redistribute weight, should not be attempted as this may cause derailment.

All cars handled in passenger trains must be equipped with steel-tired or all steel wheels.

Wooden passenger-carrying cars, wooden baggage, express and other head end cars, unless equipped with steel center sills and steel platforms must not be used in passenger trains. Speed of trains handling such cars restricted to 40 MPH.

If consist of train includes both wooden and steel passenger-carrying cars, the wooden cars must be kept together and handled on rear.

Slow boards at west switch Truckee No. 1 track, east switch Loomis No. 1 track and west switch Colfax No. 2 track, with figures 35 on upper left side, 30 on lower left side, and 20 on right side.

35 represents speed allowed for passenger trains on tangent track.
30 represents speed allowed for passenger trains on curves.
20 represents speed allowed for freight trains.

Trains consisting of engine and caboose only, may operate at speed authorized for AC 4, 5, 6, 7 and 8 class engines running light between Roseville and Sparks.

No. 290 will be permitted speed of 40 MPH when handling freight cars in territory otherwise restricted to 35 MPH.

Trains consisting of engine and caboose only, may operate at speed of 25 MPH between Middle Creek and Mount Shasta.

Trains consisting of engine, flanger and caboose may operate at maximum allowable speed of freight trains. In curve territory on the Shasta Division where maximum speed of passenger trains is 30 MPH flangers will be permitted to operate at same speed.

SPECIAL INSTRUCTIONS

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE

M. P.	LOCATION	DESCRIPTION
SACRAMENTO YARD		
184.8	Sacramento River Bridge	Oil House West of Store No. 1..... Side
201.3	Shop Yard	Sand spurs Nos. 1 and 2..... Overhead
195.7	Shop Yard	Track No. 2, Car Shop No. 9..... Side
195.4	Shop Yard	Track No. 3, Car Shop No. 9..... Side
195.1	Shop Yard	Track No. 4, Car Shop No. 9..... Side
194.9	Shop Yard	Track No. 5, Car Shop No. 9..... Side
194.3	Shop Yard	Track No. 9, Car Shop No. 9..... Overhead and Side
194.1	Shop Yard	Roundhouse spur..... Side
193.7	Shop Yard	Track No. 2 Bone Yard Track..... Side
181.0	Shop Yard	Track No. 3 Laundry..... Side
180.7	Shop Yard	Track No. 2 Scrap Dock..... Side
164.3	Shop Yard	Track No. 3 Scrap Dock..... Side
132.6	6th and I Streets	Cowell Lime & Cement Co. Bldg., Overhead and Side
124.5	6th and H Streets	Western Meat spur..... Side
124.5	6th Street	New Foundry Track..... Side
124.5	6th Street	Coke spur..... Side
124.5	6th Street	Foundry Track 6th Street..... Side
122	R between 11th and 12th	Lawrence Warehouse..... Side
122	R between 21st and 22nd	Barley spur Buffalo Brewery..... Side
122	R between 21st and 22nd	Buffalo Brewery spur..... Overhead and Side
122	21st and R	Buffalo Brewery Plant..... Overhead and Side
120.1	25th and R	Unloading pit, Sacramento Rock and Sand Co. Side
113.9	B between 11th and 12th	Phoenix Mill spur..... Side
113.9	B between 8th and 9th	Consumers Ice Co. Track..... Side
113.9	3rd to 6th Streets	Track No. 4 Rolling Mill..... Side
113.9	6th Street	Water Tank..... Side
113.9	15th and N. B. Streets	Unloading pit center of Track, Golden Gate Atlas spur
113.9	13th and 14th on B St.	Unloading pit center of Track, Clark and Henry spur
113.9	4th and R Streets	Sacramento Vegetable Growers Assn..... Side
113.9	5th and R Streets	Virden Packing Co. spur..... Overhead and Side
113.9	Front St. between M & N	Sacramento Northern Guy Pole..... Side
113.9	Walnut Grove Connection	2nd Street to Front St. Yard..... Overhead
113.9	Front St. between H & I	Stulsaft spur..... Overhead
113.9	Bet. tracks No. 1 and No. 2	South end of old freight shed..... Front St. Side
113.9	Bet. tracks No. 2 and No. 3	South end of new freight shed..... Front St. Side
113.9	American River Bridge	..... Side
ROSEVILLE-SPARKS—EASTWARD		
106.6	Roseville	Icing track, PFE track No. 2 and New Icing track, PFE plant..... Side
106.6	Roseville Yard	Track No. 3, Heavy Rip..... Side
106.6	Roseville Yard	Track No. 4, Heavy Rip..... Side
106.6	Roseville Yard	Track No. 5, Heavy Rip..... Side
106.6	Roseville Yard	Track No. 6, Heavy Rip..... Side
106.6	Roseville	P. F. E. Icing Tracks Nos. 0-1-2-3..... Side
110.6	Rocklin	Kesty Quarry spur..... Overhead
110.6	Rocklin	Henderson Quarry spur..... Overhead and Side
110.6	Rocklin	Pernu Quarry spur..... Overhead
110.6	Rocklin	Ehekson Quarry spur..... Overhead
110.6	Rocklin	Cal. Granite spur, Rocklin, Quarry..... Side
110.6	Rocklin	Stock Chute on Corral Track..... Side
114.2	E. of Rocklin	Antelope Creek bridge..... Side
114.7	E. of Rocklin	Tunnel No. 15..... Side and Overhead
117.3	E. of Lincoln Ave., Penryn	Tunnel No. 16..... Side and Overhead
120.5	E. of Newcastle	Tunnel No. 17..... Side and Overhead
122.7	E. of Newcastle	Tunnel No. 18..... Side and Overhead
123.1	E. of Newcastle	Tunnel No. 19..... Side and Overhead
124.6	E. of Newcastle	Tunnel No. 20..... Side and Overhead
131.2	E. of Nev. St., Auburn	Tunnel No. 21..... Side and Overhead
132.7	E. of Bowman	Tunnel No. 22..... Side and Overhead
132.9	E. of Clipper Gap	Tunnel No. 23..... Side and Overhead
133.1	E. of Clipper Gap	Tunnel No. 24..... Side and Overhead
133.3	E. of Clipper Gap	Tunnel No. 25..... Side and Overhead
133.8	E. of Clipper Gap	Tunnel No. 26..... Side and Overhead
134.8	E. of Applegate	Tunnel No. 27..... Side and Overhead
135.9	E. of Applegate	Tunnel No. 28..... Side and Overhead
138.7	E. of N. E. Mills	Tunnel No. 29..... Side and Overhead
139.2	E. of Lander	Tunnel No. 30..... Side and Overhead
139.4	E. of Lander	Tunnel No. 31..... Side and Overhead
141.7	Colfax	Tunnel No. 32..... Side and Overhead
141.7	Colfax	Automatic Signal Nos. 1420, 1421 and 1425..... Side
141.7	Colfax	Water Col. west of Station W. B..... Side
145.3	E. of Colfax	P. F. E. Icing Platform..... Side
144.7	E. of Colfax	Tunnel No. 33..... Side and Overhead
152.2	E. of Colfax	Tunnel No. 34..... Side and Overhead
152.2	Gold Run	Mail Crane..... Side
152.2	E. of Gold Run	Water Tank West end of Yard..... Side
165.5	Blue Canon	Oil and Water columns..... Side
171.8	Emigrant Gap Station	Water Columns..... Side
173.0	Smart	Signal 1718..... Side
185.0	Troy, Snowshed West End	Signals 1736-1737..... Side
197.0	Eder, East of Snowshed	Signal 1846..... Side
208.0	Truckee	Signals 1978-1979..... Side
208.0	Truckee	Roundhouse portals..... Side
242.9	Reno	Oilsump doorways..... Side
242.9	Reno	Transfer track..... Side
242.9	Reno	Buffalo Brewing Co. platform..... Side
164.3	Knapp	..... Side
164.3	Knapp	Tunnel No. 1..... Side and Overhead
200.6	Knapp to Andover	Snow sheds..... Side and Overhead

