WORK SAFELY TODAY

EACH RULE VIOLATION IS A POTENTIAL ACCIDENT

ASSISTANT SUPERINTENDENTS

H. E. STAPP.....Oakland
J. J. McNALLY.....Sacramento

TRAINMASTERS

G. H. EVANS.....Oakland
L. A. HENRY.....Stockton
P. F. PRENTISS.....Oroville
L. FOSTER.....Keddie

TERMINAL TRAINMASTER

L. D. MICHELSON.....Stockton

ROAD FOREMEN OF ENGINES

T. D. HUNTER.....Stockton
N. F. ROBERTS.....Oroville
R. McILVEEN.....Keddie

CHIEF TRAIN DISPATCHER

E. J. HILLIER.....Sacramento

NIGHT CHIEF TRAIN DISPATCHERS

R. W. HUFFMON.....Sacramento
R. E. VON HARTEN.....Sacramento

THE WESTERN PACIFIC RAILROAD CO.

WESTERN DIVISION TIMETABLE

41

EFFECTIVE SUNDAY, APRIL 25, 1954
AT 12:01 A. M.
PACIFIC STANDARD TIME

FOR THE GOVERNMENT AND INFORMATION OF EMPLOYES ONLY

H. C. MUNSON,
Vice-President and General Manager.

G. S. ALLEN,
Superintendent of Transportation.

G. W. CURTIS,
Superintendent.

RAILROAD SURGEONS

LOCATION	NAME	TITLE
San Francisco, Calif.	Dr. G. F. Cushman	Chief Surgeon
San Francisco, Calif.	Dr. C. E. Smith	Asst. Chief Surgeon
San Francisco, Calif.	Dr. Ruth Fleming	Local Surgeon
San Francisco, Calif.	Dr. Robert H. Bacon	Local Surgeon
San Francisco, Calif.	Dr. Rolf Brunckhorst	Internist
San Francisco, Calif.	Dr. A. J. Brinckerhoff	Oculist
San Francisco, Calif.	Dr. F. D. Fellows	Aurist
San Francisco, Calif.	Dr. O. F. Montgomery	Dermatologist
Oakland, Calif.	Dr. Robert R. Thomson	Local Surgeon
Oakland, Calif.	Dr. Fred D. Fisher	Local Surgeon
Oakland, Calif.	Dr. L. L. Coleman	Local Surgeon
Oakland, Calif.	Dr. J. P. Evans	Local Surgeon
Oakland, Calif.	Dr. R. F. Westerfield	Local Surgeon
Oakland, Calif.	Dr. H. W. Kohlmoos	Aurist
Berkeley, Calif.	Dr. W. B. McKnight	Local Surgeon
Berkeley, Calif.	Dr. Raymond Johanson	Oculist
Alameda, Calif.	Dr. D. D. Stafford	Local Surgeon
Alameda, Calif.	Dr. John Ohanneson	Local Surgeon
San Rafael, Calif.	Dr. W. M. Edwards	Local Surgeon
Hayward, Calif.	Dr. H. C. Crockett	Local Surgeon
Niles, Calif.	Dr. E. C. Grau	Local Surgeon
San Jose, Calif.	Dr. H. G. Zanger	Local Surgeon
San Jose, Calif.	Dr. R. A. Larocca	Local Surgeon
Livermore, Calif.	Dr. F. Leslie Herrick	Local Surgeon
Tracy, Calif.	Dr. Herbert R. Ellis	Local Surgeon
Stockton, Calif.	Dr. E. G. Hermosillo	Local Surgeon
Stockton, Calif.	Dr. Henry F. Quinn	Local Surgeon
Stockton, Calif.	Dr. Dewey R. Powell	Oculist and Aurist
Stockton, Calif.	Dr. James R. Powell	Oculist and Aurist
Stockton, Calif.	Dr. James B. Pope	Internist
Lodi, Calif.	Dr. S. W. Leiske	Local Surgeon
Lodi, Calif.	Dr. W. G. Fessler	Local Surgeon
Sacramento, Calif.	Dr. J. V. Chambers	Local Surgeon
Sacramento, Calif.	Dr. D. O. Kilroy	Local Surgeon
Sacramento, Calif.	Dr. D. J. Engelberg	Local Surgeon
Sacramento, Calif.	Dr. Paul W. Frame	Local Surgeon
Sacramento, Calif.	Dr. John A. Berg	Oculist
Sacramento, Calif.	Dr. K. Kossakowski	Aurist
Marysville, Calif.	Dr. P. B. Hoffman	Local Surgeon
Oroville, Calif.	Dr. J. E. Patrick	Local Surgeon
Oroville, Calif.	Dr. Chas. Benninger, Jr.	Local Surgeon
Oroville, Calif.	Dr. Concessa Craviotto	Local Surgeon
Oroville, Calif.	Dr. Robt. D. Bethel	Oculist
Quincy, Calif.	Dr. D. J. Bleiberg	Local Surgeon
Greenville, Calif.	Dr. W. C. Batson	Local Surgeon
Westwood, Calif.	Dr. H. G. Levin	Local Surgeon
Portola, Calif.	Dr. Roy M. Peters	Division Surgeon
Portola, Calif.	Dr. Chas. W. Brown	Asst. Division Surgeon
Portola, Calif.	Dr. Willard S. Bross	Local Surgeon

WATCH INSPECTORS

LOCATION	NAME	TITLE
San Francisco, Calif.	C. D. Fabrin	Manager of Time Service
San Francisco, Calif.	A. Solari	Watch Inspector
Oakland, Calif.	E. W. Becker	Watch Inspector
Oakland, Calif.	Leroy D. Wertz	Watch Inspector
Oakland, Calif.	Don J. Allphin	Watch Inspector
San Jose, Calif.	Kochers	Watch Inspector
Livermore, Calif.	C. Harlie Power	Watch Inspector
Stockton, Calif.	Conrad Mantele	Watch Inspector
Sacramento, Calif.	H. T. Harger	Watch Inspector
Marysville, Calif.	John J. Fargo	Watch Inspector
Oroville, Calif.	Philip K. Schmidt	Watch Inspector
Quincy, Calif.	Joe L. Burgess	Watch Inspector
Portola, Calif.	S. & J. Jewelers	Watch Inspector

SPEED TABLE

TIME PER MILE	MILES PER HOUR
36″	100
37″	97.3
38″	94.7
39″	92.3
40″	90
41″	87.8
42″	85.7
43″	83.7
44″	81.8
45″	80
46″	78.3
47″	76.6
48″	75
49″	73.5
50″	72
51″	70.6
52″	69.2
53″	67.9
54″	66.7
55″	65.5
56″	64.3
57″	63.2
58″	62.1
59″	61
1′00″	60
1′01″	59
1′02″	58.1
1′03″	57.1
1′04″	56.2
1′05″	55.4
1′06″	54.5
1′07″	53.7
1′08″	52.9
1′09″	52.2
1′10″	51.4
1′11″	50.7
1′12″	50
1′13″	49.3
1′14″	48.6
1′15″	48
1′16″	47.4
1′17″	46.8
1′18″	46.2
1′19″	45.6
1′20″	45
1′25″	42.4
1′30″	40
1′35″	37.9
1′40″	36
1′45″	34.3
1′50″	32.7
1′55″	31.3
2′00″	30
2′15″	26.7
2′30″	24
2′45″	21.8
3′00″	20
3′30″	17.1
4′00″	15
5′00″	12
6′00″	10
7′00″	8.6
7′30″	8
8′00″	7.5
10′00″	6

FIRST SUBDIVISION—Eastward

Symbols, Rule 6-A.	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS 62 N. C. X. Leave Daily	SECOND CLASS 54 S. W. G. Leave Daily	FIRST CLASS 2 Zephyrette Leave Sun., Wed., Fri.	FIRST CLASS 18 California Zephyr Leave Daily	Distance from San Francisco	Timetable No. 41 April 25, 1954 STATIONS	Distance from Oakland yard
WFO		Go			PM 4.30	AM 9.30	0.0	SAN FRANCISCO (Oakland Ferry)	
					4.50 PM	9.50 AM	3.5	3.5 OAKLAND PIER	
BKP		Ow			PM 5.00	AM 9.58	3.5	TO-R OAKLAND PIER (SP)	
BKW FTPO	Yard	Md	AM 5.30	AM 1.30	Via SP	Via SP	4.7	2.4 TO-R OAKLAND YARD (WP)	0.0
I							5.8	1.1 SP Crossing	1.1
I					PM 5.05	AM 10.04	5.9	0.1 CHESTNUT JCT. (SP Conn.) (Double Track)	1.2
					s 5.10	s 10.10	6.6	0.7 OAKLAND (Double Track)	1.9
							7.2	0.6 SP Crossing (Double Track)	2.5
I					5.15	10.15	7.7	0.5 CLINTON (SP X'ing.)	3.0
					5.21		9.6	1.9 FRUITVALE	4.9
I							10.6	1.0 MELROSE (SP X'ing.)	5.9
P	66					10.26	11.3	0.7 KOHLER	6.6
AI P							13.7	2.4 ELMHURST (SP X'ing.)	9.0
P		Dr			5.34		14.8	1.1 SAN LEANDRO	10.1
P	81	Hy			5.41	10.39	20.1	5.3 HAYWARD	15.4
WP	80	Cn			5.54	s 10.52	29.7	9.6 NILES	25.0
IP							30.3	0.6 NILES TOWER (SP X'ing.)	25.6
YP							30.5	0.2 NILES JUNCTION	25.8
P	74				6.04		35.6	5.1 SUNOL	30.9
P	86						38.1	2.5 HEARST	33.4
P	73	Tn			6.11	11.06	40.8	2.7 PLEASANTON	36.1
IP							42.7	1.9 RADUM TOWER (SP X'ing.)	38.0
I							42.97	0.27 RADUM TOWER (SP X'ing.)	38.27
P	73				6.21	11.14	47.1	4.13 LIVERMORE	42.4
YP	92				6.33	11.25	56.2	9.1 ALTAMONT	51.5
P	110				6.43	11.34	63.3	7.1 MIDWAY	58.6
WYP	220	Cb			6.54	11.45	72.8	9.5 CARBONA	68.1
AI							74.05	1.25 SP Crossing	69.35
P	110				7.05	11.54	82.1	8.05 WYCHE	77.4
I							84.45	2.35 SP Crossing	79.75
P	105				7.10	AM 11.58	85.73	1.28 LATHROP	81.03
BKW FTPO	Yard	Sn	AM 10.30	AM 5.00	7.18	PM 12.04	92.0	6.27 TO-R STOCKTON YARD	87.3
I							93.2	1.2 AT&SF Crossing	88.5
					s PM 7.23	s PM 12.08	93.8	0.6 STOCKTON	89.1
			Arrive Daily	Arrive Daily	Arrive Sun., Wed., Fri.	Arrive Daily			
			62	54	2	18			

Yard Limits

First-class trains must respect schedule shown.

Schedules shown for second-class trains are for information only.

Traffic Control System

Special instructions on pages 2 and 3 will apply to both pages where applicable.

Nos. 1 and 2 will stop on flag at any station to receive or discharge passengers.

No. 18 will stop on advance notice or on flag at Pleasanton for revenue passengers destined Salt Lake City and beyond.

No. 17 will stop at Pleasanton to discharge revenue passengers from Salt Lake City and beyond.

Timetable No. 41

April 25, 1954

Distance from San Francisco	STATIONS		Distance from Stockton	FIRST CLASS 1 Zephyrette Arrive Mon., Thurs., Sat.	FIRST CLASS 17 California Zephyr Arrive Daily	SECOND CLASS 61 R. T. Arrive Daily	SECOND CLASS 77 C. F. S. Arrive Daily	SECOND CLASS 59 F. M. S. Arrive Daily
0.0	**SAN FRANCISCO**	Oakland Ferry	93.8	AM 7.35	PM 4.20			
3.5	**OAKLAND PIER**		90.3	7.15 AM	4.00 PM			
3.5	TO-R **OAKLAND PIER (SP)** 2.4		90.3	AM	PM			
4.7	TO-R **OAKLAND YARD (WP)** 1.1		89.1	s 7.05	s 3.45	AM 10.00	PM 4.00	PM 10.00
5.8	**SP Crossing** 0.1		88.0	Via SP	Via SP			
5.9	**CHESTNUT JCT. (SP Conn.)** 0.7	Double Track	87.9	AM 6.53	PM 3.33			
6.6	**OAKLAND** 0.6		87.2	s 6.50	s 3.30			
7.2	**SP Crossing** 0.5		86.6					
7.7	**CLINTON (SP X'ing.)** 1.9		86.1		3.21			
9.6	**FRUITVALE** 1.0		84.2	6.35				
10.6	**MELROSE (SP X'ing.)** 0.7		83.2					
11.3	**KOHLER** 2.4		82.5		3.10			
13.7	**ELMHURST (SP X'ing.)** 1.1		80.1					
14.8	**SAN LEANDRO** 5.3		79.0	6.23				
20.1	**HAYWARD** 9.6		73.7	6.16	2.57			
29.7	**NILES** 0.6		64.1	6.04	s 2.45			
30.3	**NILES TOWER (SP X'ing.)** 0.2		63.5					
30.5	**NILES JUNCTION** 5.1		63.3					
35.6	**SUNOL** 2.5		58.2	5.54				
38.1	**HEARST** 2.7	Traffic Control System	55.7					
40.8	**PLEASANTON** 1.9		53.0	5.47	2.30			
42.7	**RADUM TOWER (SP X'ing.)** 0.27		51.1					
42.97	**RADUM TOWER (SP X'ing.)** 4.13		50.83					
47.1	**LIVERMORE** 9.1		46.7	5.37	2.20			
56.2	**ALTAMONT** 7.1		37.6	5.26	2.09			
63.3	**MIDWAY** 9.5		30.5	5.15	1.58			
72.8	**CARBONA** 1.25		21.0	5.03	1.46			
74.05	**SP Crossing** 8.05		19.75					
82.1	**WYCHE** 2.35		11.7	4.53	1.36			
84.45	**SP Crossing** 1.28		9.35					
85.73	**LATHROP** 6.27		8.07	4.48	1.32			
92.0	TO-R **STOCKTON YARD** 1.2		1.8	4.40	1.25	6.00 AM	12.45 PM	6.30 PM
93.2	**AT&SF Crossing** 0.6		0.6					
93.8	**STOCKTON**		0.0	4.35 AM	1.20 PM			
				Leave Mon., Thurs., Sat.	Leave Daily	Leave Daily	Leave Daily	Leave Daily
				1	17	61	77	59

First-class trains must respect schedules shown.

