

SOUTHERN PACIFIC COMPANY

(PACIFIC LINES)

TIME TABLE

FOR THE

WESTERN DIVISION

229



To Take Effect Tuesday, August 1, 1939, at 12:01 A. M.

PACIFIC STANDARD TIME (120th MERIDIAN)

For the government and information of employees only.

L. B. McDONALD
General Manager.

W. B. KIRKLAND
Superintendent of Transportation.

C. F. DONNATIN
Assistant General Manager.

G. E. GAYLORD
Superintendent

EASTWARD

Martinez Subdivision.

FIRST CLASS

Capacity of sidings in car lengths	Martinez Subdivision.																			Distance from San Francisco		
	20	28	8	88	226	18	26	24	248	102	246	48	14	291	52	224	204	54	262			
	Klamath	San Francisco Overland Limited	Shasta	Challenger	Passenger	Oregonian	Owl	Cascade	El Dorado	Streamliner City of San Francisco	Statesman	Treasure Island Forty-Niner	Pacific Limited	Passenger	San Joaquin	Senator	Passenger	Passenger	Passenger			
	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Sundays and Holidays	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave 2nd, 8th, 14th, 20th & 26th	Leave Daily	Leave 1, 5, 7, 11, 13, 17, 19, 23, 25 & 29th	Leave Daily	Leave Daily Ex. Sundays and Holidays	Leave Daily	Leave Daily	Leave Daily	Leave Daily				
	9.00 PM	8.35 PM	8.35 PM	8.00 PM	8.00 PM	6.40 PM	6.00 PM	5.00 PM	5.00 PM	3.45 PM	1.00 PM	11.40 AM	8.35 AM		7.30 AM	7.30 AM	6.30 AM	6.00 AM		0.0		
	9.20	8.55	8.55	8.20	8.20	7.00	6.20	5.20	5.20	4.05	1.20	11.59 AM	8.55		7.50	7.50	6.50	6.20		3.5		
BKWI P	9.38 PM	9.15 PM	9.10 PM	8.35 PM	8.25 PM	7.18 PM	6.32 PM	5.30 PM	5.27 PM	4.15 PM	1.35 PM	12.10 PM	9.05 AM		8.00 AM	7.57 AM	6.58 AM	6.28 AM		3.5		
Term. Yd. P BKWOTY																					4.9	
IP	s 9.45	s 9.22	s 9.17	s 8.45	s 8.33	s 7.26	s 6.44	s 5.38	s 5.33	s 4.22	s 1.41	s 12.16	s 9.12		s 8.06	s 8.02	s 7.04	s 6.33		5.5		
IP																					7.0	
P	s 9.56	s 9.34	s 9.27	s 8.57	s 8.42	s 7.36	s 6.57	s 5.49	s 5.41	s 4.31	s 1.50	s 12.26	s 9.22		s 8.14	s 8.10	s 7.15	s 6.41		9.2		
P																		f			13.1	
P	10.05	9.43	9.34	9.05	s 8.51	7.46	s 7.08	5.56	5.48	4.38	s 1.59	12.33	s 9.32		8.21	8.17	s 7.24	s 6.50		15.0		
WP																		f			16.6	
42 East P 33 West																					19.8	
64 West P	10.15	9.53	9.43	9.15	9.01	7.56	7.18	6.05	5.57	4.46	f 2.10	12.42	9.42		8.30	8.26	7.34	s 7.02		23.0		
P											f					s	s				25.5	
24 East P											f					s	f				26.3	
41 East P																f					27.1	
17 West P											f					s	f 7.17				27.5	
P	10.25	10.03	9.51	s 9.28	9.11	8.07	s 7.31	6.14	s 6.08	4.54	s 2.26	12.50	s 9.54		s 8.40	8.34	s 7.55	s 7.21		28.9		
Yard BKWOT P											s 2.31					s 7.59	s 7.26				29.0	
119 Center P																					31.1	
IWP	s 10.38	10.12	10.00	s 9.43	s 9.22	s 8.19	s 7.40 PM	6.23	s 6.18	5.02	s 2.41	12.58	10.04		s 8.49 AM	8.42	s 8.10	s 7.32 AM			34.7	
97 Center P	10.47			9.52	9.31	8.29					2.49		10.12			f 8.18					38.0	
82 East P 86 West BKWOY	11.01	10.34	10.19	10.06	9.45	8.43		6.42	s 6.37	5.16	s 3.05	1.16	10.24			9.00	s 8.35				48.9	
41 East P 73 West																f					51.9	
87 Center WYP	11.15	10.48	10.32	10.20	9.58	8.56		6.54	6.49		f 3.18	1.27	10.37			9.11	s 8.49				59.4	
72 Center WP	11.25	10.57	10.40	10.29	10.07	9.05		7.03	6.57	5.30	s 3.29	1.35	10.46			9.19	s 9.03				67.5	
70 East																					71.8	
78 East 80 West KWIY P	s 11.35 PM	11.06	s 10.50 PM	10.40	10.16	s 9.15 PM		s 7.12 PM	s 7.08	5.37	s 3.42	1.43	10.56	10.30 AM		9.28	s 9.17		6.45 AM		75.6	
100 Center P		11.12		10.46	10.21				7.13		3.48		11.02	f 10.37		9.33	9.23		6.50		80.4	
IP																					86.9	
Term. Yd. BKWOTY P		s 11.25 PM			s 11.00 PM	s 10.35 PM				s 7.25 PM	s 5.50 PM	s 4.00 PM	s 1.58 PM	s 11.15 AM	s 10.50 AM		s 9.45 AM	s 9.35 AM		s 7.00 AM		89.0
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Sundays and Holidays	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive 2nd, 8th, 14th, 20th & 26th	Arrive Daily	Arrive 1, 5, 7, 11, 13, 17, 19, 23, 25 & 29th	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		(88.4)		
	(1.58) 38.13	(2.10) 40.80	(1.40) 45.00	(2.25) 36.51	(2.10) 40.80	(1.57) 38.46	(1.08) 27.97	(1.42) 44.11	(1.58) 44.94	(1.35) 55.83	(2.25) 36.51	(1.48) 49.11	(2.10) 40.80	(0.20) 40.20	(0.49) 38.08	(1.48) 49.11	(2.37) 33.78	(1.04) 29.16	(0.15) 53.60		Time over District..... Average Speed per Hour.....	