M. P.	LOCATION	DESCRIPTION
SPARKS-ROSEVILLE—WESTWARD		
184.8	Andover to Knapp	Snow sheds..... Overhead and Side
201.3	Tunnel No. 6	Bunker on No. 3 spur..... Side
195.7	West of Donner	Tunnel No. 12..... Overhead and Side
195.4	West of Donner	Tunnel No. 11..... Overhead and Side
195.1	West of Donner	Tunnel No. 10..... Overhead and Side
194.9	West of Donner	Tunnel No. 9..... Overhead and Side
194.3	West of Donner	Tunnel No. 8..... Overhead and Side
194.1	West of Donner	Tunnel No. 7..... Overhead and Side
193.7	West of Donner	Tunnel No. 6..... Overhead and Side
181.0	West of Tamarack	Tunnel No. 4..... Overhead and Side
180.7	West of Tamarack	Tunnel No. 3..... Side and Overhead
164.3	West of Knapp	Tunnel No. 1..... Overhead and Side
132.6	West of Applegate	Tunnel No. 0..... Side and Overhead
124.5	Auburn	Ford & Son Warehouse, hill track..... Side
124.5	Auburn	Lowell Warehouse, hill track..... Side
124.5	Auburn	Fruit House Track, hill track..... Side
124.5	Auburn	House Track, Auburn I. & C. siding..... Side
122	Auburn	House Track, Ford & Son, warehouse siding..... Side
122	West of Flint	Cut West of 122..... Side
122	West of Flint	Cut West of 122-G..... Side
122	West of Flint	Cut West of 122-H..... Side
120.1	Newcastle	Bloomer Cut..... Side
113.9	Loomis	Tunnel No. 18..... Side and Overhead
113.9	Loomis	No. 1 Hill track, Earl Fruit Co..... Side
113.9	Loomis	No. 1 Hill track, Law Bros., Fruit House..... Side
SACRAMENTO-GERBER		
94.9	Ben Ali	Cannon Phillips spur..... Overhead and Side
117.0	Clayton	Diamond Match Co., Lumber shed..... Side
117.0	Clayton	Stockton Fire Brick Co., spur..... Overhead
140.8	Marysville	Strain Warehouse, 9th and B St. Overhead and Side
140.8	Marysville	W. T. Ellis Warehouse..... Side
140.8	Marysville	Buckeye Mill platform..... Side
122.0	Marysville, E Street	Yuba Construction Co., platform..... Side
161.4	Biggs	Rice Mill Siding..... Side and Overhead
DAVIS-TEHAMA		
84.9	Woodland	West end of Globe Rice Mill..... Overhead and Side
124.2	Williams	Bartlett Water Co., shed platform..... Side
124.2	Williams	Stoval-Wilcox platform..... Side and Overhead
149.9	Willows	Williams Warehouse Co., platform..... Side
149.9	Willows	Glenn County Spur..... Side
WYO-HARRINGTON		
120.8	Grimes	Water Spout..... Overhead
145.9	Princeton	Water Spout..... Overhead
150.4	Codora	Warehouse..... Side
165.9	Rotavele	Elevator..... Side
177.4	Hamilton	Beet pulp dryer, 285 feet east of hay barn, Holly Sugar Co..... Side and Overhead
WOODLAND-OROVILLE		
111.4	Tudor	Water Tank..... Side
112.4	Abbot	Earl Fruit Co. bldg. siding..... Side
120.4	Yuba City	S.N.R.R. trolley wire, East of depot..... Overhead
135.0	Honout	Station platform..... Side
135.0	Honout	Brown's Warehouse..... Side
147.9	Oroville	C. L. Bills cement warehouse..... Side
147.9	Oroville	Olive Produce Co. porch..... Side
147.9	Oroville	Ice House platform..... Side
SACRAMENTO-PLACERVILLE		
91.5	Sacramento, 23rd and R	Contractors' spur, building..... Side
94.8	Brighton	Unloading pit center of track A. Teichert Co. spur
95.9	Perkins	Perkins' Store..... Side
98.9	Mayhew	Humphrey Packing house platform..... Side
98.9	Mayhew	Earl Fruit Co. platform..... Side
122.3	Cothrin	Rock Cut..... Side
126.5	Latrobe	Rock Cut..... Side
126.5	Latrobe	Rock Cut..... Side
128.6	East of Latrobe	Rock Cut..... Side
148.7	Placerville	Water Tank..... Side
SACRAMENTO-ISLETON		
92-B	Charles	Bridge..... Side
93.0	Charles	Stock Chutes at 93-A..... Side
113.4	Walnut Grove	Snodgrass Slough..... Side
113.4	Walnut Grove	Pacific Fruit Bldg..... Side

