

SOUTHERN PACIFIC COMPANY

(PACIFIC LINES)

TIME TABLE

FOR THE

SACRAMENTO DIVISION

150

To Take Effect Sunday, October 1, 1933, at 12:01 A. M.

PACIFIC STANDARD TIME (120th MERIDIAN)

For the government and information of employees only.

A. T. MERCIER,
General Manager.

W. B. KIRKLAND,
Superintendent of Transportation.

L. U. MORRIS,
Assistant General Manager.

W. L. HACK,
Superintendent.

J. W. FITZGERALD,
District Superintendent.



EASTWARD

SACRAMENTO SUB-DIVISION

Time Table No. 150

October 1, 1933

Capacity of Sidings in Car Lengths	THIRD CLASS					FIRST CLASS				Distance from San Francisco
	490	488	486	484	482	28	224	318	10	
	Freight	Freight	Freight	Local Freight	Freight	San Francisco Overland Limited	Sierra	Passenger	Pacific Limited	
Term. Yard BKTWOPY	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sunday	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	
Yard P	9.00 PM	4.00 PM	12.30 PM	4.00 AM	3.00 AM	10.50 PM	11.05 AM		1.05 AM	106.6
65				4.15 AM			f 11.14 AM			110.6
84 WP	9.40	4.40	1.10	5.50 AM	3.40	11.06	See Page 3		1.21	115.5
78 WP				6.15		11.15	s 11.45 AM		s 1.33	120.2
68 P				6.30		f 11.23	s 11.57 AM		s 1.47	124.2
P						11.32	f 12.06 PM		1.57	129.1
78 W				7.00			f 12.12			131.4
75 P				7.15		11.41	f 12.19		2.06	134.3
Yard YPWBK	10.30	5.50	2.00	8.30	4.30	11.47 PM	f 12.27		2.12	137.7
60 P						12.01 AM	s 12.40		s 2.30	141.7
125 PWOY	11.15 PM	6.45	2.45	9.15	5.15	12.13	12.52		2.45	146.0
6 P Spur						12.28	f 1.07		s 3.00	152.2
4 P Spur							s			154.1
5 Spur PW				9.45 AM			s			156.0
75 P						12.43	s 1.26		3.18	156.8
78 WP	1.10 AM	9.00	5.00		7.30				3.35	160.7
Yard PTW						1.10	1.54		3.50	164.8
86 IPTW							f			165.5
82 PW	2.20	9.40	5.50		8.20	1.27	s 2.12		s 4.10	171.8
PWT						1.42	f 2.28		4.27	177.9
67 PW							s 2.34		s 4.35	180.3
P						1.59	2.47		4.48	185.5
130 PTWBI	3.00	11.00 PM	7.00		9.30		s		f	190.4
PT						2.14	s 3.01		s 5.05	192.0
72 PW										196.3
Yard PWTYOBK	4.30	12.20 AM	8.15		10.50 AM					197.7
P						2.34	3.21		5.27	200.6
99 P						s 2.45	s 3.35		s 5.45	202.9
68 PW						3.02	f 3.51		6.05	208.0
No Siding WP						3.06	3.55		6.10	216.3
131 P	6.15	1.30	10.00		12.10 PM	3.14	f 4.02		6.20	218.1
Yard P										222.4
Yard						3.32	f 4.18		6.42	228.5
Term. Yard OWTBK	7.15 AM	2.35 AM	10.45 PM		1.05 PM	s 3.55	s 4.35	7.30 AM	s 7.05	232.4
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily		4.50		7.25	242.9
	(10.15)	(10.35)	(10.15)	(5.45)	(10.05)		s 4.59	f	s	245.5
	13.38	12.95	13.38	8.73	13.60					246.2
						s 4.10 AM	s 5.02 PM	s 7.42 AM	s 7.40 AM	
						Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	
						(5.20)	(5.57)	(0.12)	(6.30)	
						25.70	23.04	16.50	21.09	

STATIONS

TO-R ROSEVILLE	4.0
ROCKLIN	4.9
LINCOLN AV., PENRYN	4.7
TO NEWCASTLE	4.0
AUBURN, NEVADA ST	4.9
BOWMAN	2.3
CLIPPER GAP	2.9
EAST APPELLEGATE	3.4
N. E. MILLS	4.0
TO COLFAX	4.3
CAPE HORN	6.2
TO GOLD RUN	1.9
DUTCH FLAT	1.9
ALTA	0.8
TO TOWLE	2.8
AMERICAN	1.1
MIDAS	4.1
KNAPP	0.7
BLUE CANON	5.2
TO EMIGRANT GAP	6.1
CRYSTAL LAKE	2.4
CISCO	5.2
TROY	4.9
SODA SPRINGS	1.6
TO NORDEN	4.3
EDER	2.9
ANDOVER	2.3
STANFORD	5.1
TO-R TRUCKEE	8.3
BOCA	1.8
HINTON	4.3
FLORISTON	6.1
CALVADA	3.9
VERDI	10.5
RENO	2.6
SPARKS (PASS. STA.)	0.7
(TO-R SPARKS (DSP.OFF.))	

Eastward inferior trains may run ahead of No. 318 Reno to Sparks.



No. 2 Track

A. B. S.

A. T. C.

A. B. S.

(137.1)
Time over District
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)
28 10 28	Any Station Any Station Colfax	Receive Receive Receive or discharge	Cheyenne Ogden To or from any point train is scheduled to stop	

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS				
Train	At	Receive or Discharge	Passengers to (or beyond)	Passengers from (or beyond)
224	Lander Magra, Forebay Smart Yuba Pass Spruce Union Mills Farad Fleish Lawton			

Eastward trains using siding at Clipper Gap must back through crossover near east end.

Additional Stations:		
Lander, 139.0	Spruce, 187.8	Wickes, 221.5
Magra, 148.5	Polaris, 211.1	Farad, 224.7
Forebay, 163.0	Union Mills, 213.5	Mystic, 225.5
Smart, 173.3	Prosser Creek, 215.0	Fleish, 229.8
Yuba Pass, 176.1	Iceland, 220.9	Mogul, 235.8
Tamarack, 183.7		Lawton, 237.1

Capacity of Sidings in Car Lengths	THIRD CLASS					SECOND CLASS	FIRST CLASS				Distance from San Francisco	
		498	502	496	512	514	510	8	18	16		292
		Local Freight	Local Freight	Freight	Mixed	Local Freight	Mixed	Shasta	Cascade	West Coast		Valley Express
Term. Yard		Leave Tues., Thurs., Sat.	Leave Daily Ex. Sunday	Leave Daily	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Tues. and Sat.	Leave Daily	Leave Daily	Leave Daily	Leave Daily	
IWYP					4.00 AM	3.45 AM		10.05 PM	8.55 PM			75.6
100 P								10.11	9.01			80.7
17												83.2
BKIPW Yard 107					4.20 AM	4.15		s 10.19	9.10			84.9
25 P						5.00		10.25	9.16			89.9
29 P								10.32	9.23			95.8
17 P												98.0
36 WP						6.33		10.41	9.31			103.2
40 P												106.4
118 119 YP								10.47	9.37			108.3
44 P						7.00		s 10.55	9.43			113.5
30 PW								11.01	9.48			117.6
11												118.5
50 P						8.05		s 11.10	9.55			124.2
45 P						8.55		11.17	10.00			129.1
59 WP								s 11.22	10.04			132.7
39 P						9.20		11.29	10.09			138.0
34								11.34	10.15			141.8
31 P												144.0
64 BKWOYP			11.30 AM			10.00 AM		s 11.50	10.27			149.6
10												152.9
44 P			11.55 AM					11.59 PM	10.35			156.5
50								12.03 AM	10.39			160.4
33 P												161.7
41 KPW			12.30 PM				7.30 AM	s 12.12	10.45			165.1
39 PY							7.35 AM					166.7
11												168.7
26 P								12.22	10.54			173.1
47 P						2.27		s 12.33	11.01			178.2
44 P								12.38	11.06			181.3
120 YP		4.00 PM	3.30	11.45 AM				12.45	11.14	1.38 PM	5.26 AM	186.0
Term. Yard BKWOYP		4.10 PM	3.40 PM	11.55 AM				s 12.53 AM	s 11.22 PM	s 1.45 PM	s 5.35 AM	188.1
		Arrive Tues., Thurs., Sat.	Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Tues. and Sat.	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	
		(0.10) 12.60	(4.10) 9.24	(0.10) 12.60	(0.20) 27.90	(6.15) 11.84	(0.05) 19.20	(2.48) 40.18	(2.27) 45.92	(0.07) 18.00	(0.09) 14.00	

Time Table No. 150
October 1, 1933

STATIONS

TO-R	DAVIS	5.1
	MERRITT	2.5
	MULLEN	1.7
TO-R	WOODLAND	5.0
	S. N. R. R. Crossing	
TO	YOLO	5.9
TO	ZAMORA	2.2
	BRETONA	5.2
TO	DUNNIGAN	3.2
	HERSHEY	1.9
	HARRINGTON	5.2
TO	ARBUCKLE	4.1
	GENEVRA	0.9
	MACY	5.7
TO	WILLIAMS	4.9
	CORTENA	3.6
TO	MAXWELL	5.3
	DELANAN	3.8
	NORMAN	2.2
	LOGANDALE	5.6
TO-R	WILLOWS	3.3
	LYMAN	3.6
	ARTOIS	3.9
	GRAPIT	1.3
	GREENWOOD	3.4
TO-R	ORLAND	1.6
	WYO	2.0
	MALTON	4.4
	KIRKWOOD	5.1
TO	CORNING	3.1
	RICHFIELD	4.7
R	TEHAMA	2.1
TO-R	GERBER	

(112.5)
Time over District.....
Average Speed per Hour.....

Schedule time and train orders will apply at the Junction Switch at Tehama.
At Woodland, the Woodland-Oroville main track originates at east switch of siding, located 150 feet east of cattle guard 85-A.
Trains to and from Knights Landing must use Woodland siding.
No. 292 will operate as mixed daily except Monday and passenger only on Monday.

West end of Harrington siding west of crossover is the westward siding and east end east of crossover is the eastward siding; Junction switch located at crossover.
Track 2 of the two tracks paralleling the main track at Wyo is the siding.

Additional Stations:
Elvaton, 89.2
Dufour, 92.1
Ronda, 93.7
Delphos, 126.8
Riz, 146.0

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS				
Train	At	Receive or Discharge	Passengers to (or beyond)	Passengers from (or beyond)
18	Any Station	Receive	Black Butte or beyond where scheduled to stop. Black Butte and points on Siskiyou line.	
8	Any Station	Receive		
8	Any Station	Discharge		Davis
18	Woodland Williams Willows Orland Corning	Detrain		Berkeley University Avenue and West

SACRAMENTO SUB-DIVISION

WESTWARD 5

Time Table No. 150

October 1, 1933

STATIONS	Distance from Gerber	FIRST CLASS				SECOND CLASS			THIRD CLASS				
		7	293	17	15	511	497	503	513	515	499	505	
		Shasta	Valley Express	Cascade	West Coast	Mixed	Freight	Local Freight	Mixed	Local Freight	Local Freight	Freight	
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Mon. and Fri.	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Mon. Wed., Fri.	Arrive Daily		
TO-R DAVIS 5.1	112.5	s 7.20AM	s 9.35AM	s 4.50PM									
MERRITT 2.5	107.4	7.08	f 9.25	4.43									
MULLEN 1.7	104.9		f										
TO-R WOODLAND S. N. R. R. Crossing 5.0	103.2	s 7.00	s 9.15	s 4.37									
YOLO 5.9	98.2	6.50	s 9.00	4.27									
ZAMORA 2.2	92.3	6.42	s 8.50	4.19									
BRETONA 5.2	90.1		f										
TO DUNNIGAN 3.2	84.9	6.33	s 8.38	4.10									
HERSHEY 1.9	81.7		f										
HARRINGTON 5.2	79.8	6.27	s 8.30	4.04									
TO ARBUCKLE 4.1	74.6	6.21	s 8.22	3.58									
GENEVRA 0.9	70.5	6.15	f 8.14	3.52									
MACY 5.7	69.6		f										
TO WILLIAMS 4.9	63.9	6.07	s 8.05	s 3.44									
CORTENA 3.6	59.0	6.00	f 7.52	3.37									
TO MAXWELL 5.3	55.4	5.55	s 7.46	3.32									
DELAVAN 3.8	50.1	5.48	f 7.37	3.25									
NORMAN 2.2	46.3		f										
LOGANDALE 5.6	44.1	5.40	f 7.28	3.17									
TO-R WILLOWS 3.3	38.5	s 5.33	s 7.20	s 3.10									
LYMAN 3.6	35.2		f										
ARTOIS 3.9	31.6	5.21	s 7.03	2.59									
GRAPIT 1.3	27.7	5.15	f 6.57	2.53									
GREENWOOD 3.4	26.4		f										
TO-R ORLAND 1.6	23.0	s 5.08	s 6.50	2.46	s 1.35PM								
WYO 2.0	21.4	5.01	f 6.41	2.41	1.25PM								
MALTON 4.4	19.4		f										
KIRKWOOD 5.1	15.0	4.53	f 6.32	2.33									
TO CORNING 3.1	9.9	f 4.47	s 6.25	2.27									
RICHFIELD 4.7	6.8	4.42	s 6.12	2.22									
R TEHAMA 2.1	2.1	4.36	s 6.06	2.16	s 2.21PM								
TO-R GERBER	0.0	4.30AM	6.00AM	2.10PM	2.15PM								
(112.5)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Mon. and Fri.	Leave Daily	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Mon. Wed., Fri.	Leave Daily	
Time over District.....		(2.50)	(3.35)	(2.40)	(0.06)	(0.10)	(0.10)	(2.30)	(0.20)	(5.30)	(0.10)	(0.10)	
Average Speed per Hour.....		39.70	31.40	42.19	18.00	9.60	12.60	15.40	27.90	13.51	12.60	12.60	

Schedule time and train orders will apply at the Junction Switch at Tehama.
 At Woodland, the Woodland-Oroville main track originates at east switch of siding, located 150 feet east of cattle guard 85-A.
 Trains to and from Knights Landing must use Woodland siding.
 No. 293 will operate as mixed daily except Monday and passenger only on Monday.

West end of Harrington siding west of crossover is the westward siding and east end east of crossover is the eastward siding; Junction switch located at crossover.
 Track 2 of the two tracks paralleling the main track at Wyo is the siding.

Additional Stations:
 Elvaton, 89.2
 Dufour, 92.1
 Ronda, 93.7
 Delphos, 126.8
 Riz, 146.0

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS				
Train	At	Receive or Discharge	Passengers to (or beyond)	Passengers from (or beyond)
293	(Dufour Ronda)	Receive or Discharge	(Points train is scheduled to stop.)	
7	Williams	Receive		
7	Any Station	Discharge		Black Butte

Capacity of Sidings in Car Lengths	THIRD CLASS					FIRST CLASS					Distance from San Francisco	Time Table No. 150 October 1, 1933	Distance from Tehama	FIRST CLASS				THIRD CLASS				
	500	498	496	494	28	224	16	292	10	9				27	15	21	501	497	499	495	505	
	Local Freight	Local Freight	Freight	Local Freight	San Francisco Overland Limited	Sierra	West Coast	Valley Express	Pacific Limited	Fast Mail				San Francisco Overland Limited	West Coast	Pacific Limited	Local Freight	Freight	Local Freight	Local Freight	Freight	
Term. Yard BKWOTYPI	5.30 PM				10.10 PM	10.20 AM	10.15 AM	1.05 AM	12.25 AM	88.8	TO-R SACRAMENTO 3.0	122.9	s 4.15 AM	s 5.10 AM	s 6.10 PM	s 7.45 PM	6.20 PM					
Yard IYP	5.40				10.17	10.27	10.22	1.12	12.32	91.8	ELVAS 1.7	119.9	4.06	5.01	6.02	7.37	6.10					
Yard PW										93.5	SWANSTON 1.4	118.2				f						
South 92 Yard P Center 86					10.22	10.34	10.27	1.17	12.37	94.9	BENALI 7.9	116.8	4.01	4.56	5.47	7.31						
60 Yard P					10.33	f 10.46	10.38	1.28	12.48	102.8	ANTELOPE 3.8	108.9	3.50	4.45	5.36	7.20						
Term. Yard BKOPTWY	6.15 7.00		8.00 AM		s 10.42 PM	s 10.57 AM	s 10.48	s 1.40	s 12.57 AM	106.6	TO-R ROSEVILLE 6.2	105.1	3.40 AM	4.35 AM	s 5.25	7.10 PM	5.30	12.35 PM			5.00 PM	
111 P							10.57	1.50		112.8	WHITNEY 4.2	98.9			5.12			12.05 PM				
134 PW	8.45						s 11.04	s 1.58		117.0	TO LINCOLN 4.0	94.7			s 5.05		5.05	11.55 AM			4.25	
38 P										121.0	EWING 1.1	90.7										
106 P	9.00		8.25				11.11	2.05		122.1	BROOK 2.7	89.6			4.57		4.15	11.11			3.40	
32							11.15	f		124.8	SHERIDAN 3.3	86.9			s 4.53							
138 PW	9.30						s 11.20	s 2.15		128.1	TO WHEATLAND 6.1	83.6			s 4.48		3.40				3.20	
101 P							11.28	2.25		134.2	OSTROM 5.6	77.5			4.39		3.15	10.50			3.05	
Yard BKIYOWP	10.30 PM		9.00	7.30 AM			s 11.40	s 2.35 2.55		140.8	TO-R MARYSVILLE 1.0	70.9			s 4.30		3.00 PM	10.30			1.20 PM 2.45	
112 WP							11.46	3.01		141.8	W. P. R. R. Crossing 2.9	69.9							10.10			1.05 2.20
43							11.51	3.06		147.7	BERG 3.0	67.0			4.14							
13										149.8	LOMO 2.1	64.0			4.10							
54 IP				8.00			s 11.57 AM	3.12		151.5	SUNSET 1.7	61.9										
108 P			9.40	8.25			s 12.08 PM	s 3.25		158.0	TO LIVE OAK S. N. R. R. Crossing 6.5	60.2			s 4.05			9.55			12.50 1.50	
49 WP				8.40			s 12.15	s 3.33		161.4	TO GRIDLEY 3.4	53.7			s 3.55			9.40			12.08 PM 1.35	
49 P							s 12.23	s 3.43		167.4	TO BIGGS 6.0	50.3			s 3.47			9.30			11.39 AM 1.25	
97 P				9.10			f 12.29	s 3.49		171.5	RIOHVALE 4.1	44.3			s 3.37							
96 P				9.40			s 12.38	s 4.00		178.1	NELSON 6.6	40.2			f 3.31			9.10				
Yard BKYWOP		2.25 PM	10.30	10.00 AM			s 12.50	s 4.10 4.35		184.2	TO DURHAM 6.1	33.6			s 3.20			8.55			11.20 12.38	
29 P							1.00	4.45		191.3	S. N. R. R. Crossing 7.1	27.5			s 3.10			8.40	10.30 AM		11.00 AM 12.20 PM	
122 P		2.51					1.04	4.50		193.6	TO-R OHIO 7.1	20.4			f 2.55							
16							1.08			196.0	NORD 2.3	18.1			2.51			7.50	10.00		11.59 AM	
130 WP		3.20	11.30				s 1.20	f 5.05		203.0	ANITA 2.4	15.7			2.47							
15										204.6	OGANA 7.0	8.7			s 2.37			7.30	9.40		11.30	
48 P		3.50					s 1.33	f 5.18		209.7	TO VINA 1.6	7.1										
120 PY		4.00 PM	11.45 AM				f 1.38 PM	s 5.26 AM		211.7	COPELAND 5.1	2.0			s 2.25							
	Arrive Daily Ex. Sunday	Arrive Tues. Thurs. & Sat.	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		TO LOS MOLINOS 2.0				2.21 PM			7.05 AM	9.10 AM		11.10 AM	
	(5.00) 5.20	(1.35) 17.37	(3.45) 28.03	(2.30) 17.36	(0.32) 33.38	(0.37) 28.87	(3.23) 36.32	(4.21) 28.44	(0.32) 33.38		R TEHAMA 0.0		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sunday	Leave Daily	Leave Mon. Wed. & Fri.	Leave Daily Ex. Sunday	Leave Daily	
											(122.9)		(0.35) 30.51	(0.35) 30.51	(3.49) 32.64	(0.35) 30.51	(3.20) 15.60	(5.30) 19.11	(1.20) 20.63	(2.20) 18.60	(5.50) 18.02	
											.....Time over District.....										
											.....Average Speed per Hour.....										

