WORK SAFELY TODAY

EACH RULE VIOLATION IS A
POTENTIAL ACCIDENT

ASSISTANT SUPERINTENDENTS

H. E. STAPP.....Oakland
C. E. McDONALD.....Sacramento

TRAINMASTERS

J. J. McNALLY.....Stockton Yard
LEROY FOSTER.....Sacramento
P. F. PRENTISS.....Oroville
G. H. EVANS.....Keddie

TERMINAL TRAINMASTER

L. A. HENRY.....Stockton Yard

ASSISTANT TRAINMASTER

C. C. ELDRIDGE.....Oakland

ROAD FOREMEN OF ENGINES

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

CHIEF TRAIN DISPATCHER

E. J. HILLIER.....Sacramento

ASSISTANT CHIEF TRAIN DISPATCHER

G. L. HARLAN.....Sacramento

NIGHT CHIEF TRAIN DISPATCHERS

W. S. GRAHAM.....Sacramento
P. JOSSERAND.....Sacramento

THE WESTERN PACIFIC RAILROAD CO.

WESTERN DIVISION TIMETABLE

40

EFFECTIVE SATURDAY, MARCH 1, 1952
AT 12:01 A. M.
PACIFIC STANDARD TIME

FOR THE GOVERNMENT AND INFORMATION
OF EMPLOYES ONLY

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

E. T. GALLAGHER,
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. J. L. Wilson	Local Surgeon
San Francisco, Calif.	Dr. S. J. Polk	Internist
San Francisco, Calif.	Dr. A. J. Brinckerhoff	Oculist
San Francisco, Calif.	Dr. F. D. Fellows	Aurist
San Francisco, Calif.	Dr. Frank Hand	Aurist
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
San Leandro, Calif.	Dr. D. M. Martin	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. J. M. Geiger	Local Surgeon
Livermore, Calif.	Dr. Paul E. Dolan	Local Surgeon
Tracy, Calif.	Dr. Marion G. Weitz	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. John A. Berg	Oculist
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. J. F. Narkevitz	Asst. Division Surgeon

WATCH INSPECTORS

LOCATION	NAME	TITLE
San Francisco, Calif.	C. D. Fabrin	Manager of Time Service
San Francisco, Calif.	E. J. Land	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.	W. H. Powell	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

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	Both Ends	30
AYALA	70.9	1 E	6
RHODES (P)	75.6	Both Ends	26
QUIGLEY (P)	83.8	1 W	95
ARMY SUPPLY DEPOT (P)	85.76	Both Ends	130
FRENCH CAMP	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
BRADFORD (P)	119.0	1 W	....
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

NORTHERN CALIFORNIA EXTENSION

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	96.49
133.4	Sacramento	140.69
201.44	Oroville	206.0
280.51	Keddie	282.47
319.94	Portola	323.09

ADDITIONAL STATION STOPS

NO TRACKS

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	250.6
SPANISH CREEK	285.4

NORTHERN CALIFORNIA EXTENSION

STATIONS	Distance from Keddie
WOLF CREEK	21.5

TONNAGE RATING

Engine Class	1st Subdivision	2nd Subdivision	3rd Subdivision	4th Subdivision		
				Keddie to Greenville	Greenville to Almanor	Almanor to Bieber
Eastward						
MTP-44	1650	4200	1250	900	617	900
C-43	1650	4200	1250	900	617	900
MK-60	2500	5500	1800	1250	858	1250
GS-64-77	2800	6000	1900	1250	858	1250
M-80	3000	6500	2200	1690	1170	1690
M-137-151	5000	8500	4000	2800	1900	2800
D-176**	2800	6500	1900	1250	858	1250
D-225***	8000	11000	4750	3600	2500	3600
D-239***	10000	13500	6000	4700	3500	4700
S-50	1050	2830	880	600	435	600
S-57****	1450	3600	1150	790	535	790
S-60	1450	3600	1150	790	535	790
				Bieber to Halls Flat	Halls Flat to Keddie	
Westward						
MTP-44	1400	4200	*	756	1600	
C-43	1400	4200	*	756	1600	
MK-60	2350	5500	*	1051	2200	
GS-64-77	2500	6000	*	1051	2450	
M-80	2600	6500	*	1427	3500	
M-137-151	4000	8500	*	2200	5500	
D-176**	2500	6500	*	1051	2450	
D-225***	6000	12000	*	3250	6500	
D-239***	7500	15000	*	4500	8000	
S-50	880	2830	*	530	1350	
S-57****	1150	3600	*	660	1950	
S-60	1150	3600	*	660	1950	

*Descending grade, no tonnage limit.

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

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

****Two engines coupled multiple control-double tonnage.

Add five tons friction for each car over 30 cars.

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

FIRST SUBDIVISION—Eastward

	Symbols, Rule 6-A.	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS 54 N. C. X. Leave Daily	SECOND CLASS 62 S. W. G. Leave Daily	FIRST CLASS 2 Zephyrette Leave Sun., Wed., Frl.	FIRST CLASS 18 California Zephyr Leave Daily	Distance from San Francisco	Timetable No. 40 March 1, 1952 STATIONS	Distance from Oakland yard
						PM	AM			
	WFO		Go			7.30	9.00	0.0	SAN FRANCISCO (Oakland Ferry)	
						7.50	9.20			
						PM	AM	3.5	OAKLAND PIER (Oakland Ferry)	
	BKP		Ow			PM 7.57	AM 9.28	3.5	TO-R OAKLAND PIER (SP)	
Yard Limits	BKW FTPO	Yard	Md	PM 9.00	AM 5.30	Via SP	Via SP	4.7	TO-R OAKLAND YARD (WP)	0.0
	I							5.8	SP Crossing	1.1
	I					PM 8.03	AM 9.34	5.9	CHESTNUT JCT. (SP Conn.) (Double Track)	1.2
						s 8.08	s 9.40	6.6	R OAKLAND (Double Track)	1.9
								7.2	SP Crossing (Double Track)	2.5
	I					8.13	9.45	7.7	CLINTON (SP X'ing.) (Traffic Control System)	3.0
						8.19		9.6	FRUITVALE (Traffic Control System)	4.9
	I							10.6	MELROSE (SP X'ing.) (Traffic Control System)	5.9
	P	66					9.56	11.3	KOHLER (Traffic Control System)	6.6
	AI P							13.7	ELMHURST (SP X'ing.) (Traffic Control System)	9.0
	P		Dr			8.32		14.8	SAN LEANDRO (Traffic Control System)	10.1
	P	81	Hy			8.39	10.09	19.8	HAYWARD (Traffic Control System)	15.1
	WP	80	Cn			8.52	s 10.22	29.7	NILES (Traffic Control System)	25.0
	I							30.3	SP Crossing (Traffic Control System)	25.6
	YP							30.5	NILES JUNCTION (Traffic Control System)	25.8
	P	74				9.02		35.6	SUNOL (Traffic Control System)	30.9
	P	73	Tn			9.09	10.36	40.8	PLEASANTON (Traffic Control System)	36.1
	I							42.7	SP Crossing (Traffic Control System)	38.0
	I							42.97	SP Crossing (Traffic Control System)	38.27
	WP	73				9.19	10.44	47.2	LIVERMORE (Traffic Control System)	42.5
	YP	92				9.31	10.55	56.2	ALTAMONT (Traffic Control System)	51.5
	P	100				9.41	11.04	63.3	MIDWAY (Traffic Control System)	58.6
	WYP	112	Cb			9.51	11.14	72.3	CARBONA (Traffic Control System)	67.6
	P	114	Ky					73.4	LYOTH (Traffic Control System)	68.7
	I							74.05	SP Crossing (Traffic Control System)	69.35
	P	86						76.7	FITZ (Traffic Control System)	72.0
	I							84.45	SP Crossing (Traffic Control System)	79.75
	P	105				10.08	11.28	85.73	LATHROP (Traffic Control System)	81.03
	P							90.3	ORTEGA (Traffic Control System)	85.6
	BKW FTPO	Yard	Sn	1.00 AM	10.30 AM	10.16	11.34	92.0	TO-R STOCKTON YARD (Traffic Control System)	87.3
	I							93.2	AT&SF Crossing (Traffic Control System)	88.5
						s 10.21 PM	s 11.38 AM	93.8	STOCKTON (Traffic Control System)	89.1
				Arrive Daily	Arrive Daily	Arrive Sun., Wed., Fri.	Arrive Daily			
				54	62	2	18			