SHASTA DIVISION

M.P.	BETWEEN	Structure	Height	Crossing
258.2	Redding	North Street..	Bridge	21' 8"
276.6	Kennet	Pitt	Tunnel No. 2	17' 10"
278.9	Pitt	Morley	Tunnel No. 3	18' 2"
286.4	Elmors	Antler	Bridge No. 3	21' 11"
288.9	Pollock	Antler	Bridge No. 6	21' 2"
295.6	Smithson	Delta	Tunnel No. 7	18' 6 1/2"
301.8	Lamoine	Gibson	Bridge No. 6	21' 9"
302.2	Lamoine	Gibson	Bridge No. 7	21' 5"
305.3	Gibson	Fisher	Bridge No. 8	21' 6"
305.4	Gibson	Fisher	Tunnel No. 9	17' 11"
306.7	Fisher	Sims	Bridge No. 9	21' 6"
307.0	Fisher	Sims	Tunnel No. 10	18' 1"
308.6	Fisher	Sims	Bridge No. 10	21' 6"
308.9	Gibson	Sims	Bridge No. 11	21' 6"
310.3	Sims	Flume	Bridge No. 12	23' 9"
325.0	Shasta Retreat	Shasta Springs	Bridge No. 16	21' 10"
329.4	Cantara	Mott	Tunnel No. 12	18' 10 1/2"
336.7	Mount Shasta	House track	.....	.....
390.9	Thrall	Hornbrook	Bridge	21' 6 1/2"
411.3	Gregory	Siskiyou	Tunnel No. 13	18' 00"
414.6	Siskiyou	Wall Creek	Tunnel No. 14	18' 7"
415.2	Siskiyou	Wall Creek	Tunnel No. 15	18' 4"
419.9	Steinman	Mistletoe	Tunnel No. 16	18' 0"
419.9	Steinman	Water tank	.....	.....
407.8	Dorris	Calor	Tunnel No. 1	21' 2"
410.0	Dorris	Calor	Tunnel No. 2	21' 2"
427.1	Texum	Klamath Falls	Highway Bridge	21' 9"
456.0	Lober	Chiloquin	Bridge	23' 7"
438.9	Algom	Planer Shed	Overhead	.....
512.3	Lakeview	Underwood Lumber Co. Spur	Starbird Lumber Co. Spur	.....

Tracks adjacent to P. F. E. icing platforms at Roseville, Klamath Falls, Ashland and Consumers Ice and Cold Storage Company, Sacramento, have side clearance of less than 7 ft. 8 in.

Employees are warned that it is dangerous to stand erect on top of cars or to ride on side of cars while passing these points and that they must protect themselves from injury.

ALARM BOX LOCATIONS KNAPP TO ANDOVER

Box No.	LOCATION	M. P.
4	Signal 1734, 1/2 mile east of M.P. 173	173 1/2
5	On top east end of Shed No. 10	179
6	900 feet east of Signal 1794	179 1/2
15	300 feet east of east portal Tunnel No. 1	.....
16	Signal 1707, 500 feet east of west switch Emigrant Gap	.....
17	150 feet east of crossover Emigrant Gap	.....
18	Between Smart and Emigrant Gap	173
19	Between Smart and Yuba Pass	174
21	Between Smart and Yuba Pass	175
22	Signal 1761, highway overhead bridge Yuba Pass	.....
23	300 feet east of M.P. 177	177
24	West end of center siding Crystal Lake	178
25	West end Butte Canyon bridge	179
26	200 feet west of crossover Cisco	180
27	East portal Tunnel No. 39	181
28	Between Tamarack and Cisco	183
29	1/4 mile west of west switch Troy on No. 1 track	.....
31	200 feet east of east switch Troy on No. 2 track	186
32	East end lower Cascade Bridge	187
33	1/4 mile east of upper Cascade Bridge	188
34	Switch of cook car spur track No. 1 Norden	.....
35	1000 feet west of west portal Tunnel No. 6	193
36	200 feet east Tunnel No. 6	194
37	Between Tunnels No. 8 and No. 9	195
38	100 feet east of east portal Tunnel No. 10	.....
39	West switch Donner	.....
41	1000 feet east of section house Eder	197
42	500 feet east M.P. 198, west end shed No. 46	198
43	1/2 mile east M.P. 198, west end shed No. 47	198 1/2
44	Signal 1994, 1/2 mile east M.P. 199	199 1/2
45	300 feet west of west portal Tunnel No. 13	200
46	Opposite section house Andover	.....
47	At Andover station	.....
48	In turntable house Norden	201
49	East switch of run-around, track No. 2 Norden	.....
51	East switch of siding No. 2 track Norden	.....
52	West portal Tunnel No. 41	.....
54	East portal Tunnel No. 41	.....

Code signals following box numbers are as follows:
 One—East. Two—West. Three—Broken rail. Four—Track men.
 Five—Slide. Six—Fire.

SPECIAL AUTOMATIC ALARM BOXES

- 8 Slide, east end Crystal Lake shed No. 2 track.
- 12 Fire, shed Andover crossover.
- 14 Fire, shed west end Tunnels No. 13 and No. 42, Andover.