Time Table No. 229

August 1, 1939

STATIONS

SAN FRANCISCO	3.5	Open
OAKLAND PIER	2.0	Open
TO-R OAKLAND PIER	1.4	TC
TO-R WEST OAKLAND	2.0	TC
OAKLAND (16th Street)	1.5	TC
SHELLMOULD	2.2	TC
BERKELEY (University Ave.)	3.9	TC
STEGE	1.9	TC
RICHMOND	1.6	TC
SAN PABLO	3.2	TC
SOBRANTE	3.2	TC
PINOLE	2.5	TC
RODEO	0.8	TC
OLEUM	0.8	TC
TORMEY	0.4	TC
SELBY	1.4	TC
CROCKETT	2.1	TC
PORT COSTA	2.0	TC
OZOL	1.6	TC
TO-R MARTINEZ	6.3	TC
BENICIA JUNCTION	10.9	TC
TO-RSUISUN-FAIRFIELD	3.0	TC
TOLENAS	7.5	TC
ELMIRA	8.1	TC
DIXON	4.3	TC
TREMONT	3.8	TC
DAVIS	4.8	TC
WEBSTER	6.5	TC
Sacramento Northern Ry. Crossing	2.1	TC
TO-R SACRAMENTO		TC

Treasure Island leaves 1st, 7th, 13th, 19th and 25th of each month.

Forty-Niner leaves 5th, 11th, 17th, 23rd and 29th of each month.

See pages 3, 4 and 5 for additional trains between Oakland Pier and Sacramento.

Automatic train control eastward track from Martinez to westward dwarf signal 300 feet east of draw span.

When distant signal 328 indicates caution, trains must not exceed 15 M. P. H. from this distant signal to track magnet located 550 feet west of Bridge signal SA-3

Martinez Subdivision.

WESTWARD

No. 229

1939

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AKLAND

16th Street)

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per Hour.....

Time Table No. 229

August 1, 1939

STATIONS

SAN FRANCISCO 3.5

OAKLAND PIER

TO-R OAKLAND PIER

2.0

TO-R WEST OAKLAND

1.0

OAKLAND (16th Street)

1.5

SHELLMOUND

2.2

BERKELEY (University Ave.)

3.9

STEGE

1.9

RICHMOND

1.6

SAN PABLO

3.2

SOBRANTE

3.2

PINOLE

2.5

RODEO

0.8

OLEUM

0.8

TORMEY

0.4

SELBY

1.4

CROCKETT

2.1

R PORT COSTA

2.0

OZOL

1.6

TO-R MARTINEZ

6.4

BENICIA JUNCTION

10.9

TO-R SUISUN-FAIRFIELD

3.0

TOLENAS

7.5

ELMIRA

8.1

DIXON

4.3

TREMONT

3.8

TO-R DAVIS

4.8

WEBSTER

6.5

Sacramento Northern Ry. Crossing

2.1

TO-R SACRAMENTO

(88.5)

Leave Daily

EASTWARD

Martinez Subdivision

Capacity of sidings in car lengths	THIRD CLASS							SECOND CLASS			FIRST CLASS							Distance from San Francisco	
	476 Freight	515 Sacramento Division Freight	462 Local Freight	464 Local Freight	412 Local Freight	478 Freight		442 Mdse	410 Freight	470 Portland Freight					58 Sequoia	50 Sequoia	10 Fast Mail	210 Sierra	
Leave Daily	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily		Leave Daily Ex. Saturday and Sunday	Leave Daily Ex. Sunday	Leave Daily Ex. Monday						Leave Daily Ex. Sunday	Leave Sunday Only	Leave Daily	Leave Daily	Distance from San Francisco
BKWI P															11.00 PM	11.00 PM	9.40 PM	9.00 PM	0.0
Term. Yd. BKWOITY	11.45 PM			9.00 AM		3.00 AM	10.00 PM	6.50 PM	2.00 AM						11.20	11.20	10.00	9.20	3.5
I P															11.35 PM	11.28 PM	10.20 PM	9.41 PM	3.5
I P															s 11.43	s 11.34	s 10.33	s 9.51	4.9
P															s 11.53 PM	s 11.43	s 10.45	s 10.03	5.5
P															s 12.03 AM	s 11.53 PM	10.53	s 10.13	7.0
P							10.22											13.1	
WP								2.45										15.0	
42 East P																		16.6	
33 West																		19.8	
64 West P							10.35								f 12.13	f 12.03 AM	11.02	10.23	23.0
P															f	f			25.5
24 East P															f	f			26.3
41 East P															f	f			27.1
17 West P															f	f			27.5
P							10.49								s 12.29	s 12.20	11.11	s 10.37	28.9
Yard BKWOT P															f 12.35	f 12.26		f 10.42	29.0
119 Center P							4.00 PM	8.45 AM											31.1
IWP	1.30 AM						9.00 AM	5.00	11.00	8.50 PM	3.45				s 12.41 AM	s 12.33 AM	11.19	s 10.52	33.1
97 Center P																	34.7	31.7	
82 East P																11.27	11.01		38.0
86 West P																			48.9
BKWOY	2.15			11.00 AM			6.45	11.39 PM		4.25							11.39	s 11.16	
41 East																			51.9
73 West																			59.4
87 Center WY P																	11.51	11.31	
72 Center WP																	11.59 PM	11.40	
70 East P																			71.8
78 East 80 West KWIY P	3.30	3.00 PM	2.15 PM				7.50	12.31		5.30							12.07 AM	s 11.55 PM	
100 Center P																	12.12	12.01 AM	75.6
I P																			80.4
Term. Yd. BKWOTY P	4.30 AM	3.30 PM	3.00 PM														s 12.25 AM	s 12.15 AM	
Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday and Monday	Arrive Daily	Arrive Daily Ex. Monday					Arrive Daily Ex. Monday	Arrive Monday Only	Arrive Daily	Arrive Daily	(88.4)
	(4.45) 18.36	(0.30) 26.80	(4.00) 10.02	(7.00) 3.72	(0.15) 14.40	(5.30) 15.85	(3.00) 29.06	(2.00) 14.80	(4.30) 19.38						(1.06) 28.27	(1.05) 28.71	(2.05) 42.43	(2.34) 34.44	Time over District..... Average Speed per Hour.....

See pages 2, 3 and 5 for additional trains between Oakland Pier and Sacramento

Automatic train control eastward track from Martinez to westward dwarf signal 300 feet east of draw span.