First-class trains must respect schedule shown.

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

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.

Timetable No. 40
March 1, 1952

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 53 S. C. X. Arrive Daily
0.0	SAN FRANCISCO (Oakland Ferry)	93.8	AM 7.35	PM 4.50			
3.5	3.5 OAKLAND PIER (Oakland Ferry)	90.3	7.15 AM	4.30 PM			
3.5	TO-R OAKLAND PIER (SP) 2.4	90.3	AM s 7.05	PM s 4.15			
4.7	TO-R OAKLAND YARD (WP) 1.1	89.1			PM 1.00	PM 4.00	PM 11.30
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 4.03			
6.6	R OAKLAND 0.6 (Double Track)	87.2	s 6.50	s 4.00			
7.2	SP Crossing 0.5 (Double Track)	86.6					
7.7	CLINTON (SP X'ing.) 1.9 (Double Track)	86.1		3.51			
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		3.40			
13.7	ELMHURST (SP X'ing.) 1.1	80.1					
14.8	SAN LEANDRO 5.0	79.0	6.23				
19.8	HAYWARD 9.9	74.0	6.15	3.27			
29.7	NILES 0.6	64.1	6.02	s 3.15			
30.3	SP Crossing 0.2	63.5					
30.5	NILES JUNCTION 5.1	63.3					
35.6	SUNOL 5.2	58.2	5.52				
40.8	PLEASANTON 1.9	53.0	5.45	3.01			
42.7	SP Crossing 0.27 (Traffic Control System)	51.1					
42.97	SP Crossing 4.23 (Traffic Control System)	50.83					
47.2	LIVERMORE 9.0 (Traffic Control System)	46.6	5.35	2.52			
56.2	ALTAMONT 7.1 (Traffic Control System)	37.6	5.23	2.41			
63.3	MIDWAY 9.0 (Traffic Control System)	30.5	5.13	2.30			
72.3	CARBONA 1.1 (Traffic Control System)	21.5	5.02	2.20			
73.4	LYOTH 0.65 (Traffic Control System)	20.4					
74.05	SP Crossing 2.65 (Traffic Control System)	19.75					
76.7	FITZ 7.75 (Traffic Control System)	17.1					
84.45	SP Crossing 1.28 (Traffic Control System)	9.35					
85.73	LATHROP 4.57 (Traffic Control System)	8.07	4.46	2.06			
90.3	ORTEGA 1.7 (Traffic Control System)	3.5					
92.0	TO-R STOCKTON YARD 1.2 (Traffic Control System)	1.8	4.39	1.59	8.00 AM	11.30 AM	6.30 PM
93.2	AT&SF Crossing 0.6 (Traffic Control System)	0.6					
93.8	STOCKTON (Traffic Control System)	0.0	4.34 AM	1.55 PM			
			Leave Mon., Thurs., Sat.	Leave Daily	Leave Daily	Leave Daily	Leave Daily
			1	17	61	77	53

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 and 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.

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."

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	SECOND CLASS 56 S. W. G. Leave Daily	SECOND CLASS 54 N. C. X. Leave Daily	FIRST CLASS 2 Zephyrette Leave Sun., Wed., Frl.	FIRST CLASS 18 California Zephyr Leave Daily	Distance from San Francisco	Timetable No. 40 March 1, 1952 STATIONS	Distance from Stockton Yard
BKW FTPO	Yard	Sn	PM 7.30	PM 12.30	AM 4.30			92.0	TO-R **STOCKTON YARD**	0.0
I								93.2	1.2 **AT&SF Crossing**	1.2
I						PM 10.23	AM 11.40	93.8	0.6 **STOCKTON (SP X'ing.)**	1.8
P	45							94.3	0.5 **FLORA STREET**	2.3
I								95.1	0.8 **SP Crossing**	3.1
P	84		First-class trains must respect schedule shown.				AM 11.47	98.1	3.0 **HAMMER LANE**	6.1
P	73					10.38		104.6	6.5 **KINGDON**	12.6
YP								105.5	0.9 **TERMINOUS JUNCTION**	13.5
WP	73	Nh				s 10.48	PM 12.01	113.9	8.4 **THORNTON**	21.9
P	74							119.0	5.1 **GLANNVALE**	27.0
P	73					11.01	12.12	124.4	5.4 **FRANKLIN**	32.4
P	100					11.11		132.4	8.0 **POLLOCK**	40.4
KWFPO	Yard	Jy	PM 9.20	PM 2.30	AM 7.30	11.17	12.26	136.5	4.1 **SOUTH SACRAMENTO**	44.5
AI								137.5	1.0 **CCT and SN Crossing**	45.5
I								138.0	0.5 **SP Crossing**	46.0
KYP		Sr Ra Ds				s 11.27	s 12.35	138.6	0.6 **SACRAMENTO**	46.6
AI								139.2	0.6 **SN Crossing**	47.2
I								140.8	1.6 **SN Crossing**	48.8
P	73		Schedules shown for second-class trains are for information only.			11.37	17 **12.43**	143.8	3.0 **DEL PASO**	51.8
I								152.5	8.7 **SN Crossing**	60.5
WP	72					11.51	12.56	156.4	3.9 **PLEASANT GROVE**	64.4
P	80					PM 11.57		161.5	5.1 **TROWBRIDGE**	69.5
P	73					AM 12.09	1.12	172.5	11.0 **EAST ARBOGA**	80.5
WP	107	Ms				s 12.19	s 1.22	178.8	6.3 **MARYSVILLE** } Joint Track	86.8
I								180.2	1.4 **SP Crossing**	88.2
P	73					12.29		186.0	5.8 **TAMBO**	94.0
P	73					12.37	1.37	193.0	7.0 **CRAIG**	101.0
BKWF TYPO	Yard	Yd	PM 11.59	PM 5.30	AM 11.30	12.50	1.47	202.9	9.9 TO-R **OROVILLE YARD**	110.9
BKP	50	Vi				s AM 12.55	s PM 1.52	205.1	2.2 TO-R **OROVILLE**	113.1
			Arrive Daily	Arrive Daily	Arrive Daily	Arrive Mon., Thurs., Sat.	Arrive Daily			
			62	56	54	2	18			