LIST OF SURGEONS

LOCATION	NAME	TITLE
San Francisco	Dr. O. A. Walker	Chief Surgeon and Manager.
Sacramento	Dr. A. M. Henderson	Division Examiner and Surgeon.
Sacramento	Dr. W. W. Cress	Division Surgeon.
Sacramento	Dr. W. N. Becker	District Surgeon.
Sacramento	Dr. Arthur F. Wallace	Assistant District Surgeon.
Sacramento	Dr. J. Roy Jones	Aurist.
Sacramento	Dr. E. C. Turner	Oculist.
Roseville	Dr. L. E. Jones	District Examiner and Surgeon.
Roseville	Dr. J. F. McAnally	Associate District Surgeon.
Loomis	Dr. P. D. Barnes	District Surgeon.
Newcastle	Dr. L. B. Barnes	District Surgeon.
Auburn	Dr. J. A. Russell	District Surgeon.
Colfax	Dr. F. Lynn Smith	District Surgeon.
Truckee	Dr. J. H. Bernard	District Examiner and Surgeon.
Reno	Dr. W. H. Hood	Consulting Surgeon.
Reno	Dr. Horace J. Brown	Division Examiner and Surgeon. State of Nev.
Reno	Dr. Leo F. Corvino	Associate District Surgeon.
Reno	Dr. C. W. West	District Surgeon.
Reno	Dr. John A. Fuller	Oculist and Aurist.
Reno	Dr. Earle C. Creveling	Emerg. Oculist and Aurist.
Lincoln	Dr. A. W. McArthur	District Surgeon.
Wheatland	Dr. F. W. Didier	District Surgeon.
Marysville	Dr. E. E. Gray	District Examiner and Surgeon.
Marysville	Dr. Samuel A. Morris	Oculist and Aurist.
Live Oak	Dr. I. W. Higgins	District Surgeon.
Gridley	Dr. W. S. Lavy	District Surgeon.
Biggs	Dr. J. Radford Linn	Emergency Surgeon.
Durham	Dr. J. L. Doyle	District Surgeon.
Chico	Dr. N. T. Enloe	District Surgeon.
Chico	Dr. D. H. Moulton	District Surgeon.
Stirling City	Dr. Harry E. Balch	District Surgeon.
Los Molinos	Dr. James L. Faulkner	District Surgeon.
Gerber	Dr. F. J. Bailey	District Examiner and Surgeon.
Davis	Dr. Thomas E. Cooper	Emergency Surgeon.
Davis	Dr. Leo A. Cronan	Emergency Surgeon.
Woodland	Dr. Fred R. Fairchild	District Surgeon.
Arbuckle	Dr. H. S. Powis	District Surgeon.
Williams	Dr. Charles F. Keith	District Surgeon.
Colusa	Dr. Virgel E. Hepp	District Surgeon.
Willows	Dr. Frank M. Lawson	District Surgeon.
Orland	Dr. T. H. Brown	District Surgeon.
Corning	Dr. H. H. Beck	District Surgeon.
Oroville	Dr. E. A. Kusel	District Surgeon.
Fair Oaks	Dr. G. M. Kennedy	Emergency Surgeon.
Folsom	Dr. L. H. Sanborn	Emergency Surgeon.
Placerville	Dr. W. A. Reckers	District Surgeon.
Hamilton	Dr. Mary B. Poket	Emergency Surgeon.
Yuba City	Dr. B. F. Miller	District Examiner and Surgeon.
Walnut Grove	Dr. V. W. Pallesen	District Surgeon.
Isleton	Dr. Godfrey Steinert	District Surgeon.
Lake Tahoe	Dr. C. B. Pedersen	Emergency Surgeon.
Dunsmuir	Dr. E. J. Cornish	District Examiner and Surgeon.
Dunsmuir	Dr. Eugene V. Anderson	District Examiner and Surgeon.
Dunsmuir	Dr. R. J. Merret	Associate District Examiner and Surgeon.
Mt. Shasta	Dr. Jas. B. McGuire	District Surgeon.
Weed	Dr. H. L. Vidricksen	District Examiner and Surgeon.
Montague	Dr. Chas. Plus	District Examiner and Surgeon.
Hilt	Dr. Roy F. Schlappi	District Surgeon.
Ashland	Dr. E. A. Woods	Oculist and Aurist.
Ashland	Dr. Harvey A. Woods	District Examiner and Surgeon.
Red Bluff	Dr. F. L. Doane	District Examiner and Surgeon.
Red Bluff	Dr. R. G. Frey	Assistant District Surgeon.
Anderson	Dr. G. E. Flora	District Surgeon.
Redding	Dr. C. D. Sewall	District Examiner and Surgeon.
Redding	Dr. T. D. Wyatt	Assistant District Surgeon.
Dorris	Dr. A. B. Gray	District Surgeon.
Klamath Falls	Dr. E. D. Johnson	Division Examiner and Surgeon.
Klamath Falls	Dr. Chas. V. Rugh	District Surgeon.
Klamath Falls	Dr. Ralph W. Stearns	Oculist and Aurist.
Klamath Falls	Dr. E. D. Lamb	Associate District Surgeon.
Tule Lake	Dr. J. Randolph Barr	District Surgeon.
Chiloquin	Dr. Marvin Nerseeth	District Surgeon.
Alturas	Dr. John Stille	District Examiner and Surgeon.
Lakeview	Dr. C. E. Leithead	District Examiner and Surgeon.
Yreka	Dr. R. W. Jones	Assistant District Surgeon.