When distant signal 328 indicates caution, trains must not exceed 15 M. P. H. from this distant signal to track magnet located 550 feet west of Bridge signal SA-332 opposite white concrete marker block.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS

Train	At	Frequency	Destined to (or beyond)	From (or beyond)
210	Oleum, Selby, Elmira and Dixon	Daily	Roseville	
210	Elmira, Dixon	Daily		
210	Cygnus	Saturday only		Any station Berkeley

Martinez Subdivision

Time Table No. 229 August 1, 1939	Distance from Sacramento	FIRST CLASS					SECOND CLASS		THIRD CLASS					
		53	215	209	225	261		471	514	405	465	463	411	475
		Passenger	Statesman	Passenger	Statesman	Passenger		Oakland Freight	Sacramento Division Freight	Freight	Local Freight	Local Freight	Local Freight	Freight
		Arrive Daily	Arrive Daily Ex. Sundays and Holidays	Arrive Sundays and Holidays	Arrive Sundays and Holidays	Arrive Daily		Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily Ex. Monday	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily
SAN FRANCISCO	92.0	10.30 PM	10.50 PM	10.30 PM	11.10 PM									
3.5		10.10	10.30	10.10	10.50									
OAKLAND PIER	88.5	s 9.58 PM	s 10.20 PM	s 10.03 PM	s 10.40 PM									
A. B. S.														
TO-R OAKLAND PIER	88.5													
2.0														
TO-R WEST OAKLAND	87.5													
1.0														
OAKLAND (16th Street)	86.5	s 9.52	s 10.14	s 9.57	s 10.34									
1.5														
SHELLMOUND	85.0													
2.2														
BERKELEY (University Ave.)	82.8	s 9.39	s 10.03	s 9.46	s 10.23									
3.9														
STEGE	78.9													
1.9														
RICHMOND	77.0	s 9.26	s 9.51	s 9.35	s 10.12									
1.6														
SAN PABLO	75.4													
3.2														
SOBRANTE	72.2													
3.2														
PINOLE	69.0	9.14	f 9.40	9.24	f 10.01									
2.5														
RODEO	66.5		f		f									
0.8														
OLEUM	65.7	f			f									
0.8														
TORMEY	64.9													
0.4														
SELBY	64.5	f		f										
1.4														
CROCKETT	63.1	s 9.03	s 9.25	9.15	s 9.46									
2.1														
R. PORT COSTA	61.0	f 8.58	s 9.20		s 9.41									
2.0														
OZOL	59.0													
1.6														
TO-R MARTINEZ	57.4	8.53 PM	s 9.14	9.06	s 9.35				10.30		4.15 AM		11.40 AM	11.20 PM
6.4														
BENICIA JUNCTION	51.0		9.03		9.25									
10.9														
TO-R SUISUN-FAIRFIELD	40.1		s 8.52	8.47	s 9.15				9.50		10.30 AM		10.40	
3.0														
TOLENAS	37.1		f											
7.5														
ELMIRA	29.6		s 8.37	8.37	s 9.02									
8.1														
DIXON	21.5		s 8.26	8.29	s 8.51									
4.3														
TREMONT	17.2													
3.3														
TO-R DAVIS	13.4		s 8.15	8.20	s 8.40	s 10.35 PM			8.55	3.30 AM			9.00	
4.8														
WEBSTER	8.6		8.05	8.15	8.30	10.26								
6.5														
Sacramento Northern Ry. Crossing	2.1			7.55 PM	8.05 PM	8.20 PM	10.15 PM		8.25 PM	3.00 AM				
2.1														
TO-R SACRAMENTO	0.0													
(88.5)		Leave Daily	Leave Daily Ex. Sundays and Holidays	Leave Sundays and Holidays	Leave Sundays and Holidays	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
Time over District.....		(1.05)	(2.25)	(1.58)	(2.20)	(0.20)			(4.00)	(0.30)	(1.15)	(7.00)	(3.00)	(6.30)
Average Speed per Hour.....		28.71	36.62	45.00	37.93	40.20			20.19	26.80	23.84	3.72	13.37	13.46

See pages 2, 3 and 4 for additional trains between Oakland Pier and Sacramento.

Automatic train control westward track from signal 347 to Martinez.

When distant signal 347 indicates caution, trains must not exceed 15 M. P. H. from this distant signal to track magnet located 1250 feet east of Bridge signal SA-337, opposite white mark on bridge.

ADDITIONAL STATIONS
(Pages 2, 3, 4 and 5)

pEmeryville.....	M.P. 6.6
Paraffin.....	M.P. 7.4
pStockyards.....	M.P. 7.8
Nobel.....	M.P. 11.2
pGiant.....	M.P. 18.9
pHercules.....	M.P. 23.8
pEckley.....	M.P. 30.1
pNevada Dock.....	M.P. 32.2
Pierce.....	M.P. 40.1
pCygnus.....	M.P. 42.2
Teal.....	M.P. 43.2
Jacksnipe.....	M.P. 45.1
Vanden.....	M.P. 53.8
Cannon.....	M.P. 55.4
Batavia.....	M.P. 64.2
Briggston.....	M.P. 73.8
Chiles.....	M.P. 77.1
Swingle.....	M.P. 79.1
Mikon.....	M.P. 86.3
Washington.....	M.P. 88.3

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS

Train	At	Frequency	Destined to (or beyond)	From (or beyond)

<tbl_r cells

EASTWARD

Capacity of Sidings in Car Lengths	THIRD CLASS		SECOND CLASS		FIRST CLASS				
	412 Local Freight	410 Freight			26 Owl	52 San Joaquin	54 Passenger	58 Sequoia	50 Sequoia
	Leave Daily Ex. Sunday		Leave Daily Ex. Sunday		Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Monday	Leave Monday Only
IWP	9.00 AM		8.50 PM		7.44 PM	8.52 AM	7.35 AM	12.43 AM	12.35 AM
P			8.55						
62 YP	9.10	9.00			7.49	8.57	s 7.41	s 12.49	f 12.41
East 80 West 109 WP	9.30	9.08			7.54		s 7.46	f 12.54	f 12.46
60 P	9.35						f		
46 P	9.45	9.13			7.58		7.50	12.58	12.50
42									
73 P	9.55 <u>11.01</u>	9.45			s 8.08	<u>9.09</u>	s 8.00	s 1.08	s 12.58
12									
40 P	11.50 AM	9.53			8.15		s 8.10	s 1.18	s 1.06
76	12.01 PM	10.00			8.19		8.15	1.23	1.11
48 WP	1.00	10.10			8.26	9.21	s 8.23	s 1.31	s 1.18
83 P	1.40	10.18					s 8.32	f 1.40	f 1.26
43 P	1.50	10.26					f		
50 P	2.00	10.33					8.38	1.45	1.31
38		10.40					8.43	1.50	1.36
Term Yard BKWOTY P	2.30 PM	10.50 PM			s 8.48 PM	s 9.43 AM	s 8.52 AM	s 2.00 AM	s 1.45 AM
	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday			Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Monday	Arrive Monday Only
	(5.30) 8.63	(2.00) 23.75			(1.04) 44.53	0.51 55.88	(1.17) 37.01	(1.17) 40.71	(1.10) 40.71

Martinez Subdivision.