Schedules shown for second-class trains are for information only.

Between Chestnut Jct. and Oakland Pier, trains will be governed by SP timetable, Rules and Regulations of the Transportation Department.

Eastward WP trains originating at Oakland Pier must obtain WP clearance at Oakland Pier and will not require clearance at Chestnut Jct.

Chestnut Jct. is initial station for eastward first-class trains.

RULE D-71. Trains have no timetable superiority between Clinton and Chestnut Jct.

Yard engines must obtain information as to when first-class trains are due and avoid delaying them and give way promptly to other trains.

RULES 83-A and 83-B. First-class trains need not register at Stockton Yard.

RULE 93. Does not apply between Clinton and MP 13.78.

RULE D-151. Trains will be authorized to move against current of traffic between Clinton and Chestnut Jct. by following form of train order:

Westward. Form D-R, Example 1.

Eastward: Form reading "No.——— use westward main track Chestnut Jct. to Clinton."

Yard engines must move with current of traffic when practicable, using crossovers to move to other track to perform work. Yardmaster may authorize long moves against the current of traffic after obtaining information that opposing trains or yard engines will not be encountered. If impracticable to contact Yardmaster and it is necessary to make a long move against the current of traffic, engine foreman may arrange such move after obtaining similar information. Short moves against the current of traffic may be made at any time except when first-class trains are due.

Special instructions on pages 2 and 3 will apply to both pages where applicable.

SECOND SUBDIVISION—Eastward

Symbols Rule 6-A.	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS 62 F. B. Leave Daily	56 N. C. X. Leave Daily	54 S. W. G. Leave Daily	FIRST CLASS 2 Zephyrette Leave Sun., Wed., Fri.	18 California Zephyr Leave Daily	Distance from San Francisco	Timetable No. 41 April 25, 1954 STATIONS	Distance from Stockton Yard
BKW FTPO	Yard	Sn	PM 10.00	AM 11.00	AM 8.00			92.0	TO-R **STOCKTON YARD**	0.0
I								93.2	1.2 **AT&SF Crossing**	1.2
I						PM 7.25	PM 12.10	93.8	0.6 **STOCKTON** (SP X'ing.)	1.8
P	45							94.3	0.5 **FLORA STREET**	2.3
IP								95.1	0.8 **EL PINAL** (SP X'ing.)	3.1
P	84		First-class trains must respect schedule shown.					98.1	3.0 **HAMMER LANE**	6.1
P	73					7.38		104.6	6.5 **KINGDON**	12.6
YP								105.5	0.9 **TERMINOUS JUNCTION**	13.5
P	73	Nh				s 7.50	12.31	113.9	8.4 **THORNTON**	21.9
P	74							119.0	5.1 **GLANNVALE**	27.0
P	73					8.03	17 **12.44**	124.4	5.4 **FRANKLIN**	32.4
P	100					8.13		132.4	8.0 **POLLOCK**	40.4
KWFPO	Yard	Jy	PM 11.59	PM 1.00		8.20	12.59	136.5	4.1 **SOUTH SACRAMENTO**	44.5
AI								137.5	1.0 **"X" ST. (CCT and SN X'ing.)**	45.5
I								138.0	0.5 **"R" St. (SP Crossing)**	46.0
KYP		Sr Ra Ds				s 8.30	s 1.10	138.6	0.6 **SACRAMENTO**	46.6
P								139.5	0.9 **HAGGIN** (SN Conns.)	47.5
P								140.7	1.2 **GLOBE** (SN Conn.)	48.7
P	73		Schedules shown for second-class trains are for information only.			8.38	1.18	143.8	3.1 **DEL PASO**	51.8
I								152.5	8.7 **SANKEY** (SN Crossing)	60.5
WP	72					8.52	1.30	156.4	3.9 **PLEASANT GROVE**	64.4
P	80					8.58		161.5	5.1 **TROWBRIDGE**	69.5
P	73					9.10	1.45	172.5	11.0 **EAST ARBOGA**	80.5
WP	107	Ms				s 9.20	s 1.55	178.8	6.3 **MARYSVILLE** (Joint Track)	86.8
IP								180.2	1.4 **BINNEY JCT.** (SP X'ing.)	88.2
P	73					9.29		186.0	5.8 **TAMBO**	94.0
P	73					9.37	2.09	193.0	7.0 **CRAIG**	101.0
BKWF TYPO	Yard	Yd	2.00 AM	3.00 PM	11.15 AM	9.50	2.19	202.9	9.9 TO-R **OROVILLE YARD**	110.9
BKP	50	Vi				s 9.55 PM	s 2.23 PM	205.1	2.2 TO-R **OROVILLE**	113.1
			Arrive Daily	Arrive Daily	Arrive Daily	Arrive Sun., Wed., Fri.	Arrive Daily			
			62	56	54	2	18			

Traffic Control System

John Track

At Flora Street, Track 7, located on north side of main track, west switch at Park Street, east switch immediately west of Harding Way, will be used as siding.

Nos. 1 and 2 will stop on flag at any station to receive or discharge passengers.

Special Instructions on pages 4 and 5 will apply to both pages where applicable.

Timetable No. 41

April 25, 1954

Distance from San Francisco	STATIONS	Distance from Oroville	FIRST CLASS 1 Zephyrette Arrive Mon., Thurs., Sat.	FIRST CLASS 17 California Zephyr Arrive Daily	SECOND CLASS 61 R. T. Arrive Daily	SECOND CLASS 53 G. W. S. Arrive Daily	SECOND CLASS 77 C. F. S. Arrive Daily	SECOND CLASS 55 S. C. X. Arrive Daily
92.0	TO-R **STOCKTON YARD** 1.2	113.1			AM 4.00	AM 6.00	AM 11.30	AM 2.30
93.2	**AT&SF Crossing** 0.6	111.9						
93.8	**STOCKTON (SP X'ing.)** 0.5	111.3	AM s 4.33	PM s 1.18				
94.3	**FLORA STREET** 0.8	110.8						
95.1	**EL PINAL (SP X'ing.)** 3.0	110.0						
98.1	**HAMMER LANE** 6.5	107.0						
104.6	**KINGDON** 0.9	100.5	4.17					
105.5	**TERMINOUS JUNCTION** 8.4	99.6						
113.9	**THORNTON** 5.1	91.2	s 4.07	12.55				
119.0	**GLANNVALE** 5.4	86.1						
124.4	**FRANKLIN** 8.0	80.7	3.51	**12.44** 18				
132.4	**POLLOCK** 4.1	72.7						
136.5	**SOUTH SACRAMENTO** 1.0	68.6	3.33	12.28	2.00 AM	4.30 AM	10.30 AM	12.30 AM
137.5	**"X" ST. (CCT and SN X'ing.)** 0.5	67.6						
138.0	**"R" ST. (SP Crossing)** 0.6	67.1						
138.6	**SACRAMENTO** 0.9	66.5	s 3.25	s 12.20				
139.5	**HAGGIN (SN Conns.)** 1.2	65.6						
140.7	**GLOBE (SN Conn.)** 3.1	64.4						
143.8	**DEL PASO** 8.7	61.3	3.12	12.09 PM				
152.5	**SANKEY (SN Crossing)** 3.9	52.6						
156.4	**PLEASANT GROVE** 5.1	48.7	2.56	11.57 AM				
161.5	**TROWBRIDGE** 11.0	43.6	2.49					
172.5	**EAST ARBOGA** 6.3	32.6	2.34					
178.8	**MARYSVILLE** 1.4	26.3	s 2.25	s 11.35				
180.2	**BINNEY JCT. (SP X'ing.)** 5.8	24.9						
186.0	**TAMBO** 7.0	19.1	2.13					
193.0	**CRAIG** 9.9	12.1	2.04					
202.9	TO-R **OROVILLE YARD** 2.2	2.2	1.50	11.10	12.01 AM	2.00 AM	8.30 AM	9.00 PM
205.1	TO-R **OROVILLE**	0.0	1.45 AM	11.05 AM				
			Leave Mon., Thurs., Sat.	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
			1	17	61	53	77	55

Traffic Control System

Joint Track

First-class trains must respect schedule shown.

Schedules shown for second-class trains are for information only.

At South Sacramento and Sacramento, engine whistle or horn should be used only when necessary and then kept as soft as possible consistent with the particular requirement.

RULES 83-A and 83-B. First-class trains need not register at Oroville Yard.

Special Instructions on pages 4 and 5 will apply to both pages where applicable.

THIRD SUBDIVISION—Eastward

Timetable No. 41
April 25, 1954

Symbols, Rule 6-A.	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS 56 N. C. X. Leave Daily	54 S. W. G. Leave Daily	94 Local Freight Leave Tues., Thurs., Sat.	96 Local Freight Leave Mon., Wed., Fri.	62 F. B. Leave Daily	FIRST CLASS 2 Zephyrette Leave Sun. Wed., Fri.	18 California Zephyr Leave Daily	Distance from San Francisco	STATIONS	Distance from Oroville Yard
BKWF TYPO	Yard	Yd	PM 5.00	PM 12.30		AM 7.30	AM 3.00			202.9	TO-R **OROVILLE YARD**	0.0
BKP	47	Vi						PM 10.05	PM 2.30	205.1	TO-R 2.2 **OROVILLE**	2.2
P	84							10.12		209.3	4.2 **QUARTZ**	6.4
P	88							10.18		212.9	3.6 **BIDWELL**	10.0
P	83							10.26	2.49	217.6	4.7 **BLOOMER**	14.7
WP	90							10.39		224.1	6.5 **BERRY CREEK**	21.2
P	93							10.53		231.2	7.1 **DAVID**	28.3
P	76							11.02	3.18	235.2	4.0 **POE**	32.3
WP	81		First-class trains must					11.12		239.3	4.1 **PULGA**	36.4
P	79		respect schedule shown.					11.22		243.5	4.2 **CRESTA**	40.6
P	73							11.31		247.6	4.1 **MERLIN**	44.7
P	55							1 **11.45**	3.49	253.1	5.5 **TOBIN**	50.2
P	83							PM 11.50		255.3	2.2 **CAMP RODGERS**	52.4
P	94							AM s 12.01		260.1	4.8 **BELDEN**	57.2
P	73							12.10		264.6	4.5 **RICH BAR**	61.7
WP	75							12.21	4.19	270.2	5.6 **VIRGILIA**	67.3
P	85							12.29		273.7	3.5 **TWAIN**	70.8
P	84							12.36		277.3	3.6 **PAXTON**	74.4
KW FTP	Yard	Kd	PM 10.00	PM 5.00	AM 8.30	12.30 PM		s 12.47	s 4.40	281.5	TO-R 4.2 **KEDDIE**	78.6
P	84							12.53		284.5	3.0 **SIERRA**	81.6
P	76	Rt						s 1.03		287.9	3.4 **QUINCY JUNCTION**	85.0
P	83		Schedules shown for second-					1.11		292.6	4.7 **MASSACK**	89.7
WP	92		class trains are for informa-					1.18	5.04	296.4	3.8 **SPRING GARDEN**	93.5
P	85	So	tion only.					1.27		301.6	5.2 **SLOAT**	98.7
P	85							1.33		305.4	3.8 **TWO RIVERS**	102.5
WP	98	Ba						s 1.43	5.25	310.4	5.0 **BLAIRSDEN**	107.5
P	82							1.58		318.7	8.3 **MABIE**	115.8
BK FYPO	Yard	Ki	12.01 AM	7.00 PM	11.30 AM		8.30 AM	s 2.05 AM	s 5.45 PM	321.4	TO-R 2.7 **PORTOLA**	118.5
			Arrive Daily	Arrive Daily	Arrive Tues., Thurs., Sat.	Arrive Mon., Wed., Fri.	Arrive Daily	Arrive Mon., Thurs., Sat.	Arrive Daily			
			56	54	94	96	62	2	18			

Traffic Control System

RULE 82-A. Trains going through Keddie which change engines at that point need not obtain a new clearance.

RULES 83-A and 83-B. Keddie is register station for trains originating and terminating only.

Nos. 17 and 18 register by ticket at Portola.

Nos. 1 and 2 will stop on flag at any station to receive or discharge passengers or express.

Nos. 1 and 2 will handle closed pouch U.S. Mail between Oroville and Mayaro, serving intermediate station of Las Plumas. Exchange of mail at Las Plumas and Mayaro will be handled through station lockers.