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

RATING OF ENGINES—SACRAMENTO AND SHASTA DIVISIONS—In M's of 1000 lbs. back of Tender

NOMINAL CLASS	OFFICIAL CLASS	ENGINE NUMBERS	Boiler Pressure	Sacramento and Gerber Via Roseville	Roseville to Colfax Via Eastward Track	Colfax to Sparks Roseville to Colfax via Westward Track	Sparks to Truckee	Truckee to Summit	Davis and Gerber Davis and Marysville	Placerville to Folsom	Folsom to Placerville	Folsom to Sacramento	Sacramento to Folsom	Chico to Stirling City	Stirling City to Chico
M-4	M-63	20/28 126	1615 to 1713	190	4300	1050	690	1650	800	3400	1250	780	3750	2300	
M-4	M-63	20/28 128 S													
M-4	M-63	20/28 135 S													
M-6	M-63	21/28 150 S													
M-6	M-63	21/28 153 S	1725 to 1769, 1780 to 1803.	200	5250	1300	870	2000	1000	4150	1550	990	4600	2850	530
M-9	M-63	21/28 150 S													
M-9	M-63	21/28 156 S													
T-1	T-63	20/28 112													
T-26	T-69	21/28 152 S	1806 to 1822	210	5550	1400	930	2150	1050	4400	1650	1050	4850	3000	570
T-23	T-63	21/28 156 S-163 SF													
T-23, 31	T-63	22/28 162 S													
T-32	T-69	23/28 174 S													
C-9, 10	C-57	22/30 200 SF	2372 to 2384	210	6150	1450	970	2300	1100	5050	1800	1150	5400	3450	
C-9, 10	C-57	22/30 194 S													
C-8	C-57	22/30 192 S													
TW-8	TW-54	21/32 161 S													
A-3	A-81	20/28 112 S-116 SF	2698 to 2749, 2751	190	5650	1450	970	2200	1250	4450	1650	1100	4900	3000	
A-3	A-81	20/28 120/B-64 SF													
Mk2-4	Mk57	23 1/30 206 S													
Mk2-4	Mk57	23 1/30 222SF-230SF													
Mk5, 6	Mk63	26/28 210 S-231 SF	3025 to 3071	210	3800					2950					
Mk7, 8, 9	Mk63	26/28 210 S-231 SF													
Mk7, 8, 9	Mk63	26/28 210 S-231 SF													
F-4, 5	F-63	29 1/32 306/B-61 SF													
F-5	F-63	29 1/32 306/B-62 SF	3200 to 3240	210	7650	1900	1250	2950	1600	5950	2200	1400	6650	4050	
AM-2	AM-63	28 2/3 357-SF													
AC-1, 2, 3	AC-57	22 2/3 441 SF													
AC-6	AC-63	24 2/3 517 SF													
AC-7	AC-63	24 2/3 515 SF	3241 to 3277	210	8400	2100	1400	3250	1850	6600	2500	1600	7400	4550	
AC-8	AC-63	24 2/3 532-SF													
Mt-1, 3, 4, 5	Mt-73	28/30 246/B-60 SF													
P-1, 3, 5	P-77	22/28 141 S													
P-1	P-77	22/28 152 SF	3668 to 3763, 3769	200	11000	2750	1850	4300	2400	8600					
P-1	P-77	22/28 160/B-54 S													
P-1	P-77	22/28 163/B-54 SF													
P-4	P-77	23/28 155/B-58 SF													
P-8, 10	P-73	25/30 181 SF	3764 to 3768	210	12150	3150	2100	4800	2700	9550					
P-8, 10	P-73	25/30 183/B-63 SF													
P-12	P-73	26/28 189 SF													
GS-1	GS-73	27/30 262/B-104 SF													
GS-2	GS-73	27/30 266/B-104 SF	3900 to 3911	210	13300	3400	2150	5200	2750	10400					
			4000 to 4048	250	18500	4900	2900	7300	3700	14500					
			4126 to 4150	210	8950	2150	1400	3400	1850	6950					
			4151 to 4176	210	5350	1250	780	2000	1050	4150	1500	900	4750	2800	
			4177 to 4204	200	6750	1550	990	2550	1350	5250					
			4300 to 4376	205	7000										
			2400 to 2452, 2459, 2460	250	9550	2250	1450	3600	1950	7450					
			2400 to 2427	250	9550	2250	1450	3600	1950	7450					
			2461 to 2474, 2478 to 2483	200	6750	1550	990	2550	1350	5250					
			2475, 2484 to 2491	205	7000										
			3120 to 3129	250	9550	2250	1450	3600	1950	7450					
			4400 to 4409	250	9550	2250	1450	3600	1950	7450					
			4410 to 4415	250	9550	2250	1450	3600	1950	7450					
			Less than 40 M's	6	6	3	6	3	6	3	3	6	6	6	6
			40 M's to 50 M's	3	3	0	3	0	3	0	0	3	3	3	3
			More than 50 M's	0	0	0	0	0	0	0	0	0	0	0	0

Note: Rating of eastward trains with two or more engines, classes AC-4, 5, 6, 7 and 8 will be single rating shown in column 3, Colfax to Sparks, multiplied by number of engines used, for the entire district, Roseville to Sparks.

These ratings include the total weight of train, exclusive of engine and tender, which the different class of engines will haul in each direction between the stations shown.

- HOSPITALS
 GENERAL.....SAN FRANCISCO
 EMERGENCY.....SACRAMENTO
 ".....ROSEVILLE
 ".....GERBER
 ".....SPARKS

RATING OF ENGINES—Sacramento and Shasta Divisions
In Ms of 1000 lbs. Back of Tender