No. 292 will operate as mixed daily except Monday and passenger only on Monday. Schedule time and train orders will apply at the Junction Switch at Tehama. Eastward trains, when taking siding at Marysville, will use crossover just west of west water column.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS				
Train	At	Receive or Discharge	Passengers to (or beyond)	Passengers from (or beyond)
224	Walerga	Receive	Klamath Falls	Lincoln
16	Any Station	Discharge		
15	Any Station	Discharge		

Additional Stations:
 Walerga, 99.4
 Clayton, 118.4
 Jester, 126.0
 Rupert Spur, 138.9
 Binney Junction Tower, 141.8
 Sullivan, 146.4
 Fagan, 155.9
 Riceton, 164.1
 Faulkner, 181.9
 Gimbal, 189.1
 Soto, 198.3
 Ensign, 207.1
 Bohemia, 208.0

EASTWARD

REDDING SUBDIVISION

WESTWARD

Capacity of Sidings and Spurs in Car Lengths	SECOND CLASS			FIRST CLASS			Distance from San Francisco via Marysville	Time Table No. 150 October 1, 1933	Distance from Dunsmuir	FIRST CLASS			THIRD CLASS		
	620			18	16	8				7	15	17	637	639	641
	Freight			Cascade	West Coast	Shasta				Shasta	West Coast	Cascade	Freight	Local Freight	Freight
Term. Yd. WOYPBK	12.01 PM			11.32 PM	1.55 PM	1.05 AM	213.8	TO-R GERBER	108.3	s 4.15 AM	s 1.40 PM	s 1.55 PM	6.30 AM	10.25 AM	11.15 PM
					f		215.8	PROBERTA	106.3						
85 P	12.09			11.40	2.03	1.14	218.9	RAWSON	103.2	4.07	1.32	1.47	6.16	10.10	11.03
49-49 P	12.18			11.46	s 2.13	s 1.24	223.4	TO RED BLUFF	98.7	s 4.00	s 1.24	f 1.41	6.09	10.00	10.56
81 P	12.29			11.53	f 2.21	1.31	228.9	BLUNT	98.2	3.51	f 1.14	1.33	5.59	9.40	10.46
80 P	12.39			11.59 PM	f 2.29	1.38	233.6	HOOKE	88.5	3.44	f 1.06	1.27	5.47	9.25	10.31
74 WP	12.53			12.07 AM	s 2.39	s 1.47	240.4	TO COTTONWOOD	81.7	s 3.33	s 12.53	1.19	5.35	9.10	10.18
76 P	1.01			12.12	2.44	1.52	244.2	OULP	77.9	3.28	12.48	1.14	5.29	8.55	10.11
70 P	1.10			12.15	s 2.50	s 1.57	247.1	TO ANDERSON	75.0	s 3.24	s 12.43	1.10	5.24	8.45	10.06
91 P	1.25			12.22	f 2.58	f 2.04	253.5	GIRVAN	68.6	f 3.16	f 12.34	1.03	5.14	8.30	9.55
95 WP I	1.40			12.29	s 3.08	s 2.20	258.2	TO REDDING	63.9	s 3.09	s 12.26	f 12.56	5.07	8.20 AM	9.49
63 P	1.54			12.40	f 3.19	2.31	263.9	KESWICK	58.2	2.54	f 12.12	12.44	4.51		9.33
P					f		267.2	TO MATHESON	54.9		s				
49 P	2.04			12.49	3.29	2.42	268.0	MOTION	54.1	2.42	12.02 PM	12.35	4.37		9.19
81 P	2.12			12.57	f 3.36	2.50	271.0	CORAM	51.1	2.32	f 11.54 AM	12.28	4.27		9.10
85 P	2.24			1.08	f 3.47	3.01	275.7	KENNET	46.4	2.21	s 11.43	12.18	4.12		8.56
57 P	2.31			1.14	f 3.53	3.08	278.3	PITT	43.8	2.15	f 11.36	12.12	4.02		8.48
83 YWPO	2.36			1.19	f 3.58	3.13	280.2	MORLEY	41.9	2.10	f 11.31	12.07 PM	3.56		8.42
45 P	2.45			1.27	f 4.06	3.22	283.8	ELMORE	38.3	2.02	f 11.22	11.59 AM	3.44		8.30
82 P	2.55			1.36	f 4.15	3.30	287.6	POLLOCK	34.5	1.54	f 11.14	11.51	3.30		8.19
75 P	3.04			1.44	4.23	3.38	291.1	SMITHSON	31.0	1.44	11.06	11.43	3.12		8.08
81 WP	3.30			2.01	s 4.39	3.55	296.7	TO DELTA	25.4	1.26	f 10.53	11.31	2.50		7.50
40 P	3.45			2.10	f 4.47	4.04	300.2	LAMOINE	21.9	1.17	f 10.44	11.23	2.37		7.39
71 P	3.57			2.19	f 4.56	4.13	304.0	GIBSON	18.1	1.08	f 10.35	11.14	2.19		7.27
72 P	4.03			2.25	f 5.01	4.19	306.0	FISHER	16.1	1.02	f 10.29	11.09	2.05		7.20
70 WP	4.15			2.33	f 5.09	4.28	309.4	SIMS	12.7	12.53	f 10.20	11.01	1.54		7.09
81 P	4.25			2.41	f 5.18	4.36	313.1	CONANT	9.0	12.44	f 10.11	10.53	1.43		6.58
56 P	4.33			2.46	f 5.24	f 4.41	315.3	TO CASTELLA	6.8	12.39	f 10.05	10.48	1.35		6.50
86 P	4.42			2.53	f 5.31	4.48	318.3	CASTLE ORAG	3.8	12.32	f 9.57	10.41	1.26		6.41
Term Yard PBK	4.55 PM			3.00	5.38	4.55	321.2	DUNSMUIR YARD	0.9	12.25	f 9.50	10.34	1.15 AM		6.30 PM
Term Yd. WOTPBK				s 3.05 AM	s 5.45 PM	s 5.00 AM	322.1	TO-R DUNSMUIR (Pass Sta.)	0.0	12.20 AM	9.45 AM	10.30 AM			
	Arrive Daily			Arrive Daily	Arrive Daily	Arrive Daily		(108.3)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sunday	Leave Daily
	(4.54) 21.76			(3.33) 30.50	(3.50) 28.25	(3.55) 27.69		.....Time over District.....		(3.55) 27.69	(3.55) 27.69	(3.25) 31.69	(5.15) 20.45	(2.05) 21.31	(4.45) 22.61
								.....Average Speed per Hour.....							

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS					
Train	At	Receive or Discharge	To (or Beyond)	From (or Beyond)	Frequency
15 & 16	Antler MP 290.5	Receive and Discharge	Any Station	Any Station	
15 & 16	Sweet Briar MP 314.8	Receive and Discharge	Any Station	Any Station	
15 & 16	Castle Rock MP 316.4	Receive and Discharge	Any Station	Any Station	
7	Bet. Dunsmuir & Redding	Discharge	Any Station	East of Dunsmuir	
18	Any Station	Receive	Black Butte or beyond where train scheduled to stop	Richmond and West	
18	Red Bluff and Redding	Discharge	Any Station	Richmond and West	
7	Castella	Receive	Richmond and West		

Additional Stations:
 Jessup Industrial Track M. P. 249.2
 Middle Creek Spur M. P. 261.0
 Antler Spur M. P. 290.5
 Plume Spur M. P. 311.8

Capacity of Sidings and Spurs in Car Lengths	EASTWARD			BLACK BUTTE SUBDIVISION										WESTWARD			
	THIRD CLASS	SECOND CLASS	FIRST CLASS	Time Table No. 150 October 1, 1933										THIRD CLASS			
	624 Freight	622 Freight	16 West Coast	8 Shasta	18 Cascade	STATIONS										633 Freight	623 Freight	635 Freight
Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Distance from San Francisco via Marysville	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		
Term. Yd. PBK	8.00 PM	7.30 PM				321.2											
Term. Yd. WOTPBK						322.1											
P						325.4											
86 P	8.43	7.55				326.1											
Spur 26 P						327.6											
84 P	9.01	8.22				331.4											
87 P	9.11	8.29				333.5											
108 WYP	9.21	8.40				336.7											
93 P	9.45	8.47				339.1											
80 YP	10.03	8.54				341.9 342.3											
M-27 E-80 W-111 WYP	10.15 PM	9.13				345.0											
82 P		9.33				352.2											
113 P		9.45				357.2											
83 P		10.01				360.7											
83 P		10.17				364.8											
Spur 202						366.6											
125 WYP		10.35				368.5											
58 P		10.48				373.1											
81 P		10.57				377.2											
No siding YP						380.6											
91 WP		11.05				381.9											
80 P		11.12				386.0											
60 P		11.19				390.0											
96 WYK 101 P		11.34				394.0											
61 P		11.39				396.7											
80 P		11.42				398.3											
61 P		11.50				402.6											
96 P		11.58 PM				407.1											
61 P		12.06 AM				411.6											
82 P		12.13				415.6											
61-32 P		12.19				418.2											
69 P		12.28				422.3											
82		12.35				426.2											
Term. Yd. WYOTPBK		12.45 AM				429.5											
Arrive Daily	Arrive Daily					Arrive Daily	Arrive Daily	Arrive Daily									

(2.15)
10.58

(5.15)
20.55

(3.25)
31.59

(1.00)
22.50

(3.05)
34.49

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

(2.50)
37.17

(3.45)
28.53

(1.00)
22.50

(5.35)
19.32

(2.00)
11.70

(5.25)
19.90

Additional Stations (Graham Industrial Track M.P. 356.0
Ivan Spur M. P. 413.6

At Black Butte schedule time and train orders of Cascade Line trains apply at the train-order signal. Schedule time and train orders of trains going to or coming from the Siskiyou Line apply at the Junction switch. Cascade Line trains going to or coming from the Cascade Line at Black Butte, including extra trains whose running orders terminate there, may occupy the main track between their initial switch and the train-order signal, but must not pass the junction switch going east or the east water column going west unless the main track is seen to be clear between those points.

First class trains of Cascade Line, with orders to meet or pass at Black Butte, use middle Siding, except when order states that order received by the westward train at Black Butte.

The schedule time and train orders of first-class trains at Klamath Falls apply at passenger station. Water Supply—Three quarter mile east of Cantara.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS				
Train	At	Receive or Discharge	To (or Beyond)	From (or Beyond)
5 & 8 5 18	Shasta Retreat...MP 323.8 Any Station Any Station	Receive and Discharge Receive and Discharge Receive	Any Station Any Station Black Butte or beyond, where train scheduled to stop.	Any Station Any Station

Capacity of Sidings and Spurs in Car Lengths	SECOND CLASS				FIRST CLASS				Distance from San Francisco via Marysville	Time Table No. 150 October 1, 1933	Distance from Crescent Lake	FIRST CLASS			SECOND CLASS		THIRD CLASS	
	386 G. N. Ry. Freight		626 Manifest		16 West Coast		18 Cascade					17 Cascade	5 Klamath		621 Manifest	387 G. N. Ry. Freight	647 Freight	
	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
Term. Yd. WOTYPBK	8.15 AM	1.00 AM	9.35 PM	6.30 AM	429.5	TO-R KLAMATH FALLS	98.9	s 7.20 AM	s 7.40 PM	9.35 AM	2.30 PM	5.05 PM						
63 P	8.21	1.10	9.41	6.35	431.9	2.4 CHELSEA	96.5	7.14	f 7.30	9.25	2.21	4.57						
66 P	8.27	1.15	9.46	6.40	434.1	2.2 WOCUS	94.4	7.10	f 7.23	9.18	2.15	4.50						
110 P	8.37	1.23	s 9.54	6.48	438.9	4.3 TO ALGOMA	89.5	7.04	s 7.16	9.09	2.05	4.40						
62 P	8.44	1.30	10.00	6.58	442.6	3.7 OUXY	85.8	6.58	f 7.07	9.01	1.55	4.32						
82 P	8.53	1.40	f 10.07	7.05	447.2	4.6 TO MODOC POINT	81.2	6.53	s 7.01	8.53	1.45	4.23						
67 P	9.02	1.50	10.13	7.11	451.8	4.0 LOBERT	76.6	6.48	f 6.53	8.43	1.35	4.13						
170 WYPK	9.11	2.00	s 10.23	f 7.20	456.7	1.3 TO OHIOQUIN	71.7	f 6.42	s 6.46	8.33	1.25	4.03						
87 P	9.15	2.04	f 10.27	7.23	458.0	3.1 PINE RIDGE	70.4	6.39	f 6.40	8.18	1.17	3.53						
62 P	9.22	2.12	10.33	7.28	461.1	4.2 BRAYMILL	67.3	6.35	f 6.33	8.12	1.10	3.48						
85 P	9.32	2.25	10.40	7.34	465.3	3.5 CALIMUS	63.1	6.30	f 6.26	8.01	1.00	3.40						
Spur 13					469.1	1.2 MARTIN	59.3		f									
122 WYP	9.42	2.40	s 10.49	7.40	470.3	4.3 KIRK	58.1	6.24	f 6.19	7.40	12.49	3.25						
102 P	9.52	2.50	10.55	7.46	474.5	4.3 FUEGO	53.9	6.19	f 6.11	7.21	12.40	3.17						
102 P	10.02	2.58	11.01	7.52	478.8	4.6 CHINCHALO	49.6	6.14	f 6.05	7.13	12.31	3.09						
102 WP	10.12	3.10	11.08	7.58	483.4	4.8 LENZ	45.0	6.09	f 5.59	7.05	12.22	3.01						
102 P	10.22	3.19	11.14	8.04	488.2	4.4 MAZAMA	40.2	6.04	f 5.53	6.52	12.07 PM	2.46						
No siding P			11.20	8.10	492.6	5.4 YAMSAY	35.8	5.59	f 5.47									
102 P	10.43	3.37	11.27	8.17	498.0	5.3 DIAMOND LAKE	30.4	5.53	f 5.41	6.35	11.35 AM	2.28						
102 PBK	11.05 AM	3.46	f 11.35	f 8.26	503.3	3.9 TO-R CHEMULT	25.1	5.47	s 5.34	6.25	11.20 AM	2.18						
102 YP		3.54	11.41	8.32	507.2	7.6 PAUNINA	21.2	5.42	f 5.26	6.16		2.03						
102 P		4.10	11.51	8.41	514.8	4.7 MOWICH	13.6	5.34	f 5.16	6.02		1.49						
No siding P			11.58 PM	8.47	519.5	4.5 KOTAN	8.9	5.27	f 5.09									
102 P		4.27	12.06 AM	8.53	524.0	4.4 UMLI	4.4	5.21	f 5.03	5.45		1.15						
Term. Yd. WOYPBK	4.40 AM		s 12.15 AM	s 9.00 AM	528.4	0.0 TO-R CRESCENT LAKE	0.0	5.15 AM	4.55 PM	5.30 AM		1.05 PM						
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		(98.9)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily						
	(2.50) 26.04	(3.40) 26.95	(2.40) 37.08	(2.30) 39.53		Time over District.....	(2.05) 47.47	(2.45) 35.95	(4.05) 24.22	(3.10) 23.30	(4.00) 24.72							
						Average Speed per Hour.....												

The schedule time of Nos. 386 and 387 at Klamath Falls applies at Great Northern Junction Switch, Mile post 428.4.
The schedule time and train orders of first-class trains at Klamath Falls apply at passenger station.

At Crescent Lake Sacramento 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.

At Black Butte schedule time and train orders of Cascade line trains apply at the junction of the main track and the siding. Portland Division first-class schedules and train orders referring to such schedules apply at the junction of the main track and the siding. The main track at Black Butte 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. Water supply one quarter mile east of Crescent Lake.