Nos. 93, 94, 95 and 96 may carry WP employes and/or their families traveling on WP trip or annual passes only.

Special Instructions on pages 6 and 7 will apply to both pages where applicable.

Timetable No. 41
April 25, 1954

Traffic Control System

Distance from San Francisco	STATIONS	Distance from Portola	FIRST CLASS 17 California Zephyr Arrive Daily	FIRST CLASS 1 Zephyrette Arrive Mon., Thurs., Sat.	SECOND CLASS 77 C. F. S. Arrive Daily	SECOND CLASS 93 Local Freight Arrive Mon., Wed., Fri.	SECOND CLASS 95 Local Freight Arrive Tues., Thurs., Sat.	SECOND CLASS 55 S. C. X. Arrive Daily	SECOND CLASS 53 G. W. S. Arrive Daily	SECOND CLASS 61 R. T. Arrive Daily
202.9	TO-R **OROVILLE YARD** 2.2	118.5			AM 7.00		PM 12.50	PM 7.30	AM 12.01	PM 11.00
205.1	TO-R **OROVILLE** 4.2	116.3	AM s 11.02	AM s 1.40						
209.3	**QUARTZ** 3.6	112.1		1.32						
212.9	**BIDWELL** 4.7	108.5		1.25						
217.6	**BLOOMER** 6.5	103.8	10.43	1.15						
224.1	**BERRY CREEK** 7.1	97.3		12.58						
231.2	**DAVID** 4.0	90.2		12.41						
235.2	**POE** 4.1	86.2	10.14	12.31						
239.3	**PULGA** 4.2	82.1		12.21						
243.5	**CRESTA** 4.1	77.9		12.09 AM						
247.6	**MERLIN** 5.5	73.8		11.59 PM						
253.1	**TOBIN** 2.2	68.3	9.43	**11.45** 2						
255.3	**CAMP RODGERS** 4.8	66.1		11.40						
260.1	**BELDEN** 4.5	61.3		s 11.30						
264.6	**RICH BAR** 5.6	56.8		11.20						
270.2	**VIRGILIA** 3.5	51.2	9.13	11.09						
273.7	**TWAIN** 3.6	47.7		11.01						
277.3	**PAXTON** 4.2	44.1		10.54						
281.5	TO-R **KEDDIE** 3.0	39.9	s 8.53	s 10.45		AM 11.30	8.00 AM	3.30 PM	8.30 PM	
284.5	**SIERRA** 3.4	36.9		10.37						
287.9	**QUINCY JUNCTION** 4.7	33.5		s 10.31						
292.6	**MASSACK** 3.8	28.8		10.22						
296.4	**SPRING GARDEN** 5.2	25.0	8.29	10.15						
301.6	**SLOAT** 3.8	19.8		10.06						
305.4	**TWO RIVERS** 5.0	16.0		9.59						
310.4	**BLAIRSDEN** 8.3	11.0	8.08	s 9.50						
318.7	**MABIE** 2.7	2.7		9.35						
321.4	TO-R **PORTOLA**	0.0	7.50 AM	9.30 PM	2.00 AM	7.30 AM		12.30 PM	5.30 PM	6.00 PM
			Leave Daily	Leave Sun., Wed., Fri.	Leave Daily	Leave Mon., Wed., Fri.	Leave Tues., Thurs., Sat.	Leave Daily	Leave Daily	Leave Daily
			17	1	77	93	95	55	53	61

First-class trains must respect schedule shown.

Schedules shown for second-class trains are for information only

The following will govern use of retainers on westward freight trains Portola to Bloomer:

Retainers will not be used on westward freight trains handled by four unit locomotive with dynamic brakes operative unless, in the judgment of engineer, their use is necessary.

On westward freight trains being handled by locomotive with dynamic brake inoperative, if in the judgment of engineer retainers are necessary, sufficient retainers will be used to control speed of train while brake pipe pressure is being restored.

If, in the judgment of engineer, the number of retainers is unsatisfactory, stop must be made and retainers turned up in accordance with his instructions.

When retainers are used, they will be applied to cars on head end in a block of not less than 15 cars. Retainers are to be used in low pressure position, which is horizontal. Should wheels show a tendency to heat retainers must be alternated.

Special Instructions on pages 6 and 7 will apply to both pages where applicable.

FOURTH SUBDIVISION—Eastward

	Symbols, Rule 6-A.	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS		156 N. C. X. Leave Daily	154 S. W. G. Leave Daily	312 Southern Pacific Local Freight Leave Daily Ex. Sunday	Distance from San Francisco (Via 4th Sub. Conn.)	Timetable No. 41 April 25, 1954 STATIONS	Distance from Keddie
Yard Limits	BKW FTP	Yard	Kd			PM 10.00	PM 2.00		280.8	TO-R KEDDIE	0.0
	P	86				10.20	2.20		287.0	6.2 MOCCASIN	6.2
	P	13				10.29	2.29		289.4	2.4 CRESCENT MILLS	8.6
	P	86	Gi			10.40	153 2.40		295.5	TO 6.1 GREENVILLE	14.7
	WYP	86				11.15	3.15		306.2	10.7 ALMANOR	25.4
	P	86				11.35	3.35		313.2	7.0 LASSEN VIEW	32.4
	P					11.45	3.45		316.0	2.8 CLEAR CREEK JCT. (ARR Conn.)	35.2
Yard Limits	BK YP	Yard	Wd			PM 11.59	4.00	AM 9.15	320.2	TO-R 4.2 WESTWOOD (Joint Track)	39.4
	P		Mn			AM 12.10	4.10	9.30 AM	324.3	TO-R 4.1 MASON (SP Conn.) (Joint Track)	43.5
	P	86				12.12	4.12		324.9	0.6 ROBBERS CREEK	44.1
	PY	86				12.31	4.31		333.3	8.4 NORVELL	52.5
	P	86				12.50	4.50		343.7	10.4 LODGEPOLE	62.9
Yard Limits	YP	86				1.15	5.15		357.2	13.5 HALLS FLAT	76.4
	P	86				1.35	5.35		365.0	7.8 JELLICO	84.2
	P	86				1.52	5.52		371.0	6.0 WILLOW SPRINGS	90.2
	P	86				2.04	6.04		375.6	4.6 LITTLE VALLEY	94.8
	P	86				2.24	6.24		381.7	6.1 DIXIE	100.9
	P	86				2.49	6.49		390.3	8.6 PIT RIVER	109.5
Yard Limits	BKW FYPO	Yard	B			3.00 AM	7.00 PM		392.6	TO-R 2.3 BIEBER	111.8
						Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday			
						156	154	312			

RULE S-72. WESTWARD TRAINS ARE SUPERIOR TO EASTWARD TRAINS OF THE SAME CLASS.

The following will govern use of retainers on freight trains being handled by locomotives with dynamic brake operative on four units:

Almanor to Greenville

D-225. One retainer for each 50 tons in excess of 3600 tons.
D-239. One retainer for each 50 tons in excess of 4250 tons.

Halls Flat to Little Valley

D-225. One retainer for each 50 tons in excess of 3900 tons.
D-239. One retainer for each 50 tons in excess of 4700 tons.

In the event one or more units become inoperative, or in the judgment of the engineer, more retainers are needed, stop must be made and trainmen must turn up retainers in accordance with his instructions.

When handled by locomotive with dynamic brake inoperative, trainmen will turn up one retainer for each 90 tons in train.

On westward trains between Dixie and Little Valley, Norvell and Almanor, Moccasin and Keddie, and on eastward trains between Dixie and Pit River, retainers will not be used unless in the judgment of engineer their use is necessary to assist in controlling speed of train while brake pipe pressure is being restored.

When retainers are used, they will be applied to cars on head end in a block of not less than 15 cars. Retainers are to be used in low pressure position which is horizontal. Should wheels show a tendency to heat, retainers must be alternated.

The Keddie-Westwood Local will handle all passengers to and from points between Keddie and Westwood on days on which they operate.

Trains carrying NCX and SCX symbols will handle passengers.

Trains carrying consolidated SWG-NCX or GWS-SCX symbols will not handle passengers to or from any intermediate point between Keddie and Bieber.

Special Instructions on pages 8 and 9 will apply to both pages where applicable.

Timetable No. 41

April 25, 1954

SECOND CLASS

Distance from San Francisco (Via 4th Sub. Conn.)	STATIONS	Distance from Bieber	155 S. C. X. Arrive Daily	311 Southern Pacific Local Freight Arrive Daily Ex. Sunday	153 G. W. S. Arrive Daily
280.8	TO-R **KEDDIE** 6.2	111.8	AM 8.05		PM 3.20
287.0	**MOCCASIN** 2.4	105.6	7.43		2.58
289.4	**CRESCENT MILLS** 6.1	103.2	7.37		2.52
295.5	TO **GREENVILLE** 10.7	97.1	7.25		**2.40** 154
306.2	**ALMANOR** 7.0	86.4	6.50		2.05
313.2	**LASSEN VIEW** 2.8	79.4	6.32		1.47
316.0	**CLEAR CREEK JCT.** (ARR Conn.) 4.2	76.6	6.25		1.40
320.2	TO-R **WESTWOOD** 4.1 (Joint Track)	72.4	6.15	AM 8.50	1.30
324.3	TO-R **MASON** (SP Conn.) 0.6 (Joint Track)	68.3	6.03	8.35 AM	1.18
324.9	**ROBBERS CREEK** 8.4	67.7	6.01		1.16
333.3	**NORVELL** 10.4	59.3	5.45		1.00
343.7	**LODGEPOLE** 13.5	48.9	5.26		12.41
357.2	**HALLS FLAT** 7.8	35.4	5.02		12.17 PM
365.0	**JELLICO** 6.0	27.6	4.37		11.52 AM
371.0	**WILLOW SPRINGS** 4.6	21.6	4.16		11.31
375.6	**LITTLE VALLEY** 6.1	17.0	3.59		11.14
381.7	**DIXIE** 8.6	10.9	3.44		10.59
390.3	**PIT RIVER** 2.3	2.3	3.20		10.35
392.6	TO-R **BIEBER**	0.0	3.15 AM		10.30 AM
			Leave Daily	Leave Daily Ex. Sunday	Leave Daily
			155	311	153

In Bieber Yard trains will be governed by Great Northern timetable and transportation rules. Rule 93, Great Northern Transportation Rules, reads as follows:

"Within yard limits the main track may be used, clearing first-class trains when due to leave the last station where time is shown. In case of failure to clear the main track, protection must be given as prescribed by Rule 99.

"Within yard limits the main track may be used without protecting against second and inferior class, extra trains and engines.

"Within yard limits second and inferior class, extra trains and engines must move at restricted speed.

"Within yard limits when running against the current of traffic or on a portion of double or three or more tracks used as single track, all trains and engines must move at restricted speed."

Definition of "Restricted Speed" in Great Northern Transportation Rules is:

"Proceed prepared to stop short of train, obstruction or anything that may require the speed of a train to be reduced."

Southern Pacific and Fruit Growers Supply Co. trains and engines will be governed by Western Pacific timetable and operating rules.

Keddie. Normal position of switch leading from east leg of wye to Fourth Subdivision, lined for east leg of wye. Single switch indicator located at this switch.

Serviceable portion of west leg of wye ends 770 feet west of east wye switch (140 feet east of Bridge 280.61) and bumper in place at that location.

Clear Creek Junction. Normal position junction switch lined for Western Pacific main track.

Westwood. Nos. 153, 154, 155 and 156 register by ticket.

A train must not leave without a clearance.

Track 4 will be used as siding, but must not be blocked between 6:01 AM and 7:30 AM (5:01 AM and 6:30 AM during period California Daylight Saving Time is in effect).

Mason. Dispatchers may, when necessary, issue train orders to westward trains at Mason restricting them at Robbers Creek. Westward trains finding train order signal at Mason in STOP position will not pass fouling point west switch Robbers Creek until ascertain reason for signal being in stop position. See Rule 221.

Train order signal governs all trains except westward Southern Pacific trains. Westward Southern Pacific trains must obtain clearance.

Register station for Nos. 311 and 312 only. Nos. 311 and 312 may register by ticket when there is an operator on duty.

Western Pacific trains will approach junction switch under control, being sure switch is right and that Southern Pacific trains are clear of junction switch before using. Normal position junction switch is lined for Western Pacific main track.

Special Instructions on pages 8 and 9 will apply to both pages where applicable.

Eastward — FIRST SUBDIVISION "A"—SAN JOSE BRANCH — Westward

Timetable No. 41, April 25, 1954

Symbols, Rule 6-A.	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS 254 Freight Leave Daily	Distance from Niles Junction	STATIONS	Distance from Alameda St. Freight Station	SECOND CLASS 253 Freight Arrive Daily
WP	80	Cn	AM 12.30		TO-R NILES		PM 10.45
YP			12.40	0.0	NILES JUNCTION (0.8)	23.0	10.25
	Spur 1E 12		1.00	3.3	IRVINGTON (3.3)	19.7	10.10
	Spur 1W 6		1.15	6.8	WARM SPRINGS (3.5)	16.2	9.55
	Spur 1E 18		1.22	8.0	CURTNER (1.2)	15.0	9.50
P	167		1.35	11.5	MILPITAS (3.5)	11.5	9.40
	Spur 1E 10		1.45	14.1	BERRYESSA (2.6)	8.9	9.25
Yard Limits			2.00	16.9	SAN JOSE (East Santa Clara St.) (2.8)	6.1	9.10
BKW FTPO	Yard	Sx	2.10 AM	17.5	TO-R SAN JOSE YARD (0.6)	5.5	9.00 PM
				19.6	VALBRICK (SP X'ing.) (2.1)	3.4	
I				20.2	WILLOW GLENN (SP X'ing.) (0.6)	2.8	
I				22.3	WEST SAN JOSE (SP X'ing.) (2.1)	0.7	
	Yard			23.0	SAN JOSE (Alameda St. Fr't. St'n.) (0.7)	0.0	
			Arrive Daily				Leave Daily
			254				253

RULE S-72. WESTWARD TRAINS ARE SUPERIOR TO EASTWARD TRAINS OF THE SAME CLASS.