Nominal Class	OFFICIAL CLASS	ENGINE NUMBERS	Boiler Pressure	Ashland and Hornbrook	Dunsmuir and Edgewood to Black Butte	Snowdon to Edgewood to Hornbrook	Hornbrook to Snowdon	Gerber to Dunsmuir	Dunsmuir to Gerber	Black Butte to Grass Lake	Mt. Hebron to Dunsmuir	Grass Lake to Klamath Falls to Crescent Lake to Mt. Hebron	Klamath Falls to Crescent Lake	Perez to Canby	Canby to Perez	Klamath Falls and Perez Canby and Alturas
T-28, 31	T-63 22/28 162-S	2311 to 2362.....	210	700	1100	2100	1500	1950	3750	1750	2600	5250	3050	2450	1050	3550
C-9, 10 C-5, 8	C-57 22/30 194-S, 200-SF C-57 22/30 185-S, 192-S	2513 to 2599..... 2624 to 2860.....	210	800	1250	2400	1650	2150	4200	1950	2950	5850	3400	2750	1200	3950
TW-8 P-12 Mk-2, 4 Mk-5, 6 Mk-10	TW-54 21/32 161-S P-73 26/28 189-SF MK-57 23 1/2/30 206-S, 230-SF MK-63 26/28 210-S, 233-SF MK-51 24 1/2/28 206-S	2914 to 2921, 2923..... 3120 to 3129..... 3200 to 3240..... 3241 to 3277..... 3295 to 3296.....	190 205 210 210 180	640 930 970 830	1050 1150 1450 1550 1300	2000 2800 2950 2500	1400 1950 2050 1700	1850 2200 2500 2750 2350	3500 4300 4900 5300 4450	1650 1950 2200 2100	2500 2900 3300 3100	5000 6000 6700 7000 6200	2900 3400 3850 3600	2300 3100 2950	1000 1350 1250	3400 4550 4200
F-3 F-4, 5 F-5	F-63 29 1/2/32 297-S300-SF F-63 29 1/2/32 306/B-61-SF F-63 29 1/2/32 306/B-62-SF	3653 to 3667..... 3668 to 3789.....	200	1250	2000	3950	2600	3650	6950	3200	4900	9650	5650	4850	2150	6650
AM-2	AM-63 22 1/2/28 357-SF	3900 to 3911.....	210	1500	2300	4350	3050	4050	7650	3650	5400	10600	6200	.....	.....	.....
AC-1, 2, 3	AC-57 22 1/2/30 441-SF	4000 to 4048.....	210	1600	2500	4750	3350	4450	8350	4000	5900	11700	6800	5550	2500	8000
AC-6 AC-7 AC-8	AC-63 24 1/2/24 517-SF AC-63 24 1/2/24 515-SF AC-63 24 1/2/24 532-SF	4126 to 4204.....	250	2250	3500	6600	4650	6200	11600	5550	8200	16200	9450	.....	.....	.....
Mt-1,3,4,5	Mt-73 28/30 246/B-60-SF	4300 to 4376.....	210	1000	1650	3350	2300	2850	6200	2500	3850	7750	4500	.....	.....	.....
GS-1 GS-2	GS-73 27/30 262/B-104-SF GS-73 27/30 266/B-104-SF	4400 to 4409..... 4410 to 4415.....	250 250	..... .....	1750 1750	3550 3550	..... .....	3000 3000	6450 6450	2700 2700	4050 4050	8400 8400	4800.....	..........	..........	..........
Allowance for Empty and Underloaded Cars			Less than 40 M's..... 40 M's to 50 M's..... More than 50 M's.....	3 0 0	3 0 0	3 0 0	3 0 0	3 0 0	6 3 0	3 0 0	3 0 0	6 3 0	6 3 0	6 3 0	3 0 0	6 3 0