Train No.	Direction	Class	Time
386	Eastward	Second Class	8:15 AM
626	Westward	Second Class	1:00 AM
16	Eastward	First Class	9:35 PM
18	Westward	First Class	6:30 AM
17	Eastward	First Class	7:20 AM
5	Westward	First Class	7:40 PM
621	Eastward	Second Class	9:35 AM
387	Westward	Second Class	2:30 PM
647	Eastward	Third Class	5:05 PM

Capacity of Sidings and Spurs in Car Lengths	THIRD CLASS			FIRST CLASS			Distance from San Francisco via Marysville	Time Table No. 150 October 1, 1933			Distance from Ashland	FIRST CLASS			THIRD CLASS		
	624 Freight			8 Shasta				STATIONS				7 Shasta			645 Local Freight Logger			623 Freight
			Leave Daily			Leave Daily		TO-R		Arrive Daily		Arrive Daily Ex. Sunday		Arrive Daily		Arrive Daily	
M-27 E-82 W-113 WYP			10.20 PM			6.10 AM	345.0	BLACK BUTTE	85.3	s 10.55 PM		2.20 AM		2.40 PM			
No Siding P Spur					f 6.16	347.0		IGERNA	83.3	f 10.48		2.10					
56-109 WOYPKB			10.40		s 6.27	348.4		WEED	80.7	s 10.40		2.00 AM		2.00			
50 WYP			11.20		s 6.41	353.4		EDGEWOOD	75.7	s 10.24				12.40			
No Siding					s 6.47	357.1		METCALF	72.0	10.16							
71 P			11.40		s 6.57	361.0		GAZELLE	68.1	s 10.09						12.01 PM	
61 P			11.59 PM		s 7.09	369.1		GRENADA	60.0	s 9.54						11.45 AM	
66 PK			12.18 AM		s 7.25	375.5		MONTAGUE	58.6	s 9.42						11.20	
68 YP			12.30		f 7.33	380.7		SNOWDON	48.4	f 9.29						10.40	
55 P			12.50		f 7.45	386.2		AGER	42.9	f 9.16						10.20	
No Siding P					f 7.51	388.4		THRALL	40.7	f 9.09							
No Siding P					f 7.56	390.5		KLAMATHON	38.6	f 9.04							
79 Yard WOYP			1.30		f 8.05	393.1		HORN BROOK	36.0	s 8.57						9.30	
No Siding P					8.13	395.6		PILOT	33.5	f 8.50							
70			1.50		f 8.19	397.5		ZULEKA	31.6	f 8.44						8.54	
51 P			2.10		s 8.31	401.8		HILT	27.3	s 8.33						8.31	
No Siding					8.33	402.8		COLE	26.3	8.30							
No Siding WP					8.35	403.6		ORCAL	25.5	8.28							
60 P			2.45		f 8.45	407.4		GREGORY	21.7	f 8.19						7.10	
69 P			2.55		8.51	410.0		WHITE POINT	19.1	8.12						6.47	
101 TP			3.16		s 8.59	412.2		SISKIYOU	16.9	s 8.05						6.35	
No Siding P					9.04	414.1		VIADUCT	15.0	7.59							
No Siding					9.09	415.6		WALL CREEK	13.5	7.54							
No Siding P					9.14	416.9		FOLIAGE	12.2	7.50							
59 WP			3.55		s 9.25	419.3		STEINMAN	9.8	f 7.44						5.50	
73 P			4.20		f 9.35	422.9		MISTLETOE	6.2	f 7.35						5.30	
No Siding P					9.42	425.5		OLAWSON	3.6	7.28							
Term. Yd. WOTPBK			4.45 AM		s 9.50 AM	429.1		ASHLAND	0.0	7.20 PM						5.00 AM	
			Arrive Daily		Arrive Daily			(85.3)		Leave Daily		Leave Daily Ex. Sunday		Leave Daily			

(6.25)
13.29

(3.40)
23.26

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

(3.35)
23.80

(0.20)
13.80

(9.40)
8.82

At Black Butte schedule time and train orders of Cascade Line trains apply at the train-order signal. Schedule time and train orders of trains going to or coming from the Siskiyou Line apply at the Junction switch. Cascade Line trains going to or coming from the Cascade Line at Black Butte, including extra trains whose running orders terminate there, may occupy the main track between their initial switch and the train-order signal, but must not pass the junction switch going east or the east water column going west unless the main track is seen to be clear between those points.

At Ashland Sacramento 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.

Water supply one quarter mile east of Grenada.

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

Capacity of Sidings and Spurs in Car Lengths	EASTWARD		Distance from San Francisco	WESTWARD		Distance from Klamath Falls
	SECOND CLASS	FIRST CLASS		FIRST CLASS	SECOND CLASS	
	628 Northwest Special	314 Passenger		313 Passenger	625 Oregon Special	
	Leave Daily	Leave Mon., Wed., Fri.		Arrive Tues., Thurs., Sat.	Arrive Daily	
Term. Yd. WOYPBK		2.50 PM	457.9	2.40 PM		
P		s 2.55 PM	458.8	2.35 PM		
Term. Yd. WOYPBK	9.30 AM		457.9		8.00 PM	
66 cars	9.37		459.9		7.53	
76 P	10.02		470.6		7.25	
81 WYP	10.25		477.7		7.05	
79 YP	11.00		485.4		6.25	
77 P	11.10		489.8		6.00	
85 WYP	11.20		493.6		5.35	
77 P	11.40		500.8		4.50	
84 WYP	11.55 AM		506.1		4.35	
No Siding	12.05 PM		508.9		4.15	
77 P	12.31		515.4		4.00	
77 WP	1.15		524.3		3.35	
I No Siding			525.4			
No Siding P	1.55		529.7		3.25	
No Siding P	2.04		533.2		3.10	
No Siding	2.15		536.0		3.02	
77 P	2.55		537.9		2.55	
No Siding	3.15		543.8		2.30	
77 P	3.25		547.1		2.23	
Term. Yd. WOYTPBK	4.00 PM		555.8		2.00 PM	
	Arrive Daily	Arrive Mon., Wed., Fri.		Leave Tues., Thurs., Sat.	Leave Daily	
	(6.30) 15.06	(0.05) 10.80		(0.05) 10.80	(6.00) 16.31	

Time Table No. 150
October 1, 1933

STATIONS

- ALTURAS YARD 0.9
- ALTURAS 0.9
- ALTURAS YARD 2.0
- JUNIPER 10.7
- FLETOHER 7.1
- GHEENT 7.7
- AMBROSE 4.4
- BOLES 3.8
- HACKAMORE 7.2
- MEARES 5.3
- PEREZ 2.8
- DRY LAKE 6.5
- OORNELL 8.9
- STRONGHOLD 1.1
- Great Northern Ry. Crossing 4.3
- TULE LAKE 3.5
- HATFIELD 2.8
- MALONE 1.9
- MERRILL 5.9
- HOSLEY 3.3
- STUKEL 8.7
- TO-R KLAMATH FALLS 8.7

(98.8)

Capacity of Sidings and Spurs in Car Lengths	EASTWARD		Distance from San Francisco	WESTWARD		Distance from Lakeview
	SECOND CLASS	FIRST CLASS		SECOND CLASS	FIRST CLASS	
	632 Local Freight	630 Mixed		629 Mixed	631 Local Freight	
	Leave Tues., Thurs., Sat.	Leave Mon., Wed., Fri.		Arrive Tues., Thurs., Sat.	Arrive Mon., Wed., Fri.	
P	3.25 PM	3.10 PM	457.8	2.40 PM		
Spur 6		f	459.7			
26-P	4.15	s 4.00	466.9			
Spur 24		f	478.6			
10-P	4.45	s 4.30	481.3			
Spur 2		f	488.9			
See Note 23-P	5.35	s 5.20	491.2			
Spur 1		f	497.8			
Term. Yd. WOYTPBK	6.45 PM	s 6.30 PM	503.5			
	Arrive Tues., Thurs., Sat.	Arrive Mon., Wed., Fri.	512.3			
	(3.20) 16.35	(3.20) 16.35		(3.20) 16.35	(3.20) 16.35	

Time Table No. 150
October 1, 1933

STATIONS

- ALTURAS 1.9
- MATTES 7.2
- SURPRISE 11.7
- DAVIS CREEK 2.7
- GARRET 9.9
- WILLOW RANCH 3.9
- JOFFRE 2.7
- FAIRPORT 5.7
- SNELLING 8.8
- LAKEVIEW 8.8

(54.5)

Additional Water Supply Whittier Tank MP 485.8

Siding at Fairport located 1525 feet East of Station. Schedule Time and Train Orders will apply at Siding.

Trains originating and terminating Alturas Yard, will register at Alturas.

SACRAMENTO SUB-DIVISION

EASTWARD

Table with columns for Capacity of Sidings in Car Lengths, Second Class (516, 512), and Distance from San Francisco. Rows include stations like IBKPW, 16, 23, 31, 25, 2, 65, 29, 19, 8, 31, 43, 19, Yard WPYOIBK, 19, 15, 14, 35, 27, and Yard WTPK.

Time Table No. 150
October 1, 1933

Knights Landing and Oroville Branches

STATIONS

Table with columns for TO-R, STATIONS, and Distance from Oroville. Rows include Woodland, Gario, Peart, Curtis, Knights Landing, Grace, Bypass, Ohandler, Marcuse, Tudor, Abbott, Oswald, Bogue, Yuba City, Marysville, Ramirez, Honcut, Hearst, Palermo, Villa Verona, and Oroville.

WESTWARD

THIRD CLASS

513 517

Table with columns for Capacity of Sidings in Car Lengths, Third Class (513, 517), and Distance from Oroville. Rows include stations like Woodland, Gario, Peart, Curtis, Knights Landing, Grace, Bypass, Ohandler, Marcuse, Tudor, Abbott, Oswald, Bogue, Yuba City, Marysville, Ramirez, Honcut, Hearst, Palermo, Villa Verona, and Oroville.

EASTWARD

SACRAMENTO SUB-DIVISION

WESTWARD

Complex table for Sacramento Sub-Division with columns for Capacity of Sidings in Car Lengths, Third Class, First Class, Distance from San Francisco, Time Table No. 150 (October 1, 1933), Placerville Branch, STATIONS, Distance from Placerville, and First/Third Class. Rows include stations like Sacramento, Jot. Switch, R Street, Homestead, Brighton, Perkins, Manlove, Mayhew, Routier, Mills, Mather, Citrus, Nimbub, Alder Creek, Natoma, Folsom, White Rock, Latrobe, Dugan, Shingle Springs, El Dorado, Diamond Springs, and Placerville.

EASTWARD

SACRAMENTO SUB-DIVISION

WESTWARD

Table for Sacramento Sub-Division with columns for Capacity of Sidings in Car Lengths, Third Class, First Class, Distance from San Francisco, Time Table No. 150 (October 1, 1933), Fair Oaks Branch, STATIONS, Distance from Fair Oaks, and Second/Fourth Class. Rows include stations like Citrus and Fair Oaks.

Additional Stations

- Ramona, 95.5; Brown, 97.0; Alden, 98.0; Bradshaw, 99.8; Boyd, 100.3; Soudan, 103.7; Salsbury, 105.2; Nagle, 111.3; Prattrock, 111.4; Malby, 119.4; Harvey, 121.7; Cothrin, 123.1; Flonellis, 127.6; Swift, 127.8; Brella, 128.1; Brandon, 129.8; Bullard, 131.7; Bennett, 134.0; Cummings, 140.4; Apex, 147.7

Additional Flag Stops to Receive or Discharge Passengers:

- Nos. 298, 299 and 300; Brown Ramona; Malby Soudan; Harvey Cothrin; Bradshaw Bryants; Salsbury Crossing; Alden Flonellis; Brella; Brandon; Bullard; Bennett; Cummings; and Apex

At Woodland, the Woodland-Oroville main track ends at east switch to siding, located 150 feet east of cattle guard 85-A.

Trains to and from Woodland-Oroville line will use Woodland siding. Normal position of east switch is for Woodland-Oroville line.

Normal position of switch of the Woodland-Oroville main track at Marysville is for Yuba City.

Additional Stations:

- Laugenour, 89.4; Saccarus, 89.7; Coranco, 92.4; Cunard, 96.1; Vernon, 98.7; Coulter, 101.8; Lee, 102.7

- Wilson, 109.2; Messick, 114.5; Binney Junction Tower, 122.7; Mello, 126.5; Mission, 131.8; Coxlane, 139.2; Baggett, 146.5

Additional Flag Stops to Receive or Discharge Passengers:

- Nos. 512 and 513; Laugenour; Saccarus; Coranco; Cunard; Vernon; Coulter; Lee; Wilson; Messick

EASTWARD			WESTWARD		
Time Table No. 150 October 1, 1933			Time Table No. 150 October 1, 1933		
Colusa Branch			Colusa Branch		
STATIONS			STATIONS		
Yard PY	FIRST CLASS 520 Mixed Leave Mon., Friday 9.10 AM	Distance from San Francisco	R	HARRINGTON 4.0	72.1
40	f	108.3		COLLEGE CITY 3.7	68.1
33	f	116.0		GRAINO 4.8	64.4
101 W	s 9.45	120.8	TO	GRIMES 3.6	59.6
30	f	124.4		SYCAMORE 4.4	56.0
35	f	128.8		DOLAN 4.2	51.6
97	s 10.30	133.0	TO	COLUSA 10.2	47.4
50	f	143.2		STEGEMAN 2.7	37.2
39 W	s 11.10	145.9		PRINCETON 4.5	34.5
33	s 11.30 AM	150.4		OODORA 5.2	30.0
64	f	155.6		GLENN 6.5	24.8
40	f	162.1		ORDBEND 3.8	18.3
33	f	165.9		ROTAVELE 4.1	14.5
84 W	s 12.50 PM	170.0	TO	HAMILTON 10.4	10.4
42 PY	s 1.25 PM	180.4		WYO (72.1)	0.0
	Arrive Mon., Friday (4.15) 16.64				
				Leave Tues., Saturday (3.40) 19.67	
				Time over District.....	
				Average Speed per Hour.....	

Additional Stations: Oak Flat 125.4, Denco 137.0, Nadine Spur 157.0, Moda 175.2 and Cory 178.6.
 Additional Flag Stops to Receive or Discharge Passengers: Nos. 520 and 521, at road-crossing 300 feet west of M.P. 139, 148f, Denco, Moda, Nadine Spur and Cory.

EASTWARD			WESTWARD		
Time Table No. 150 October 1, 1933			Time Table No. 150 October 1, 1933		
Dantoni Branch			Dantoni Branch		
STATIONS			STATIONS		
		Distance from San Francisco			Distance from Dantoni Jct.
		139.8		DANTONI JOT. 3.2	4.4
7		143.0		LINDA 1.2	1.2
17		144.2		DANTONI (4.4)	0.0

EASTWARD			WESTWARD		
Time Table No. 150 October 1, 1933			Time Table No. 150 October 1, 1933		
Fruto Branch			Fruto Branch		
STATIONS			STATIONS		
		Distance from San Francisco			Distance from Fruto
64 WYBKP		149.9	TO-R	WILLOWS 2.4	17.0
7 Spur		152.3		LOSA 3.5	14.6
20		155.8		KURAND 3.8	11.1
10		159.6		MILLSHOLM 4.0	7.3
9		163.6		ATHENA 3.3	3.3
19 PT		166.9	R	FRUTO (17.0)	0.0
				Time over District.....	
				Average Speed per Hour.....	

EASTWARD			WESTWARD		
Time Table No. 150 October 1, 1933			Time Table No. 150 October 1, 1933		
Sutter Basin Branch			Sutter Basin Branch		
STATIONS			STATIONS		
		Distance from San Francisco			Distance from Josephine
P		96.5	R	GRACE 0.4	20.8
30 P		96.9		MARCHANT 1.5	20.4
33		98.4		MACKERT 2.0	18.9
39 WP		100.4		ROBBINS 1.3	16.9
33 P		101.7		SEYMOUR 3.4	15.6
55 P		105.1		SUBACO 2.1	12.2
33		107.2		PELGER 2.1	10.1
55 P		109.3		EVERGLADE 1.9	8.0
51 P		111.2		HINSDALE 0.6	6.1
YP		111.8		SHEFFIELD 1.5	5.5
44		113.3		TISDALE 1.9	4.0
15 (Spur)		115.2		PROGRESS 2.1	2.1
24		117.3		JOSEPHINE (20.8)	0.0
35 (Spur)					
				Time over District.....	
				Average Speed per Hour.....	

EASTWARD			WESTWARD		
Time Table No. 150 October 1, 1933			Time Table No. 150 October 1, 1933		
Sutter Basin Branch			Sutter Basin Branch		
STATIONS			STATIONS		
		Distance from San Francisco			Distance from Karnak
30 P		96.9		MARCHANT 0.7	2.5
26		97.6		ENSLEY 1.8	1.8
5 P		99.4		KARNAK (2.5)	0.0
				Time over District.....	
				Average Speed per Hour.....	

3600, 3700, 4100, 4300 or 5000 class engines must not be operated between Dantoni Junction and Dantoni.

EASTWARD			WESTWARD		
Time Table No. 150 October 1, 1933			Time Table No. 150 October 1, 1933		
River Farms Branch			River Farms Branch		
STATIONS			STATIONS		
		Distance from San Francisco			Distance from Boyer
		93.5		KNIGHTS LDG. JOT. 2.8	13.8
Spur 16		96.3		EASTHAM 2.9	11.0
		99.2		AYRSHIRE 3.2	8.1
Spur 68		102.4		TYNDALL 3.7	4.9
		106.1		JIMENO 1.2	1.2
Spur 14		107.3		BOYER 0.9	0.0
				END OF TRACK (13.8)	

Trains must not exceed 20 miles per hour between Knights Landing Junction and End of Track.

EASTWARD			WESTWARD		
Time Table No. 150 October 1, 1933			Time Table No. 150 October 1, 1933		
Walnut Grove Branch			Walnut Grove Branch		
STATIONS			STATIONS		
		Distance from San Francisco			Distance from Isleton
		88.8	TO-R	SACRAMENTO 0.5	32.4
Term. Yard WOTYPBK	FIRST CLASS 524 Local Freight Leave Daily Ex. Sunday 3.00 PM	89.3		S. N. R. R. Crossing 0.3	31.9
Yard		89.6		JOT. SWITCH, R STREET 2.2	31.6
Yard P	3.05	91.8		BATHS 2.4	29.4
60	3.20	94.2		DEL RIO 3.3	27.0
60	3.30	97.5		FREEMONT 7.8	23.7
60 P	3.55	105.3		HOOD 4.0	17.3
55	4.10	107.9		LAMBERT 3.3	13.3
44		111.2		MOFUBA 2.2	10.0
Yard 61 PWY	4.25	113.4	TO	WALNUT GROVE 7.8	7.8
Yard PWBY	5.00 PM	121.2	TO-R	ISLETON (32.4)	0.0
	Arrive Daily Ex. Sunday (2.00) 16.20				
				Time over District.....	
				Average Speed per Hour.....	

Additional Stations: Charles Mile Post 93.0, Pocket 96.4, Content 98.9, Cronin 100.1, Mosher 100.9, Acacia 102.6, Rosebud 103.3, Locke 112.6.

EASTWARD			WESTWARD		
Time Table No. 150 October 1, 1933			Time Table No. 150 October 1, 1933		
Stirling City Branch			Stirling City Branch		
STATIONS			STATIONS		
		Distance from San Francisco			Distance from Stirling City
		184.2	TO-R	OHIO 2.4	31.2
Yard OYWBKP	FIRST CLASS 526 Mixed Leave Mon., Friday 1.15 PM	186.6		S. N. R. R. Crossing 2.7	28.8
		189.3		DREDGE 3.3	26.1
18	f 1.50	192.6		OROUCH 5.6	22.8
21 WP	s 2.20	198.2		PARADISE 5.0	17.2
12	s 2.50	203.2		MAGALIA 3.0	12.2
3 P	s 3.10	206.2		APPLETON 3.8	9.2
10 (Spur) WP	s 3.30	210.0		DOON 5.4	5.4
PY Yard	s 4.00 PM	215.4	R	STIRLING CITY (31.2)	0.0
	Arrive Mon., Friday (2.45) 11.35				
				Time over District.....	
				Average Speed per Hour.....	

Additional Flag Stops to Receive or Discharge Passengers: Nos. 526, 527, Barber (Chico yard), Oakdale Farms, Ostrander, Wagstaff, Optimo, Bush and Luce.
 Additional Stations: Barber 185.1, Oakdale Farms 196.6, Ostrander 199.6, Wagstaff 200.2, Optimo 202.2, Bush 203.9, Luce 207.1.
 Emergency water supply, Stirling City.