Niles Junction is within station limits Niles and movements between these points will be in accordance with T.C.S. signals and rules. Time shown at Niles is for information only.

Eastward — FIRST SUBDIVISION "B"—CARBONA BRANCH — Westward

Timetable No. 41, April 25, 1954

Symbols, Rule 6-A.	Car Capacity of Sidings	Telegraph Office Calls	Distance from Carbona	STATIONS	Distance from End of Branch
WYP	220	Cb	0.0	CARBONA (2.2)	2.2
PO	63		1.7	KERLINGER (1.7)	0.5
	Spur 1W 18		1.92	TEEKAY (0.22)	0.28
			2.2	END OF BRANCH (0.28)	0.0

RULE 201. Train order authority is not required on Carbona Branch and all movements on branch must be made at yard speed.

Eastward — SECOND SUBDIVISION "A"—TERMINOUS BRANCH — Westward

Timetable No. 41, April 25, 1954

Symbols, Rule 6-A.	Car Capacity of Sidings	Telegraph Office Calls	Distance from Terminous Jct.	STATIONS	Distance from Terminous
YP	31		0.0	TERMINOUS JCT. (7.8)	7.8
	16		3.5	GARDEN (3.5)	4.3
Yard Limits	3		6.6	GRASS (3.1)	1.2
WY	Yard	Us	7.8	TERMINOUS (1.2)	0.0

ALL SUBDIVISIONS

All times as shown for trains at Stations on schedule pages are Pacific Standard Time. Trains will continue to operate on Pacific Standard Time during period that Daylight Saving Time is in effect.

RULE 10-J. Yellow round speed-control boards indicate the maximum permissible speed of California Zephyr trains.

Between Oroville and Portola, the speed of California Zephyr trains will be five miles per hour above the maximum permissible speed indicated on white oval speed-control boards for passenger trains.

RULE S-17. Figures indicating "Car Capacity of Sidings" are number of cars, based on average allowance of 48 feet per car, that tracks will hold between clearance points, plus 250 feet for engine and caboose.

Outside of T.C.S. territory care must be taken to see that flag protection is furnished ahead when taking siding to meet trains unless it is definitely known that train is clear of the main track. After train comes to rest in the siding, the head end must receive a stop signal from the rear end indicating that train is clear of the main track. Until such signal has been received by head end, headlight will be displayed and flag protection provided. This does not in any way relieve the approaching train from complying with provisions of Rule S-90.

RULES 20, S-20, 21 and 23. Classification signals need not be displayed on San Jose and Terminous Branches. At meeting points on these branches trains must stop for purpose of identification.

RULE 34. The fireman on a freight train must not leave the forward cab while train is in motion unless authorized by the engineer, who must give four short sounds of alarm gong to indicate that head brakeman must immediately come forward and comply with Rule 34 before fireman leaves and until return of fireman. When third seat is available, head brakeman will ride in forward cab.

RULE 101-B. When tracks are covered by water and it is known they are safe for movement, engines may be operated over them only if the water is below the traction motor frames, not exceeding 5 MPH.

RULE 105. On First and Second Subdivisions and at Oroville and Keddie, sidings between clearance points are not included in signal circuits.

RULE 110.

First and Second Subdivisions: Freight trains need not stop for train inspection if train is operating normally.

Third Subdivision: Eastward freight trains need not stop for train inspection if train is operating normally.

Westward freight trains not using retainers need not stop for train inspection if train is operating normally.

Westward freight trains requiring the use of retainers must stop for inspection at Belden, except when train has been inspected at Keddie, in which case, they may run from Keddie to Bloomer for inspection.

Fourth Subdivision: Eastward freight trains will be inspected at Almanor or before leaving Halls Flat.

Westward freight trains will be inspected at Halls Flat or before leaving Almanor.

All Subdivisions: When weather conditions restrict visibility, the conductor will designate additional stops for inspection that are necessary in his judgment.

RULE 342. When operating Budd Cars 375 and 376 in T.C.S. or block signal territory every precaution must be taken when using sand to prevent coming to a stop with wheels resting on layers of sand. Conditions permitting, sand should be shut off at least two car lengths in advance of the point where car finally stops. When conditions require sand to be used until car is stopped, immediately after stopping the engineer or hostler will sound signal 14 (b), and upon receiving proceed signal from trainman or hostler helper will move car forward at least fifteen (15) feet. Trainmen must not permit passengers to detrain or entrain until after second stop is made.

RULE 509. When a train or engine becomes disabled in a block between stations and is unable to proceed, train dispatcher may authorize another engine or train to enter the block in accordance with provisions of Rule 509 (B), or first paragraph of Rule 509 (C), according to conditions. Form B must be issued and location of disabled train shown thereon.

RULE 540. Traffic Control System extends from Clinton to Portola.

On First, Second and Third Subdivisions trains will be authorized by clearance at terminals. Trains originating at intermediate stations will be authorized verbally by train dispatcher except at a station where an operator is on duty.

Conductor, or engineer if there is no conductor, of a train authorized verbally, must ascertain from the train dispatcher what instructions are outstanding as to track conditions on that portion of the system over which movement is to be made.

Trains on First and Second Subdivisions which are operated through Stockton and Stockton Yard with the same conductor may be issued Form Y train orders affecting their movement on either or both Subdivisions and may assume corresponding schedules or run extra from Stockton or Stockton Yard without obtaining clearance. When engine crews are changed at Stockton or Stockton Yard, incoming engineer must deliver clearance, train orders and instructions to outgoing engineer.

RULE 547. When a train is standing or switching in a block at a station, train dispatcher may authorize another train to flag into the block to perform work. Crew of train so authorized must have an understanding with crew of train occupying the block before entering and must fully protect their movements against any movements by the train originally occupying the block.

RULE 831. When steam shovels, cranes, pile drivers, ditchers, spreaders or similar equipment are handled in trains, other than work trains in service, they must be placed on rear, unless otherwise directed. If picked up at a point where they cannot be placed on rear, they may be placed on head end and switched to rear at first station where possible to do so.

RULE 1011. When engine is not detached from train on No. 17 or No. 18 at Oroville, or on No. 17 at Portola, it will not be necessary for outgoing enginemen to check supplies and equipment.

AIR BRAKE RULES

RULES 24-B and 24-C. On California Zephyr trains, if motive power is changed at any intermediate station or terminal, or continuity of brake pipe is disturbed, air brake tests must be made.

On No. 18 at Oroville and on No. 17 at Portola and Oroville, except when engine is to be detached, the incoming engineer, after making station stop, will make a full service electro-pneumatic brake application (approximately 75 pounds), or if electro-pneumatic brake is inoperative, a 20 pound brake pipe reduction with the automatic brake. Release will be made by outgoing engineer upon receiving the proper signal (hand or air whistle). Inspection card, Form 809-G, is not required at these points. When engine is to be detached at Oroville, automatic air will be used in making station stop.

On other passenger trains at points where terminal tests are made, when the continuity of the brake pipe is not disturbed, or motive power not changed, the incoming engineer, after making station stop, must apply the train brakes with a 15 pound brake pipe reduction immediately after stopping and without waiting for a signal.

The brake pipe leakage must be noted, then the reduction increased to a total of 20 pounds. The incoming engineer will notify the outgoing engineer the amount of brake pipe leakage.

Release of the train brakes will be made upon receiving the proper release signal.

RULE 32. Modified to the extent that at Oakland, passenger equipment being switched in the making up or breaking up of trains or in the coach yard may be handled without air brakes cut in.

Such passenger equipment must not be kicked or dropped and any cars left standing must have hand brakes set or be coupled to car or cars with sufficient hand brakes set to prevent them from moving. Switch crews are cautioned that CZ type cars in particular, which have roller bearings, have a tendency to roll and every precaution must be taken to prevent accident.

RULES 43-A and 43-B. Freight trains originating at South Sacramento and Keddie will make air brake tests as prescribed under these rules.

RULE 43-B. When locomotives in charge of a messenger are picked up at intermediate points, rear end test must be made.

RULE 44 is revised as follows:

When a passenger train, including Zephyrette, is departing from an originating point, or engineer and/or engine, has been changed, helper engine added or detached, cars added to train, or angle cock closed, except for detaching cars at the rear, as soon as speed permits the train brakes must be applied sufficiently to determine whether they operate properly. Automatic brake will be used for this purpose unless otherwise provided. Power must not be shut off unless conditions require.

Trainmen stationed at the rear of train must see that the brake on the rear car applies and releases properly before giving a proceed signal.

When practicable, communicating signal will be used, in which case one long sound must be given. If the brake on the rear car fails to apply and release or engineer does not receive the required signal the train must be stopped and cause ascertained and condition corrected before proceeding.

RULE 57. When changing ends on diesel engines equipped with 24-RL brake equipment proceed as follows:

Make a 20 pound brake pipe reduction with the automatic brake valve, after which move the brake valve handle to lap position, move the independent brake valve handle to release position and observe that the brakes are still applied. Close the doubleheading cock, and place the Rotair valve in FRT lap or PASS lap position depending on service in which it is used. Move the automatic brake valve handle to running position and remove both handles.

To assume control at the other end, first insert the brake valve handles, place the Rotair in PASS or FRT position depending on the service in which it is used. Move the independent brake valve handles to application position. Open the doubleheading cock and depress foot pedal, check gages to insure brake pipe and main reservoirs are fully charged, and if ready to move, release independent brake.

When opening doubleheading cock, move handle toward open position until latch engages the lug, then pull handle up to clear lug and complete handle movement. This procedure will prevent undesired brake application and operation of the P.C.S.

When changing ends on Zephyrette cars 375 and 376 proceed as follows:

Make a 20 pound brake pipe reduction with the automatic brake valve and then move brake valve handle to lap position. Release independent brake. Close brake valve cut-out cock and return automatic brake valve handle to running position. Remove both brake valve handles in running position and proceed to opposite end. In cutting in on opposite end, place brake valve handles on respective brake valves, apply independent brake fully.

Place foot on Safety Control Pedal and open the brake valve cut-out cock. Check the feed valve setting to insure required pressure in order to release brakes set up at opposite end. Release independent brake when ready to move.

TRAINS EQUIPPED WITH ELECTRO-PNEUMATIC BRAKE

Electro-pneumatic brake wire connectors and straight air hose must be connected between all cars and engine. Cut-out cocks must be open except on the rear of last car and electro-pneumatic brake wire connectors securely fastened in their receptacles. Electro-pneumatic brake wire connectors must not be disconnected while train is in motion.

When a train leaves its originating terminal with automatic air brakes, or when operation of brakes is changed enroute from electro-pneumatic to automatic, the incoming engineer must inform the outgoing engineer that electro-pneumatic brake is inoperative. No attempt must be made to use the electro-pneumatic brake unless defects are corrected and a standing test is made as prescribed by Rules 24-B and 24-C.

RULE 37. When a stop is made with electro-pneumatic brake, a full service application of the automatic brake must be made before engine or cars are detached.

AUTOMATIC BLOCK SIGNALS

Keddie. Fourth Subdivision:

Eastward two position signal at west portal Tunnel 1 and westward two position signal 60 feet east of east wye switch are not equipped with number plates. When aspect per Rule 292 is displayed by either of these signals Rules 509(A) and 509(B) will not apply and it will not be necessary to contact the train dispatcher. Rule 509(C) will govern. Train or engine will proceed under flag protection to block system limit sign.

Three position signal 45 feet east of Tunnel 2.

Overlap for westward signal east end of Tunnel 1 extends 528 feet west of signal at west portal Tunnel 1. Signal east end of Tunnel 1 is actuated by both switches of first crossover west of Tunnel 1.

FIRST SUBDIVISION

(A) RULE 292-A. Signals at entrance to certain sidings are located 300 feet beyond switch. When such signals indicate STOP, trains should stop back of switch in position to enter siding if required.

When the "S" is illuminated the switch must be lined for the diverging route and train must enter siding. When switch is lined the "S" is extinguished. Upper unit continues to display red aspect for main track move.

(B) At signals equipped with "S" indicators, switches must not be changed unless the "S" is illuminated except when moving over switch by permission of the train dispatcher.

Trainmen and enginemen must not operate these switches for trains other than their own except at meeting points, train holding main track may line switch when the "S" is illuminated for opposing train and it is known that the opposing train has passed the last signal governing such train.

(C) Switches of certain tracks are not electrically-locked or signalled. Except in emergency a train must not clear main track on such tracks. If necessary to clear, permission must be obtained from the train dispatcher before again entering main track and provisions of Rule 520 will apply.

Switching may be done at these switches without work authority provided part of train is left at all times on main track within the block being used. Train dispatcher should be advised when such switching is to be done between stations.