WESTWARD

Time Table No. 229 August 1, 1939	Distance from San Francisco	FIRST CLASS					THIRD CLASS
		25 Owl	55 Tehachapi	51 San Joaquin	53 Passenger		
STATIONS	Distance from Tracy	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		Arrive Daily Ex. Monday
TO-R MARTINEZ 1.3 MOCOCO End of Double Track 0.8 PEYTON 1.3	47.5	7.05 AM	s 11.20 AM	s 7.26 PM	s 8.48 PM		4.15 AM
	36.0						
	36.8						
TO-R AVON 3.2	44.1	6.59	11.15		f 8.42		4.04
TO PORT CHICAGO 1.7	40.9	6.55	11.10	7.17	s 8.37		3.58
NICHOLS 1.8	39.2						
McAVOY 2.0	37.4	6.51	11.06		8.32		3.52
SHELL POINT 2.1	35.4						
TO-R PITTSBURG 1.9	33.3	6.46	s 11.01	7.09	s 8.27		3.45
LOS MEDANOS 2.7	31.4						
TO ANTIUCH 1.5	28.7	6.39	s 10.50	7.04	s 8.15		3.38
JERSEY 1.0	27.2						
NEWLOVE 1.3	26.2						
NEROLY 2.1	24.9	6.34	10.43		8.03		3.29
ARBOR 2.3	22.8						
TO BRENTWOOD 3.0	20.5	6.28	s 10.38	6.55	s 7.58		3.20
SILISAND 2.2	17.5						
TO BYRON 2.0	15.3	6.22	10.28		s 7.48		3.10
BYRON HOT SPRINGS 2.7	13.3						
HERDLYN 4.1	10.6						
BETHANY 3.4	6.5	6.13	10.19	6.41	7.35		2.55
JANNEY 3.1	3.1						
TO-R TRACY 0.0	0.0	6.05 AM	10.12 AM	6.34 PM	7.28 PM		2.40 AM
(47.5)		Leave Daily	Leave Daily	Leave Daily	Leave Daily		Leave Daily Ex. Monday
.....Time over District.....		(1.00) 47.50	(1.08) 41.91	(0.52) 54.80	(1.20) 35.62		(1.35) 30.00
.....Average Speed per Hour.....							(5.10) 9.19

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS				
Train	At	Receive or Discharge	To (Or Beyond)	From (Or Beyond)
25	Brentwood, Pittsburg and Martinez	Discharge	Berkeley	Fresno
25	Brentwood and Pittsburg	Receive		Berkeley
26	Brentwood	Discharge	Fresno	
26	Brentwood	Receive		

ADDITIONAL FLAG STOPS		
Train	At	Frequency
25	Martinez	Sundays

At Mococo: Schedule time and train orders will apply at the end of double track.

At Port Chicago: Eastward siding is the first track on bay side of the main track. Westward siding is the first track on the station side.

At Shell Point: Location for stop of passenger trains is opposite the platform of the Sacramento Northern Railway.

Nos. 50 and 58 reduce speed at Avon and Byron Hot Springs to 10 miles per hour to dispatch papers.