SACRAMENTO SUBDIVISION

SACRAMENTO YARD—OUTBOUND, VIA ELVAS

SACRAMENTO YARD—INBOUND, VIA ELVAS

Terminal Yard	THIRD CLASS				FIRST CLASS				Distance from San Francisco	Time Table No. 150 October 1, 1933	Distance from End of Division	FIRST CLASS			THIRD CLASS	
	518				15	300	298	231				16	299	282	519	
	Local Freight				West Coast	Motor	Motor	Passenger				West Coast	Motor	Passenger	Local Freight	
Yard					Leave Daily	Leave Saturday Only	Leave Daily Ex. Saturday	Leave Daily	88.8		Arrive Daily	Arrive Daily	Arrive Daily		Arrive Tues. Thurs., Sat.	
Yard					6.40 PM	4.05 PM	2.35 PM	8.20 AM	89.8	TO-R SACRAMENTO (Passenger Station) 1.0	8.55 AM	9.20 AM	9.00 PM			
Yard I					5.30 AM				91.8	R SACRAMENTO (12th Street) 2.0					12.15 PM	
Yard I					6.50	4.15	2.45	8.30	94.8	ELVAS 3.0	8.45	9.08	8.50		12.01 PM	
I					5.50 AM				95.8	BRIGHTON 1.0	8.30 AM	9.03 AM	8.45 PM		11.50 AM	
					Arrive Mon. Wed., Fri.	Arrive Daily	Arrive Saturday Only	Arrive Daily Ex. Saturday		Interlocking A. B. S.		Leave Daily	Leave Daily	Leave Daily	Leave Tues., Thurs., Sat.	
										END OF SAC'TO DIV. 1.0						
										(7.0)						

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.
Brighton is register station for scheduled trains to and from Placerville only.

No. 16 will stop on flag at Brighton on Sundays only.

SPECIAL INSTRUCTIONS



RULE 2. The following are designated Watch Inspectors:
San Francisco.....S. A. Pope, Manager of Time Service, 65 Market St.
Sacramento, H. T. Harger, 1022 "K" St.
Roseville.....H. T. Harger
Sparks.....W. R. Adams & Son
Oroville.....R. A. Williams
Marysville.....Frank G. Mooney
Red Bluff.....G. C. Wilkins
Redding.....F. R. Dobrowsky
Dunsmuir.....John Evans
Chico.....J. R. Dupen
Willows.....Robt. E. Boyd
Orland.....L. Schnell
Placerville.....Leo C. Burger
Weed.....Marion Dayley
Klamath Falls.....F. W. Bertram
Ashland.....Chas. A. White
Alturas.....M. Einarsson

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

RULE 14 (d). As specified below four long one short sounds of whistle will be indication that flagman may return from west as prescribed by Rule 99.
Tehama on Davis-Gerber Line.
Siskiyou Line trains to recall flag between Junction Switch at Black Butte and Weed, and Modoc Line trains to recall flag between Stukel and Klamath Falls.

RULE 14 (e). As specified below six long sounds of whistle 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 flag between Junction Switch at Black Butte and Weed, and Modoc Line trains to recall flag between Stukel and Klamath Falls.

RULE 19. Markers must be kept lighted on No. 2 track between Rocklin and Colfax and on Nos. 1 and 2 tracks Knapp and Truckee, at all hours.

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

RULE D-71 and 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.

RULE 83 (A). At the following stations, only the trains indicated will register.
Chico } Trains originating and terminating.
Willows }
Harrington }
Weed, and Nos. 7, 8, 623 and 624.
Sacramento, 12th St.—Trains terminating, information to be telephoned to operator in "H" Office, Sacramento.

RULE 83 (B). At open train-order offices trains may register by ticket as follows:
Black Butte.
Nos. 7, 8, 17 and 18 at Woodland and Orland.
First-class trains Truckee.
First-class trains register at Roseville Passenger Station.
Westward G. N. Ry. at Klamath Falls.
Chemult, except No. 386 and No. 387.

Folsom.—Register at Junction Switch, Folsom. Trains that are required to go to Folsom or trains originating or terminating at Folsom will on return to the Junction register the same information as shown on register at station.

RULE 83 (D). Trains must obtain a clearance before leaving Marysville, Colfax, Truckee, Folsom and Fair Oaks when such stations are open train-order offices. Extra trains not routed via Folsom or Fair Oaks will not go to or obtain a clearance at those stations.

Train order office Colfax closed 4.00 A. M. to 8.00 P. M.
Train order office Marysville closed 5.00 P. M. to 1.00 A. M.

All eastward extra trains and trains originating Sacramento obtain clearance at Sacramento General Telegraph Office located on second floor of passenger station.
Western Division freight trains originating Roseville will be cleared over the signature of Western and also Sacramento Division Chief Dispatchers on separate clearances.

Westward Third Class and extra trains passing Sacramento will not comply with Rule 83. A proceed signal received from switchtender at Front Street, Sacramento, given with green flag by day or green light by night and in addition a clear indication in Signal No. S. A. 887, located at east end of bridge, will indicate that all first-class overdue trains have departed.

RULE 93. YARD LIMITS.—Are defined by yard limit signs at the following stations:
Truckee Colfax Willows Chico Oroville Isleton
Emigrant Gap Woodland Orland Folsom Walnut Grove Placerville
Red Bluff Black Butte Hornbrook Klamath Falls Crescent Lake Hackamore
Redding Weed Ashland Kirk Alturas Lakeview
Dunsmuir Montague Mt. Hebron

SACRAMENTO YARD.—Between a point 1,000 feet east of Benali to a point ¼ mile west of west switch Mikon to a point 1,000 feet west of west switch at Polk on Stockton Line, to a point 1,000 feet east of Junction switch Brighton on Placerville Line, to a point 3½ miles east of Junction switch, R Street, on Walnut Grove Line.

ROSEVILLE YARD.—Between a point 4,000 feet west of west switch Antelope, to a point one mile east of junction switch on Roseville-Gerber Line, to a point 1,000 feet east of east switch at Rocklin, on No. 4 track and to a point 1,000 feet east of crossover on Nos. 1 and 2 tracks.

TAHOE YARD.—From a point 1,000 feet west of west switch Moss Hills.

MARYSVILLE YARD.—Between a point, 1,000 feet west of Rupert Spur, and including Dantoni Branch, to a point 1,000 feet east of 143-D, to a point 9,240 feet east of Binney Jet. switch on Woodland-Oroville Line, to a point 1,000 feet west of west switch of cannery track at Yuba City. This includes E and A Street cut-off.

GERBER YARD.—Between a point 80 feet east of east switch of house track at Tehama and a point east of Gerber.

SPARKS YARD (Salt Lake Div.).—Between a point one and one-half miles west of Reno to a point 2,700 feet east of east switch at Sparks.

Movements of Great Northern Railway trains and engines at Klamath Falls between initial switch east end of yard and Junction switches of Great Northern Railway, will be directed by Yardmaster.

Movement of engines and trains between Alturas Yard and Alturas will be directed by yardmaster, when yardmaster on duty.

RULE D 97 (A). On double track between Sacramento and Sparks, trains may run extra moving with the current of traffic without running orders, but must obtain clearance before commencement of trip, if an operator is on duty.

DRAWBRIDGES AND RAILROAD CROSSINGS NOT INTERLOCKED
RULE 98.
Sacramento River at Knights Landing. Trains must not stop on drawbridge at Knights Landing.
Sacramento River at Tehama.

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

Southern Pacific and Western Pacific 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 will stop within two hundred feet of Sacramento Northern R. R. crossing Front and R Streets Sacramento before crossing.

Movement 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 Street, Sacramento and Southern Pacific yard engines switching on Front Street will stop before reaching the crossing at Front and M Streets and will proceed on hand signals from flagmen on the ground in the center of the crossing, flagman using a green flag by day and a green light by night.

Sacramento Northern trains and San Francisco & Sacramento Railroad trains will stop before reaching the crossing and will proceed on signal from the flagman in the center of the crossing, flagman using a yellow flag by day and a yellow light by night.

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

RULE 104. BLACK BUTTE
The normal position of Junction Switch (1200 feet west of Train Order Office) is for Cascade Line.

Track extending from connection at east end of east leg of wye to east end of yard will be known as EAST siding. Track extending from west end of yard to connection with Siskiyou Line main track, 1000 feet east of Train Order Office, will be known as WEST siding. Track extending from connection at east end of east leg of wye to connection with Siskiyou Line main track, 800 feet east of east water column, will be known as MIDDLE siding.

Trains moving in either direction between WEST and MIDDLE sidings must protect against overdue Siskiyou Line first class trains.

Helper engines may use that portion of Siskiyou Line main track between Junction switch and a point 200 feet east of wye switch, except when a first class train is due.

Siskiyou Line trains, except first class, must approach and move between a point 200 feet east of wye switch and junction switch prepared to stop, expecting to find engines turning on wye or trains or engines moving in either direction between WEST and MIDDLE sidings.

The normal position of switch on Siskiyou Line main track 443 feet east of Junction switch is for track leading to WEST siding.

CHEMULT

Junction Switch of Great Northern Railway located in siding 130 feet east of west switch at Chemult. Normal position of Junction Switch is for Southern Pacific track.

KLAMATH FALLS

Junction switch of Great Northern Railway is located at Mile Post 428.4, 2773 feet east of west switch of yard. Normal position of switch is for Southern Pacific main track.

Modoc Line main track parallels south side of Cascade Line main track at Klamath Falls, from a point at Cascade Line Mile Post 427.023 and Modoc Line Mile Post 553.2 to Cascade Line Mile Post 427.786. Junction switch of Modoc Line and Cascade Line at Klamath Falls is 1000 feet west of Mile Post 428. Normal position of junction switch is for Cascade Line.

ALTURAS YARD

Junction switch of Lakeview Branch and Modoc Line main track at Alturas Yard is 480 feet west of Mile Post 458. Normal position of junction switch is for Modoc Line.

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

RULE 206 (A). Clearance dated at Dunsmuir will authorize second class and inferior trains at Dunsmuir Yard.

Clearance dated at Alturas will authorize No. 628 from Alturas Yard.

RULE 220. Third paragraph of rule will be complied with by Nos. 623 and 624 at Weed.

RULE 221.—Train Order Signals:

Emigrant Gap.
Westward signal located 2500 feet east of office and eastward signal 100 feet west of office.

Norden:
Westward signal located 900 feet east of station, and
Eastward signal 800 feet west of station.
Indication of these train order signals will be by lights only.
When a train reaches a point approximately 300 feet from signal, if no train orders, light will change from "Stop" to "Proceed."

If signal is first seen in "Proceed" indication clearance card must be obtained.
Light will not be displayed in train order signals on Lakeview Branch at Willow Ranch except when train orders are to be delivered.
Trains must obtain clearance at Redding.

RULE 221 (A): Rule 221 (A) is so interpreted as to make it unnecessary for dispatchers to O. K. a clearance and operators to transmit the address and order numbers from clearance to the train dispatcher, unless requested to do so by train dispatchers, nor will they complete that portion of clearance (Form CS-2643) reading:

"OK at M. Chief Train Dispatcher," all provided that said orders affect movement of a train wholly within block system or signal dispatching limits.

If the orders affect movement, either wholly or in part, outside of the block system or signal dispatching limits, operators must repeat address and order numbers and obtain dispatcher's OK before the orders are delivered.

RULE 516. Overlap posts affecting trains are located:

Eastward Trains:—Dunsmuir Yard—515 feet west of signal 3210.
White Point—1000 feet west of signal 4104.
Viaduct—Fouling point west end of siding.
Wall Creek—Fouling point west switch.
Leaf—Fouling point west switch.
Texum—Near middle of yard.

Westward Trains:—Wall Creek—Fouling point west switch.
Pine Ridge—Near middle of yard.
Somerset—Middle of yard.

TRAIN AND AIR INSPECTION.

On grades retaining valves will be used as follows:

- Norden to Truckee.
One retaining valve for every 120 Ms in train.
- Norden to Yuba Pass
One retaining valve for every 140 Ms in train.
- Yuba Pass to Loomis
One retaining valve for every 100 Ms in train.
- Stirling City to Mile Post 188
One retaining valve for every 80 Ms in train.
- Placerville Branch
From MP-148 to MP-146 and from MP-145 to MP-138 one retaining valve for every 120 Ms in train.
- MP-186 to MP-130 and from MP-129 to MP-122, one retaining valve for every 140 Ms in train.
- From MP-117 to MP-112, one retaining valve for every 150 Ms in train.

Passenger Trains

- Siskiyou to Ashland.....All retainers.
- Siskiyou to Orcal.....All retainers.
- Mile Post 400 to Hornbrook.....All retainers.
- Black Butte to Edgewood.....Accessible retainers.
- Azalea to east switch Dunsmuir.....Accessible retainers.
- Ambrose to Ghent.....Accessible retainers.

Retainers on head end cars must be left turned up from Orcal to Mile Post 400 but should be turned down momentarily if stop is made at Hilt.
Accessible retainers will be turned down after passing Yard Limit sign at Ashland. Retainers may be turned down if stop is made at Shasta Springs or west.
In operating retainers, they should be turned up commencing at the head end, and when turned down, commencing at the rear end.

Freight Trains

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

Retainers will be turned up solid on head end of train in such number, depending upon the total weight of train, one operative retainer for the amount of M's shown as follows:

- Siskiyou to Ashland.....} One (1) retainer for each 90 M's.
- Siskiyou to Hornbrook.....}
- Azalea to Dunsmuir Yard.....} One (1) retainer for each 120 M's.
- Black Butte to Edgewood.....}
- Ambrose to Ghent.....}
- Snowdon to Hornbrook.....} One (1) retainer for each 200 M's.
- Grass Lake to Azalea.....}
- Dunsmuir Yard to Gibson.....} One (1) retainer for each 400 M's.

Example: A train consisting of 80 cars 7,000 M's Grass Lake to Azalea requires 35 retainers and from Azalea to Dunsmuir Yard 58 retainers turned up solid on head end.

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

Retainers must be turned down momentarily ascending grade Orcal 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.

Solid stock trains Snowdon to Hornbrook and Grass Lake to Azalea may be handled 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.

Additional retainers will be turned up or down on instructions of engineman if in his judgment it is necessary.
When passenger train has stopped, engineman will release air brakes and retainers must be turned down and engineman notified by one sound of air signal.

Where retainers are used the rate of speed of freight trains on any grade of over one per cent (1%) will not exceed 25 miles per hour, and on grades of this character, MORE THAN FIVE MILES LONG, FOR THE FIRST FIVE MILES THE TIME CONSUMED IN TRAVELING ANY ONE MILE SHALL NOT BE LESS THAN THREE MINUTES. This will not be authority to exceed specified speed restrictions.

Freight trains and light engines, not equipped with tire coolers, except Mallets, on descending grade will make a stop of ten minutes between switches at the following stations to permit wheels to cool, trainmen will make a careful inspection of all cars, and enginemen inspect engine:

- Andover: (During storms inspection will be made in shed at Andover.) Colfax.
- Truckee, Five minutes. Flint (except westward freight trains that stop at Auburn, will inspect at Auburn instead of Flint.)
- Summit. On No. 1 track. Latrobe.
- Norden. On No. 2 track. Paradise.
- Troy. Doon.
- Yuba Pass. Midas.
- Paradise. Crouch.
- Midas. Doon.
- Gold Run. Crouch.

Passenger trains stop at Paradise five minutes to cool wheels.
Freight trains on descending grade, stop between switches at Knapp, five minutes to cool wheels.

Mallet engines running light on descending grades will make stop of sufficient length of time to inspect engine.

Light engines descending grade that are equipped with tire coolers will stop at Emigrant Gap, Truckee, and Colfax for inspection.

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

Westward passenger trains on No. 1 Track will make running test just before entering tunnel No. 6.

- Standing air brake tests must be made at:
- Summit.....Westward freight trains.
 - Norden.....Eastward and westward freight trains.
 - Stirling City.....All trains.
 - Placerville.....All trains.

This test must be made immediately before departure from Norden and Summit and enginemen and conductors are responsible for brake pipe pressure throughout the train.

When stopping freight trains on descending grade Andover for inspection engine will be stopped west of culvert 202-E located 1879 feet west of west switch Stanford.

Westward freight trains will make brake pipe test at Truckee and Summit.
The tonnage of freight trains between Stirling City and Chico must not exceed 80 M's per operative brake.

The tonnage of freight trains between Placerville and Folsom must not exceed 100 M's per operative brake.

The tonnage of freight trains between Summit and Loomis, must not exceed 100 M's per operative brake.

The tonnage of freight trains between Norden and Truckee must not exceed 120 M's per operative brake.

Emergency hose must be used on freight trains between Sparks and Roseville. Emergency hose will be handled by carmen at Sparks and Roseville, but must be applied and removed when necessary by trainmen at intermediate stations.

Passenger trains descending grade will stop four minutes at Steinman and freight trains descending grade will stop as indicated below for inspection of and for heat of wheels to equalize:

- Steinman or Foliage.....10 minutes
- Gregory or White Point.....10 minutes
- Orcal or Hilt.....5 minutes
- Weed or Edgewood.....10 minutes
- Mott or Azalea.....5 minutes
- Cougar or Andesite.....10 minutes
- Bolam (If stop not made at Andesite).....5 minutes
- Ghent.....10 minutes

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 freight trains on Roseville-Gerber line may go to Biggs for inspection if an additional stop can be avoided.

Trains handling logs must stop and inspection made by crew of load and chains before passing through tunnels and over Sprague River Bridge west of Chiloquin, Dry Canyon Viaduct between Hotlum and Bolam, Klamath River Bridge east of Klamathon, and all crossings except 2nd, 4th, 15th and 18th, over Sacramento River, except local freight trains between Ashland and Hornbrook when handling few cars of logs loaded in gondola cars.

Two Dietz lanterns must be placed on rear of caboose after dark so that crew may observe track from rear door of caboose in order to enable them to detect any logs which may have fallen from train.

Where train handling logs siding to meet an opposing train or allow a following train to pass, such train must be thoroughly inspected to see that proper clearance exists to insure safe movement for the expected train, and no movement of train on siding attempted until train to be met has passed.

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

Running air brake test must be made:

- Snowdon.....Eastward passenger trains.
- Black Butte.....Siskiyou Line passenger trains.
- Grass Lake.....Westward passenger trains.
- Ambrose.....Westward passenger trains.

Standing air brake test must be made:

- Siskiyou.....All trains.
- Grass Lake.....Westward freight trains.
- Hornbrook.....Eastward trains.
- Black Butte.....Siskiyou Line freight trains.
- Ambrose.....Westward freight trains.

Eastward trains which have made standing air brake test at Mt. Shasta or Deetz need not do so at Black Butte.

The tonnage of any freight train between Hornbrook and Ashland must not exceed 100 M's per operative brake when handled on descending grade by AC, Mallet, 2-10-2 or SP type engines. When other class engine used 90 M's 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 Mt. Shasta and Dunsmuir, and between Ambrose and Ghent, must not exceed 120 M's per operative brake.

RULE 869.—Descending Steep Grades.

This applies between Edgewood and Black Butte
Snowdon and Ashland.
Grass Lake and Delta.
Ambrose and Ghent.

AUTOMATIC BLOCK SYSTEM

The two center tracks, for entering and leaving Sacramento passenger station, are equipped with automatic signals between 6th and 7th Street switchtenders' 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 indication for crossover movement to 6th Street switchtender's station.

Main tracks 1 and 2, between Signal 890 and 891 located at 7th Street and interlocking signals located at 2nd Street, are not protected by automatic block signals. All trains will proceed with caution.