Oakland.

(a) Street Crossing at Third and Broadway must not be blocked.

A westward train finding an eastward passenger train at passenger station will not pass Franklin St. until eastward train leaves station.

(b) Joint WP and SP drill track between Melrose and Elmhurst must not be used for meeting or passing trains. Crossover between drill track and west end of Elmhurst siding must not be used by road crews. Normal position at west end of crossover, lined for drill track and at east end, lined for crossover.

(c) 66th and Seminary Avenue Crossings must be cut when blocked more than five minutes.

Hayward. Freight trains doing switching will leave train outside of limits of bonded rails operating crossing bells at "A," "B" and "C" Streets and will use engine whistle or horn and bell only when necessary to prevent accident.

Trainmen must not ride cars beyond a point 548 feet from point of switch on Hayward Building Material Company spur. Sign has been placed at this point, reading: "STOP: Trainmen must not operate beyond this point."

Dispatcher's telephone installed in baggage room.

Niles. Look out for heavy movement of gravel trucks using Shinn Road crossing over main track, siding and back track 800 feet west of Station. Engineers must prolong horn or whistle signal 14 (1) approaching and passing over this crossing on any of the above named tracks.

Dispatcher's telephone installed in baggage room.

Sunol. Cars must not be left on house track spur within 75 feet of either side of Crossing No. 4-36.0.

Altamont. Under no circumstances may cars be left on either leg of wye.

Water cars spotted on house track are connected with underground water line. They must not be moved except on special instructions.

Carbona. Engines must move with extreme caution not exceeding 3 MPH while moving over frogs and switches and around curves on Tomato Spurs.

San Joaquin River Bridge. Dispatcher's telephone at west end of bridge, inside old bridge tender's shanty.

Army Supply Depot (Lathrop).

(a) No signals for movement from main track to Army Supply Depot tracks. Trains clearing main track on these tracks must notify train dispatcher when they have done so.

Entrance to main track through crossover at west end is governed by dwarf signal. At east end, signal located just west of switch points, inside switch, governs entrance to main track from either No. 1 track or lead. Signal is not affected by position of inside switch.

(b) Tail track, capacity 54 cars, is connected with switching track at west end. Normal position of all switches in switching track or tail track is lined for switching track. Do not exceed 10 miles per hour on interchange trackage with Army Supply Depot.

(c) Tracks 2 and 3 are to be used for setting out and picking up cars.

Hayward, Army Supply Depot and Stockton Yard. Inside switches of crossovers east end new siding Hayward, west end Army Supply Depot track and MP 90.4 and MP 91, Stockton Yard, normally lined for tail track or lead. Inside signals at these locations govern entrance to main track only. They are not illuminated unless one or both crossover switches are lined and do not affect movements on tail track or lead other than to main track.

The "S" unit on signal mast will be illuminated when train dispatcher authorizes switches to be lined and signal will light when switches are changed. Neither switch to crossover may be changed unless "S" unit is illuminated.

Stockton Yard.

(a) Absolute signals at west yard connection, MP 90.4. Eastward trains, caboose hops or light engines will be governed by signal indications entering Stockton Yard. Eastward trains which head in at MP 91 call Yardmaster on telephone located near switch for track instructions. Eastward caboose hops and light engines which head in at MP 90.4 will proceed via No. 2 lead through crossover west of Bridge 90.97-C to No. 3 lead and No. 15 track to yard office and roundhouse track. Eastward trains which head in at MP 90.4 by signal indication stop at train yard lead MP 91 and call Yardmaster for track instructions.

(b) The old Ortega siding, extreme west end of yard, is a storage track. It must not be used by road crews as entrance or departure track to or from Stockton Yard.

(c) Hunter Street Line. See instructions on page 15 under Ortega Tower governing westward movement to main track. For movements main track to Hunter Street line, indication first must be received on eastward absolute signal MP 90.4 permitting entrance into block. Switch points are immediately east of signal and when switch is thrown signal will change to STOP. Under these conditions the absolute signal in STOP position may be passed without further authority.

SECOND SUBDIVISION

Stockton Yard.

(a) Diner Siding. West switch governed by absolute signals with "S" unit on entering and leaving signals. When "S" unit is illuminated electric lock is released and must be unlocked before switch is changed by hand operation.

(b) Charter Way. Westward signal is a two-unit signal and diverging route may be to either "B" lead or Diner Siding.

When either of the dual control switches in this block is placed in hand-throw position the other switch is disconnected from power operation and it is not necessary to place it in hand-throw position when switching over it unless it is used.

Stockton.

(a) Flora Street. Switches hand operated. Eastward signal at west end is a two-unit signal with "S" unit on mast which governs movements to Track 7. Westward signal at east end is a two-unit signal with two "S" units on bracket, one on north side governs movements to Track 7 and one on south side governs movements to tracks on that side.

(b) North Channel Line. Governed by absolute signals and electric lock. Eastward signal is a two-unit signal with "S" unit. When the "S" unit is illuminated electric lock is released and must be unlocked before switch is changed by hand operation.

Engines and cars must be brought to a stop at Country Club Highway crossing and must be preceded by flagman over crossing.

Bridge over Smith Canal will not clear man on top of car.

Terminous Junction. Two derails at each end, on siding and leg of wye, pipe-connected in tandem with east and west siding switches. Switches from siding to each leg of wye, Terminous Branch, operate independently from derails.

South Sacramento.

(a) Campbell Soup Co. track. West crossover switches both electrically-locked. After lock is released main track switch must be opened before inside switch can be opened and inside switch must be closed before main track switch can be closed.

(b) Sutterville Road crossing at west end of train yard, must not be blocked excessively by freight trains or switch movements.

(c) Two dual control switches at east end. Easterly switch connects with No. 1 track on north side and westerly switch connects with yard tracks on south side of main track. Power-operated switch point derail in No. 1 track connected with dual control switch but operates separately when either switch or derail is in hand-throw position. When either dual control switch or power derail is placed in hand-throw position the other switch and derail are disconnected from power operation and it is not necessary to place other switch in hand-throw position when switching over it unless it is used.

Westward absolute signal at east end is a two-unit signal with two marker lights on bracket which, when signal indication is per Rule 287, will show whether switch to north or south side is open.

(d) Both switches of crossover from main track to No. 1 track at west end of train yard electrically-locked. After lock is released, main track switch must be opened before inside switch can be opened and inside switch must be closed before main track switch can be closed.

Sacramento.

(a) Joint Track. Sacramento Northern crews operate over Western Pacific "R" Street line and main track between "R" Street and Globe and crews will be governed by Western Pacific Operating Rules and permissible speeds.

(b) **RULE 509.** Train dispatcher may issue Form B covering blocks Globe to east end South Sacramento, inclusive, in either direction.

(c) Normal position of switch at tail of wye "R Street Line" is lined for west leg of wye.

Marysville.

(a) Main track and inside switches of crossover west of passenger station, east switch to No. 1 track and hand-throw tandem derails at east end of Tracks 1 and 2 are bolt-locked with one electric lock. They must be operated separately after electric lock is released and restored to normal position before electric lock is returned to the train dispatcher.

(b) Joint Track. Sacramento Northern crews operate over all Western Pacific tracks between junction switch MP 178.13 and MP 180.07. Junction switch on siding must be locked for siding when not in use. All movements on siding must be made at yard speed.

THIRD SUBDIVISION

Sidings except Oroville and Keddie must not be occupied or fouled unless authorized by an absolute signal indication or by permission from the train dispatcher.

Oroville. West switch is governed by absolute signals with "S" unit. When "S" unit is illuminated, electric lock is released and must be unlocked before switch is changed by hand, after which signal will show indication for movement.

When switching is to be done at this location, after electric lock is released, moves may be made at restricted speed within the limits specified by the train dispatcher without regard to signal indications except that main track block east of west siding switch may not be entered without signal indication unless working on train, or cars occupying the block.

Land. Engines heavier than two-unit diesels must not use tracks 2, 3 and 4 except portions at west end on tangent track.

Two-unit diesels and smaller engines may use all tracks and may use east lead as far as derail and sign reading "WPRR engines must not go beyond this point" located 125 feet east of extreme east switch of interchange tracks with the Feather River Railway Co.

No. 1 track, which is a crossover from siding, and No. 2 track used as a runaround track, must be left clear. All classes of engines may use siding entire length.

Camp Rodgers. West connected switch to tracks serving PG&E Co. located in siding 1472 feet east of west siding switch. Hayes derail on lead track 200 feet east of connecting switch. Unless some portion of train is left on siding, derail must be set in derailing position while engine is on PG&E tracks and thereafter siding must not be entered without permission of train dispatcher. Cars must not be left on grade on lead track between connecting switch and switchback 550 feet from east end of lead track.

Paxton. West connected crossover from main track to house track located 942 feet west of east end of 47-car house track spur. Both switches electrically-locked. After lock is released main track switch must be opened before inside switch can be opened and inside switch must be closed before main track switch can be closed.

Keddie.

(a) When calling in flagman from east on Fourth Subdivision enginemen will sound six long blasts of horn.

(b) All switches leading in or out of siding (No. 1 track), except inside switch to Upper Crossover, must be left lined for the siding. Derailing switch at west end of siding is dual control, power-operated and when in power position works simultaneously with west siding switch. When west siding switch is in hand-operated position, derailing switch must also be hand operated.

(c) Both switches of west crossover between No. 1 track and Fourth Subdivision lead are included in circuits of eastward absolute entering signal west end Keddie siding. These switches must be left lined for No. 1 track and Fourth Subdivision lead respectively when not in use.

(d) Movements of trains or engines between yard tracks and tail track east of upper crossover may be made by, first obtaining release of electric lock on switch from roundhouse lead to tail track from the train dispatcher. After obtaining release of electric lock and reversing switch, then line inside switch of upper crossover to tail track. Movements must not be made west of roundhouse lead switch or on tail track east of eastward dwarf absolute signal at inside switch of upper crossover until this is done. Signal will display aspect per Rule 287 for eastward movement to tail track.

Hayes derail on tail track, pipe-connected to inside switch to upper crossover.

After this lineup is made, roundhouse lead switch must not be lined back until engine or cars are clear of section of tail track between dwarf signal and derail.

Quincy Junction. East house track switch operates pipe-connected derails on east end house track and east end interchange track simultaneously.

Blairsden. Trains setting out or picking up on house track must have air cut through and operative.

Movement over Mill track between Blairsden and Graeagle must be made with air cut through and operative.

A sign reading "TRAINMEN PROHIBITED FROM RIDING CARS BEYOND THIS POINT" and illuminated at night is located over tracks at a point approximately 60 feet in advance of log rollway at plant of California Fruit Exchange, Graeagle.

On Graeagle Spur do not exceed 8 MPH between main track switch and derail at switch leading to box factory and 4 MPH beyond this derail.

Crews spotting moulding mill at Graeagle must hold onto nine cars including cars to be spotted.

FOURTH SUBDIVISION

Markers must be burning through Tunnels 1, 2, 3 and 6.

Keddie. When calling in flagmen from east on Fourth Subdivision enginemen will sound six long blasts of horn.

Box. Engines or cars must not be moved over road crossing on Box Spur just east of Greenville without being brought to a stop and road traffic flagged in both directions by a member of crew.

Clear Creek Junction. The 33-car siding is the interchange track with Almanor Railroad Company and trackage between Western Pacific main track switch and yard limit board 2000 feet beyond end of the 33-car siding toward Chester is joint track for interchange purposes. Movements over this trackage are under operating rules governing operations within yard limits. Switch point derail on Almanor RR main track 400 feet from junction switch.

Westwood.

(a) Following instructions govern movements over crossings at Veneer Plant and Third Street (east and west of passenger station):

Trains meeting at Westwood must not block these crossings. Trains or engines using main track over crossings will run prepared to stop before hitting anything on or about to use the crossings. Between the hours of

* 7:20 AM and 7:30 AM — * 12:20 PM and 12:30 PM
* 11:30 AM and 11:40 AM — * 4:30 PM and 4:40 PM

trains stopping at Westwood must not block crossings any part of the periods specified, waiting back of crossings if necessary. Any movements over crossings between these times must be preceded by flagman. Gate tender at Third Street crossing on duty continuously.

Any crossing must be cut immediately upon request of plant gate watchman for impending movement of ambulance or fire apparatus and kept clear until released by him.

(b) Between the hours of

* 5:01 AM and 7:01 AM — * 1:30 PM and 6:01 PM

daily except Sundays, log truck crossing near east switch, yard lead, must not be blocked by trains stopping.

* One hour earlier during period California Daylight Saving Time is in effect.

(c) Movements of trains or engines on any tracks other than main track over any crossings in yard must be preceded by flagman.

(d) Derail on west end F.G.S. Co. electric siding must be kept in derail position when cars are on siding. East switch of F.G.S. Co. electric siding must be left lined for siding. Switch leading from west end of house track to gravel bin spur must be left lined for gravel bin spur to serve as derail.

RULE 827. When cars are set out on sidings at Moccasin, Greenville, Almanor, Lassen View, Robbers Creek, Jellico, Willow Springs or Little Valley, in addition to provisions of Rule 827, lower car must be chained to rail and train dispatcher notified.

INTERLOCKING PLANTS AND SIGNALS AND RAILROAD CROSSINGS NOT INTERLOCKED

At certain Interlocking Crossings aspects per Rules 281 through 292 will be supplemented by semaphore arms as follows:

RULE 281. A single semaphore arm 60 degrees below horizontal position. Two semaphore arms on the same mast inclined 60 degrees below horizontal position.
NAME. CLEAR.
INDICATION. PROCEED.