Traffic Control System

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. 40
March 1, 1952

Traffic Control System

Distance from San Francisco	STATIONS	Distance from Oroville	FIRST CLASS 1 Zephyrette	FIRST CLASS 17 California Zephyr	SECOND CLASS 61 R. T.	SECOND CLASS 77 C. F. S.	SECOND CLASS 53 S. C. X.	SECOND CLASS 55 G. W. S.
			Arrive Mon., Thurs., Sat.	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily
92.0	TO-R **STOCKTON YARD** 1.2	113.1			AM 6.00	AM 10.00	PM 1.30	PM 8.00
93.2	**AT&SF Crossing** 0.6	111.9						
93.8	**STOCKTON** (SP X'ing.) 0.5	111.3	AM s 4.32	PM s 1.53				
94.3	**FLORA STREET** 0.8	110.8						
95.1	**SP Crossing** 3.0	110.0						
98.1	**HAMMER LANE** 6.5	107.0		1.45				
104.6	**KINGDON** 0.9	100.5	4.16					
105.5	**TERMINOUS JUNCTION** 8.4	99.6						
113.9	**THORNTON** 5.1	91.2	s 4.06	1.30				
119.0	**GLANNVALE** 5.4	86.1						
124.4	**FRANKLIN** 8.0	80.7	3.51	1.18				
132.4	**POLLOCK** 4.1	72.7	3.41					
136.5	**SOUTH SACRAMENTO** 1.0	68.6	3.35	1.03	4.00 AM	8.00 AM	11.30 AM	6.00 PM
137.5	**CCT and SN Crossing** 0.5	67.6						
138.0	**SP Crossing** 0.6	67.1						
138.6	**SACRAMENTO** 0.6	66.5	s 3.28	s 12.55				
139.2	**SN Crossing** 1.6	65.9						
140.8	**SN Crossing** 3.0	64.3						
143.8	**DEL PASO** 8.7	61.3	3.13	**12.43** 18				
152.5	**SN Crossing** 3.9	52.6						
156.4	**PLEASANT GROVE** 5.1	48.7	2.59	12.27				
161.5	**TROWBRIDGE** 11.0	43.6	2.52	12.21				
172.5	**EAST ARBOGA** 6.3	32.6						
178.8	**MARYSVILLE** 1.4 } Joint Track	26.3	s 2.30	s 12.01 PM				
180.2	**SP Crossing** 5.8	24.9						
186.0	**TAMBO** 7.0	19.1		11.51 AM				
193.0	**CRAIG** 9.9	12.1	2.13	11.44				
202.9	TO-R **OROVILLE YARD** 2.2	2.2	2.00	11.33	12.30 AM	5.00 AM	7.30 AM	3.00 PM
205.1	TO-R **OROVILLE**	0.0	1.55 AM	11.28 AM				
			Leave Mon., Thurs., Sat.	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
			1	17	61	77	53	55

First-class trains must respect schedule shown.

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

At South Sacramento and Sacramento, engine whistle 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

Symbols, Rule 6-A.	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS 56 S. W. G. Leave Daily	54 N. C. X. Leave Daily	94 Local Freight Leave Tues., Thurs., Sat.	96 Local Freight Leave Mon., Wed., Fri.	62 F. B. Leave Daily	FIRST CLASS 18 California Zephyr Leave Daily	2 Zephyrette Leave Mon., Thurs., Sat.	Distance from San Francisco	Timetable No. 40 March 1, 1952 STATIONS	Distance from Oroville Yard
BKWF TYPO	Yard	Yd	PM 7.00	PM 1.30		AM 7.30	AM 1.30			202.9	TO-R **OROVILLE YARD**	0.0
BKP	47	Vi						PM 2.00	AM 1.00	205.1	2.2 TO-R **OROVILLE**	2.2
P	84								1.09	209.3	4.2 **QUARTZ**	6.4
P	88								1.15	212.9	3.6 **BIDWELL**	10.0
P	83							2.20	1.25	217.6	4.7 **BLOOMER**	14.7
WP	90								1.40	224.1	6.5 **BERRY CREEK**	21.2
P	93								1.55	231.2	7.1 **DAVID**	28.3
P	76							2.51	2.04	235.2	4.0 **POE**	32.3
WP	81								2.14	239.3	4.1 **PULGA**	36.4
P	79								2.22	243.5	4.2 **CRESTA**	40.6
WP	73								2.30	247.6	4.1 **MERLIN**	44.7
P	55							3.24	2.43	253.1	5.5 **TOBIN**	50.2
P	83								2.48	255.3	2.2 **CAMP RODGERS**	52.4
P	94	Bn							s 2.59	260.1	4.8 **BELDEN**	57.2
P	73								3.08	264.6	4.5 **RICH BAR**	61.7
WP	75							3.55	3.19	270.2	5.6 **VIRGILIA**	67.3
P	85								3.27	273.7	3.5 **TWAIN**	70.8
P	84								3.34	277.3	3.6 **PAXTON**	74.4
KW FTP	Yard	Kd	AM 12.01	PM 7.00	AM 8.30	12.30 PM	AM 5.30	s 4.18	s 3.46	281.5	R 4.2 **KEDDIE**	78.6
P	84								3.54	284.5	3.0 **SIERRA**	81.6
P	76	Rt							s 4.07	287.9	3.4 **QUINCY JUNCTION**	85.0
P	83								4.15	292.6	4.7 **MASSACK**	89.7
WP	92							4.43	4.22	296.4	3.8 **SPRING GARDEN**	93.5
P	85	So							4.32	301.6	5.2 **SLOAT**	98.7
P	85								4.40	305.4	3.8 **TWO RIVERS**	102.5
WP	98	Ba							s 4.50	310.4	5.0 **BLAIRSDEN**	107.5
P	90								4.59	313.8	3.4 **CLIO**	110.9
P	82								5.08	318.7	4.9 **MABIE**	115.8
BKW FTYPO	Yard	Ki	3.00 AM	10.00 PM	11.30 AM		7.30 AM	s 5.25 PM	s 5.15 AM	321.4	2.7 TO-R **PORTOLA**	118.5
			Arrive Daily	Arrive Daily	Arrive Tues., Thurs., Sat.	Arrive Mon., Wed., Fri.	Arrive Daily	Arrive Daily	Arrive Mon., Thurs., Sat.			
			56	54	94	96	62	18	2			

Traffic Control System

First-class trains must respect schedule shown. Schedules shown for second-class trains are for information only.

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

Trains going through Keddie which change engines at that point need not register or obtain a clearance, but must obtain permission from train dispatcher before proceeding.

Switch point derail located on NCE lead Keddie Yard between the two crossovers from NCE lead to west end of No. 1 track.