Three-arm block signal on No. 2 track at Junction switch, Rocklin, governs the movement of eastward trains. The upper home and distant signals govern the use of No. 2 track. The lower home signal will clear only when No. 4 track is clear and switch lined for that track.

On No. 1 track between Newcastle and Loomis and on No. 4 track between Rocklin and Loomis, Rule 509, single track will apply.

Signal arrangement west end Sparks yard will govern as follows: Signal 2452 on bridge governs main track movements on eastward main track. Dwarf signal 2452 on signal mast governs diverging route movements from eastward track across westward track into freight yard. Dwarf light signals 2453 and 2459 govern main track movements on westward main track. Light signal 2455 governs movement from engine lead to eastward main track.

Trains or engines stopped by signals 2134 or 2141 Gerber; 3208, 3209 or 3210 at Dunsuir Yard; 3216, 3218, 3222 or 3223 at Dunsuir; 4288, 4293 and 4297 at Ashland; 4292, 4293 and 4295 at Klamath Falls may proceed with caution, not exceeding 12 miles per hour.

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

SPECIAL SIGNALS

Light signals governing movement against 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, mile post 171.5.

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

Disc signals located at west switch Colfax, controlled by operators, will govern movement of trains as follows:

When showing yellow disc or yellow light; take siding.

When showing white disc or green light, proceed, if train orders or schedule permits.

Light signal on mast of signal 1427 east of Colfax, controlled by operators.—Indications are given by illuminated letters and figures as follows:

M—Hold main track.

X—Take crossover for roundhouse.

3—Take No. 3 siding at crossover east of road crossing.

4—Take No. 4 siding at east switch.

No light—Proceed, on time table or train order authority.

Light signal at switchman's cabin opposite yard office Roseville. This signal to be used by switchmen to give proceed signal to westward freight trains off Sparks-Roseville line to enter yard. Indications as follows:

No light—Stop and stay clear of Yosemite Street crossing.

Yellow light—Proceed into yard.

When proceed signal is given the yellow light will alternately flash off and on. Junction switch, Tehama, normally lined for movement via Chico.

Normal indication Signal 2116—Stop, Trains on Davis-Gerber line will not pass Signal 2116 until junction switch is lined for Davis-Gerber line. Rule 509 applies.

When a westward train is holding main track at Siskiyou 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 the turntable lead at Siskiyou (this is the track on the south side of main track used by helper engines in moving to and from turntable) will not pass signal 4125 until it is known that opposing train has passed signal 4112 at west end of tunnel 13.

Eastward engines or trains will leave turntable lead at east switch located 200 feet west of Signal 4124.

When necessary to send flagman through tunnel 13, train must wait until flagman calls on telephone from opposite end of tunnel.

Signal 3218 at Dunsuir governs movement from work track through crossover and on main track to signal 3222. Dwarf light signal 3214 at derail east end of drill track Dunsuir 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 track is unoccupied. Signal 3222 at Dunsuir governing eastward trains is located on left side of main track.

Signal 5031 on Great Northern Ry. at junction switch, Chemult, governs movement of trains and engines from Great Northern Railway track to joint track.

Signal 5025 at derail on left side west end of interchange track, Chemult, governs movement from interchange track to main track.

Signal 4282 located at derail on Great Northern Railway at junction switch Klamath Falls, governs movement of trains and engines from Great Northern Railway track to joint track.

INTERLOCKING

SACRAMENTO RIVER DRAWBRIDGE.—Extends eastward on No. 1 track to westward home signal three hundred fifty feet east of Front Street crossing and eastward on westward freight track to westward home signal three hundred fifty feet east of crossing.

Interlocking home light signal governing westward movements on No. 1 track at east end of bridge, equipped with number plate SA-887.

Derails, operated by switchtender, in Front Street tracks and drill tracks seventy-five feet from crossing.

Trains, engines and cars approaching Front Street crossing or junction of freight tracks with No. 1 and No. 2 tracks, will be governed by hand signal from switchtender, using green flag by day and green light by night.

NINETEENTH STREET, SACRAMENTO.—At crossing of R Street track with Western Pacific R. R.

Limits extend from interlocking home signal 400 feet west of tower to dwarf

signal 250 feet east of tower.

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

To Valley Grocery spur—one short, two long.

To Bekins spur—one long, one short, one long.

ELVAS.—Limits on Sacramento-Roseville line extend from interlocking home signal 1400 feet west of tower to automatic home Signal 924.

On Elvas-Polk line extend to interlocking home light signal at west switch to siding at Polk and to home interlocking light signal 600 feet east of Junction switch to Placerville line.

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.

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.

Crossover, center siding Elvas to westward track Elvas-Polk line. Movement governed by Signal 1355.

Crossover, center siding Elvas to eastward track Polk-Elvas line. Movement governed by Signal 1354.

West switch and derail center siding Elvas. Movement governed by Signal 1351.

Hopfen spur switch and derail. Movement governed by Signal 1345.

"R" Street connection, switch and derail. Movement governed by Signal 1331.

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

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

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. Trainman must notify engineer when the selector lever is in the "hand-throw" position, and also notify him when it is returned to the "switch-machine" position, so he may know when to be governed by the interlocking signals adjacent to the switch.

Whistle Signals governing routes as follows:

To Roseville, one long, four short.

To Sacramento, three long, one short.

To Polk, two long, three short.

To Elvas Siding, three short, two long.

To Third Track, two short, two long.

To American Can Spur, one long, one short, one long.

To Meister's Spur, one short, two long.

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

EMIGRANT GAP.—Limits as follows:

On No. 1 Track from interlocking signal located 100 feet west of house track spur at Emigrant Gap, to signal 1711, 500 feet west of turntable.

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.

Indication displayed on interlocking signal located sixty (60) feet east of crossover switch Emigrant Gap, governing movement through crossover from No. 2 track to No. 1 track:

East switch of crossover equipped with electric lock.

Derail located at clearance on east lead of turntable and equipped with electric lock.

Westward trains stopped at interlocking signal west of house track spur switch, will call operator at Emigrant Gap on telephone and be governed by his instructions and when instructed by him to operate the derail by hand, be governed by the instructions on the sign at derail.

Trains moving through crossover from No. 2 track to No. 1 track will be governed by interlocking signal located 60 feet east of crossover switch. Signal will not clear for crossover movement until crossover switches have been lined.

Trains moving off east lead of turntable to No. 1 track will be governed by signal located 60 feet west of derail. Signal will not clear until derail and switch have been lined.

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 turntable until derail has been closed.

Eastward interlocking signal, located on No. 1 track opposite east switch to crossover, governs movement against current of traffic on No. 1 track to signal 1718.

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

Rule 628 and 663 will not apply and the following will govern:

Telephones located at interlocking signals establishing communication with operator at Emigrant Gap. Trains stopped at signals will call operator for instructions and when such instructions have to do with an inoperative signal, trains will be preceded by flagman to next home or end of interlocking limits.

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 crossover 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. Movement from spur governed by signal.

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.

Rules 628 and 663 will not apply and the following will govern. Telephones located at signals communicating with signal operator at Norden office call signal operator by one long ring giving number of train, route desired, etc., movement will be governed by signal indication or instructions of signal operator and when such instructions have to do with an inoperative signal, trains will be preceded by a 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, will 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.

Signal on No. 2 track 60 feet west of west switch to siding governing eastward movement on No. 2 track and to siding and turntable.

Signal on No. 1 track opposite clearance point on west lead to turntable governing westward movement on No. 1 track and through crossovers.

GEORGIANA SLOUGH-DRAWBRIDGE.—Limits extend from interlocking home signal 500 feet west of drawbridge to interlocking home signal 500 feet east of drawbridge.

SNODGRASS SLOUGH-DRAWBRIDGE.—Limits extend from interlocking home signal 400 feet west of drawbridge to interlocking home signal 600 feet east of bridge.

NINTH AND K STREETS TOWER, MARYSVILLE.—Crossing Western Pacific Railroad and Knights Landing and Oroville Branch Lines.

Limits on Knights Landing line extend from home interlocking signal 445 feet west of Western Pacific Railroad crossing to home interlocking signal 380 feet east of crossing.

Towerman on duty 7:30 A.M. to 12:00 Noon.

1:00 P.M. to 4:30 P.M.

Following switches and derails on Western Pacific Railroad 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 either direction 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 the Western Pacific track from east or west, signals 4 located on Western Pacific track 474 feet west of crossing, and 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. You will 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.

In the event it is necessary to make this movement when a train is approaching on Western Pacific main track from either east or west, opening the door of any electric lock will not put signals 4 or 15 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 4 and 15 in STOP POSITION. After time hand release has restored to normal position a white light will light up, indicating 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 tracks on Knights Landing Branch, when towermen are off duty, will call Chief Dispatcher at Sacramento and be governed by his instructions.

BINNEY JUNCTION TOWER.—Junction with Woodland-Oroville line and crossing Western Pacific R. R.

Limits on Roseville-Gerber line extend from signal bridge 1300 feet west of tower to automatic home signal 1420. On Oroville line extend from signal bridge 1300 feet west of tower to interlocking home signal 950 feet east.

Woodland line from signal bridge 1300 feet west of tower to interlocking home dwarf signal on west leg of wye at clearance point to main track. Also from interlocking home signal 500 feet east of tower to interlocking home dwarf signal at spur switch on east leg of wye.

Whistle signals governing routes as follows:

Main track to or from Gerber, one long, four short.

Main track to or from Oroville, two short, two long.

Siding to or from Gerber, one short, three long.

Siding to or from Oroville, three long, one short.

Siding to or from west leg of wye, three short, two long.

Main track to or from west leg of wye, two long, three short.

Main track to or from east leg of wye, one short, one long.

To Spur, one short, two long.

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

LIVE OAK AUTOMATIC.—Crossing Sacramento Northern Railway one half mile east of Live Oak.

Interlocking limits on S. P. track extend from home light signal SA 1522, 517 feet west of crossing, to home light signal SA-1523, 523 feet east of crossing, and on S. N. Railway track between home light signals located 600 feet on both sides of crossing.

Speed of engines at crossing 20 miles per hour.

Normal indication of interlocking home signal is STOP.

Home signal will change to PROCEED (or CAUTION) when train enters approach circuit to distant signal, provided there is no train in the block and no train within interlocking limits or approach thereto on Sacramento Northern Railway.

Eastward trains holding main track when meeting another train at Live Oak will stop west of overlap post located 100 feet west of station.

Trains having switching to perform at Live Oak should take siding, clearing main track as quickly as possible. East switch to house track and east switch to siding should be restored normally as quickly as possible after using same.

When train is stopped by interlocking home signal flagman must be sent to operate clockwork time release located in door of battery house at crossing.

This clockwork time release must not be operated when trains or engines are between home signals or seen to be approaching on Sacramento Northern R. R. tracks.

To operate clockwork time release, turn knob to right to extreme position about one-quarter turn, release knob and when a red indicator light appears, this will indicate to flagman that signals on Sacramento Northern R. R. are in proper position to protect the movement. After 4 minutes, home signal should change from stop to proceed with caution, or a repeater red indicator light located on signal mast near base of home signal will light up and will indicate to engineman that home signals on Sacramento Northern R. R. are in stop position. Train may then proceed through interlocking limits as prescribed by Rules 663 and 509.

In the event the red indicator light does not appear at the clockwork time release flagman must be sent in each direction on intersecting track to protect the movement.

Train may then proceed through interlocking limits not exceeding 12 miles per hour.

WOODLAND.—Crossing Sacramento Northern R. R.

Limits on Davis-Gerber line extend from interlocking home signal 450 feet west of Sacramento-Northern R. R. crossing to home signal 500 feet east of crossing. On Woodland-Oroville line extend to dwarf signal 200 feet east of crossing.

Whistle signals governing routes as follows:

For Tehama to or from siding, one long, four short.

For Tehama to or from house track, three long, one short.

For Knights Landing to or from siding, one short, three long.

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

Signal Operator off duty Woodland Tower between hours 12:01 A.M. and 6:30 A.M.

Switch and derail will be lined up for movement on main track and Knights Landing branch.

Interlocking signals and derails on Sacramento Northern Railway will be set to protect movement on Southern Pacific tracks. When train is stopped by interlocking signal Rule 663 will govern.

Trains having switching to perform will use west switch to house track as east switch is interlocked and lined for main track.

REDDING REMOTE CONTROL.—Limits as follows:

From Interlocking Signal SA-2586 located 1200 feet east of Telegraph Office, Redding, to Interlocking Signal SA-2587 located at east switch to westward siding.

Rule 628 and 663 will not apply and the following will govern:

Telephone located at relay housing opposite west switch to crossover, communicating with Signal Operator at Redding office. Call Signal Operator by one long ring, giving number of train, route desired, etc. Movement will be governed by signal indication, or instructions of Signal Operator, and when such instructions have to do with an inoperative signal, trains will be preceded by a flagman to next home signal, or end of interlocking limits. When instructed by Signal Operator to operate switches on crossover by hand, be governed by instructions on sign on relay housing opposite west switch on crossover.

STRONGHOLD AUTOMATIC.—Crossing Great Northern Railroad one-half mile east of Stronghold.

Interlocking limits on S. P. track extend from home interlocking signal 503 feet west of crossing to home interlocking signal 404 feet east of crossing and on Great Northern Railroad between home interlocking signals located 546 feet on both sides crossing.

Speed of engines at crossing 20 miles per hour.

Normal indication of interlocking home signal is STOP.

Home signals will change to "Proceed" when train enters approach circuit to distant signal, provided there is no train in the block and no train within interlocking limits or approach thereto on Great Northern Railroad.

When train is stopped by interlocking home signal flagman must be sent to operate clockwork time release located in iron box at crossing locked with switch lock.

This clockwork time release must not be operated when trains or engines are between home signals or seen to be approaching on Great Northern R. R. tracks.

To operate clock work time release, turn knob to right to extreme position about one-quarter turn, release knob and when a red indicator light appears, this will indicate to flagman that signals on Great Northern R. R. are in proper position to protect the movement. After 4 minutes, home signal should change from stop to proceed, or a repeater red indicator light located on signal mast near base of home signal will light up and will indicate to engineman that home signal on Great Northern R. R. are in stop position. Train may then proceed through interlocking limits as prescribed by Rules 663 and 509.

In the event the red indicator light does not appear at the clockwork time release flagman must be sent in each direction on intersecting track to protect the movement unless interlocking signals or derails thereon be known to be in position to protect the movement.

Train may then proceed through interlocking limits not exceeding 12 miles per hour.

MISCELLANEOUS—GENERAL

Cars with inoperative couplers or couplers pulled out, if loaded with perishables or live stock, may be chained in train and moved to nearest available repair point. All other cars with defective couplers or those with couplers pulled out will be switched to the rear of caboose, using operative coupler on opposite end of the car by turning car either on turntable or wye. Car and caboose should be chained to prevent car from breaking away from train while enroute. Cars chained may be moved to the nearest repair point in the direction the train is moving.

Not more than one 2-10-2, AC or Mallet class engine must be placed on head end of freight trains, nor more than two Consolidations or one Mikado and one Consolidation, 2-10-2, AC or Mallet class engines must not be coupled ahead of engines smaller than Consolidation, when tonnage behind such engines is in excess of its rating as shown in time tables.

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

When making up train or picking up enroute, scale repair and scale test cars should be placed in rear of freight train next ahead of caboose, or next ahead of occupied outfit cars, when latter cars are handled in freight train. Yard crews must not switch with scale repair or scale test cars, but will handle them in this respect as required to handle caboose, and when setting these cars in or out of train or shifting them from one track to another, rough switching must be avoided and equipment carefully handled.

When car is set out and scale inspector is working in car, he will display a blue signal, which must be respected as per Transportation Rule No. 26. Inspector must not display blue signal for any other purpose, that unnecessary delay in handling this equipment may be avoided.

Except as specifically authorized by proper authority no car containing passengers is to be hauled next to locomotive of a steam passenger train. A steel combination or partitioned car may be hauled with baggage or unoccupied end next to engine.

For your information, quoting below sections 392, 399 and 8203 of Penal Codes of California, Arizona and Utah:

"Every person, who, in making up or running railroad trains, places or runs, or causes to be placed or run, any freight car in the rear of passenger cars, is guilty of a misdemeanor, and if loss of life or limb results from such placing or running, is guilty of felony. The term 'freight car' as used in this section does not include a baggage, express or mail car."

While the above statute applies to freight cars only, we will in addition, prohibit in California the placing or running, on the rear of any passenger train, a baggage, express, mail, refrigerator express or other head end passenger car so constructed or loaded as to prevent trainmen passing through it.

When head end cars are handled as trailers behind gas-electric cars, if these head end cars cannot be readily passed through by trainmen, they must be turned so that the retainers will be on the head end to enable compliance with air rule No. 16.

When necessary to handle head end cars behind gas-electric cars, they must be turned so that the baggage and express compartment will be at the extreme rear end of train and flagman must ride in that compartment.

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

After taking water, firemen should shove 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.

Mount Shasta, Black Butte, Grass Lake, Bray, Mt. Hebron, Pine Ridge, Kirk,

Lenz, Stronghold, Perez, Hackamore, Ghent, Alturas Yard, Lakeview, Lawton, Emigrant Gap.

Outstanding instructions provide engineers will not blow off locomotives while passing over steel bridges.

These instructions will not apply, however, on line between Roseville and Sparks during months of May, June, July, August, September and October, because of the fact that hot slivers from brake shoes may set fire to ties and it will be in order to sprinkle ties to prevent such fires.

On Shasta District use sprinklers on engines so equipped and blow off on engines not equipped with sprinklers when passing through all tunnels over second crossing Sacramento River west of Elmore, and over all steel bridges in Sacramento Canyon from Lamoine to Cantara.

MISCELLANEOUS—SACRAMENTO SUB-DIVISION

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

On freight trains ascending and descending grade between Emigrant Gap and Andover member of train crew must observe track from rear of caboose, that train may be brought to stop promptly in event of derailment.

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 may take oil and water without cutting off train at all stations except Gold Run.

Tracks between Sacramento and Roseville numbered and will be used as follows:

No. 1 Track, by westward trains.

No. 2 Track, by eastward trains.

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.

5000 Class Engines will not clear umbrella sheds of Sacramento passenger station and must not be used on Tracks 2, 3, 4, 5, 6, and 7.

Trains and engines must not pass the switch tenders stations at east end Sacramento River Bridge, Sixth Street and Seventh Street, Sacramento, without receiving a signal from switch tender to proceed, green flag by day and green light by night, and will move with caution between switch stations enumerated above.

Engineers leaving and arriving Sacramento passenger station will refrain from sounding whistle or ringing bell and keep cylinder cocks closed while passing hospital building.

Rolling Mill 4, tracks, Sacramento yard must not be used by 1300 class switch engines or other engines larger than eight wheel engines not exceeding 74,000 pounds on the drivers, ten wheel Mogul engines not exceeding 105,000 pounds on the drivers and twelve wheel consolidation engines not exceeding 125,000 pounds on the drivers.

Tracks between Roseville and Sparks numbered and will be used as follows:

No. 1 Track, via Auburn, by westward trains.

No. 2 Track, Eastward main track via Auburn, Nevada Street, by eastward trains.

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

Oil spring switch located in eastward main track at east end of east drill track, Roseville.