Capacity of Sidings in Car Lengths in

10 BKWC
24
35
20 We
23 Ea

47
24
19

17
16 B

Capacity of Sidings in Car Lengths in

1

66

EASTWARD		Martinez Subdivision.		WESTWARD		EASTWARD		Martinez Subdivision.		WESTWARD		EASTWARD		Martinez Subdivision.		WESTWARD			
		SECOND CLASS		THIRD CLASS				Time Table No. 229						Time Table No. 229					
RD CLASS		440	438	439	441			August 1, 1939						August 1, 1939					
Capacity of Sidings in Car Lengths	Local Freight	Local Freight	Capacity of Sidings in Car Lengths	Local Freight	Local Freight	Capacity of Sidings in Car Lengths	Distance from San Francisco via Vallejo	Arrive Daily Ex. Sunday	Leave Daily Ex. Sunday	Capacity of Sidings in Car Lengths	Distance from San Francisco	Capacity of Sidings in Car Lengths	Distance from Capay	Capacity of Sidings in Car Lengths	Distance from San Francisco	Capacity of Sidings in Car Lengths	Distance from Ratium		
411	Local Freight	411	Local Freight	440	438	439	441			59 4	59 6	R	ELMIRA	32.3	62 YP	38.1	TO-R AVON	29.7	
Arrive Daily Ex. Sunday		Leave Daily Ex. Sunday		Leave Daily		WY P	47.6	5.10 AM	6.15 PM	45.0	47.9	TO	VACAVILLE	28.2		41.0	GALINDO	26.8	
5AM	11.40 AM	101	BKWOYP	2.00 AM	1.00 AM	50.5	TO-R SUISUN-FAIRFIELD	2.6		43.3	5.00	6.00	1.7	65.6	63.7	22 W	42.5	OOONCORD	25.3
						24	SUBEET	46.2		41.9	4.55	5.50	1.4	70.3	68.5		45.1	HOOKSTON	22.7
						35 WP	THOMASSON	44.8		38.1	4.45	5.35	3.8	74.0	70.0		45.8	LAS JUNTAS Sacramento Northern Ry. Crossing	22.0
						20 West 23 East P	CORDELIA	41.0		34.4	4.30 AM	5.15	0.7	76.0	74.0		47.3	OXLEY	20.5
						WYP	ORESTON	37.3		33.7	Napa Valley Ry. Crossing	7.4	0.1	WT 15	TO-R NAPA JUNCTION	4.3	18	TO WALNUT CREEK	19.6
								45.4		26.3			26.2	80.3	NORTON	11.6	ALAMO	15.2	
						47 KW	TO	40.0					4.45		2.5	52.6	DANVILLE	13.0	
						24	UNION	41.0		47.8			3.50		0.8	54.8	OSAGE	11.4	
						19	YOUNTVILLE	44.8		54.0			3.40		3.2	56.4	SAN RAMON	10.1	
							OAKVILLE	41.0		57.5			3.20		3.1	57.7	FOREST HOME	6.5	
						4.55	RUTHERFORD	41.0		59.4			3.05		2.0	61.3	DOUGHERTY	4.2	
						5.10	ZINFANDEL	41.0		61.2			2.50		0.0	63.6	ASCO	1.4	
						5.15	ST. HELENA	41.0		63.6			2.45		(32.5)	22	Western Pac. Crossing	0.0	
						17	BALE	41.0		67.5			4.2			66.4	RADUM	(29.7)	
						W	MAPLE	41.0		69.0			2.7			67.8			
						16 BKTW	TO-R CALISTOGA	41.0		71.7			0.0		2.00PM				
													(47.6)	Leave Daily	Leave Daily Ex. Sunday				
													(0.40)	19.80	(4.15)	11.17			
													Time over District.....		Average Speed per Hour.....				
													(5.00)	(0.40)	19.80	(4.15)	11.17		
EASTWARD		Martinez Subdivision.		WESTWARD				Time Table No. 229						Time Table No. 229					
		SECOND CLASS		THIRD CLASS				August 1, 1939						August 1, 1939					
RD CLASS		438	Local Freight	439	Local Freight			Capacity of Sidings in Car Lengths		Distance from San Francisco via Vallejo				Capacity of Sidings in Car Lengths		Distance from Union			
Capacity of Sidings in Car Lengths	Local Freight	Leave Daily	Capacity of Sidings in Car Lengths	Local Freight	Arrive Daily	Capacity of Sidings in Car Lengths	Distance from Schellville Junction	TO-R NAPA JUNCTION	0.3	11.3	4.10 AM	43.8	42.2	BUCHLI	8.6				
		2.00 AM	37.3	37.6					0.4	11.0		45.4	48.8	CARNEROS	7.0				
		2.05	38.0	40.7				LOMBARD	2.7	10.6	4.05	50.1	50.8	STANLEY	5.4				
								BRAZOS	1.5	7.9				WEST NAPA	2.0				
								BUCHLI	2.2	6.4				0.7					
								MERAZO	1.3	4.2				UNION	0.0				
								RAMAL	2.9	2.9				(8.6)					
								TO-R SCHELLVILLE JOT.	0.0	0.0									
EASTWARD		Martinez Subdivision.		WESTWARD				Time Table No. 229						Time Table No. 229					
		SECOND CLASS		THIRD CLASS				August 1, 1939						August 1, 1939					
RD CLASS		438	Local Freight	439	Local Freight			Capacity of Sidings in Car Lengths		Distance from San Francisco via Vallejo				Capacity of Sidings in Car Lengths		Distance from Bentia Junction			
Capacity of Sidings in Car Lengths	Local Freight	Leave Daily	Capacity of Sidings in Car Lengths	Local Freight	Arrive Daily	Capacity of Sidings in Car Lengths	Distance from Schellville Junction	TO-R NAPA JUNCTION	0.3	37.3	4.10 AM	43.8	32.4	BENICIA	5.6				
		2.00 AM	37.3	37.6					0.4	11.0		44.4	45.7	ARMY POINT	4.2				
		2.05	38.0	40.7					1.5	7.9				BENICIA JUNCTION	0.0				
									2.2	6.4				(5.6)					
									1.3	4.2									
									2.9	2.9									
									2.9	2.9									
									0.0	0.0									
EASTWARD		Martinez Subdivision.		WESTWARD				Time Table No. 229						Time Table No. 229					

EASTWARD

Niles Subdivision.

Capacity of sidings in car lengths	THIRD CLASS						SECOND CLASS						FIRST CLASS						Distance from San Francisco										
	418 Local Freight	416 Local Freight	408 Freight	472 Freight	402 Freight	422 Freight	450 Mdse	406 Freight	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily Ex. Monday	Leave Daily Ex. Sunday	Leave Daily	Leave Daily Ex. Sat., Sun. and Holidays	Leave Daily	4 W. P. Passenger	40 W. P. Passenger	74 Oakland Lark	280 Stockton	252 Passenger	250 Passenger								
	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily Ex. Monday	Leave Daily Ex. Sunday	Leave Daily	Leave Daily	Leave Daily Ex. Sat., Sun. and Holidays	Leave Daily								Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily								
																9.40 PM	9.00 PM	8.00 PM	6.00 PM	5.20 PM	7.00 AM	0.0							
																10.00	9.20	8.20	6.20	5.40	7.20	3.5							
																10.15 PM	9.28 PM	8.28 PM	6.28 PM	5.48 PM	7.35 AM	3.5							
BKWI P																						4.9							
Term. Yard BKWOITYP	10.30 AM	6.30 AM							8.45 PM	7.15 PM												5.9							
I P																	10.22 PM	9.34 PM				6.7							
I P																	s 8.45	s 6.35	s 5.55	s 7.47		8.3							
P																	s 8.52	s 6.42	s 6.02	s 7.54		9.7							
I P																		8.58 PM	6.47	s 6.08	s 8.00 AM		13.4						
45 WP	11.00 AM	7.00							9.30 PM	7.32 PM								s 6.49	s 6.11				14.8						
31 P		7.05																f					15.5						
																		f					16.5						
31 P		7.20																	f 6.20					17.5					
100 WP		8.00																s 6.58	s 6.28				20.1						
28 P		8.15																7.03	f 6.35				24.0						
27 P		8.22																7.06	f 6.40				26.5						
																							27.6						
68 BKWY P		8.35 AM																s 7.14	s 6.45 PM				29.2						
IY									4.50 AM	11.28 PM	9.08 PM			6.33 AM										29.9					
75 P									4.55	11.33	9.13			6.38					7.18					31.7					
95 P									5.05	11.43	9.23			6.49					f 7.26					35.6					
71 P									5.15	11.52	9.33			6.59					s 7.35					38.4					
I Y P																							40.9						
East-110 West-105 YP									5.20	11.56 PM	9.37			7.02					7.38					42.0					
East 85 West 78BKWP									5.45	12.03 AM	9.55			7.08					s 7.46					42.4					
P																							43.0						
72 P									5.55	12.08	10.03			7.14						8.00					46.9				
93 WT P									6.10	12.20	10.20			7.29						8.06					48.4				
71 P									6.25	12.33	10.35			7.45						8.13					50.5				
70 P									6.35	12.43	10.45			8.10										55.0					
22 P																							56.0						
Perm. Yard BKWOTY P									6.55 AM	1.00 AM	11.00 PM			8.30 AM						s 8.23 PM					59.5				
Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday	Arrive Daily Ex. Monday	Arrive Daily Ex. Monday	Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily Ex. Sat., Sun. and Holidays	Arrive Daily	(1.52)	(1.32)	(1.26)	(1.52)	(1.45)	(21.91)	(0.17)	(1.57)	(26.47)	(0.07)	(20.57)	(0.06)	(24.00)	(0.30)	(19.80)	(1.55)	(35.11)	(0.57)	(27.05)	(0.25)	(23.76)Time over District..... .....Average Speed per Hour.....
(0.30) 17.00	(2.05) 11.66	(2.05) 19.63	(2.05) 26.67	(1.52) 21.91	(1.45) 10.00																								