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 stations of Las Plumas and Isaiah. Exchange of mail at Las Plumas, Isaiah 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. 40
March 1, 1952

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 55 G. W. S. Arrive Daily	SECOND CLASS 93 Local Freight Arrive Mon., Wed., Fri.	SECOND CLASS 95 Local Freight Arrive Tues., Thurs., Sat.	SECOND CLASS 61 R. T. Arrive Daily	SECOND CLASS 77 C. F. S. Arrive Daily	SECOND CLASS 53 S. C. X. Arrive Daily
202.9	TO-R OROVILLE YARD 2.2	118.5			PM 2.00		PM 12.50	PM 10.30	AM 3.30	AM 6.00
205.1	TO-R OROVILLE 4.2	116.3	AM s 11.25	s AM 1.50						
209.3	QUARTZ 3.6	112.1		1.41						
212.9	BIDWELL 4.7	108.5		1.35						
217.6	BLOOMER 6.5	103.8	11.05	1.25 2						
224.1	BERRY CREEK 7.1	97.3		1.03						
231.2	DAVID 4.0	90.2		12.47						
235.2	POE 4.1	86.2	10.35	12.37						
239.3	PULGA 4.2	82.1		12.27						
243.5	CRESTA 4.1	77.9		12.15						
247.6	MERLIN 5.5	73.8		12.05 AM						
253.1	TOBIN 2.2	68.3	10.04	11.52 PM						
255.3	CAMP RODGERS 4.8	66.1		11.46						
260.1	BELDEN 4.5	61.3		s 11.35						
264.6	RICH BAR 5.6	56.8		11.24						
270.2	VIRGILIA 3.5	51.2	9.34	11.10						
273.7	TWAIN 3.6	47.7		11.02						
277.3	PAXTON 4.2	44.1		10.54						
281.5	R KEDDIE 3.0	39.9	s 9.12	s 10.45	10.00 AM	AM 11.30	8.00 AM	6.30 PM	11.30 PM	2.00 AM
284.5	SIERRA 3.4	36.9		10.34						
287.9	QUINCY JUNCTION 4.7	33.5		s 10.27						
292.6	MASSACK 3.8	28.8		10.17						
296.4	SPRING GARDEN 5.2	25.0	8.49	10.10						
301.6	SLOAT 3.8	19.8		10.00						
305.4	TWO RIVERS 5.0	16.0		9.53						
310.4	BLAIRSDEN 3.4	11.0		s 9.44						
313.8	CLIO 4.9	7.6		9.34						
318.7	MABIE 2.7	2.7		9.26						
321.4	TO-R PORTOLA	0.0	8.05 AM	9.20 PM	7.00 AM	7.30 AM		4.30 PM	9.30 PM	10.30 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	55	93	95	61	77	53

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:

When the gross weight of train does not exceed 33 tons per car, turn up retainer valves on first fifteen cars back of engine. When gross weight of train exceeds 33 tons and is less than 45 tons per car, turn up retainer valves on first twenty cars back of engine. When gross weight of train exceeds 45 tons per car, turn up retainer valves on first twenty five cars back of engine.

Retainer valves are to be used in low pressure position which is horizontal. Should wheels show tendency to heat, retainers will be alternated. If, in judgment of engineer, number of retainers unsatisfactory, engineer may instruct the brakeman to add or subtract as required to keep slack bunched and control train at safe speed while brake pipe pressure is being fully recharged.

Retainers will not be used on westward freight trains handled by diesel engines with dynamic brake operative, unless, in the judgment of conductor and engineer, their use is necessary.

Westward freight trains handled by diesel engines with dynamic brake inoperative will use retainers as prescribed for steam engines.

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

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

	Symbols, Rule 6-A.	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS				Distance from San Francisco (Via NCE Conn.)	Timetable No. 40 March 1, 1952		Distance from Keddie
						156 S. W. G.	154 N. C. X.	312 Southern Pacific Local Freight			
						Leave Daily	Leave Daily	Leave Daily Ex. Sunday		STATIONS	
Yard Limits	BKW FTP	Yard	Kd			PM 10.30	PM 3.30		280.8	TO-R KEDDIE	0.0
	P	86				10.50	3.50		287.0	6.2 MOCCASIN	6.2
	P	13	Cm			10.59	3.59		289.4	TO 2.4 CRESCENT MILLS	8.6
	WP	86	Gi			11. 10	4.10		295.5	TO 6.1 GREENVILLE	14.7
	WYP	86				PM 11.45	4.45		306.2	10.7 ALMANOR	25.4
	P	86				AM 12.05	153 5.05		313.2	7.0 LASSEN VIEW	32.4
	P					12.15	5.15		316.0	2.8 CLEAR CREEK JCT. (ARR Conn.)	35.2
Yard Limits	BK WYP	Yard	Wd			12.30	5.30	AM 9.15	320.2	TO-R 4.2 WESTWOOD (Joint Track)	39.4
	P		Mn			12.40	5.40	9.30 AM	324.3	TO-R 4.1 MASON (SP Conn.) (Joint Track)	43.5
	P	86				12.42	5.42		324.9	0.6 ROBBERS CREEK	44.1
	PY	86				1.01	6.01		333.3	8.4 NORVELL	52.5
	P	86				1.22	6.22		343.7	10.4 LODGEPOLE	62.9
Yard Limits	WYP	86				1.50	6.50		357.2	13.5 HALLS FLAT	76.4
	P	86				155 2.08	7.08		365.0	7.8 JELLICO	84.2
	P	86				2.23	7.23		371.0	6.0 WILLOW SPRINGS	90.2
	W at MP 96.0 P	86				2.35	7.35		375.6	4.6 LITTLE VALLEY	94.8
	P	86				2.55	7.55		381.7	6.1 DIXIE	100.9
	P	86				3.20	8.20		390.3	8.6 PIT RIVER	109.5
Yard Limits	BKW FYPO	Yard	B			3.30 AM	8.30 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 Keddie-Westwood Local will handle all passengers to and from points between Keddie and Westwood daily except Sunday.

No. 154 (NCX) and No. 153 (SCX) will handle passengers daily except Sunday to and from points between Westwood and Bieber, except on days when there is not sufficient business to operate these trains, passengers will be handled on No. 156 (SWG) and No. 155 (GWS).

On Sunday such passengers between Keddie and Bieber and intermediate points will be handled on No. 156 (SWG) and No. 153 (SCX); however, if No. 153 is not operated, passengers will be handled on No. 155.

On passenger trains, before descending grades Almanor to Greenville and Halls Flat to Little Valley, understanding must be had between conductor and engineer as to number of retainers necessary to control train.

On eastward freight trains before leaving Halls Flat and on westward freight trains before leaving Almanor, enginemen must be notified as to number of loads, empties and tons in train and whether all air brakes are cut in and operative.

On westward freight trains between Almanor and Greenville, when handled by D-239 engines with dynamic brake operative on four units, trainmen will turn up one retainer for each 50 tons in excess of 4250 friction tons in train. When handled by D-225 engines with dynamic brake operative on four units, trainmen will turn up one retainer for each 50 tons in excess of 3600 friction tons in train. When handled by diesel engines with dynamic brake inoperative or with steam engines, trainmen will turn up one retainer for each 100 friction tons in train. Retainers used will be applied to head cars in train.