Spring switch located at M. P. 107.38 is normally lined for main track, and is designated by SS on switch stand target.

Eastward trains moving from drill track will run through switch when lined in normal position.

Maximum speed when moving through switch from drill track 15 miles per hour. To avoid making reverse movement through switch when leaving drill track, trains will observe position of signal 1074 located three hundred and fifty feet east of switch before fouling eastward main track, and when signal is in stop position stop at clearance point on drill track.

Train moving through switch from drill track and stopping on switch must not make reverse movement nor take slack until switch has been thrown by hand.

Switch may be thrown by hand by keeping steady pressure on switch stand lever until completely thrown and lever latched.

Running switches are prohibited.

When movement made from drill track through switch, reverse movement on main line must not be made until points are completely closed.

Westward movement on main track must not be made over this switch without first stopping and ascertaining that switch is properly lined.

Blow-off cocks, sanders, or injectors must not be used, or boosters operating passing through this switch.

During the months of May, June, July, August, September and October, because of the fact that hot slivers from brake shoes may set fire to ties, sprinklers will be placed in service on departure of westward freight trains and light engines Norden to Loomis; eastward on freight trains and light engines between Norden and Truckee.

Eastward passenger trains will operate sprinklers Norden to Truckee and westward passenger trains will operate sprinklers from first stop west of Norden.

Sprinklers are to be kept open while train is in motion, except where long stops are made, at which times they will be closed temporarily to avoid waste of water.

When making westward movement into drill track, switch must be thrown by hand and returned to normal position by hand.

Mallet, 2-10-2, 4-10-2, AC Mt., GS-I and Mikado engines, must not be operated over the following tracks:

- Rocklin, siding and house track.
- Penryn, fruit spurs west of station.
- Newcastle, tracks 3 and 4 (either from crossover leading from main track to No. 3 or from crossover from siding).

- Flint, Standard Oil spur.
- Auburn, high line.
- Nev. St., Auburn, spurs.
- Clipper Gap, team track east of road crossing.
- W. New England Mills, spur, west of tool house.
- W. Applegate, spur.
- Colfax, material spur in west yard.

- Magra, spur.
- Towle, spur.
- Blue Canon, dump spur, oil spur and Greek spur east of oil column.
- Spur switch, Eder.
- Lumber spur switch, Summit.
- Spur switch, Spruce.
- Outfit spur switch, Cisco.
- Crystal Lake, spur on south side of No. 2 track.
- Spur switches, Yuba Pass.
- Andover, outfit spur, 3 car lengths back of frog.
- Donner, 6 car lengths back of frog.
- Campbell Spur, Cisco, east of corral chute.

5000 and 4100 class engines must not use following tracks in Colfax Yard:
 Corral track west of corral,
 Bunk track,
 House track and house track lead east of freight house.

Trains picking up Colfax helpers for movement to Emigrant Gap or Norden, must cut same in ahead of the Roseville helper.

On account of 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 after engine has passed this point.

Normal position west switch siding at Midas lined for lead to No. 1 track.
 Three Indication Light Type Dwarf Signal 1603 and switchindicator (Rule 512-A), located at derail west end center siding, Midas, governing movement from center siding to No. 1 track.

Normal indication Signal 1603, no light. RED indication will be displayed after derail has been closed; and with main line switch to No. 1 track lined for siding, GREEN indication will be displayed if block is unoccupied.

YELLOW indication if block is unoccupied and signal in advance is at stop.

Should Signal 1603 fail to change immediately from RED to GREEN or YELLOW after derail and switch are lined, wait four minutes for time element relay which will be effective when the approach to Signal 1601 is occupied.

Should Signal 1603 fail to change from RED to either GREEN or YELLOW be governed by Rules 509 and 99.

Two indication light type automatic dwarf signals, 1779 and 1857, and switch indicators (Rule 512-A) located at derails on west end of center sidings Crystal Lake and Troy governing movement from center sidings to No. 1 track.

Normally no indication will be displayed on dwarf signals. RED indication will be displayed after derails have been closed, and with main line switches to No. 1 track lined for center sidings. GREEN indication will be displayed if block is unoccupied.

Should signals fail to change immediately from RED to GREEN after derails and switches are lined, wait four minutes for time element relay which will be effective when the approach to signals are occupied.

Should dwarf signals fail to change from RED to GREEN be governed by Rules 509 and 99.

Eastward freight trains with helpers to cut at Norden will take siding. Westward freight trains with helpers to cut at Summit will take upper siding.

5000 and 4100 class engines may operate on west end of team track Colfax to east end of freight house platform, but must not proceed beyond east end of platform.

When torpedoes are used between Blue Canon and Stanford, each torpedo placed, will be duplicated on opposite rail.

Crotch switch at east end of Verdi center siding will be mechanically locked by the derail. Derail must be open before crotch switch can be operated.

Cars containing live poultry moving west from Sparks must be placed three cars ahead of caboose, Sparks to Truckee and three cars ahead of helper engine from Truckee to Summit.

Normal position turntables on Truckee District will be as follows:
 Blue Canon.....West approach, on account of repair platform on west end.
 Emigrant Gap....East approach, with motor on east end.
 Cisco.....East approach, with motor on east end.
 Norden.....East approach to eastward track.

Trainmen and enginemen using these turntables must leave them lined as shown above.

OPERATION OF TURNTABLE AT NORDEN

Yellow light signals on leads to turntable at Norden. These signals will indicate route to be used from turntable. If no indication visible when engine is ready to leave turntable, telephone signal operator at Norden for instructions.

Remove rail locks before attempting to move table.
 Properly line table and reset rail locks before moving engine on or off table.
 Release brake before moving turntable and do not apply brake unless control handle is in the "off" position.

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

To Stop Turntable: Turn controller rapidly to "off" position.
 Allow turntable to come to a stop before reversing motor.

In case of trouble notify operator at Norden office, who will call maintainer.
 Turntable must be left lined and locked for east lead to eastward track.

Box No.	ALARM BOX LOCATIONS	Mile Post
3	300 feet east of east portal Tunnel No. 1.....	...
4	3/4 mile east of Blue Canon.....	...
5	300 feet west of Signal 1687 (Gunter).....	...
7	Signal 1707, 500 feet east of west switch Emigrant Gap.....	...
8	Crossover east of turntable house, Emigrant Gap.....	...
9	Between Smart and Emigrant Gap.....	173
12	Between Smart and Yuba Pass.....	174
13	Between Smart and Yuba Pass.....	175
14	In first shed west of Yuba Pass.....	...
15	East switch of Summer Siding, Yuba Pass.....	...
16	End of shed east of portal Tunnel No. 36.....	...
17	West end of center siding, Crystal Lake.....	178
18	West end Butte Canyon Bridge.....	179
19	200 feet west of west crossover, Cisco.....	180
21	End of shed east portal Tunnel No. 39.....	181
22	1 1/2 miles east of Cisco.....	182
23	1/2 mile west of crossover, Tamarack.....	183
24	1/2 mile east of crossover, Tamarack.....	184
25	Between Tamarack and Troy.....	185
26	3/4 mile west of west switch, Troy on No. 1 track.....	...
27	East switch, Troy.....	186
28	600 feet east of Lower Cascade Bridge.....	187
29	3/4 mile east of Upper Cascade Bridge.....	188
31	Between Spruce and Soda Springs.....	189
32	In first shed west of Soda Springs.....	190
33	300 feet east of crossover, Soda Springs.....	...
34	Castle Creek Bridge (Culvert 190-0).....	...
35	East switch of west run-around track on No. 1 track, Summit.....	...
36	1000 feet west of west portal Tunnel No. 6.....	193
37	East portal Tunnel No. 6.....	194
38	Between Tunnels Nos. 9 and 10.....	195
39	West Switch, Donner.....	...
41	1 mile east of Donner.....	197
42	1/2 mile east of crossovers, Eder.....	198
43	Between Eder and Andover.....	199
44	Between Eder and Andover.....	199 1/2
45	300 feet west of west portal Tunnel No. 13.....	200
46	100 feet east of Andover Section House.....	...
47	At Andover Station.....	201
48	In turntable house, Summit.....	...
49	East switch of run-around on No. 2 track, Norden.....	...
51	East switch of siding on No. 2 track, Norden.....	...
52	West portal Tunnel No. 41.....	...
53	Center of 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.

Trains using spur track serving the Stockton Fire Brick Co. across highway at Clayton will be governed by the following:

This spur must not be used by any class of engine larger than 2700 Class.
 Trains, motors, engines and cars must be stopped before crossing the highway and must not proceed to cross highway until conductor or other trainman has gone upon the crossing to ascertain if it is safe to do so and until signal to proceed has been given.

Oil trains in valley district when consisting of mixed loads and empties, will be made up with ten steel frame empty cars immediately behind engine, loaded oil cars to follow.

Through trains between Roseville and Gerber will take water at Berg instead of Marysville whenever possible.

Sidings at Nord and Lomo and team track, mill spur and Earl Fruit spur Marysville must not be used by Mikados, Mallets, SP, AC, Mt, GS-I, or 2-10-2 type engines.
 Engines equipped with pilot plows must not use tracks on "E" Street, Marysville.

Where cars or engines are to be moved on old Cannery Track over 4th Street, Marysville, flagman must flag the crossing before movement is started over crossing.

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 using Wye track at Barber, by engine with or without cars, tangent track, continuation of the Wye, must be used and at no time use the Diamond Match Company's track.

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

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

At Chico, the Chico-Stirling City main track originates at switch on Chico-Stirling City line leading to engine house at Chico.

Trains to and from Stirling City line use yard tracks from passenger station Chico to Chico-Stirling City main track.

Track between station and Stirling City main track, must be kept clear of cars.
 Westward freight trains when 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.

Flint hoppers and box cars must not be placed on spur serving El Dorado Lime & Mineral Company at Bullard to or beyond rock chute which does not clear this class of equipment.

Bullard spur from Bullard Junction to Lime Quarry in service. Trains and engines must not exceed 10 miles per hour on this spur. Engines must not pass a point 60 feet east of bunker switch.

Trains must stop and flagmen must precede train over Main Street when making movement on house track at Woodland.

Trains to and from Oroville on Woodland-Oroville line use Marysville siding.
 No engine larger than Consolidation engines with 225,000 pounds on the drivers should pass over Trestles 97-A and 97-E on Knights Landing Line.

No train, engine, motor or car shall be operated over county road known as Wilson road at Wilson unless said train, engine, motor or car shall be under control and unless traffic on the highway be protected by a member of the train crew or other competent employee acting as flagman.

Willows-Fruto main track originates at yard limit board located on Willows-Fruto line. Trains to and from Willows-Fruto line use yard tracks from passenger station to Willows-Fruto main track.

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

Engines larger than Consolidation type must not use No. 7 track at Newcastle beyond the end of curve.

Westward trains receiving orders at, or east of Newcastle moving an eastward train 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.

A westward train must stop east of east crossover switch at Newcastle unless they receive a train-order signal permitting it to proceed.

Eastward trains authorized to use No. 1 track between Loomis and Newcastle, may proceed on No. 1 track to first crossover switch, located east of the station building at Newcastle.

Nos. 224 and 484 will use No. 4 track, Rocklin to Loomis.

Before using drill track across Victory Highway at Isleton Wharf, train must be under control and traffic on the highway must be protected by member of the crew acting as flagman.

Minimum Clearances for Rotary Plows, Blue Canon East

Push cars in shed district must be placed between posts providing for proper clearance.

Tunnels 3 and 4 shed posts clear 8 to 10 inches.

Tunnel 5, 8 inches clearance.

East and west of mile post 195, stone walls clear 6 inches. Water trough east of tunnel 10 clears 5 inches.

East end of tunnel 11 clears 8 inches.

Rotary plow on an 8 or 10 degree curve will swing approximately 7 inches from center.

Crews handling plows through district where standard clearance is not provided must reduce speed to six miles per hour through tunnels and at rock walls.

MISCELLANEOUS—SHASTA DISTRICT

Engines of freight trains on descending grades of 1% or over, also westward at Cottonwood, Chilochin and Lenz, must be detached to take water. Engines of freight trains, except eastward at Morley, must be detached to take oil.

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

Leading and helper engines must not be 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 pounds 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.

Outfit cars must not be left in front of warehouses, storehouses, lumber yards, or other buildings.

Passenger equipment handled in freight trains must be placed between cars equipped with carmen cutting lever.

Engines equipped with pilot plows must not be operated past log landings.

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 employe 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.

Trains or yard engines moving on track No. 3, Dunsmuir, will move with caution approaching roundhouse, and will stop before passing turntable if engine is being turned with draw heads extending over end of turntable.

Engines heavier than 210 M's on drivers must not be operated over the following switches: If any cars to be set out or picked up on these tracks, sufficient cars from the train must be coupled to engine while doing the work.

Red Bluff..... Pioneer Fruit Spur.
Redding..... Hofer's and Sterling Lumber Co. Spurs.
Kennet..... High Line Spur and Bridge over High Line Spur.
Pollock..... Spur.
Lamoine..... Industrial Tracks Little Slate Creek Bridge and west thereof.
Gibson..... Spur.
Dirigo..... Industrial Tracks north side of main track.

Engines must not use crossovers to S. V. & E. Ry. or S. V. & E. Ry. storage track east of owner's post at Pitt.

Eastward trains, except first class, will not enter west end Dunsmuir Yard and westward engines and trains, except first class, will not pass signal 3213 at signal shop east end Dunsmuir Yard, without proceed signal from yardman.

AC 4, 5 and 6 class engines must not be operated on Pacific Fruit and Produce Company's spur or on house track beyond west end of freight platform, Mount Shasta.

The following rules will govern the handling of a passenger train which has parted from any cause on grades between Dunsmuir and Ashland: On ascending grade, when train has parted, angle cock must be closed at opening, and immediately all hand brakes must be 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 the 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 the train has been coupled, air must be applied from engine before hand brakes and retainers are released.

Engines heavier than 210 M's on drivers must not be operated over the following switches: If any cars to be set out or picked up on these tracks, sufficient cars from the train must be coupled to engine while doing the work.

Igerna..... Spur.

Deetz. AC and MC class engines may use stem of Wye leading to rock crusher at Deetz as far as Highway crossing but must not go on curved portion of balloon track.

Weed. Engines larger than the 2600 Consolidation class must not be used on tracks of the Long Bell Lumber Co. at Weed as follows:

Dock 1 and 2 in lumber shed and shed spur.
Block Spur.
Factory 2.
Factory 3.
Track No. 6 in lumber yard.

When necessary to perform switching on these tracks, care should be exercised to see that heavy class power is not used on such tracks.

Engines must not operate over following Industrial Tracks:

Ager..... Spur beyond signal just east of road crossing.

Engines heavier than 210 M's on drivers must not be operated on industrial tracks between Bray and Klamath Falls and must use cars from the train when necessary to do the work except consolidation, 4000 and 4200 class engines can use lumber spur back of stock corral Macdoel. Box Factory spur Bray and all spurs Dorris.

At Mt. Hebron EASTWARD siding will be used by eastward trains and is located on left side of main track going east. WESTWARD siding will be used by westward trains and is located on left side of main track going west. East connection switch on EASTWARD siding must be normally lined for stock track.

When necessary to occupy McCloud River Railroad Company's tracks at Mount Shasta, including the west leg of wye it must be under protection of flag. Trackage arrangements with McCloud River Railroad Company prohibit this company's trains or engines using their main track from clearance with interchange track east end of yard to point opposite station building.

Rear brakemen on freight trains descending grades between Black Butte and Metcalf, Snowdon-Ashland, Grass Lake and Dunsmuir will observe track from rear door of caboose that trains may be stopped in event of derailment. Dietz lantern placed on rear of caboose will be used at night to assist in observing track. On four brakemen trains fourth brakeman will be stationed near emergency hose on train, swing brakeman will ride cupola of caboose to watch train and for signals. This will not interfere with other assignment of brakemen by Conductor should necessity require it. In the absence of brakeman in cupola, Conductor must devote as much time as possible to watch train.

Freight trains taking siding at Grass Lake stop east of east house track switch to permit engine movement around wye track. East and west house track switches, Grass Lake, will be normally lined for legs of wye. When there is a Westward train on siding Grass Lake, Eastward freight trains pull to clear west switch of siding and cut out helper through connection east of east leg of wye.

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

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

Light engines arriving at Dunsmuir from East, desiring to enter roundhouse lead, will sound whistle signal as follows: "Short, long, two short."

At Ashland eastward freight trains use No. 1 track and when necessary double over to No. 3 track. Westward freight trains use No. 4 track and when necessary double to No. 2 track.

Westward passenger trains making station stop at Steinman will stop with rear end west of the east switch.

Engines heavier than 210 M's on drivers must not be operated on industrial tracks between Klamath Falls and Kirk, except engines not heavier than 275 M's on drivers may operate over the following:

Algoma Log Spur and industrial track to box factory switch.
Modoc Point Lamm Lbr. Co. Spur.

Engines must not use spur at Perez. When necessary to handle cars on this spur hold onto sufficient cars to keep engine off spur.

SCALES

Track scale at Matheson is private scale.

SPEED TABLE

Miles per Hour	1 Mile in		Miles per Hour	1 Mile in		Miles per Hour	1 Mile in		Miles per Hour	1 Mile in	
	Min.	Sec.		Min.	Sec.		Min.	Sec.		Min.	Sec.
6	10	.....	21	2	51	31	1	56	41	1	27
8	7	30	22	2	43	32	1	52	42	1	25
10	6	.....	23	2	36	33	1	49	43	1	23
12	5	.....	24	2	30	34	1	45	44	1	21
15	4	.....	25	2	24	35	1	42	45	1	20
16	3	45	26	2	18	36	1	40	46	1	18
17	3	31	27	2	13	37	1	37	47	1	16
18	3	20	28	2	8	38	1	34	48	1	15
19	3	9	29	2	4	39	1	33	49	1	13
20	3	.....	30	2	.....	40	1	30	50	1	12

Where maximum speed of 60 miles per hour authorized for passenger trains, maximum speed of 50 miles per hour must not be exceeded on curves.

Engines with water capacity of engine tender 7000 gallons or less, except tender classes 70-R-1 and 70-SC-1, maximum speed of 50 miles per hour must not be exceeded.

SPEED RESTRICTIONS

Wooden passenger cars, when used in main line service, must be equipped with steel center sills and steel platforms, except

(a) Wooden baggage, express and other head-end cars not so equipped may be used, when entire consist of train is composed of such equipment, or may be handled

on head end of passenger trains, provided consist thereof does not exceed seven cars, and inspection indicates movement can be made with entire safety.

(b) Wooden passenger-carrying cars not so equipped may be used in local passenger trains and in local extras, operated account holiday or excursion traffic, provided speed of such extras is restricted to forty miles per hour. When consist of local regular or extra trains contain both wooden and steel passenger-carrying cars, the wooden equipment must be kept together and on the rear.

Speed of 60 miles per hour permitted train No. 9 between Roseville and Sacramento, where speed of other passenger trains is restricted to 50 miles per hour.

Trains must not exceed 25 miles per hour on No. 4 track between Rocklin and Loomis.

Slow boards have been placed 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.