RULE 283. Upper semaphore arm in horizontal position; lower semaphore arm inclined 60 degrees below horizontal position.
NAME. DIVERGING CLEAR.
INDICATION. PROCEED ON DIVERGING ROUTE. OBSERVE PRESCRIBED SPEED THROUGH TURNOUT.

RULE 292. A single square-ended red semaphore arm in horizontal position. Two semaphore arms in horizontal position.
NAME. STOP.
INDICATION. STOP.

MP 5.8—SP Crossing and MP 5.9—Chestnut Junction, Magnolia Tower. Interlocking.

Eastward: Two-arm home signal 700 feet west of crossing; upper arm governs movement to eastward main track; lower arm to westward main track. Dwarf signal 490 feet west of crossing governs movement from No. 1 track to either eastward or westward main track.

Westward: Three-unit home signal on westward main track 700 feet east of crossing; upper unit governs movement to SP; middle unit to WP yard; lower unit to Oliver Park Spur. Color-light dwarf signal 490 feet east of crossing governs movement from eastward main track to WP yard or SP.

Eastward whistle signals: Old yard to eastward main track—one long; to westward main track—one long, one short and one long. No. 1 track, old yard, to eastward main track—one short and one long; to westward main track—one short, one long and one short.

Telephone for communicating with towerman installed at eastward home signal.

MP 7.2 SP Crossing. Both Main Tracks. No interlocking. Protected by manually-operated gates. When SP engines or cars are using SP track gates will be across both WP tracks and indicate STOP to movements on WP in either direction. Trains must approach under control and not proceed over this crossing unless it is known to be clear.

MP 7.7 Clinton, SP Crossing. Modified interlocking.

Spring switch located 60 feet west of crossing at end of double track normally lined for westward main track and may be trailed through eastbound on eastward main track.

Home signal east of crossing is a two-unit signal with "S" unit on mast. Upper unit governs movement over crossing to westward main track; lower unit to eastward main track after spring switch has been lined. The "S" unit must be illuminated before spring switch is changed. Trains or engines moving from eastward main track to westward main track or vice versa must move beyond home signal and receive proper signal indication for reverse movement. If authorized to pass this signal in STOP position, in addition to observing Rule 663, spring switch must be examined and points found to fit properly for movement desired.

MP 10.6 and MP 10.7 Melrose Tower, SP Crossings. Interlocking.

MP 13.7 Elmhurst, SP Crossing. Automatic interlocking.

East switch to Elmhurst siding is within home signal limits and movement over this switch to the main track is governed by a dwarf home signal located at the clearance point.

For movement siding to main track stop train within 250 feet of dwarf signal. Call train dispatcher and when given permission by him open door on electric lock and proceed according to instructions posted therein.

For movement from main track to siding, stop train between home signals and at least 50 feet east of switch points. Call train dispatcher and when given permission by him open door on electric lock and proceed according to instructions posted therein.

Electric lock is not equipped with an emergency release. If lock does not release west siding switch should be used.

If home signals indicate STOP upon the approach of a train, or if dwarf home signal indicates STOP with switch in the reverse position, be governed by Rules 664 and 509.

Cars left on Elmhurst siding must be placed at least 300 feet west of dwarf home signal to avoid occupying approach lighting circuit.

MP 30.3 Niles Tower, SP Crossing. Interlocking.

MP 42.7 and MP 42.97 Radum Tower, SP Crossings. Interlocking.

Towerman on duty daily except Sundays and seven National holidays. During hours towerman is off duty normal operation of signals on WP will be semi-automatic.

In order to avoid delay to trains on opposing route while doing work at Radum train must be left outside of interlocking plant circuit governed by home signals.

MP 74.05, SP Crossing. Automatic Interlocking.

While doing work on tracks adjoining this crossing train or cars must be left outside of interlocking plant circuit governed by home signals in order to avoid delay to trains on opposing route.

MP 84.45 SP Crossing. Interlocking.

When switching is done on main track at west Lathrop or crossover west end of Army Supply Depot track, signal operator in SP depot Lathrop must be notified by telephone length of time to be used so signal lineup may be changed if necessary and must also be notified when switching is completed. Telephones located at crossing and in T.C.S. booths west Lathrop and crossover west end Army Supply Depot track.

MP 90.5 Ortega Tower, SP Crossing. Interlocked with Hunter Street track.

Home signal 450 feet east of crossing is also absolute signal governing entrance to main track block on westward moves. Connecting switch to main track MP 90.42 must be thrown by hand. If this signal is in STOP position be governed by Rule 663 within interlocking limits and Rule 509 before passing this signal in STOP position. Telephones for communicating with train dispatcher located in tower and in booth adjacent to main track absolute signals MP 90.4.

Towerman on duty 8:00 PM to 12:00 Midnight and 1:00 AM to 5:00 AM daily, except Saturdays, Sundays and the seven National holidays.

MP 93.2 AT&SF Tower, AT&SF Crossing. Interlocking.

Whistle signals: Main track either direction—one long; to or from Hazelton Avenue line—three short and one long.

MP 93.8 Weber Avenue Tower, SP Crossing. Interlocking.

MP 95.1 El Pinal Tower, SP Crossing. Interlocking.

MP 137.5 "X" Street, CCT and SN Crossing. Automatic interlocking.

Dwarf signals with "S" indicators on Sacramento Valley Tractor Co. spur and west end interchange track. For movement out of spur or interchange track, first contact train dispatcher, then when "S" is illuminated line switch and signal should clear for movement.

MP 138.0 "R" Street Tower, SP Crossing. Interlocking.

Two-unit signal on west leg of wye 800 feet from main track switch. Upper unit governs movement from "R" Street line over crossing to WP main track; lower unit governs movement over crossing to California Builders' Supply spur.

Spur serving Valley Wholesale Grocery Co. connected with west leg of wye with switch facing west. Indication on eastward home signal on main track is same for movements from main track to either "R" Street line or to spur. Crews desiring to enter spur must advise towerman. Switch cannot be changed while engine or cars are between home signals of plant.

Whistle signals: Main track to wye, either leg—one long and one short. Wye to main track, either leg—one short and one long.

MP 152.5 Sankey, SN Crossing. Modified interlocking.

MP 180.2 Binney Junction Tower, SP Crossing. Interlocking.

San Jose Branch.

MP 19.6 SP Crossing. No interlocking.

MP 20.2 Willow Glenn, SP Crossing. Modified interlocking. Home signals 225 feet east and west of crossing. No approach signals.

MP 22.3 West San Jose, SP Crossing. Modified interlocking. Home signals 250 feet east and west of crossing. No approach signals.

All trains must come to STOP at home signals, Willow Glenn and West San Jose crossings and a member of crew go to crossing and carefully follow instructions pasted inside of derail lock box at each crossing before proceeding over either crossing.

YARD OPERATIONS

OAKLAND — BETWEEN CLINTON AND EAST YARD LIMIT
STOCKTON — BETWEEN MP 91 AND EAST SWITCHING LIMIT
SACRAMENTO — BETWEEN WEST AND EAST SWITCHING LIMITS
OROVILLE — BETWEEN WEST TRAIN YARD SWITCH, OROVILLE YARD AND EAST SWITCHING LIMIT

(A) **RULE 547.** Will apply within above limits, with work authority limited to not more than four blocks at any one time. Engine foreman must obtain authority from train dispatcher whenever switching is to be done in a block or blocks and, when switching is completed, engine foreman personally must release block or blocks to the train dispatcher.

When initially entering a block at a switch where there is no signal or electric lock permission must be obtained from the train dispatcher and three minutes must elapse after switch is opened before engine or cars foul main track.

A yard engine may be granted work authority including a block in which a train is standing (provided such train has not been granted block work authority) for the purpose of switching such train. When such authority is granted signal indication is not required for entrance to the block nor must three minutes elapse after opening switch not protected by signal or electric lock to enter the block provided train to be switched can be seen stopped in the block. If it becomes necessary to switch such train from both ends, two yard engines may be granted authority to work in the same block from opposite ends of the train. Under such arrangements a portion of the train must be left at all times in the block originally occupied and after switching is completed the work authority will be considered cancelled.

The granting of work authority does not relieve trains or engines from complying with the indications of any interlocking signals within the switching limits. Any movement within interlocking limits must be made in accordance with interlocking rules.

Absolute signals at other than dual control switches within working limits may be passed without stopping.

(B) Certain switches within above limits are not electrically-locked or signalled. Switch crews using such switches within a block under work authority may leave and return to the main track without additional authority from the train dispatcher provided they have left a car or cars on main track or main track switch open with a man in charge.

If main track has been cleared and switches restored to normal position new authorization must be obtained from the train dispatcher before returning to the main track.

(C) Engine foreman must notify train dispatcher when leaving or intending to leave main track at an intermediate switch except when working under work authority. A block must not be released to the train dispatcher in advance when work authority has been granted but blocks must be released promptly when switching has been completed or specified time has expired in order to avoid delay to trains.

OAKLAND

(a) Block limits are as follows:
Clinton, MP 7.7 to absolute signal MP 8.8
Absolute signals MP 8.8 to MP 9.9
Absolute signal MP 9.9 to west switch Kohler
West switch Kohler to east switch Kohler
East switch Kohler to absolute signal MP 14.7.

(b) Train dispatcher must be notified when yard engines intend to enter T.C.S. on main track at Clinton and thereafter signal indications will govern.

(c) Telephones for communicating with train dispatcher are located adjacent to absolute signals and at following points:
Fruitvale, east and west siding switches
Continental Can Co. Spur, MP 10.76
81st Ave. crossover to drill track
Harvey Spur
Gerber Spur, 98th Ave.
MP 13.7 Elmhurst crossing.

STOCKTON

(a) Block limits are as follows:
MP 91 to west switch Diner Siding
West switch Diner Siding to east switch Diner Siding
East switch Diner Siding to AT&SF Crossing
AT&SF Crossing to Weber Avenue Crossing
Weber Avenue Crossing to west switch Flora Street
West switch Flora Street to east switch Flora Street
East switch Flora Street to North Channel Line
North Channel Line to west switch Hammer Lane.

(b) Work authority is not required for straight moves to or from SP Transfer or through other switches protected by electric locks.

(c) **Hazelton Ave. Line.** When yard engines desire to move to or from Hazelton Ave. Line train dispatcher must be advised when signal lineup for the move is requested and he will arrange for towerman at AT&SF Crossing to line the route.

(d) Telephones for communicating with train dispatcher are located adjacent to absolute signals and electric locks (except home interlocking signals east of AT&SF Crossing and east and west of Weber Avenue Crossing) and at following points:
AT&SF Crossing—in tower
West switch house track, Church Street
Weber Avenue Crossing—in box on side of tower and in tower
East switch house track, Lindsay Street.

SACRAMENTO

(a) Block limits are as follows:
East switch Pollock to west switch South Sacramento
West switch South Sacramento to east switch South Sacramento
East switch South Sacramento to absolute signal SN-CCT crossing X Street
Absolute signal SN-CCT crossing X Street to absolute signal SP crossing R Street
Absolute signal SP crossing R Street to absolute signal SN connection F Street
Absolute signal SN connection F Street to absolute signal east switch Haggin
Absolute signal east switch Haggin to absolute signal Globe.

(b) Flashing red aspect displayed by indicator on signal mast in front of yard office South Sacramento authorizes switching movements between absolute signals at east and west ends of train yard without contacting train dispatcher. All movements so authorized must be made at yard speed. It will not be necessary to wait three minutes before entering main track after opening non-locked switches in this block when flashing red aspect is displayed on the indicator.

When the flashing red aspect is extinguished it will terminate the authority and main track must be cleared as promptly as possible. If unable to clear the main track within five minutes, the train dispatcher must be contacted.

(c) Flashing red aspect displayed by indicator on instrument house in vicinity of east train yard is authority to place power switches at east end of train yard in hand-throw position and to make switching movements in block between eastward absolute signals east switch South Sacramento and eastward absolute signal "X" Street. All movements so authorized must be made at yard speed.

When flashing red aspect is extinguished it will terminate switching authority and main track must be cleared promptly and power switches returned to motor position. If unable to clear main track within five minutes, the train dispatcher must be contacted.

Power switch to be used must be placed in hand-throw position before passing absolute signals and must be restored to motor position immediately when switching movements are completed.

(d) In connection with the power-operated derail at east end of No. 1 track, South Sacramento, it is permissible for yard engine to make an eastward move over it by signal indication, then, without reaching main track, move westward without placing the derail in hand-throw position. However, if there are a series of such moves the derail must be placed in hand-throw position to avoid hazard of train dispatcher changing lineup during the switching operations.

(e) At South Sacramento authority to place power switches at east end in hand-throw position will carry with it authority to switch in the block between east switch South Sacramento and eastward absolute signal at "X" Street and at west end authority to switch in the block between west switch South Sacramento and Pollock, as well as between east and west switches South Sacramento. This

means that two switch engines may be granted authority to switch over power switches at each end of South Sacramento at the same time but, only the switch engine which has specific authority from the train dispatcher to do so may use the main track block between east and west switches. (The foregoing not in conflict with instructions in paragraphs (b) and (c).

It will not be necessary for train dispatcher to record switching authority in connection with permission to use these power switches except when authority includes the main track block between east and west switches.