On westward freight trains between Dixie and Little Valley, between Norvell and Almanor and between Moccasin and Keddie and on eastward freight trains between Dixie and Pit River, an understanding must be had between conductor and engineer as to number of retainers necessary to control train and they must be used accordingly.

On eastward freight trains between Halls Flat and Little Valley, if gross weight of train does not exceed 33 tons per car, turn up retainer valves on the first 20 cars back of engine. If gross weight of train exceeds 33 tons per car and is less than 45 tons per car, turn up retainer valves on first 25 cars back of engine. If gross weight of train exceeds 45 tons per car, turn up retainer valves on first 30 cars back of engine.

When retainer valves are turned up, handle will be placed in low pressure position, which is horizontal, and should wheels show tendency to heat, retainers must be alternated.

Use of dynamic brake on freight trains being handled by diesel freight engines does not in any way modify requirements pertaining to use of retainers, except between Halls Flat and Little Valley when D-225 engines with dynamic brake operative on four units are handling eastward freight trains of 3500 friction tons or less and D-239 engines with dynamic brake operative on four units are handling eastward freight trains of 4700 friction tons or less, retainers need not be used unless requested by engineer.

In all cases of grade braking, if in the judgment of the engineer retainers are needed, or the number of retainers being used is insufficient, stop must be made and trainmen must turn up retainer valves in accordance with his instructions.

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

Distance from San Francisco (Via NCE Conn.)	Timetable No. 40 March 1, 1952 STATIONS		Distance from Bieber	SECOND CLASS 155 G. W. S. Arrive Daily	311 Southern Pacific Local Freight Arrive Daily Ex. Sunday	153 S. C. X. Arrive Daily
280.8	TO-R **KEDDIE** 6.2		111.8	AM 5.40		PM 6.40
287.0	**MOCCASIN** 2.4		105.6	5.18		6.18
289.4	TO **CRESCENT MILLS** 6.1		103.2	5.12		6.12
295.5	TO **GREENVILLE** 10.7		97.1	5.00		6.00
306.2	**ALMANOR** 7.0		86.4	4.25		5.25
313.2	**LASSEN VIEW** 2.8		79.4	4.07		**5.05** 154
316.0	**CLEAR CREEK JCT.** (ARR Conn.) 4.2		76.6	4.00		4.55
320.2	TO-R **WESTWOOD** 4.1	Joint Track	72.4	3.50	AM 8.50	4.45
324.3	TO-R **MASON** (SP Conn.) 0.6	Joint Track	68.3	3.38	8.35 AM	4.33
324.9	**ROBBERS CREEK** 8.4		67.7	3.36		4.31
333.3	**NORVELL** 10.4		59.3	3.20		4.15
343.7	**LODGEPOLE** 13.5		48.9	3.00		3.55
357.2	**HALLS FLAT** 7.8		35.4	2.35		3.30
365.0	**JELLICO** 6.0		27.6	**2.08** 156		3.05
371.0	**WILLOW SPRINGS** 4.6		21.6	1.43		2.43
375.6	**LITTLE VALLEY** 6.1		17.0	1.25		2.25
381.7	**DIXIE** 8.6		10.9	1.10		2.10
390.3	**PIT RIVER** 2.3		2.3	12.45		1.45
392.6	TO-R **BIEBER**		0.0	12.40 AM		1.40 PM
				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, but not less than five minutes. 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. Second and inferior class, extra trains and engines must move within yard limits at restricted speed. When running against the current of traffic or on a portion of two or more tracks used as a single track, all trains and engines must move within yard limits at restricted speed."

Southern Pacific and Fruit Growers Supply Co. trains 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.

Switch point derail located on NCE lead Keddie Yard between the two crossovers from NCE lead to west end of No. 1 track.

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.

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. 40, March 1, 1952

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
							PM
WP	80	Cn	AM 12.30		TO-R NILES		10.45
YP			12.40	0.0	NILES JUNCTION (0.8)	23.0	10.25
	Spur 1W 6		1.15	6.8	WARM SPRINGS (6.8)	16.2	9.55
	Spur 1E 4		1.22	8.0	CURTNER (1.2)	15.0	9.50
P	1E 1W 12		1.35	10.9	MILPITAS (2.9)	12.1	9.40
	Spur 1E 10		1.45	14.1	BERRYESSA (3.2)	8.9	9.25
			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
Yard Limits				19.6	VALBRICK (SP X'ing.) (2.1)	3.4	
I				20.2	SP Crossing (0.6)	2.8	
I				22.3	SP Crossing (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. 40, March 1, 1952

Symbols, Rule 6-A.	Car Capacity of Sidings	Telegraph Office Calls	Distance from Carbona	STATIONS	Distance from End of Branch
WYP	112	Cb	0.0	CARBONA (1.7)	2.2
PO	63		1.7	KERLINGER (0.22)	0.5
	Spur 1W 18		1.92	TEEKAY (0.28)	0.28
			2.2	END OF BRANCH	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. 40, March 1, 1952

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. (3.5)	7.8
	16		3.5	GARDEN (3.1)	4.3
Yard Limits	3		6.6	GRASS (1.2)	1.2
WY	Yard	Us	7.8	TERMINOUS	0.0

ALL SUBDIVISIONS

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

Between Oroville and Portola, the speed of diesel-powered 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 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 diesel freight engines 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 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 with diesel engines not using retainers need not stop for train inspection if train is operating normally.

Westward freight trains handled by steam or diesel engines requiring the use of retainers must stop for inspection at Rich Bar, Belden or Camp Rodgers, 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 509. When a train 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 550. At electric locks, circuits are provided in main track which must be occupied before electric lock can be released for entrance to electrically-locked switches. These circuits vary at different locations but in any case, if part of engine or cars is standing ahead of switch from 50 feet to 130 feet ahead of switch points, release of lock may be accomplished.

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 of trains, 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 siding will permit.

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 my 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 or picking up and setting out cars at South Sacramento will make air test under these rules.

RULE 43-B. On trains originating at Keddie, rear end test will be made under this rule.

RULE 44. Running brake test will be made on eastward passenger trains leaving Oakland Pier or Oakland Yard and on westward passenger trains not less than two or more than three miles before reaching SP Crossing MP 13.7.

Running brake test other than above will not be required for crossings between MP 5.8 and MP 13.7 inclusive.

Zephyrette trains will make a running brake test.

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 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 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.
Westward: Three-position signal 45 feet east of Tunnel 2.
Two-position signal 60 feet east of east wye switch.

Overlap for westward Signal 03, east end Tunnel 1, extends 528 feet west of Signal 02. Signal 03 is actuated by both switches of first crossover west of Tunnel 1 and by derail between crossover switches on NCE lead when in non-derailing position.

FIRST SUBDIVISION

(A) RULE 292-A. Signals at entrance to 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 working over switch by permission of the train dispatcher.

Trainmen and enginemen must not operate 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 block 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) Kohler. Seminary Avenue Crossing must be cut when blocked more than five minutes.

(d) 85th Avenue. Any engines or cars moving over spur serving California Packing Corporation must be under control and highway traffic protected by member of crew.