Passenger trains must not exceed 35 miles per hour on tangent and 30 miles per hour on curves between Truckee and Loomis on No. 1 track and between Colfax and Truckee on No. 2 track.

Freight trains must not exceed 20 miles per hour between Truckee and Loomis on No. 1 track and between Colfax and Truckee on No. 2 track.

SP-1, SP-2, SP-3, F-3, F-4, F-5, F-6, AM, GS-1, and MM-2 type engines must not exceed 25 miles per hour and AC-4, AC-5, AC-6 type engines must not exceed 28 miles per hour where slow boards restricting speed on curves, show 30 miles per hour between Truckee and Loomis on No. 1 track and between Colfax and Truckee on No. 2 track, and between Truckee and Sparks on Nos. 1 and 2 tracks where slow boards restricting speed on curves show 28 miles per hour.

AC-4, 5 and 6 type engines must not exceed 25 miles per hour over the following structures:

Bear River Bridge 126-C 1.2 Miles West of Wheatland.
Yuba River Bridge 140-C 2000 feet West of Marysville.
Butte Creek Bridge 175-B 2.8 Miles West of Durham.
Deer Creek Bridge 203-E .8 Miles East of Vina.
Sacramento River Bridge 210-C At Tehama.

Clear Creek Bridge at Girvan. Stoney Creek 166-D and 166-E between
Cache Creek 89-A between Woodland and Yolo. Orland and Wyo.
Thomas Creek 182-A between Richfield and Tehama.

Mt. 1, 2, 3, 4, 5 class engines must not exceed 28 miles per hour where slow boards restricting speed on curves show 30 miles per hour.

MC 2, 4, 6 and AC 1, 2 and 3 class engines must not exceed 20 miles per hour on curves.

Motors backing through yards and over highway crossings must not exceed 10 miles per hour.

Relief trains with steam derrick must not exceed 15 miles per hour over Colusa, Sutter Basin, River Farms, Stirling City, Walnut Grove, and Placerville lines.

Relief trains with steam derrick must not exceed 25 miles per hour and will be governed by other speed restrictions.

Fire trains and flangers operating between Lawton and Loomis must not exceed 30 miles per hour and be governed by other speed restrictions.

Speed of fire trains, with water cars full, must not exceed 25 miles per hour in forward direction.

Speed of fire trains, with water cars less than three quarters full, must not exceed 20 miles per hour in forward direction. Water cars must be kept full when possible.

Trains handling loaded Flint hoppers must not exceed 25 miles per hour.

At intermediate stations where mail is dispatched while trains are in motion, speed must be reduced sufficiently to avoid injury to passengers or others who may be standing on station platforms.

Eastward first-class trains must not exceed 30 miles per hour from yard limit board located one thousand feet west of west switch at Antelope to signal 1046, from signal 1046 to mile post 108 on Roseville-Sparks line, 20 miles per hour.

Westward first-class trains from mile post 108 Roseville-Sparks line to signal 1049 20 miles per hour. From signal 1049 to Antelope station 30 miles per hour.

Freight trains on descending grades must not exceed 15 miles per hour while passing passenger trains.

When necessary for locomotive cranes to move in trains with flexible or swivel truck trailing, the speed of the train must not exceed 18 miles per hour.

Trains must not exceed 25 miles per hour entering or moving through controlled sidings, or when running against the current of traffic on double track under authority of dwarf signals.

Trains must not exceed 25 miles per hour from Yuba River bridge to Feather River bridge, Marysville, and from east yard limit board Chico to west switch Chico Siding.

Eastward trains using No. 2 track must not exceed 12 miles per hour from Signal Bridge just west of Passenger Station Sparks to yard office at Sparks.

Engines must not exceed 8 miles per hour on balloon track at Lake Tahoe.

Trains must not exceed 25 miles per hour over Feather River bridge east of Binney Junction. This includes approaches as well as trestle on the curve just east of Feather River.

Trains must not exceed 15 miles per hour between the overhead bridge at Roseville, on the Roseville-Gerber line, and the passenger station at Roseville.

Consolidation engines must not exceed 15 miles per hour between Wyo and Hamilton. Trains must not exceed 12 miles per hour over railroad crossing Bridge Street east of Yuba City station.

Trains must stop within 200 feet of S. N. R. R. crossing at Yuba City and at Knights Landing drawbridge before crossing.

SPECIAL INSTRUCTIONS

LOCATION OF STRETCHERS

Sacramento.....Hospital	Knights Landing.....Freight House	Penryn.....Baggage Room	Gerber Mt. Shasta Ashland
".....Baggage Room	Woodland.....Baggage Room	Newcastle....." "	Redding Weed Klamath Falls
Fair Oaks.....Freight House	Williams....." "	Auburn....." "	Kennet Montague Crescent Lake
Hood....." "	Willows (2)....." "	Colfax....." "	Dunsmuir Hornbrook Alturas
Walnut Grove.....Baggage Room	Roseville.....Power House	Dutch Flat....." "	Dunsmuir Yard Alturas Yard
Lincoln....." "	".....Car Dept.	Towle....." "	
Wheatland....." "	".....Yard Office	Blue Canon (2)....." "	HOSPITALS
Marysville....." "	".....Station	Cisco....." "	GENERAL.....SAN FRANCISCO
Gridley....." "	".....Hospital	Norden....." "	EMERGENCY.....SACRAMENTO
Biggs....." "	".....Store Dept.	Truckee (3)....." "	".....ROSEVILLE
Chico (2)....." "	Rocklin.....Baggage Room	Floriston....." "	".....GERBER
Oroville....." "	Loomis....." "		".....SPARKS

Mile Post	LOCATION	DESCRIPTION
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.....	Boiler House of sugar factory.....Side
177.4	Hamilton.....	Shed over beet unloading track.....Overhead

Mile Post	LOCATION	DESCRIPTION
DAVIS-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, E. of depot.....Overhead
135.0	Honcut.....	Station platform.....Side
135.0	Honcut.....	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

Mile Post	LOCATION	DESCRIPTION
SACRAMENTO-PLACERVILLE		
91.5	Sacramento, 23rd & R.....	Contractors' spur, building.....Side
94.8	Brighton.....	Unloading pit center of track A. Teichert Co. spur.....Side
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
126.4	Latrobe.....	Rock Cut.....Side
126.5	E. of Latrobe.....	Rock Cut.....Side
128.6	E. of Latrobe.....	Rock Cut.....Side
148.7	Placerville.....	Water Tank.....Side

Mile Post	LOCATION	DESCRIPTION
SACRAMENTO-ISLETON		
92-B	.....	Bridge.....Side
93.0	Charles.....	Stock Chutes at 93-A.....Side
	Snodgrass Slough.....	Bridge.....Side
113.4	Walnut Grove.....	Pacific Fruit Bldg.....Side

M.P.	BETWEEN	Structure	Height	Crossing
.....	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	Elmore.....Antler.....	Bridge No. 3.....	21' 11"	Sacramento River
288.9	Pollock.....Antler.....	Tunnel No. 6.....	21' 2"	
295.6	Smithson.....Delta.....	Tunnel No. 7.....	18' 6 1/2"	
299.8	Delta.....Lamoine.....	Tunnel No. 8.....	18' 2"	
301.8	Lamoine.....Gibson.....	Bridge No. 6.....	21' 9"	Sacramento River
302.2	Lamoine.....Gibson.....	Bridge No. 7.....	21' 5"	Sacramento River
305.3	Gibson.....Fisher.....	Bridge No. 8.....	21' 6"	Sacramento River
305.4	Gibson.....Fisher.....	Tunnel No. 9.....	17' 11"	
306.7	Fisher.....Sims.....	Bridge No. 9.....	21' 6"	Sacramento River
307.0	Fisher.....Sims.....	Tunnel No. 10.....	18' 1"	
308.6	Fisher.....Sims.....	Bridge No. 10.....	21' 6"	Sacramento River
308.9	Gibson.....Sims.....	Bridge No. 11.....	21' 6"	Sacramento River
310.3	Sims.....Flume.....	Bridge No. 12.....	23' 9"	Sacramento River
310.6	Sims.....Flume.....	Bridge No. 13.....	21' 4"	Sacramento River
317.6	Castle Rock.....Castle Crag..	Bridge No. 14.....	21' 9"	Sacramento River
317.8	Castle Rock.....Castle Crag..	Bridge No. 15.....	21' 7"	Sacramento River
325.0	Shasta Retreat..Shasta Springs.	Bridge No. 16.....	21' 10"	Sacramento River
327.2	Small.....Cantara.....	Bridge No. 17.....	21' 10"	Sacramento River
329.4	Cantara.....Mott.....	Tunnel No. 12.....	18' 10 1/2"	
390.9	Klamathon.....Hornbrook.....	Bridge.....	21' 6 1/2"	Klamath River
411.3	White Point.....Siskiyou.....	Tunnel No. 13.....	18' 00"	
414.6	Viaduct.....Wall Creek.....	Tunnel No. 14.....	18' 7"	
415.2	Viaduct.....Wall Creek.....	Tunnel No. 15.....	18' 4"	
419.9	Steinman.....Mistletoe.....	Tunnel No. 16.....	18' 0"	
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"	S. P. Tracks
456.0	Lobert.....Chiloquin.....	Bridge.....	23' 7"	Sprague River

Steinman water tank, impaired side clearance.

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

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE

Mile Post	LOCATION	DESCRIPTION
SACRAMENTO YARD		
	Sacramento River Bridge.....	Side
	Shop Yard.....	Oil House West of Store No. 1.....Side
	Shop Yard.....	Sand spurs Nos. 1 and 2.....Overhead
	Shop Yard.....	Track No. 2, Car Shop No. 9.....Side
	Shop Yard.....	Track No. 3, Car Shop No. 9.....Side
	Shop Yard.....	Track No. 4, Car Shop No. 9.....Side
	Shop Yard.....	Track No. 5, Car Shop No. 9.....Side
	Shop Yard.....	Track No. 9, Car Shop No. 9.....Overhead & Side
	Shop Yard.....	Roundhouse spur.....Side
	Shop Yard.....	Track No. 2 Bone Yard Track.....Side
	Shop Yard.....	Track No. 3 Laundry.....Side
	Shop Yard.....	Track No. 2 Scrap Dock.....Side
	Shop Yard.....	Track No. 3 Scrap Dock.....Side
	6th and H Streets.....	Western Meat spur.....Side
	6th Street.....	New Foundry Track.....Side
	6th Street.....	Coke spur.....Side
	6th Street.....	Foundry Track 6th Street.....Side
	R between 11th & 12th.....	Lawrence Warehouse.....Side
	R between 21st & 22nd.....	Barley spur Buffalo Brewery.....Side
	R between 21st & 22nd.....	Buffalo Brewery spur.....Overhead & Side
	25th & R.....	Unloading pit, Sacramento Rock and Sand Co.....Side
	B between 11th & 12th.....	Phoenix Mill spur.....Side
	B between 8th & 9th.....	Consumers Ice Co. Track.....Side
	3rd to 6th Streets.....	Track No. 4 Rolling Mill.....Side
	6th Street.....	Water Tank.....Side
	15th & N. B. Streets.....	Unloading pit center of Track, Golden Gate Atlas spur.....Side
	13th & 14th on B St.....	Unloading pit center of Track, Clark and Henry spur.....Side
	4th & R Streets.....	Sacramento Vegetable Growers Assn.....Side
	5th & R Streets.....	Viriden Packing Co. spur.....Overhead & Side
	Front St. between M & N.....	Sacramento Northern Guy Pole.....Side
	Walnut Grove Connection.....	2nd Street to Front St. Yard.....Overhead
	Front St. between H & I.....	Stulsaft spur.....Overhead
	Between tracks No. 1 and No. 2.....	South end of old freight shed.....Front St. Side
	Between tracks No. 2 and No. 3.....	South end of new freight shed.....Front St. Side
	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 & Side
110.6	Rocklin.....	Pernu Quarry spur.....Overhead
110.6	Rocklin.....	Elickson Quarry spur.....Overhead
110.6	Rocklin.....	Cal. Granite spur, Rocklin, Quarry.....Side
110.6	Rocklin.....	Stock Chute on Corral Track.....Side
110.6	E. of Rocklin.....	Antelope Creek bridge.....Side
114.2	E. of Rocklin.....	Tunnel No. 15.....Side & Overhead
114.8	E. of Rocklin.....	Tunnel No. 16.....Side & Overhead
117.3	E. of Lincoln Ave., Penryn.....	Tunnel No. 17.....Side & Overhead
120.5	E. of Newcastle.....	Tunnel No. 18.....Side & Overhead
122.7	E. of Newcastle.....	Tunnel No. 19.....Side & Overhead
123.2	E. of Newcastle.....	Tunnel No. 20.....Side & Overhead
124.7	E. of Nev. St., Auburn.....	Tunnel No. 21.....Side & Overhead
131.2	E. of Bowman.....	Tunnel No. 22.....Side & Overhead
132.7	E. of Clipper Gap.....	Tunnel No. 23.....Side & Overhead

LOCATION DESCRIPTION

ROSEVILLE-SPARKS—EASTWARD—Continued

132.9	E. of Clipper Gap.....	Tunnel No. 24.....Side & Overhead
133.1	E. of Clipper Gap.....	Tunnel No. 25.....Side & Overhead
133.3	E. of Clipper Gap.....	Tunnel No. 26.....Side & Overhead
133.8	E. of Clipper Gap.....	Tunnel No. 27.....Side & Overhead
134.8	E. of Applegate.....	Tunnel No. 28.....Side & Overhead
136.0	E. of Applegate.....	Tunnel No. 29.....Side & Overhead
138.7	E. of N. E. Mills.....	Tunnel No. 30.....Side & Overhead
139.2	E. of Lander.....	Tunnel No. 31.....Side & Overhead
139.4	E. of Lander.....	Tunnel No. 32.....Side & Overhead
141.7	Colfax.....	Automatic Signal Nos. 1420, 1421 & 1425.....Side
141.7	Colfax.....	Water Col. W. of Station W. B.....Side
141.7	Colfax.....	PFE Icing Platform.....Side
144.5	E. of Colfax.....	Tunnel No. 33.....Side & Overhead
144.7	E. of Colfax.....	Tunnel No. 34.....Side & Overhead
152.2	Gold Run.....	Mail Crane.....Side
152.2	Gold Run.....	Water Tank West end of Yard.....Side
152.4	E. of Gold Run.....	Oil & Water columns.....Side
165.5	Blue Canon.....	Water Columns.....Side
208.0	Truckee.....	Roundhouse portals.....Side
208.0	Truckee.....	Oil sump doorways.....Side
242.9	Reno.....	Transfer track.....Side
242.9	Reno.....	Buffalo Brewing Co. platform.....Side
164.8	Knapp to Andover.....	Snow sheds.....Side & Overhead
200.6	Knapp to Andover.....	Snow sheds.....Side & Overhead

SPARKS-ROSEVILLE—WESTWARD

164.8	Andover to Knapp.....	Snow sheds.....Overhead & Side
201.3	Andover to Knapp.....	Snow sheds.....Overhead & Side
195.7	West of Donner.....	Tunnel No. 12.....Overhead & Side
195.4	West of Donner.....	Tunnel No. 11.....Overhead & Side
195.1	West of Donner.....	Tunnel No. 10.....Overhead & Side
194.9	West of Donner.....	Tunnel No. 9.....Overhead & Side
194.3	West of Donner.....	Tunnel No. 8.....Overhead & Side
194.1	West of Donner.....	Tunnel No. 7.....Overhead & Side
193.7	West of Donner.....	Tunnel No. 6.....Overhead & Side
181.0	West of Tamarack.....	Tunnel No. 4.....Overhead & Side
180.7	West of Tamarack.....	Tunnel No. 3.....Overhead & Side
165.4	West of Knapp.....	Tunnel No. 1.....Overhead & Side
132.7	W. of Applegate.....	Tunnel No. 0.....Side & 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.....	Hse. Track, Auburn I. & C. siding.....Side
124.5	Auburn.....	Hse. Track, Ford & Son, Whse. siding.....Side
122	W. of Flint.....	Cut West of 122.....Side
113.9	W. of Flint.....	Cut West of 122-G.....Side
113.9	W. of Flint.....	Cut West of 122-H.....Side
113.9	Loomis.....	Bloomer Cut.....Side
113.9	Loomis.....	No. 1 Hill track, Earl Fruit Co.....Side
113.9	Loomis.....	No. 1 Hill track, Law Bros., Fruit Hse.....Side

SACRAMENTO-GERBER

94.9	Ben Ali.....	Cannon Phillips spur.....Overhead & Side
117.0	Lincoln.....	Diamond Match Co., Lumbershed.....Side
140.8	Clayton.....	Stockton Fire Brick Co., spur.....Overhead
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 & Overhead

WOODLAND-TEHAMA

103.2	Dunnigan.....	Water Tank.....Side
117.6	Genevra.....	Water Tank.....Side
124.2	Williams.....	Bartlett Water Co., shed platform.....Side
124.2	Williams.....	Stoval-Wilcox Wholesale platform.....Side & Overhead
124.2	Williams.....	Williams Warehouse Co., platform.....Side
133.0	Maxwell.....	Water Tank.....Side

LIST OF SURGEONS

LOCATION	NAME	TITLE
San Francisco	Dr. W. B. Coffey	Chief Surgeon and Manager.
Sacramento	Dr. A. M. Henderson	Division Surgeon.
Sacramento	Dr. G. L. Stevenson	Division Surgeon.
Sacramento	Dr. W. W. Cress	District Surgeon.
Sacramento	Dr. J. Roy Jones	Aurist.
Sacramento	Dr. E. C. Turner	Oculist.
Roseville	Dr. L. E. Jones	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. R. C. Atkinson	District Surgeon.
Dutch Flat	Dr. E. A. Bryan	District Surgeon.
Truckee	Dr. J. H. Bernard	District Surgeon.
Reno	Dr. W. H. Hood	Consulting Surgeon.
Reno	Dr. Horace J. Brown	District Surgeon.
Reno	Dr. M. R. Walker	Assistant District Surgeon.
Reno	Dr. John A. Fuller	Oculist and Aurist.
Lincoln	Dr. A. W. McArthur	District Surgeon.
Wheatland	Dr. F. W. Didier	District Surgeon.
Marysville	Dr. E. E. Gray	District Surgeon.
Marysville	Dr. Thos E. Lerner	Oculist and Aurist.
Live Oak	Dr. I. W. Higgins	District Surgeon.
Gridley	Dr. W. S. Lavy	District Surgeon.
Biggs	Dr. Geo. W. Hemmlinger	Emergency Surgeon.
Durham	Dr. J. L. Doyle	District Surgeon.
Chico	Dr. N. T. Enloe	District Surgeon.
Chico	Dr. D. H. Moulton	Associate District Surgeon.
Los Molinos	Dr. J. H. Belyea	District Surgeon.
Gerber	Dr. F. J. Bailey	District Surgeon.
Davis	Dr. W. E. Bates	Emergency Surgeon.
Davis	Dr. Thomas E. Cooper	Emergency Surgeon.
Woodland	Dr. H. D. Lawhead	Consulting Surgeon.
Woodland	Dr. Fred R. Fairchild	District Surgeon.
Arbuckle	Dr. H. S. Powis	District Surgeon.
Williams	Dr. N. M. Salter	District Surgeon.
Colusa	Dr. C. O. Poage	District Surgeon.
Willows	Dr. C. W. Lund	District Surgeon.
Corning	Dr. H. H. Beck	District Surgeon.
Stirling City	Dr. A. L. Derbyshire	District Physician and Surgeon.
Orland	Dr. T. H. Brown	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. Smith McMullen	District Surgeon.
Walnut Grove	Dr. V. W. Pallesen	District Surgeon.
Isleton	Dr. J. H. Leimbach	District Physician and Surgeon.
Tahoe	Dr. C. B. Pedersen	Emergency Surgeon.
Dunsmuir	Dr. E. J. Cornish	District Surgeon.
Dunsmuir	Dr. A. H. Newton	District Surgeon.
Mt. Shasta	Dr. Paul Wright	District Surgeon.
Weed	Dr. H. L. Vidricksen	District Surgeon.
Montague	Dr. Chas. Pius	District Surgeon.
Hilt	Dr. Jos. Langer	District Surgeon.
Ashland	Dr. F. G. Swedenburg	District Surgeon.
Ashland	Dr. E. A. Woods	Assistant District Surgeon.
Gerber	Dr. F. J. Bailey	District Surgeon.
Red Bluff	Dr. F. L. Doane	District Surgeon.
Cottonwood	Dr. R. G. Frey	Emergency Surgeon.
Anderson	Dr. G. E. Flora	District Surgeon.
Redding	Dr. C. D. Sewall	Acting District Surgeon.
Dorris	Dr. D. Todorovic	District Surgeon.
Klamath Falls	Dr. E. D. Johnson	Division Surgeon.
Klamath Falls	Dr. Chas. V. Rugh	Assistant District Surgeon.
Klamath Falls	Dr. Ralph W. Stearns	Oculist and Aurist.
Klamath Falls	Dr. E. D. Lamb	Assistant District Surgeon.
Chiloquin	Dr. Marvin Nersest	District Surgeon.
Alturas	Dr. John Stille	District Surgeon.
Lakeview	Dr. C. E. Leithead	District Surgeon.