At Eliot: Eastward siding is first siding north of main track.
Westward siding is second siding north of main track.

At Livermore: Eastward siding is opposite station extending 4600 feet westward.
Westward siding is 2000 feet east of station extending 4000 feet eastward.

At Niles schedule time and train orders for westward trains via Decoto will apply at the junction switch located 550 feet west of the station building.

Time Table No. 229

August 1, 1939

STATIONS

SAN FRANCISCO 3.5
OAKLAND PIER 3.5
{ OAKLAND PIER

TO-R OAKLAND PIER	1.4
Cedar St. Crossing	
TO-R WEST OAKLAND	1.0
Western Pacific Crossing	
MAGNOLIA TOWER	0.8
OAKLAND (First Street)	1.6
EAST OAKLAND	1.4
FRUITVALE	3.7
TO-R ELMHURST	End of Double Track
	1.4
TO SAN LEANDRO	0.7
SOUTH SAN LEANDRO	1.0
ESTUDILLO	1.0
LORENZO	2.6
TO HAYWARD	3.9
HALVERN	2.5
DECOTO	1.1
PABRIOO	1.6
TO-R NILES	0.7
NILES JUNCTION	1.8
FARWELL	3.9
SUNOL	2.8
VERONA	2.5
TO PLEASANTON	1.1
TO RADUM	0.4
REMILLARD	0.6
ELIOT	3.9
TO-R LIVERMORE	1.5
TREVARNO	2.1
ULMAR	4.5
TO ALTAMONT	4.5
CAYLEY	3.6
MIDWAY	5.6
MEDAL	2.1
TO-R TRACY	(67.3)

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS

Train	At	Receive or Discharge	For Passengers To or From
252	Cherry and Harder	Receive or Discharge	Any station

Niles Subdivision.												WESTWARD							
Time Table No. 229			FIRST CLASS										SECOND CLASS				THIRD CLASS		
August 1, 1939			Distance from Tracy	251	3	73	279	255	39			451	Mdse.	401	409	419	437	417	473
STATIONS				Passenger	W. P. Passenger	Oakland Lark	Stockton	Passenger	W. P. Passenger			Arrive Daily Ex. Sun., Mon. and Holidays	Arrive Daily	Freight	Freight	Local Freight	Local Freight	Freight	
SAN FRANCISCO	3.5	OAKLAND PIER	70.8	7.50 AM	8.50 AM	9.50 AM	9.50 AM	6.50 PM	10.30 PM										
			67.3	7.30	8.30	9.30	9.30	6.30	10.10										
TO-R OAKLAND PIER	1.4	Cedar St. Crossing	67.3	s 7.25 AM	s 8.20 AM	s 9.10 AM	s 9.25 AM	s 6.24 PM	s 9.55 PM										
		TO-R WEST OAKLAND	65.9																
		Western Pacific Crossing	64.9		8.13 AM				9.48 PM				8.40 AM						
		MAGNOLIA TOWER	64.1	s 7.15		s 9.00	s 9.17	s 6.14											
		OAKLAND (First St.)	62.5																
		EAST OAKLAND	61.1	s 7.05		s 8.49	s 9.09	s 6.03											
		FRUITVALE	57.4	s 6.56		8.42 AM	9.03	5.56 PM					8.19 AM						
		TO-R ELMHURST	55.0																
		End of Double Track	55.0																
		TO SAN LEANDRO	55.0	s 6.51			9.01												
		SOUTH SAN LEANDRO	55.3	f															
		ESTUDILLO	54.3	f															
		LORENZO	53.3	s 6.41			8.57												
		TO HAYWARD	50.7	s 6.35			8.53												
		HALVERN	46.8	f 6.26			8.48												
		DECOTO	44.3	s 6.22			8.45												
		FABRICO	43.2																
		TO-R NILES	41.6	6.17 AM		s 8.40												1.30 PM	
		NILES JUNCTION	40.9																
		1.8																	
		FARWELL	39.1			8.34													
		3.9																	
		SUNOL	35.2			f 8.27													
		2.8																	
		VERONA	32.4																
		2.5																	
		TO PLEASANTON	29.9			s 8.19												10.52	
		1.1																	
		TO RADUM	28.8																
		0.4																	
		REMILLARD	28.4																
		0.6																	
		ELIOT	27.8			8.14												10.48	
		3.9																	
		TO-R LIVERMORE	23.9			s 8.09												10.40	
		1.5																	
		TREVARNO	22.4																
		2.1																	
		ULMAR	20.3			8.01												10.33	
		4.5																	
		TO ALTAMONT	15.8			7.54												10.20	
		4.5																	
		OAYLEY	11.3			7.45												9.55	
		3.6																	
		MIDWAY	7.7			7.39												9.40	
		5.6																	
		MEDAL	2.1																
		2.1																	
		TO-R TRACY	0.0			7.30 AM												9.20 PM	
		(67.3)			Leave Daily		Leave Daily Ex. Sun., Mon. and Holidays		Leave Daily										
					(1.08) 22.67	(0.07) 20.57	(0.28) 21.23	(1.55) 35.11	(0.28) 21.23	(0.07) 20.57		(0.21) 24.28		(1.35) 25.83	(2.05) 19.63	(0.30) 17.00	(2.00) 11.86	(0.30) 17.00	(1.57) 20.97
		Time over District.....		Average Speed per Hour.....															