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 and bell only when necessary to comply with the rules.

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 gravel trucks using crossing over main track, siding and back track just west of station.

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.

Carbona.

(a) The south siding is the designated track to be used for meeting or passing of trains. Permission from train dispatcher is required to enter north siding after entering main track block by signal indication at east or west Carbona. Entrance from north siding to main track governed by signal indication. Train dispatcher cannot clear entrance signals from north siding to main track when main track block is occupied and Rule 547 will apply under these circumstances.

(b) Normal position of all switches leading from siding is lined for the siding. Normal position of the east house track switch and of the two inside crossover switches east of depot is for east leg of wye and storage track. When not in use these switches must be left lined for the normal route. Track on north side of main track may be used as an auxiliary siding.

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

Lyoth. Crossover between main track and siding is not electrically-locked and must not be used to enter main track block unless part of train already is on main track within the block.

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

Army Supply Depot.

(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) A 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.

Hayward, Fitz, Army Supply Depot and Stockton Yard. Inside switches of crossovers east end new siding Hayward, east Fitz, 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) When westward trains leaving Stockton Yard do not find the "S" illuminated on inside leaving signal at crossovers MP 90.4 or MP 91 member of crew must call train dispatcher. Telephones located north side of main track opposite these signals.

(b) Absolute signals located at Ortega 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.

(c) Ortega. Siding is a storage track. It must not be used by road crews as entrance or departure track to or from Stockton Yard.

(d) Ortega-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

When eastward trains leaving Stockton Yard do not find route lined for them member of crew must call the train dispatcher.

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. After moves are completed electric lock must be locked by member of crew.

(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 used.

Stockton.

(a) Flora Street. Switches hand operated. Eastward signal at west end is a two-unit signal with "S" unit on mast which covers west switch to Track 7. Westward signal at east end is a two-unit signal with two "S" units on bracket, one on north side covering east switch to Track 7 and one on south side covering switch 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. After movement through switch is completed electric lock must be locked by member of crew.

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 high 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. Electric lock will stay released as long as padlock is out.

(b) Sutterville Road crossing, at west end of train yard, must not be blocked by freight trains taking water, oil or doing work.

(c) Two dual-control switches at east end. Easterly switch connects with No. 1 track on north side and westerly switch connects with old siding. 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) Absolute signals on main track at west end of sidings govern west switches to north and south sidings. Eastward absolute signal is a two-unit signal with two "S" units on bracket which will indicate whether train dispatcher desires switch lined to north or to south siding.

Dwarf absolute signals on sidings at east and west ends of north and south sidings govern entrance to main track block.

Absolute signal on main track just west of east switch to north siding does not control switches. No signal provided for westward trains to enter either siding.

(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.

Pleasant Grove. House track. Electrically-locked switch between absolute signals governing west end of siding. Dual-control switch at west end of siding must be lined for main track and in hand-throw position before electric lock on house track switch can be released. Instructions for operating electric lock posted in phone booth.

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) Derail on SP Interchange Track 172 feet west of switch connection with SP tracks.

(c) Joint Track. Sacramento Northern freight trains operate over Western Pacific main track between junction switch MP 178.13 and west siding switch and over Western Pacific siding between west switch and switch leading to Sacramento Northern track opposite Western Pacific passenger station. Junction switch on siding must be locked for siding when not in use.

Movement of trains between junction switch MP 178.13 and west siding switch are governed by signal indication. All movements on siding must be made at yard speed.

Oroville Yard. West train yard switch is a dual-control switch. Permission is required from Second Subdivision train dispatcher to use switch except by signal indication. When westward trains ready to leave Oroville Yard do not find signals lined for them member of crew must call train dispatcher.

THIRD SUBDIVISION

Sidings on Third Subdivision are included in signal circuits except Oroville and Keddie. Sidings must not be occupied or fouled unless authorized by an absolute signal indication or by permission from the train dispatcher.

After being authorized by clearance, eastward trains originating at Oroville Yard must not leave until given permission by train dispatcher after member of crew advises him they are ready to leave.

Passenger trains may leave Oroville when ready, being governed by signal indications.

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. After moves are completed electric lock must be locked by member of crew.

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 C-43 or two-unit diesels must not use tracks 2, 3 and 4 except at west end of yard on tangent track.

Two-unit diesels and smaller or C-43 and smaller engines may use all tracks in entire yard 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 yard with the Feather River Railway Co.

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

Camp Rodgers. Hand-operated switch point derail at west end of siding; normal position closed. Train or cars may be left on siding while switching is being performed on PG&E tracks provided that, in addition to observing provisions of Rule 827, derail is opened to derailing position and locked. Derail must be closed and locked after switching is completed and before train departs.

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. Electric lock will stay released as long as door to electric lock is open.

Keddie.

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

(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 N.C.E. 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 N.C.E. lead respectively when not in use.

(d) Engines cannot take oil or water from east end of siding (No. 1 track) without fouling detector circuit which protects main track. Engines on siding requiring oil and water must not go beyond eastward dwarf absolute signal unless it shows indication per Rules 281, 284 or 285. If movement on main track prevents display of proceed signal to main track, engines may take oil and water by heading toward tail track. Trains or engines may be headed to tail track by making arrangements with train dispatcher to release electric lock on switch to tail track and lining switch by hand. After reversing tail track switch and inside switch to Upper Crossover, signal will display indication per Rule 287, for movement to tail track.

(e) Switch from tail track to roundhouse lead (first inside switch east of Upper Crossover) is electrically-locked. Instructions and telephone are in instrument house across main track from lock.

Hayes derail installed on tail track 75 feet east of inside switch to Upper Crossover and pipe-connected to that switch.

When lining rip track lead switch for tail track first have electric lock 126-A released and line switch for tail track, then line inside switch to Upper Crossover and pipe-connected derail for tail track. Movement must not be made west of rip track lead switch or on tail track east of eastward dwarf absolute signal at inside switch to Upper Crossover until this is done.

After this lineup is made, rip track lead switch must not be lined back until engine or cars are clear of section of tail track between dwarf signal and derail. Main track absolute signals at west Sierra and east Keddie are thrown to STOP if rip lead switch is changed while this section of track is occupied.

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, 6 and 8.

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

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 protected 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.

(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.

Little Valley. Water at MP 96.0, Little Valley, not suitable for human consumption. Water peddlers and gang water cars must not be filled at this point.

RULE 827. When cars are set out at 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

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. 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 Lyoth Tower, SP Crossing. Interlocking.

Whistle signals: Westward trains desiring to enter siding—one long and one short. Eastward trains desiring to leave siding—one short and one long.

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

MP 80.28 San Joaquin River Drawbridge. Interlocking.

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 6:00 PM to 3:00 AM daily except Saturdays, Sundays and 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 139.2 "C" Street, SN Crossing. Automatic interlocking.

MP 140.8 Globe, SN Crossing. Modified interlocking.

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. Interlocking. Home signals 225 feet east and west of crossing. No approach signals.

MP 22.3 West San Jose, SP Crossing. 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 three 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.