(f) An engine foreman may permit road crews to use his switching authority for moves, such as engine to or from train, etc., or other switch crews crossing over, but must insure that there is no hazard by reason of his own switching operations. Train dispatcher may not issue switching authority (including operation of power switches in hand-throw position) to more than one person at a time (except to switch both ends of a train).

(g) Telephones for communicating with train dispatcher are located adjacent to absolute signals, electric locks and at following points:

Phone booth opposite yard office, South Sacramento
Phone booth south side "T" Street
Between legs of wye, 19th Street—in box
East leg of wye—in box

(h) Yard track indicators located opposite absolute signals governing movements of eastward or westward freight trains into Yard will indicate to trains or engines the number of the track on which they are to yard their trains.

When indicator is dark Yardmaster must be contacted at head-in switch to obtain track assignment unless previously received.

OROVILLE

(a) **RULE 547.** Train dispatcher may grant permission to different engines in different parts of the same block to operate a dual control switch by hand or use the main track for switching and will not be required to protect work limits by absolute signals in each direction or apply red tags to the signal levers. However, he must not grant such permission if a train or engine is moving by signal indication in the block toward point where work is to be done or is closely approaching such block.

(b) Switch to house track, Oroville, operates derails on east end of house track and east end of team track simultaneously.

(c) **Oroville Yard.** Yard track indicators located opposite absolute signals governing movements of eastward or westward freight trains into Yard will indicate to trains or engines the number of the track on which they are to yard their trains.

When indicator is dark Yardmaster must be contacted at head-in switch to obtain track assignment unless previously received.

SACRAMENTO NORTHERN CREWS—MARYSVILLE

(A) All switches for entrance to WP main track are governed by absolute signals or electric locks. Movements of SN trains or switch engines will be made by signal indication or by permission of the WP train dispatcher. Western Pacific rules will apply.

(B) **RULE 547.** Governs switching operations. Block limits are:

Junction switch MP 178.13 to west siding switch
West siding switch to east siding switch
East siding switch to Binney Junction.

Engine foreman must obtain authority from train dispatcher whenever switching is to be done in a block or blocks and, when switching is completed, engine foreman personally must release block or blocks to the train dispatcher.

A yard engine may be granted work authority including a block in which a train is standing (provided such train has not been granted block work authority) for the purpose of switching such train.

Work authority is not required for straight moves across WP main track through switches protected by electric locks.

(C) **Junction Switch MP 178.13 (Oliver).** Protected by electric lock. Absolute signal on Sacramento Northern track with "S" unit on mast. When "S" unit is illuminated electric lock is released and must be unlocked before switch is changed by hand operation. After switch is changed signal will display aspect for movement over the route lined. After move is completed electric lock must be locked by member of crew and train dispatcher notified.

For movement leaving WP main track permission must be obtained from the WP train dispatcher before operating the electric lock.

(D) Instructions for operating electric locks are posted in telephone booths adjacent thereto.

Permission must be obtained from train dispatcher before electric locks can be released (except when entering WP main track at junction switch MP 178.13 by signal indication) and he must be notified after movement is completed and electric lock has been locked.

Telephones for communicating with train dispatcher are located adjacent to all electric locks and absolute signals.

(E) Switch point derail on California Packing Corp. spur 172 feet west of main track switch at MP 179.2.

OPERATION OF TRAINS AND ENGINES BETWEEN EAST AND WEST TRAIN YARD SWITCHES PORTOLA

(A) A flashing red aspect displayed by automatic signals between east train yard switch, MP 322.13, and west train yard switch, MP 320.25, authorizes yard switching or engine movements on the main track within these limits and is an indication the electrically-locked switches within these limits have been unlocked by the train dispatcher. Complete instructions for operation of electrically-locked switches are posted in telephone box located vicinity of switches.

(B) The absence of the flashing red aspect or the removal of the flashing red aspect is an indication that the train dispatcher desires the main track cleared for through train movements. Howlers controlled by the train dispatcher are located throughout the yard, and when operated the main track must be cleared immediately.

(C) In addition, train dispatchers will furnish information to operator as to times passenger trains are expected to reach Portola. Employes in charge of switch engines, light engines, and similar moves must ascertain from operator whether these trains are due before occupying main track and not delay them.

(D) When main track is used on authority of flashing red aspect, all movements must be made at yard speed.

(E) When a westward train or engine is stopped at absolute signal at east train yard switch, MP 322.13 or an eastward train or engine is stopped at absolute signal at west train yard switch, MP 320.25, by a STOP indication and train or engine is instructed by the train dispatcher to proceed under flag protection per Rule 509 (C), it must be preceded by a flagman. When next signal in advance can be seen displaying a flashing red aspect and intervening track to such signal can be seen to be clear, train or engine may pick up flagman and proceed at yard speed

(F) Eastward absolute signals at west train yard switch are under electrically-coordinated joint control of train dispatchers for the Third Subdivision, Western Division and First Subdivision, Eastern Division.

Permission to take switch or derail at west end train yard in hand-throw must be obtained from Western Division train dispatcher. Western Division train dispatcher will in turn contact Eastern Division train dispatcher for his concurrence.

When west train yard switch is in hand-operated position, derailing switch, if used, must also be hand operated.

(G) Train washer located on main track between west pocket track switch and east switch west siding.

Automatic signals 3210 and 3211 located adjacent to washer are equipped with marker lights indicating the position of washing arches.

All indications displayed by these signals are subject to the restrictions imposed by the marker lights and the following will govern:

LUNAR: Washer clear — Movement may be made through washer not exceeding 10 MPH.

PURPLE: Washing position — Restricted clearance. All trains and engines to be washed STOP and then proceed not exceeding 2 MPH.

Lunar light must be displayed for all non-washing movements. If lunar light not displayed for non-washing movements, trains and engines must STOP, check all washing arches, see they are locked in clear, then movement may be made through washer not exceeding 10 MPH.

Employes are prohibited from riding on sides or tops of trains, cars or engines while passing through train washer in operating position.

(H) After being authorized by clearance, trains must not leave until given permission by train dispatcher after member of crew advises him that they are ready to leave, except Nos. 17 and 18 will leave when ready being governed by signal indications.

(I) Derail on west end of west siding pipe-connected to main track switch. Switch must not be lined for main track until engines or cars have passed over derail.

(J) Yard track indicators located opposite absolute signals governing movements of eastward or westward freight trains into Yard will indicate to such trains the number of the track on which they are to yard their trains.

When indicator is dark Yardmaster must be contacted at head-in switch to obtain track assignment.

TRACKS ON WHICH ENGINE MOVEMENTS RESTRICTED

Location and Description of Track	Class of Engine	Prohibited
Goad Spur	All	Beyond 400 feet from switch.
Radum	All	Beyond frog on all tracks except 1 and 2.
Carbona Branch		
Spur MP 0.5	All	Beyond frog.
MP 73.8		
Standard Oil Spur	All	Beyond sign 225 feet from switch.
Stockton		
N. Channel Line*	All Road	Beyond frog.
Harte Spur	All	Beyond Bridge 100.56.
Terminous Branch	½ D-225 or heavier	On entire branch.
East Arboga, Outfit Spur	All	Beyond 300 feet from frog.
Marysville		
Old SN freight Connections	All	Beyond frog.
Cliff House Spur	All	Beyond frog.
Adelaide Spur		
Pond Track	All	Beyond frog.
Oroville		
Ehman Spur	½ D-225 or heavier	Beyond restricting sign.
Land		
See special instructions page 13, under third subdivision.		
Bloomer, River Spur	All	Beyond 6 cars from clearance point.
Belden, House Spur	All	Beyond MP 260.
Rich Bar, Outfit Spur	All	Beyond clearance point.
Keddie		
West Leg of Wye	All	Beyond frog from Fourth Subdivision.
Graeagle		
Log Unloading Track	All	Beyond west end log unloading dock.
Factory Tracks	All	Beyond sign at beginning of 20 degree curve between W. end of box factory and moulding mill.
Westwood		
Fredonia Track and Standard Oil Spur**	Heavier than ½ D-225 (also SP engines of similar weight and type including steam)	Beyond frog.
Oil Spur off FGS House Track	All	Beyond frog.
All Mill Spurs leading off track No. 4	All	Beyond frog.
Halls Flat		
West leg Logging Industry Wye	All	Beyond frog.
FGS Main Track and Siding	All	Beyond fouling point.

* All switch engines, except S-50 class (501-511), must be separated from any loaded cars by at least 1 empty while handling cars over Smith Canal drawbridge, North Channel Line, Stockton.

** Necessary to have hold of at least 4 cars to switch Standard Oil spur.

SPURS AND COMMERCIAL TRACKS

MAIN LINE

STATIONS	Distance from San Francisco	How Connected	Car Capacity
L. A. YOUNG & CRATERITE	14.1	1 E	22
HOMECRAFT BAKING CO.	14.3	1 W	6
HUDSON	15.9	1 E	20
GOLDEN GRAIN CO.	16.04	1 W	14
WYLLIE	16.4	1 E	3
GENERAL FOODS CO.	16.48	1 W	16
ESTUDILLO	16.5	1 E	13
CARPENTER (P)	24.9	Both Ends	39
DECOTO	26.6	Both Ends	18
PABRICO	27.8	Both Ends	51
EBERLY	28.9	Both Ends	20
GOAD (P)	32.1	1 E	25
RADUM (P)	43.4	Both Ends	33
TREVARNO (P)	49.0	1 W	24
REDMOND CUT (P)	59.3	1 W	33
VALPICO (P)	68.3	1 E	30
AYALA (P)	70.9	1 E	6
LYOTH (P)			
U.S.Q.M. & SP Conn. (Spur leads from east end Carbona siding)	73.8	1 W	..
Standard Oil Co.	73.8	1 W	..
RHODES (P)	75.6	Both Ends	26
ARMY SUPPLY DEPOT (P)	85.76	Both Ends	130
FRENCH CAMP (P)	88.35	Both Ends	29
HARTE (P)	100.5	1 W	24
VILLINGER (P)	107.8	1 W	13
LAS VINAS (P)	109.5	Both Ends	50
ALBERT (P)	127.2	1 W	9
BOMBAY (P)	146.6	1 E	13
VISTA ROBLES (P)	198.8	1 E	33
ADELAIDE	202.7	1 E	..
LAND (P)	212.2	Both Ends	28
JARBO (P)	236.1	1 E	17
GRIZZLY (P)	246.1	1 E	11
ROCK CREEK (P)	249.1	Both Ends	18
DALITE (P)	256.8	1 W	12
GRAY'S FLAT (P)	272.6	1 W	74
" " (PSGR STOP)	273.0	.....	..
STODDARD (P)	279.3	1 W	15
CLIO (P)	313.72	1 E	18

FOURTH SUBDIVISION

STATIONS	Distance from Keddie	How Connected	Car Capacity
INDIAN CREEK (P)	3.1	1 W	14
MACKEY	3.7	1 E	6
CHENEY LUMBER CO.	13.9	1 E	16
BOX (P)	15.5	1 W	34
COHALA (P)	17.1	1 W	20
ROLLO (P)	21.6	1 W	11
INDIAN HEAD LBR. CO. (P)	95.4	1 W	10

YARD LIMITS

West MP		East MP
WP Mole	Oakland	13.78
BR-14.4	San Jose	BR-23.0
MJ-6.0	Terminous	End of Branch
	Keddie (4th Subdivision)	K-0.48
K-38.25	Westwood	SP-409.45
	(2¼ miles west of Mason)	
K-75.17	Halls Flat	K-78.7
K-111.2	Bieber	GN-86.5
	(3.1 miles east of passenger station)	

SWITCHING LIMITS

West MP		East MP
28.5	Niles	31.38
	Niles Junction (San Jose Branch)	BR-0.61
70.14	Carbona	73.05
89.34	Stockton	96.59
133.4	Sacramento	140.69
177.62	Marysville	180.24
201.44	Oroville	206.0
280.51	Keddie	282.47
319.94	Portola	323.09

ADDITIONAL STATION STOPS

MAIN LINE

STATIONS	Distance from San Francisco
COUNSMAN	150.6
PALERMO	199.3
LAS PLUMAS	221.4
CHINO CREEK	229.5
ISAIAH	230.5
INTAKE	232.1
MAYARO	240.9
STORRIE (P)	250.6
SPANISH CREEK	285.4

FOURTH SUBDIVISION

STATIONS	Distance from Keddie
WOLF CREEK	21.5

TONNAGE RATING

Engine Class	1st Subdivision	2nd Subdivision	3rd Subdivision	4th Subdivision: Keddie to Greenville and Almanor to Bieber	4th Subdivision: Greenville to Almanor	San Jose Branch
Eastward						
D-176*	2620	5950	1810	1250	858	2620
D-225**	7300	10000	4375	3340	2350	7300
D-239**	9100	12250	5500	4330	3250	9100
S-50	1050	2645	880	600	435	2800
S-57***	1450	3340	1150	790	535	3160
S-60	1450	3340	1150	790	535	3250
S-62***	2350	3925	1500	1175	875	3340
RS-62***	2350	3925	1500	1175	875	3340
				Bieber to Halls Flat	**Halls Flat to Keddie**	
Westward			Descending grade No tonnage limit			
D-176*	2350	5950		1051	2305	2650
D-225**	5500	10900		3025	5950	7300
D-239**	6850	13600		4150	7300	9100
S-50	880	2645		530	1350	2800
S-57***	1150	3340		660	1855	3160
S-60	1150	3340		660	1855	3250
S-62***	1400	4150		1125	2350	3340
RS-62***	1400	4150		1125	2350	3340

Ratings shown above are actual tonnage.