RATING OF LOCOMOTIVES—SACRAMENTO DIVISION—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 1719	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	1725 to 1769, 1780 to 1803	200	5250	1300	870	2000	1000	4150	1550	990	4600	2850	530	980	
M-6	M-63 21/28 153 S	1823 to 1825														
M-9	M-63 21/28 150 S	1806 to 1822	210	5550	1400	930	2150	1050	4400	1650	1050	4850	3000	570	1050	
M-9	M-63 21/28 156 S	1826, 1827														
T-1	T-63 20/28 112	2235 to 2271	180	3850	900	590	1400	680	3100	1100	700	3350	2100	370	700	
T-26	T-69 21/28 152 S	2283 to 2300	200	4800	1150	750	1800	870	3900	1400	860	4250	2700	440	860	
T-23	T-63 21/28 156 S-163 SF	2301 to 2310	210	5550	1350	920	2100	1050	4400	1650	1050	4850	3000	560	1040	
T-28, 31	T-63 22/28 162 S	2311 to 2362	210	6050	1500	1000	2350	1150	4800	1800	1150	5300	3250	630	1150	
T-32	T-69 23/28 174 S	2363 to 2370														
T-32	T-69 23/28 174 S	2372 to 2384	210	6150	1450	970	2300	1100	5050	1800	1150	5400	3450			
C-11	C-51 22/26 152	2502	180	5150					4050	1550	1000	4500	2750	550	1100	
C-12	C-50 20/28 164	2503	190	4750					3700	1400	870	4150	2500	580	1080	
C-9, 10	C-57 22/30 200 SF	2513 to 2599, 2750, 2752 to 2860														
C-9, 10	C-57 22/30 194 S	2860														
C-8	C-57 22/30 192 S	2698 to 2749, 2751	210	6650	1700	1150	2600	1300	5200	2000	1300	5800	3550			
C-5	C-57 22/30 187 S	2624 to 2679														
C-5	C-57 22/30 185 S	2680 to 2693														
C-5	C-57 22/30 180	2624 to 2679	200	5950	1450	970	2300	1100	4650	1750	1100	5150	3150			
C-5	C-57 22/30 178	2680 to 2693														
TW-1	TW-54 22/26 147	2900 to 2913	180	5100	1250	850	1950	1100	3950	1500	960	4450	2700	500	950	
TW-8	TW-54 21/32 161 S	2914 to 2921, 2923	190	5650	1450	970	2200	1250	4450	1650	1100	4900	3000			
TW-4	TW-56 20/30 120	2928, 2930, 2931	160	3900	970	640	1500	830	3050	1150	720	3400	2050	400	740	
A-3	A-81 20/28 112 S-116 SF	3025 to 3040, 3042 to 3071	210	3800					2950							
A-3	A-81 20/28 120/B-64 SF	3025 to 3040, 3042 to 3071														
Mk2-4	Mk57 231/30 206 S	3200 to 3240	210	7650	1900	1250	2950	1600	5950	2200	1400	6650	4050			
Mk2-4	Mk57 231/30 222SF-230SF															
Mk5, 6	Mk63 26/28 210 S-231 SF	3241 to 3277	210	8400	2100	1400	3250	1850	6600	2500	1600	7400	4550			
F-1	F-63 271/32 273 S	3600 to 3652	200	9650	2450	1650	3750	2100	7550							
F-4, 5	F-63 291/32 306/B-61 SF	3668 to 3763	200	11000	2750	1850	4300	2400	8600							
F-5	F-63 291/32 306/B-62 SF	3764 to 3768														
AC-1,2,3	AC-57 22/30 2441 SF	4000 to 4048	210	13300	3400	2300	5200	3000	10400							
AC-4	AC-63 24/32 4475 SF	4100 to 4109	235	17350	4450	3050	6800	3900	13600							
AC-5	AC-63 24/32 4483 SF	4110 to 4125														
AC-6	AC-63 24/32 4517 SF	4126 to 4150	250	18500	4800	3250	7300	4150	14500							
MM-2	MM-63 25/30 320 SF	4200 to 4211	200	10350	2600	1750	4050	2250	8100							
AM-2	AM-63 25/30 320 SF	4200 to 4211	210	12150	3150	2100	4800	2700	9550							
MT-1,3,4,5	MT-73 28/30 246/B-60 SF	4300 to 4376	210	8950	2150	1400	3400	1850	6950							
SP-1	SP-63 28/30 316/B-60 SF	5000 to 5015	225	12950	3300	2200	5050	2850	10150							
SP-2, 3	SP-63 28/30 317/B-61 SF	5016 to 5048														
P-1, 3, 5	P-77 22/28 141 S	2400 to 2452, 2459, 2460														
P-1	P-77 22/28 152 SF		210	4850	1100	700	1800	950	3800	1350	810	4300	2550			
P-1	P-77 22/28 160/B-54 S	2400 to 2427														
P-1	P-77 22/28 163/B-54 SF															
P-4	P-77 23/28 155/B-58 SF	2400 to 2437	210	5350	1250	780	2000	1050	4150	1500	900	4750	2800			
P-8, 10	P-73 25/30 181 SF	2461 to 2474, 2478 to 2483	200	6750	1550	990	2550	1350	5250							
P-8, 10	P-73 25/30 183/B-63 SF	2475, 2484 to 2491														
GS-1	GS-73 27/30 262/B-104 SF	4400 to 4409	250	9550	2250	1450	3600	1950	7450							
Allowance for Empty and Under-loaded Cars				Less than 40 M's	6	6	3	6	3	6	3	6	6	6	6	6
				40 M's to 50 M's	3	3	0	3	0	3	0	3	3	3	3	3
				More than 50 M's	0	0	0	0	0	0	0	0	0	0	0	0

Note: Rating of trains East with two or more locomotives classes AC-4, 5 and 6 will be single rating shown in column 3, Colfax to Sparks, multiplied by number of locomotives 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.

CLASS "C"—Consolidation engine
 "T"—Ten-wheelers
 "MM"—Mallet Mogul
 "AC"—Articulated Consolidation
 "A"—Atlantic Type

"M"—Moguls "Mk"—Mikado
 "TW"—Twelve-wheelers
 "MC"—Mallet Consolidation
 "MT"—Mountain Type
 "GS"—Golden State

"E"—Eight-wheelers
 "P"—Pacific Type
 "F"—Two-ten-two Type
 "SP"—Southern Pacific Type

Example.—Consolidation engine having 57-inch drivers, Cylinders 22-inch diameter and 30-inch stroke, and weighing 187,000 pounds on Drivers: C-57—187 30

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 LOCOMOTIVES—Continued

NOMINAL CLASS	OFFICIAL CLASS	ENGINE NUMBERS	Boiler Pressure	Ashland and Hornbrook	Dunsmuir and Edgewood	Snowdon to Edgewood	Hornbrook to Snowdon	Gerber to Dunsmuir	Dunsmuir to Gerber	Dunsmuir to Gerber	Black Butte to Grass Lake	Mt. Hebron to Dunsmuir	Grass Lake to Klamath Falls	Klamath Falls to Crescent Lake	Klamath Falls to Alturas	Alturas to Klamath Falls
				Single	Dunsmuir to Black Butte	Edgewood to Hornbrook	Single	Single	Single	Single	Single	Double Hooker Hill	Single	Single	Single	Single
T-1	T-63 20/26 112	2235 to 2271	180	410	680	1300	910	1200	2350	2600	1050	1600	3250	1850	1550	660
T-26	T-69 21/28 152-S	2283 to 2300	200	410	800	1300	910	1500	2350	2600	1050	1600	3250	1850	1550	660
T-23	T-63 21/28 156-S-163-SF	2301 to 2310	210	590	1000	1950	1350	1750	3450	3800	1750	2600	5250	3050	2450	1050
T-28, 31	T-63 22/28 162-S	2311 to 2362	210	700	1100	2100	1500	1950	3750	4150	1750	2600	5250	3050	2450	1050
C-9, 10	C-57 22/30 200-SF	2513 to 2599, 2750, 2752 to 2860 2698 to 2749, 2751	210	800	1250	2400	1650	2150	4200	4600	1950	2950	5850	3400	2750	1200
C-9, 10	C-57 22/30 194-S															
C-8	C-57 22/30 192-S															
C-5	C-57 22/30 187-S															
C-5	C-57 22/30 185-S															
C-5	C-57 22/30 180															
C-5	C-57 22/30 178	2680 to 2693	200	690	1100	2100	1450	1950	3750	4100	1700	2550	5150	3000	....	....
TW-8	TW-54 21/32 161-S	2914 to 2921, 2923	190	640	1050	2000	1400	1850	3500	3900	1650	2500	5000	2900	2300	1000
MK-2, 4	MK-57 23 1/30 206-S	3200 to 3240	210	930	1450	2800	1950	2500	4900	5400	....	....	....	....	....	....
MK-2, 4	MK-57 23 1/30 222-SF-230-SF															
MK-5, 6	MK-63 26/28 210-S-231-SF															
F-1	F-63 27 1/32 273-S	3600 to 3652	200	1150	1800	3300	2450	3200	6100	6700	2800	4300	8000	4950	....	....
F-4, 5	F-63 29 1/32 306/B-61-SF	3668 to 3763	200	1250	2000	3950	2600	3650	6950	7650	3200	4900	8000	5650	4850	2150
F-5	F-63 29 1/32 306/B-62-SF	3764 to 3768														
F-6	F-63 29 1/32 314/B-61-SF	3769														
AC-1, 2, 3	AC-57 2 1/2-2 1/2 441-SF	4000 to 4048	210	1600	2500	4750	3350	4450	8000	8000	4000	5900	8000	6800	5550	2500
AC-4	AC-63 2 1/2-2 1/2 475-SF	4100 to 4109	235	2100	3250	6200	4350	5800	8000	8000	5200	7700	8000	8000	....	....
AC-5	AC-63 2 1/2-2 1/2 483-SF	4110 to 4125														
AC-6	AC-63 2 1/2-2 1/2 517-SF	4126 to 4150														
MM-2	MM-63 2 1/2-2 1/2 320-SF	4200 to 4211	200	1200	1900	3600	2550	3400	6450	7100	3050	4500	8000	5250	....	....
AM-2	AM-63 2 1/2-2 1/2 320-SF	4200 to 4211	210	1500	2300	4350	3050	4050	7650	8000	3650	5400	8000	6200	....	....
MT-1,3,4,5	MT-73 28/30 246/B-60-SF	4300 to 4376	210	1000	1650	3350	2300	2850	6200	6850	2500	3850	7800	4500	....	....
GS-1	GS-73 27/30 262/B-104-SF	4400 to 4409	250	....	1750	3550	....	3000	6450	7100	2700	4050	8000	4800	....	....
SP-1	SP-63 2 1/2-2 1/2 316/B-60-SF	5000 to 5015	225	1450	2300	4750	3150	4300	8000	....	3650	5400	8000	6250	5550	2450
SP-2, 3	SP-63 2 1/2-2 1/2 317/B-61-SF	5016 to 5048														
Allowance for Empty and Underloaded Cars			Less than 40 M's	3	3	3	3	3	6	6	3	3	6	6	6	3
			40 M's to 50 M's	0	0	0	0	0	3	3	0	0	3	3	3	0
			More than 50 M's	0	0	0	0	0	0	0	0	0	0	0	0	0

AVERAGE TARE WEIGHTS OF PASSENGER TRAIN CARS

CLASS	All Steel	Steel Underframe	Wood
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	....	....
—69 ft.	124,760	....	....
—70 ft.	129,140	....	....
Baggage & Passenger	108,675	103,590	99,200
Express Refr.—N. P. Ry.	....	112,640	76,320
—G. N. Ry.	....	74,000	60,000
—A. R. E. No. 40-154	....	78,000	70,000
—155-224	....	89,000	....
—500-506	....	110,000	....
—1101-1175	....	85,000	....
—P. F. E. 500-799	....	83,000	....
Tea & Silk	....	....	48,180
Express, Horse	133,050	....	81,633
Postal	112,120	....	....
Postal Storage—40 ft.	74,530	....	....
—60 ft.	105,120	....	....
Club	146,210	122,300	....
Official	170,700	155,370	109,370
Chair—60 ft.	100,620	....	84,740
—74 ft.	163,900	....	....
Coaches—60 ft.	98,130	....	....
—70 ft.	137,640	....	....
—72 ft.	139,660	....	....
—73 ft.	148,040	....	....
—72 ft. (Interurban)	120,000	....	....
All-Day Lunch—Chair	105,970	....	81,210
—Coach	103,875	....	....
Cafe Coach	....	138,600	....
Diner—70 ft.	....	135,930	131,040
—72 ft.	155,330	146,930	134,530
—77 ft. (Arch Type Roof)	156,000	....	....
—77 ft. (Clerie Story Roof)	161,520	165,530	....
—79 ft.	169,100	....	....
—80 ft.	175,200	....	....
Cafe Parlor	148,950	161,200	....
Lounge	173,000	....	....
Observation—75 ft.	154,400	....	....
—77 ft.	173,300	....	....
Pullman—Observation	164,600	141,870	121,300
—Observation Lounge	171,200	153,000	....
—Lounge	168,700	....	....
—Parlor	155,600	147,500	....
—Bedroom Car	167,600	....	....
—Standard Sleeper	164,600	144,000	....
—Tourist	140,600	133,000	....
Rail Car—Gas-Electric, 400 H. P.	158,400	....	....
—Gas-Electric, 600 H. P.	167,200	....	....
—McKeen—55 ft.	64,140	....	....
—70 ft.	71,530	....	....
Observation (Open Top)	....	....	62,000

MILEAGE Main Lines

End Western Division to Sacramento	S. P. R. R.	29
Sacramento to Lawton	C. P. Ry.	147.73
At Elvas	C. P. Ry.	.31
Polk to Elvas	C. P. Ry.	4.63
Davis to Tehama	S. P. R. R.	109.71
Roseville to Gerber	C. P. Ry.	105.92
Gerber to California-Oregon State Line	C. P. Ry.	191.60
California-Oregon State Line to Ashland	S. P. Co.	27.61
Black Butte to Odell Lake	C. P. Ry.	187.87
Paola to Klamath Falls	N-C-O Ry.	2.31
	C. P. Ry.	95.41
Total Main Lines		873.39

Branches

Colusa	S. P. R. R.	Harrington to Wyo.	71.66
Dantoni	C. P. Ry.	Dantoni Jet. to Dantoni	4.46
Fair Oaks	S. P. R. R.	Citrus to Fair Oaks	2.14
Fruto	S. P. R. R.	Willows to Fruto	17.20
Knights Landing	S. P. R. R.	Woodland to West of Cunard	9.71
	S. P. Co.	West of Cunard to Grace	1.20
	S. P. R. R.	Grace to Binney Junction	26.23
Lake Tahoe	S. P. Co.	Truckee to Lake Tahoe	14.73
Oroville	S. P. R. R.	Binney Junction to Oroville	25.26
	S. P. R. R.	Sacramento K to N Streets	.25
Placerville	S. P. R. R.	Sacramento Q Street to Brighton	4.94
	C. P. Ry.	At Brighton	.39
	S. P. R. R.	Brighton to Placerville	55.87
River Farms	S. P. Co.	Knights Landing Jet. to Boyer	14.21
Stirling City	C. P. Ry.	Chico to Stirling City	31.22
Sutter Basin	S. P. Co.	Grace to Josephine	20.96
		Marchant to Karnak	2.75
Walnut Grove	C. P. Ry.	Sacramento to Ileton	33.23
Lakeview	N-C-O Ry.		56.16
Total Branches			392.57
Total Sacramento Division			1265.96

TRAINMASTERS

J. LORD.....SACRAMENTO, CAL. H. A. SPRAGUE.....KLAMATH FALLS, ORE.
 C. C. FISHER.....SACRAMENTO, CAL. J. J. SULLIVAN.....DUNSMUIR, CAL.
 M. L. JENNINGS.....ROSEVILLE, CAL. J. W. CORBETT, Assistant Trainmaster...ALTURAS, CAL.

CHIEF TRAIN DISPATCHERS

O. T. STACKPOOLE.....Chief Train Dispatcher.....SACRAMENTO, CAL. C. N. JONES.....Assistant Chief Train Dispatcher.....SACRAMENTO, CAL.
 T. F. CUSTER.....Chief Train Dispatcher.....DUNSMUIR, CAL. P. B. BELL.....Assistant Chief Train Dispatcher.....DUNSMUIR, CAL.
 D. A. NEELLEY.....Assistant Chief Train Dispatcher.....SACRAMENTO, CAL.

ROAD FOREMEN OF ENGINES

F. E. KEENAN.....SACRAMENTO, CAL.
 W. C. DAVIS.....DUNSMUIR, CAL.

EXAMINER

W. S. HOOSON.....SACRAMENTO, CAL.

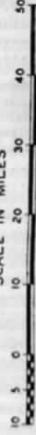
E. F. NASSOIY, Assistant Superintendent

MAP OF THE SACRAMENTO DIVISION SOUTHERN PACIFIC COMPANY

APRIL 1933

R.P.C.

SCALE IN MILES



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