(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 end train yard
West end train yard to east end train yard
East end train yard to eastward absolute signal "X" Street
Eastward absolute signal "X" Street to west end depot siding
West end depot siding to 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 end train yard 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) If westward absolute signal at east end of depot siding, Sacramento, is in STOP position it may be passed without communicating with the train dispatcher and second paragraph of Rule 509(C) will govern.

(e) 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
Haggin—phone booths adjacent to east and west switches.

(f) 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. Switch to Mt. Ida spur operates derails on Mt. Ida and Ehman spurs simultaneously.

(c) **Oroville Yard.** Main track and inside crossover switches at east end of train yard are dual-control switches. When either switch 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.

Signals governing movement over inside dual-control switch are controlled by the train dispatcher. When these signals are lined for movement on the drill track and indications are per Rule 287 or Rule 285, movements may be made to or from drill track or switch engines may drill over inside switch without placing switch in hand-throw position. If signals are in STOP position and reason is not apparent or if call light is lit on telephone booth north of main track, train dispatcher must be contacted promptly.

(d) 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.

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) 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.

(F) 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.

(G) 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.

(H) 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.

(I) 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
	Steam	Diesel	
Oakland, Balloon track	MTP-44 or heavier	None	Beyond frog.
San Leandro			
L. A. Young Spring and Wire Spur	MTP-44 or heavier	None	Beyond frog.
Crate Rite Spur No. 1	C-43 or heavier	None	Beyond 450 feet from Main Track.
Crate Rite Spur No. 2	MTP-44 or heavier	None	Beyond frog.
Caterpillar Tractor	MTP-44 or heavier	None	Beyond frog.
Calif. Pack. Corp.	MTP-44 or heavier	None	Beyond frog.
Hyrup Spur	MTP-44 or heavier	None	Beyond frog.
Golden Grain Co. Spur	MTP-44 or heavier	None	Beyond frog.
Hayward			
Farm Produce Spur	MTP-44 or heavier	None	Beyond frog.
Poultry Prod. Spur	MTP-44 or heavier	None	Beyond frog.
San Jose Branch*	MTP-44 or heavier	None	On entire branch from point ¼ mile east of tail of wye Niles Jct.
Goad Spur	All	All	Beyond 400 feet from switch.
Radum	All	All	Beyond frog on all tracks except 1 and 2.
Livermore			
Brick Yard Track	All	All	Beyond WP ownership sign.
Brick Yard Track	MTP-44 or heavier	None	Beyond frog.
Stock track	MTP-44 or heavier	None	Beyond frog.
Altamont, Wye	MTP-44, GS-64-77, M-137-151	None	Beyond frog either leg.
Carbona			
Tomato Spur	MTP-44, GS-64-77, M-137-151	None	Beyond frog.
Bean Spur	MTP-44, GS-64-77, M-137-151	None	Beyond frog.
Carbona Branch			
Main Track	MTP-44 or heavier	None	Beyond west switch Kerlinger.
Spur MP 0.5	All	All	Beyond frog.
Kerlinger	MTP-44 or heavier	None	Beyond frog main track switch both ends.
Lyoth, Standard Oil Spur	All	All	Beyond sign 225 feet from switch.
Stockton			
N. Channel Spur**	C-43 or heavier	All Road	Beyond frog.
Harte Spur	All	All	Beyond Bridge 100.56.
Terminous Branch	MTP-44 or heavier	½ D-225 or heavier	On entire branch.
Villinger Spur***	MTP-44, GS-64-77, M-80, M-137-151	None	Beyond frog.
Las Vinas	MTP-44, GS-64-77, M-80, M-137-151	None	Beyond frog.
Glannvale			
Stock Yard Spur	GS-64-77 or heavier	None	Beyond frog.
Stock Yard Spur	MTP-44 or heavier	None	Beyond stock chute.
Bradford Winery	MTP-44 or heavier	None	Beyond frog.
Bradford Winery	MTP-44 or heavier	½ D-225 or heavier	Beyond first curve.
Sacramento			
Wye and "R" St. Line	MK-60 or heavier	None	Beyond 17th Street.
Pleasant Grove			
House Track	MTP-44 or heavier	None	Beyond depot.
Trowbridge			
Rice Elevator Spur	MTP-44, GS-64-77 or heavier	None	Beyond frog.
Team Track Outfit Spur	GS-64-77 or heavier	None	Beyond frog.
East Arboga, Outfit Spur	All	All	Beyond 300 feet from frog.
Marysville			
Old SN freight Connections	All	All	Beyond frog.
Old Freighthouse and Sand Plant	MTP-44 or heavier	None	Beyond clearance point of new storage spur.
Cliff House Spur	All	All	Beyond frog.
High Line	MTP-44 or heavier	None	Beyond frog.
WP-SP Interchange, MP 179.63	MTP-44, GS-64-77, M-137-151	None	Beyond frog.
Craig, Stock Track	MTP-44 or heavier	None	Beyond frog.
Vista Robles	GS-64-77 or heavier	None	Beyond frog.
Adelaide Spur (Oroville Yard)	C-43 or heavier	None	Beyond frog.
Pond Track	All	All	Beyond frog.
Oroville			
High Sierra Pine Spur	C-43 or heavier	None	Beyond clearance point.
SN Transfer	C-43 or heavier	None	Beyond clearance point.
Hoke Spur	C-43 or heavier	None	Beyond clearance point.
Mt. Ida Spur	C-43 or heavier	½ D-225 or heavier	Beyond clearance point.
Ehman Spur****	C-43 or heavier	½ D-225 or heavier	Beyond clearance point.
Sunkist Spur	C-43 or heavier	½ D-225 or heavier	Beyond clearance point.
Land See special instructions page 13, under third subdivision.			
Bloomer, River Spur	MTP-44 or heavier	None	Beyond frog.
River Spur	All	All	Beyond 6 cars from clearance point.
Berry Creek, House Spur	MTP-44 or heavier	None	Beyond clearance point.
House Spur	All	All	Beyond water column.
Jarbo Spur	MTP-44 or heavier	None	Beyond 500 feet from frog.
Grizzly Spur	MTP-44 or heavier	None	Beyond frog.
Rock Creek, Outfit Track	MTP-44 or heavier	None	Beyond clearance point.
Highway Spur	MTP-44 or heavier	None	Beyond clearance point.
Tobin, River Spur No. 1	M-137-151	None	Beyond culvert 253.01.
Belden, House Spur	MTP-44 or heavier	None	Beyond frog.
House Spur	All	All	Beyond MP 260.
Rich Bar, Outfit Spur	MTP-44 or heavier	All	Beyond clearance point.
Virgilia, River Spur	MTP-44 or heavier	None	Beyond clearance point.
Twain, Outfit Spur	MTP-44 or heavier	None	Beyond frog.
Paxton, House Track	MTP-44 or heavier	None	Beyond clearance point.
Stoddard Spur	MTP-44 or heavier	None	Beyond frog.
Keddie			
Kelly Spur	MTP-44 or heavier	None	Beyond frog.
Depot Back Track Spur	MTP-44 or heavier	None	Beyond frog.
West Leg of Wye	All	All	Beyond frog.
Spring Garden			
Stock Track	MTP-44 or heavier	None	West of stock chute.
Back Track	MTP-44 or heavier	None	Beyond frog.
Sloat, Log Spur	MTP-44 or heavier	None	Beyond frog.
All Mill Tracks	MTP-44 or heavier	None	Beyond frog.
Blairsden			
Richfield Oil Spur	MTP-44 or heavier	None	Beyond frog.