*Three unit engine. Reduce 33⅓% of tonnage rating for each inoperative, or detached unit.

**Four unit engine. Reduce 25% of tonnage rating for each inoperative, or detached unit.

***One unit engine. When operated in multiple control, add together the rating for each operative unit.

Tonnage rating based on maximum grade each subdivision. Between points where grades are less than maximum, greater tonnage can be handled.

SPEED RESTRICTIONS—in miles per hour will apply as follows:

Between	Passenger: California Zephyr Maximum	Passenger: California Zephyr Restrictions	Passenger: Other Passenger Trains Maximum	Passenger: Other Passenger Trains Restrictions	Freight: All Freight Trains Maximum	Freight: All Freight Trains Restrictions
First Subdivision—Pages 2-3						
Chestnut Jct. and Oak St., Oakland	15	..	15	..	15	..
Over Washington and Franklin Streets, Oakland	..	8	..	8	..	8
Oak St., Oakland and SP Crossing, MP 10.6	20	..	20	..	20	..
MP 7.2 over SP Crossing	..	10	..	10	..	10
*MP 7.7 over SP Crossing, Clinton	..	15	..	15	..	15
MP 9.5 just west 29th Ave. and MP 9.8 just east of Fruitvale Ave.	..	10	..	10	..	10
*SP Crossing MP 10.6 and East Oakland Yard Limit	35	..	35	..	25	..
*MP 13.7 over SP Crossing	..	30	..	30	..	..
Oakland Yard Limit and MP 29.7	70	..	60	..	50	..
Bridge 14.55 just west of San Leandro depot and Williams St., 5 blocks east of depot	..	20	..	20	..	15
Over "A" and "B" Streets, Hayward	..	45	..	45	..	30
MP 23.93 and MP 24.31	..	50	..	45	..	35
MP 29.25 and MP 29.6 on curve	..	45	..	40	..	30
MP 29.7 and MP 39	55	..	50	..	40	..
*MP 30.3 over SP Crossing	..	30	..	25	..	20
MP 30.3 and MP 32	..	45	..	40	..	30
Through Tunnel 1	..	45	..	40	..	30
MP 33.6 and MP 34.4 on curves	..	50	..	45	..	35
MP 36.4 and MP 37 on curves	..	50	..	45	..	35
MP 38.2 and MP 38.7 at SP underpass on curve	..	50	..	45	..	35
MP 39 and MP 52	70	..	60	..	50	..
MP 39.9 and MP 40.3 on curve	..	60	..	55	..	45
City Limits, Pleasanton	..	50	..	45	..	40
*MP 42.7 and MP 42.97 SP Crossings	..	50	..	40	..	35
City Limits, Livermore	..	50	..	50	..	30
MP 49.6 and MP 50.1 over SP	..	60	..	55	..	..
MP 51.5 and MP 51.9	..	60	..	55	..	..
MP 52 and MP 60.5	50	..	45	..	35	..
MP 52.3 and MP 58.2 on curves	..	45	..	40	..	..
MP 60.5 and Stockton Depot	70	..	60	..	50	..
MP 61.8 and MP 62.1 on curve	..	60	..	55	..	45
MP 63.3 and MP 67 on curves	..	50	..	45	..	40
MP 71 and MP 74	..	..	..	..	..	45
*MP 74.05 SP Crossing	..	50	..	40	..	30
MP 76 and MP 77.1	..	..	..	..	..	40
MP 79.8 and East End Bridge 80.28	..	50	..	40	..	30
*MP 84.45 SP Crossing	..	40	..	30	..	25
MP 84.45 and MP 86.4	..	..	..	..	..	45
MP 90.4 and MP 90.55 on curve	..	50	..	45	..	35
MP 92.4 and Charter Way on curves	..	50	..	45	..	30
Charter Way and Stockton Depot, Main Track	..	20	..	20	..	20
Other Tracks	..	12	..	12	..	12
Second Subdivision—Pages 4-5						
Stockton Depot and MP 122	70	..	60	..	50	..
Stockton Depot and MP 95, Main Track	..	20	..	20	..	20
Other Tracks	..	12	..	12	..	12
*MP 95.1 over SP Crossing	..	40	..	40	..	30
MP 95.2 and MP 98.5	..	..	..	..	..	40
MP 116.07 Mokelumne River Bridge	..	45	..	40	..	35
Over Bridges 116.28 and 116.37	..	45	..	40	..	35
MP 122 and MP 133.5	50	..	50	..	35	..
MP 133.5 and MP 140.1	60	..	60	..	40	..
Over and between Sutterville Road and "C" St., Sacramento	..	15	..	15	..	15
"C" St. and MP 140.1	..	20	..	20	..	20
MP 140.1 and Oroville	70	..	60	..	50	..
MP 140.1 and MP 142	..	..	..	..	..	45
*MP 152.5 SN Crossing	..	50	..	45	..	35
MP 161 and MP 162	..	..	..	..	..	40
MP 178 and MP 179.1	..	45	..	40	..	30
*MP 180.2 SP Crossing	..	50	..	45	..	35
MP 201.7 and MP 201.9 on curve	..	45	..	40	..	35
MP 204.7 and MP 205.1 on curve	..	50	..	45	..	35

*All trains approaching interlocked crossings must reduce to speeds shown above before engine passes home signal.

Between	Passenger: California Zephyr Maximum	Passenger: California Zephyr Restrictions	Passenger: Other Passenger Trains Maximum	Passenger: Other Passenger Trains Restrictions	Freight: All Freight Trains Maximum	Freight: All Freight Trains Restrictions
Third Subdivision—Pages 6-7						
Oroville and Bloomer	55	..	50	..	40	..
MP 205.1 and MP 205.5 on curves	..	50	..	45	..	30
Through Tunnel 4	..	35	..	30	..	25
MP 207.2 and MP 207.6 on curves	..	35	..	30	..	25
MP 208.5 and MP 209.3 on curves	..	45	..	40	..	30
MP 211.4 and MP 212.1 on curves	..	50	..	45	..	35
MP 212.7 and MP 213.1 on curves	..	45	..	40	..	35
MP 214 and MP 214.1 on curves	..	45	..	40	..	35
MP 214.8 and MP 215.8 on curves	..	45	..	40	..	35
MP 216.15 and MP 216.75 on curves	..	40	..	35	..	30
Bloomer and MP 272.6	40	..	35	..	30	..
MP 218.15 and MP 218.3 on curve	..	35	..	30	..	25
MP 220.9 and MP 223.2 on curves	..	35	..	30	..	25
MP 230.2 and MP 230.45 on curves	..	35	..	30	..	25
MP 231.9 and MP 234.15 on curves	..	35	..	30	..	25
MP 235.25 and MP 239 on curves	..	35	..	30	..	25
MP 241.4 and MP 241.5 on curve	..	35	..	30	..	25
MP 244.2 and MP 245 on curves	..	35	..	30	..	25
MP 248.4 and MP 252.6 on curves	..	35	..	30	..	25
Over Bridge 252.6	..	30	..	25	..	20
MP 252.7 and MP 253.2 on curves	..	35	..	30	..	25
MP 254 and MP 256.2 on curves	..	35	..	30	..	25
MP 257.8 and MP 259.2 on curves	..	35	..	30	..	25
MP 260.9 and MP 271.5 on curves	..	35	..	30	..	25
MP 272.6 and MP 283.8	45	..	40	..	30	..
MP 273.3 and MP 273.5 on curves	..	40	..	35	..	..
MP 275.2 and MP 283 on curves	..	35	..	30	..	25
MP 283 and MP 283.5 on curves	..	40	..	35	..	..
MP 283.8 and Portola	50	..	45	..	35	..
MP 284.9 and MP 285.32 on curves	..	45	..	40	..	..
MP 286 and MP 287.1 on curves	..	35	..	30	..	25
MP 288.9 and MP 291.1 on curves	..	45	..	40	..	..
MP 291.9 and MP 295.1 on curves	..	35	..	30	..	25
MP 295.9 and MP 296.15 on curves	..	45	..	40	..	..
Through Tunnel 35	..	..	..	..	..	25
MP 298.55 and MP 299.75 on curves	..	35	..	30	..	25
MP 300.85 and MP 301.05 on curves	..	40	..	35	..	30
MP 304.05 and MP 305.25 on curves	..	40	..	35	..	30
MP 306.15 and MP 307.45 on curves	..	45	..	40	..	..
MP 310.7 and MP 314.2 on curves	..	45	..	40	..	..
MP 314.25 and MP 314.35 on curves	..	40	..	35	..	30
MP 314.8 and MP 316 on curves	..	45	..	40	..	..
MP 316 and MP 316.45 on curves	..	35	..	30	..	25
MP 316.65 and MP 316.98 on curves	..	45	..	40	..	..
MP 318.1 and MP 318.3 on curves	..	45	..	40	..	..
Fourth Subdivision—Pages 8-9						
Keddie and Moccasin	..	..	35	..	25	..
Moccasin and Crescent Mills	..	..	40	..	35	..
Crescent Mills and Greenville	..	..	40	..	40	..
Greenville and Clear Creek Jct.	..	..	35	..	25	..
Almanor and Greenville Westward	..	..	..	..	..	20
Clear Creek Jct. and Mason	..	..	35	..	30	..
Clear Creek Jct. and Westwood, on curves	..	..	..	25	..	25
Mason, trains using turnout	..	..	..	20	..	20
Mason and Halls Flat	..	..	40	..	40	..
Halls Flat and Pit River	..	..	35	..	25	..
Halls Flat and Pit River, on curves	..	..	..	25	..	..
Pit River and Bieber	..	..	40	..	30	..
San Jose Branch—Page 10	..	..	30	..	25	..
Within city limits, San Jose	..	..	..	12	..	12
Over all street and highway crossings within city limits, San Jose	..	..	..	5	..	5
Carbona Branch—Page 10	..	..	12	..	12	..
Terminous Branch—Page 10						
Terminous Jct. and Garden	..	..	20	..	20	..
Garden and Terminous	..	..	15	..	15	..

On curves speed will be reduced below the maximums or restrictions provided where necessary to insure safety.

Light engines must not exceed freight train speed.

SPEED RESTRICTIONS FOR ENGINES: Maximum speed in miles per hour shown below is subject to further restrictions applicable to certain territories as shown in Speed Restrictions for Trains:

Class		Engine Maximum Speed
D-176	(801-805)*	95
D-225	(901-912)	65
D-239	(913-924)	65
S-50	(501-503)	45
S-50	(504-511)	65
S-57	(551-564)	65
S-57	(559-564 in multiple)	30
S-60	(581-585)	65
S-62	(601-606)	30
RS-62	(701-713)	65

*Units 801A and 802A are equipped with freight gears, Maximum speed 65 MPH.

OTHER MAXIMUM SPEEDS

	Maximum MPH
Steam engines backing	20
When engineer is operating D-176, D-225 and D-239 class engines from other than leading control cab in direction of movement	20
On curves and where track conditions are unfavorable, and when approaching highway or street crossings at grade, speed of engines running backward must be further reduced to a rate consistent with safety.	
Through turnouts, crossovers, on sidings and other inside tracks (except on Other Tracks between Charter Way and MP 95)	10
Except through power operated switches and sidings Del Paso to Craig inclusive	20
Passenger trains with freight train cabooses on rear	50
Trains handling steam derrick No. 37—straight track	35
On curves 5 MPH less than speed prescribed for freight trains but not exceeding	30
Trains handling steam derricks (other than derrick No. 37), steam shovels, cranes, rotary plows or pile drivers on own wheels—	
First and Second Subdivisions	25
Third and Fourth Subdivisions	20
Trains handling logs on flat cars	25
When two trains meet, either of which is handling logs, the standing train will remain standing until other train has cleared or come to a stop unless necessary to saw by.	
Maximum speed of train passing	15
Trains handling air dump cars loaded	25
Scale test cars must be handled next to caboose and trains handling such cars will not exceed—	
Between Oakland and Portola	30
Between Keddie and Bieber	25
Branches	20
North Channel Line, Stockton	12
Trains handling steam engines with all side rods in place but with main rods partly or completely removed	25
Steam switch engines without lead trucks	12
GS-64-77 engines over bridges 18.80, 20.87, 22.11, 37.12, 37.36, 39.40, 49.88, 53.40, 56.96, 64.43 and 116.28	45
Over bridge 35.09	35
C-43 or MK-60 engines handling passenger trains	50

MISCELLANEOUS

When two or more steam engines are in a train either in service or dead, they must be spaced at least five cars apart.

Diesel freight engines dead in train must have automatic brake valves cut out in cabs and brake valve handles locked in running position; independent brake valve handles locked in running position (locking pins are provided for this); dead engine features cut in; all isolation switches placed in "start" position; all switches at engineer's control stand locked in "off" position and main battery switches pulled and reversers locked in neutral position in all units. Distributing valve pops must be set to 25 pounds pressure. Same procedure should be followed on passenger engines after electric brakes have been cut out and changeover lever placed in automatic position.

Diesel switch engines dead in train must have automatic brake valve cut out and handle placed in running position; distributing valve pop set to 15 pounds pressure; dead engine feature cut in; main battery switch pulled and reversers locked in neutral position.

During freezing weather engine water cooling system must be drained on any type Diesel engine being towed.