AVERAGE TARE WEIGHTS OF PASSENGER TRAIN CARS

CLASS	NOT AIR-CONDITIONED		AIR-CONDITIONED	
	All-Steel	Steel Underframe	All-Steel Cooling Season	All-Steel Heating Season
Baggage—60 ft.....	93,070	.....	.....	.....
"—66 ft.....	127,610	.....	.....	.....
"—70 ft.....	122,620	.....	.....	.....
"—70 ft. (With Auto. End Door).....	125,800	.....	.....	.....
"—(Dynamo).....	98,730	.....	.....	.....
Baggage & Mail—60 ft.....	103,620	87,120	.....	.....
"—69 ft.....	124,760	.....	.....	.....
"—70 ft.....	129,140	.....	.....	.....
"—Passenger.....	108,675	103,590	.....	.....
Express Refr.—N. P. Ry.....	74,000	112,640	.....	.....
"—A. R. E. No. 40-154.....	78,000	74,000	.....	.....
"—" " " 155-224.....	89,000	74,000	.....	.....
"—" " " 500-506.....	110,000	74,000	.....	.....
"—" " " 1101-1175.....	85,000	74,000	.....	.....
"—P. F. E. " 500-799.....	83,000	74,000	.....	.....
Express, Horse.....	133,050	.....	.....	.....
Postal.....	112,120	.....	.....	.....
Postal Storage—40 ft.....	74,530	.....	.....	.....
"—60 ft.....	105,120	.....	.....	.....
Assembly (ACW).....	.....	.....	168,950	168,950
Club (ACI).....	146,210	122,300	172,200	164,700
Official... (NAC).....	170,700	155,370	.....	.....
" (ACW)—Cars 107-128.....	.....	.....	182,800	182,800
" (ACW)—Cars 140-141.....	.....	.....	195,040	195,040
Chair—60 ft..... (ACI).....	100,620	.....	138,000	132,000
"—72 ft..... (ACI).....	.....	.....	165,000	157,800
"—72 ft..... (ACW).....	.....	.....	158,700	158,700
"—Streamline—Single (ACS).....	.....	.....	120,900	104,500
"—Art..... (ACS).....	.....	.....	205,400	172,600
"—74 ft..... (ACI).....	.....	.....	180,915	173,125
"—74 ft..... (ACS).....	.....	.....	197,944	181,600
Coaches—60 ft..... (ACI).....	98,130	.....	136,100	130,100
"—70 ft..... (ACI).....	137,640	.....	157,800	151,000
"—70 ft..... (ACW).....	137,640	.....	151,000	151,000
"—72 ft..... (ACI).....	.....	.....	164,500	157,400
"—72 ft..... (ACW).....	.....	.....	153,500	153,500
"—73 ft. 6 in..... (ACW).....	.....	.....	163,000	163,000
"—73 ft. 6 in..... (ACI).....	.....	.....	168,500	161,200
"—72 ft. (Interurban).....	120,000	.....	.....	.....
All-Day Lunch—Chair.....	105,970	.....	.....	.....
"—Coach.....	103,875	.....	.....	.....
Cafe-Coach..... (ACI).....	.....	138,600	155,700	149,000*
Cafe-Lounge..... (ACI).....	148,950	161,200	173,500	166,000
"..... (ACW).....	.....	.....	158,000	156,000
Diner—70 ft.....	.....	135,930	.....	.....
"—72 ft.....	155,330	146,930	.....	.....
"—77 ft. (Arch Roof)..... (ACI).....	156,000	.....	170,100	162,700
"—77 ft. (" ")..... (ACW).....	.....	.....	162,950	162,950
"—77 ft. (Clere Story Roof)..... (ACW).....	.....	165,530	169,450	169,450
"—77 ft. (" ")..... (ACM).....	.....	.....	189,581	173,836
"—79 ft..... (NAC).....	169,100	.....	.....	.....
"—80 ft. (Clere Story Roof)..... (ACM).....	.....	.....	201,323	184,700
Lounge..... (ACI).....	.....	.....	189,800	181,630
" (Arch Roof)..... (ACI).....	.....	.....	167,500	160,300
"..... (ACW).....	.....	.....	164,980	157,780
Observation—75 ft..... (ACI).....	154,400	.....	169,185	161,900
"—77 ft..... (ACI).....	.....	.....	194,543	186,166
Pullman—Observation..... (ACI).....	.....	141,870	.....	.....
"..... (ACM).....	160,800	153,000	177,314	169,200
"..... (ACM).....	160,800	153,000	192,300	176,300
"..... Lounge..... (ACM).....	171,200	.....	194,900	178,900
"..... (ACI).....	171,200	.....	187,682	179,600
"—Bedroom..... (ACI).....	167,600	.....	183,920	176,000
"..... (ACM).....	167,600	.....	195,800	179,800
"—Sleeper..... (ACM).....	163,100	.....	191,100	175,100
"..... (ACI).....	163,100	.....	180,075	171,500
"—Tourist..... (ACM).....	153,000	.....	185,200	169,200
"..... (ACI).....	153,000	.....	168,663	161,400
Streamliner "City of San Francisco"— (18 cars incl. Power Units).....	.....	.....	2,807,000	2,807,000
Power Units SF-1, 2, 3.....	.....	.....	882,260	882,260
Power Units SF-4, 5, 6..... (Note: If train is less than 18 cars, deduct 130,500 lb. per car.)	.....	.....	994,460	994,460
Rail, Gas-Electric—400 H.P.....	158,400	.....	.....	.....
"—600 H.P.....	167,200	.....	.....	.....

*Steel underframe.

CODE:—NAC—Non-Air Conditioned.
—ACI—Air-Conditioned—Ice System.
—ACM—Air-Conditioned—Mechanical System.
—ACW—Air-Conditioned—Waukesha System.
—ACS—Air-Conditioned—Steam Ejector System.

SACRAMENTO DIVISION

R. E. HALLAWELL, Assistant Superintendent, Sacramento, Cal.

TRAINMASTERS

H. E. MILLER..... SACRAMENTO, CAL.
F. PURDY..... ROSEVILLE, CAL.
W. S. HOOSON..... TRUCKEE, CAL.

CHIEF TRAIN DISPATCHERS

O. T. STACKPOOLE... Chief Train Dispatcher..... SACRAMENTO, CAL.
D. A. NEELLEY... Assistant Chief Train Dispatcher..... SACRAMENTO, CAL.
C. N. JONES... Assistant Chief Train Dispatcher..... SACRAMENTO, CAL.

ROAD FOREMAN OF ENGINES

A. CARR..... ROSEVILLE, CAL.

SHASTA DIVISION

T. F. CUSTER, Assistant Superintendent, Dunsmuir, Cal.

TRAINMASTERS

H. A. SPRAGUE..... KLAMATH FALLS, ORE.
J. A. MCKINNON..... ALTURAS, CAL.
J. B. STARBUCK..... DUNSMUIR, CAL.
R. R. BADGLEY..... DUNSMUIR, CAL.

CHIEF TRAIN DISPATCHERS

A. J. LEBOURVEAU... Chief Train Dispatcher..... DUNSMUIR, CAL.
P. B. BELL... Assistant Chief Train Dispatcher..... DUNSMUIR, CAL.
W. T. MANLEY... Assistant Chief Train Dispatcher..... DUNSMUIR, CAL.

ROAD FOREMAN OF ENGINES

J. E. PETERSON..... DUNSMUIR, CAL.

MILEAGE

SACRAMENTO DIVISION

Main Lines

	First Track	Second Track
End Western Division to Sacramento..... S. P. R. R.....	862	862
Sacramento to Lawton..... C. P. Ry.....	147,754	149,289
At Elvas (West Wye)..... C. P. Ry.....	308	314
Polk to Elvas..... C. P. Ry.....	4,629	2,997
Davis to Tehama..... S. P. R. R.....	109,707	.....
Roseville to Gerber..... C. P. Ry.....	105,916	.....
TOTAL MAIN LINE.....	369,176	153,462