Location and Description of Track	Class of Engine		Prohibited
	Steam	Diesel	
Graeagle, All Tracks	MTP-44 or heavier	None	Beyond sign 1166 ft. east of house track sw Blairsden.
Log Unloading Track	All	All	Beyond west end log unloading dock.
Factory Tracks	All	All	Beyond sign at beginning of 20 degree curve between W. end of box factory and moulding mill.
Clio, Outfit Spur	MTP-44 or heavier	None	Beyond frog.
Crescent Mills			
Standard Oil Spur	M-137-151	None	Beyond frog.
Box			
Setzer Lumber Co. Spur	M-137-151	None	Beyond frog.
MP K-21.02, Tunnel Spur	M-137-151	None	Beyond frog.
Tunnel Spur	M-80 or heavier	All	Beyond clearance point.
Rollo Spur	M-137-151	None	Beyond frog.
Clear Creek Junction			
Almanor RR	M-137-151	None	Beyond frog.
Westwood			
Fredonia Track and Standard Oil Spur*****	MK-60 or heavier (also SP engines of similar weight and type)	D-225 or heavier (also SP engines similar weight and type)	Beyond frog.
Oil Spur off FGS House Track	All	All	Beyond frog.
Electric Siding	M-137-151	None	West of crossover.
Both Legs FGS Wye	M-80 or heavier	None	Beyond frog.
All Mill Spurs leading off track No. 4	All	All	Beyond frog.
Roundhouse Lead	M-80 or heavier	None	Beyond frog.
Halls Flat			
Logging Industry Tracks	M-137-151 or heavier	None	Beyond clearance point.
West leg Logging Industry Wye	All	All	Beyond frog.
Indian Head Lbr. Co. Spur	MTP-44, MK-60, GS-64-77, M-137-151	None	Beyond frog.

*MTP-44 engines may be used on San Jose Branch when authorized by Chief Dispatcher.

**Diesel switch engines of 551-564 (S-57) and 581-585 (S-60) class must be separated from any loaded cars by at least 1 empty car while handling cars over Smith Canal drawbridge, North Channel Line, Stockton.

***Diesel engines must not exceed 5 MPH on Spur.

****½ D-225 or heavier must not pass beyond sign restricting M-137-151 class engines.

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

Where D-225 or heavier diesels are restricted, there is no restriction for 2 units or ½ of this class of engine.

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 east 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
Thru Tunnels 1 and 2	..	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 53 and MP 54 on curves	..	45	..	40	..	..
MP 58 and MP 58.2 on curve	..	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 MP 80.2 on curve	..	50	..	40	..	25
MP 80.2 and MP 80.4, San Joaquin River Drawbridge	..	30	..	20	..	15
*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	..	8	..	8	..	8
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	..	8	..	8	..	8
*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
Bradford Spur	..	..	..	..	..	10
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 140.8 SN Crossing	..	50	..	45	..	35
*MP 152.5 SN Crossing	..	50	..	45	..	35
MP 161 and MP 162	..	..	..	..	..	40
MP 178 and MP 179.4	..	45	..	45	..	30
*MP 180.2 SP Crossing	..	40	..	40	..	25
MP 201.7 and MP 201.9 on curve	..	45	..	40	..	35
MP 204.7 and MP 205.1 on curve	..	50	..	45	..	35

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	..
Through Tunnel 4	..	50	..	45	..	..
MP 207.2 and MP 207.6 on curves	..	50	..	45	..	30
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	..	..
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	..	25
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	..	..

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

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

BETWEEN	Passenger		Freight	
	Maximum	Restriction	Maximum	Restriction
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	..	..
On curve west mile board Willow Springs	..	20	..	20
Pit River and Bieber	40	..	30	..
First curve west of Bieber	..	20	..	20
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	..

MAXIMUM SPEEDS

	Maximum MPH
Through turnouts, crossovers, on sidings and other inside tracks	10
Except through power operated switches and sidings Del Paso to Craig inclusive	20
Engines running light	*FT
Engines backing, except Diesel switchers—straight track	20
On curves and where track conditions are unfavorable speed must be reduced further to a rate consistent with safety.	
Passenger trains with cabooses on rear	50
Trains handling steam derrick 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 37, steam shovels, cranes, rotary plows or pile drivers:	
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 WP 11000 series air dump cars loaded	25
Trains handling SP scale test car	40
Trains handling engines with all side rods in place but main rods partly or completely removed	25
Switch engines without lead trucks, light or in trains	12
Diesel switch engines dead in train	45
Diesel freight engines dead in train	60
S-50, Nos. 501 to 503 incl. light or handling train	45
Diesel switch engines coupled in multiple control, light or handling trains	30
M-80 engines	35
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

	Maximum MPH
M-137-151 engines:	
While engine passing through turnouts and crossovers	5
Handling passenger trains	*FT
Over bridge 317.43	25
Second Subdivision	30
Fourth Subdivision	
Between Keddie and Greenville	25
" Greenville and Almanor	20
" Almanor and Bieber	25
" Halls Flat and Bieber, on curves descending grade	20
Freight engines handling passenger trains:	
C-43 or MK-60	50
S-50, Nos. 501 to 503 incl.	45
S-50, Nos. 504 to 511 incl.	65
S-57, Nos. 551 to 564 incl.	65
S-60, Nos. 581 to 585 incl.	65
D-176, Cab units 801-A, 802-A and 803-A only	65
D-225 and D-239	65

*FT — Speed prescribed for freight trains.

MISCELLANEOUS

Dead engines handled in trains must be placed at least 10 cars behind train engine except a Diesel engine being towed by another Diesel engine. When two or more Diesel engines, either road or yard, are being towed dead in freight trains they must be separated by not less than one car.

When steam derrick 37 (weighing 200 tons) or other derricks of a similar or heavier weight are handled with a GS-64-77 or M-137-151 engine, there must be at least two cars between engine and derrick.

DOUBLEHEADING. When MTP-44, MK-60, GS-64-77, M-80 or M-137-151 engines are in a train with another engine of any class, either in service or dead, they must be spaced at least 10 cars apart.

Exceptions:

D-176, D-225 and D-239 engines may be doubleheaded with C-43, MTP-44, MK-60 or M-80 engines.

Two Diesel engines may be doubleheaded, provided not more than a total of four units are in service.

On Third Subdivision and between Stockton Yard and Altamont a C-43 engine may be doubleheaded with an MTP-44 engine.

On Fourth Subdivision a C-43 engine may be doubleheaded with an MK-60 or M-80 engine; also two M-80 engines, a D-225 or D-239 and an M-80 engine, or an M-80 and M-137-151 engine may be doubleheaded between Bieber and Halls Flat. GS-64-77 and M-80 engines may be doubleheaded between Greenville and Bieber but must not exceed 25 MPH over all steel bridges.

DIESEL ENGINES. 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.

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.