At Eliot: Eastward siding is first siding north of main track.

Westward siding is second siding north of main track.

EASTWARD**Niles Subdivision.****WESTWARD****EASTWARD****Niles Subdivision. WESTWARD**Capacity of sidings
in car lengths**THIRD CLASS****SECOND CLASS****FIRST CLASS****258**

Passenger

Distance from
San Francisco**Time Table No. 229**
August 1, 1939**THIRD CLASS****401**

Freight

413

Local Freight

473

Freight

Arrive Daily

Arrive Daily
Ex. Sunday

Arrive Daily

Distance from
Niles and
Niles Jct.

26.2

D. T.

TO-R REDWOOD JCT.
1.3End of Double Track
2.0

HENDERSON

4.4

DUMBARTON

3.3

TO-R NEWARK

2.9

CENTERVILLE

1.6

SHINN

0.8

W. P. Crossing

TO-R NILES TOWER

0.5

NILES JUNCTION

0.5

TO-R NILES

0.0

Automatic Block System

D. T.

TO-R REDWOOD JCT.
1.3End of Double Track
2.0

HENDERSON

4.4

DUMBARTON

3.3

TO-R NEWARK

2.9

CENTERVILLE

1.6

SHINN

0.8

W. P. Crossing

TO-R NILES TOWER

0.5

NILES JUNCTION

0.5

TO-R NILES

0.0

Automatic Block System

D. T.

TO-R REDWOOD JCT.
1.3End of Double Track
2.0

HENDERSON

4.4

DUMBARTON

3.3

TO-R NEWARK

2.9

CENTERVILLE

1.6

SHINN

0.8

W. P. Crossing

TO-R NILES TOWER

0.5

NILES JUNCTION

0.5

TO-R NILES

0.0

Automatic Block System

D. T.

TO-R REDWOOD JCT.
1.3End of Double Track
2.0

HENDERSON

4.4

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3.3

TO-R NEWARK

2.9

CENTERVILLE

1.6

SHINN

0.8

W. P. Crossing

TO-R NILES TOWER

0.5

NILES JUNCTION

0.5

TO-R NILES

0.0

Automatic Block System

D. T.

TO-R REDWOOD JCT.
1.3End of Double Track
2.0

HENDERSON

4.4

DUMBARTON

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TO-R NEWARK

2.9

CENTERVILLE

1.6

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0.8

W. P. Crossing

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NILES JUNCTION

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Automatic Block System

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W. P. Crossing

TO-R NILES TOWER

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NILES JUNCTION

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Automatic Block System

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TO-R REDWOOD JCT.
1.3End of Double Track
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SHINN

0.8

W. P. Crossing

TO-R NILES TOWER

0.5

NILES JUNCTION

0.5

TO-R NILES

0.0

Automatic Block System

D. T.

TO-R REDWOOD JCT.
1.3End of Double Track
2.0

HENDERSON

4.4

DUMBARTON

3.3

TO-R NEWARK

2.9

CENTERVILLE

1.6

SHINN

0.8

W. P. Crossing

TO-R NILES TOWER

0.5

NILES JUNCTION

0.5

TO-R NILES

0.0

Automatic Block System

D. T.

TO-R REDWOOD JCT.
1.3End of Double Track
2.0

HENDERSON

4.4

DUMBARTON

3.3

TO-R NEWARK

2.9

CENTERVILLE

1.6

SHINN

0.8

W. P. Crossing

TO-R NILES TOWER

0.5

NILES JUNCTION

0.5

TO-R NILES

0.0

Automatic Block System

D. T.

TO-R REDWOOD JCT.
1.3End of Double Track
2.0

HENDERSON

4.4

DUMBARTON

3.3

TO-R NEWARK

2.9

CENTERVILLE

1.6

SHINN

0.8

W. P. Crossing

TO-R NILES TOWER

0.5

EASTWARD

Los Banos Subdivision

WESTWARD

Capacity of Sidings in Car Lengths	SECOND CLASS			FIRST CLASS			Distance from San Francisco via Antioch
	428	402	400	Mdse.	26	Owl	
	Leave Daily	Leave Daily Ex. Monday	Leave Daily Ex. Sunday and Monday		Leave Daily		
Term. Yard BKWOTY P	11.30 AM	1.40 AM	12.30 AM		8.53 PM	82.2	
40 I P	11.37	1.47	12.35		8.59	84.9	
49 P	11.43	1.52	12.40			87.9	
49 P	11.52 AM	2.00	12.47		9.09	92.6	
P						94.9	
39 P						96.4	
103 WP	12.04 PM	2.12	12.59		9.18	100.4	
48 P	12.17	2.23	1.08		9.27	107.4	
47 P	12.27	2.33	1.16		9.34	113.2	
43 P						117.3	
51 WP	12.40	2.44	1.24		f 9.42	119.5	
47 P	12.48	2.50	1.30		s 9.56	123.5	
35						126.9	
64 P	12.58	2.59	1.38		10.04	129.3	
50 P	1.08	3.09	1.47		10.12	135.6	
77 BKWOY P	1.35	3.30	2.02		s 10.21	140.4	
49 P	1.50	3.45	2.15		10.30	148.3	
92 P	2.01	4.08	2.22		10.37	153.0	
36 P	2.13	4.25			10.46	159.8	
103 WP	2.24	4.35	2.40		10.56	166.2	
39 P	2.31	4.42	2.46		11.02	170.8	
89 P	2.37	4.49	2.52		11.07	174.5	
37 P	2.50	5.04	3.04		11.18	181.9	
40 P	2.54	5.08	3.27		11.21	184.5	
42 WY P	3.10	5.30	3.45		11.32	193.0	
52						196.7	
39 P	3.25	5.38	3.53		11.40	198.5	
40 P	3.35	5.45	4.00		11.46	202.5	
Term Yard BKWOTY P	3.50 PM	6.00 AM	4.15 AM		s 11.59 PM	208.4	
	Arrive Daily	Arrive Daily Ex. Monday	Arrive Daily Ex. Sunday and Monday		Arrive Daily		
	(4.20) 29.12	(4.20) 29.12	(3.45) 33.65		(3.06) 40.71		