Branches

Colusa..... S. P. R. R. Harrington to Wyo.....	71,655	.....
Dantoni..... C. P. Ry. Dantoni Jct. to Dantoni.....	4,464	.....
Fair Oaks..... S. P. R. R. Citrus to Fair Oaks.....	2,113	.....
Folsom..... S. P. R. R. Folsom Jct. to Folsom.....	995	.....
Fruto..... S. P. R. R. Willows to Fruto.....	17,204	.....
Knights Landing..... S. P. R. R. Woodland to west of Cunard.....	9,713	.....
Lake Tahoe..... S. P. Co. West of Cunard to Grace.....	1,198	.....
Oroville..... S. P. R. R. Grace to Binney Jct.....	26,225	.....
Placerville..... S. P. Co. Truckee to Lake Tahoe.....	14,735	.....
"R" St..... S. P. R. R. Binney Jct. to Oroville.....	25,267	.....
River Farms..... C. P. Ry. Brighton to beginning S. P. R. R. track.....	670	.....
Sterling City..... S. P. R. R. Beginning S. P. R. R. track to Placerville.....	54,920	.....
Sutter Basin..... S. P. Co. At Brighton (Link track).....	323	.....
Walnut Grove..... S. P. R. R. Brighton to "Q" St., Sacramento.....	4,941	.....
..... S. P. Co. Knights Landing Jct. to Boyer.....	14,212	.....
..... C. P. Ry. Chico to Sterling City.....	31,216	.....
..... S. P. Co. Grace to Josephine.....	20,957	.....
..... C. P. Ry. Marchant to Karnak.....	2,749	.....
..... S. P. R. R. Sacramento to Front and "K" St.....	292	.....
..... C. P. Ry. "K" St. to "N" St.....	245	.....
..... C. P. Ry. "N" St. to Isleton.....	32,937	.....
TOTAL BRANCH LINE.....	336,431	.....
TOTAL SACRAMENTO DIVISION.....	859,069	.....

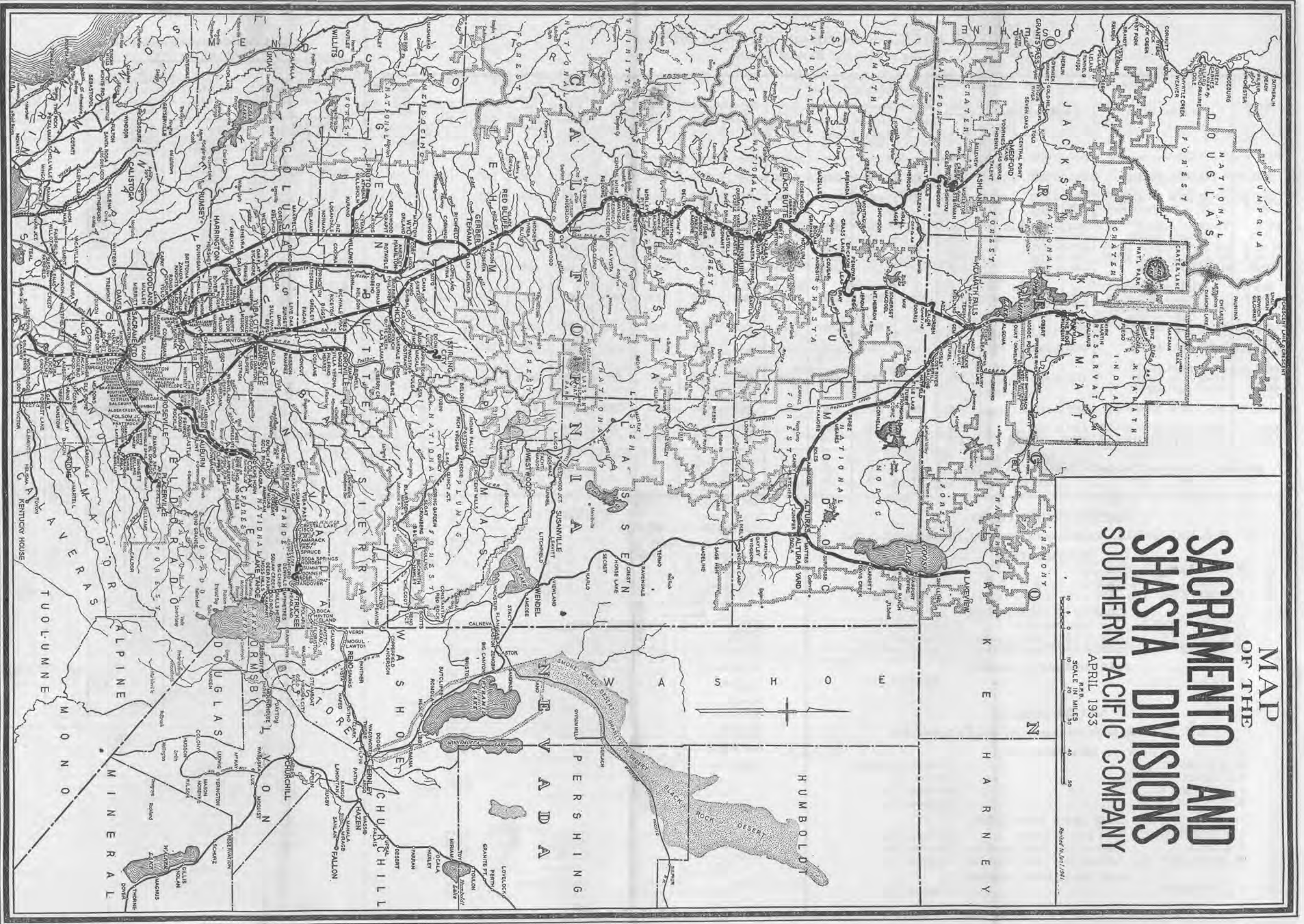
SHASTA DIVISION

Main Line

Gerber to California-Oregon State Line..... C. P. Ry.....	191,572
California-Oregon State Line to Ashland..... S. P. Co.....	27,598
Black Butte to Crescent Lake..... C. P. Ry.....	181,773
Paola to Klamath Falls..... C. P. Ry.....	97,654
TOTAL MAIN LINE.....	498,597

Branches

Lakeview..... N. C. O. Ry..... Alturas to Lakeview.....	56,163
TOTAL SHASTA DIVISION.....	554,760



**MAP
OF THE
SACRAMENTO AND
SHASTA DIVISIONS
SOUTHERN PACIFIC COMPANY**

APRIL 1933

SCALE IN MILES
0 10 20 30 40 50

Revised to April 1931