Time Table No. 229

August 1, 1939

STATIONS

TO-R	TRAICY	2.7	Distance from Fresno	FIRST CLASS	25	403	401	THIRD CLASS
	W. P. Crossing LYOTH	3.0			s 5.55 AM	8.40 PM	11.10 PM	
	YARMOUTH	4.7			126.2			
	VERNALIS	2.3			123.5			
	SOLYO	1.5			120.5			
	HALLY	4.0			115.8			
	WESTLEY	7.0			113.5			
	TO PATTERSON	5.8			108.0			
	CROWS LANDING	4.1			101.0			
	TIMBA	2.2			95.2			
	TO NEWMAN	4.0			91.1			
	GUSTINE	3.4			88.9			
	LINORA	2.4			84.9			
	INGOMAR	6.3			81.5			
	VOLTA	4.8			79.1			
	TO-R LOS BANOS	7.9			72.8			
	AGATHA	4.7			68.0			
	DOS PALOS	6.8			60.1			
	OXALIS	6.4			55.4			
	TO FIREBAUGH	4.6			48.6			
	OROMIR	3.7			42.2			
	TO MENDOTA	7.4			37.6			
	INGLE	2.6			33.9			
	JAMESAN	8.5			26.5			
	TO-R KERMAN	3.7			23.9			
	FLOYD	1.8			15.4			
	ROLINDA	4.0			11.7			
	PRATTON	5.9			9.9			
	TO-R FRENO	0.0			5.9			
	(126.2)				0.0			
	Time over District.....				2.55 AM	4.30 PM	7.00 PM	
	Average Speed per Hour.....				Leave Daily	Leave Daily Ex. Sunday	Leave Daily	
					(3.00) 42.06	(4.10) 30.28	(4.10) 30.28	

EASTWARD Los Banos Subdivision WESTWARD

Time Table No. 229
August 1, 1939

STATIONS

Capacity of Sidings in Car Lengths	Distance from San Francisco Via Antioch	EASTWARD	Los Banos Subdivision	WESTWARD
42 KWY P	193.0	TO-R	KERMAN	15.6
8 P	200.5	TO	BIOLA	8.1
	202.0		TRUMAN	6.6
	204.0		EVERTS	4.6
	206.0		WEST ACRES	2.6
P	208.6		BIOLA JUNCTION	0.0
			(15.6)	

EASTWARD Los Banos Subdivision WESTWARD

Time Table No. 229
August 1, 1939

Kerman Branch

Capacity of Sidings in Car Lengths	Distance from San Francisco Via Antioch	EASTWARD	Los Banos Subdivision	WESTWARD
42 WY P	193.0	TO-R	KERMAN	17.70
	199.7		MC MULLIN	11.00
24	205.1		RAISIN CITY	5.6
48	210.7		CARUTHERS	0.0
			(17.7)	

ADDITIONAL STATIONS

Los Banos Line

Ohm.....	M. P. 93.5
Vanormer.....	M. P. 104.8
Stomar.....	M. P. 116.0
Trent.....	M. P. 138.3
Abatto.....	M. P. 141.6
Brito.....	M. P. 149.6
Silaxo.....	M. P. 161.6
Benito.....	M. P. 169.0
Arbios.....	M. P. 172.8
pKearney.....	M. P. 200.8 (Spur)
Forsey.....	M. P. 203.7 (Spur)
Crayold.....	M. P. 205.3 (Spur)

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS				
Train	At	Receive or Discharge	To (or beyond)	From (or beyond)
26	Solyo, Patterson, Dos Palos, Firebaugh, Mendota and Kerman	Receive and Discharge	Fresno	Martinez Tracy
26	(4.20) 29.12	(3.45) 33.65	(3.06) 40.71	

EASTWARD

Lathrop Subdivision

Capacity of Sidings in Car Lengths	THIRD CLASS			SECOND CLASS			FIRST CLASS								Distance from San Francisco Via Niles	
	454	421	410	280	232	52	54	59	58	50						
	Freight	Freight	Freight	Stockton	Passenger	San Joaquin	Passenger	West Coast	Sequoia	Sequoia	Leave Daily Ex. Sunday	Leave Monday Only	Leave Daily Ex. Monday	Leave Daily		
Term Yard BKWOTYP				Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	2.30 AM	1.30 AM	8.28 PM	6.40 PM	9.47 AM	
P														8.57 AM	2.15 AM	
Spur															1.55 AM	
I P															70.8	
Eastward 57 Westward 77 Fresno 50 WY I P	3.00	10.55 PM	9.20 AM	2.00 AM	8.43	s 7.10	10.03 AM	s 9.13 AM	6.50 AM	f 2.31 AM	f 2.11 AM				73.9	
P															76.8	
I															78.3	
I Yard BKWOTYP	3.30 AM	11.20 PM	9.45		s 8.55	s 7.25			s 7.05						81.5	
P					9.05	7.35			7.20						86.1	
I P															87.7	
Spur P															90.9	
Spur															92.3	
W															92.7	
P															93.5	
125 P															94.9	
Spur															95.0	
125 P															96.6	
BKWOTYP 125					s 9.30 PM	s 8.00			s 7.45						98.1	
Spur P															100.2	
125 P															103.3	
125 P															105.1	
125 P															106.2	
125 P															109.5	
WYP 176						s 8.22			s 8.00						111.7	
125 P															115.8	
P															117.5	
128 P															119.5	
133 P						f 8.40			8.14						122.9	
125 P															125.7	
135 WP						f 8.50			8.22						129.0	
P															132.0	
WP						f 9.00 PM			8.30 AM						133.2	
	Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Monday Only				(62.4)	
	(1.00) 20.10	(1.45) 29.54	(1.45) 29.54	(0.30) 21.40			(1.02) 31.45	(2.20) 26.89	(0.16) 40.12	(0.16) 40.12	(1.40) 31.02	(0.16) 40.12	(0.16) 40.12		Time over District Average Speed per Hour.....	

Single track over San Joaquin River Drawbridge; trains will be governed by interlocking signals.

No. 59 reduce speed to 15 M. P. H. at Acampo to dispatch mail.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS				
Train	At	Receive or Discharge	To or Beyond	From or Beyond
59 59	Any Station Any Station	Receive Discharge	Beyond Sacramento	Fresno

Time Table No. 229

August 1, 1939

STATIONS

TO-R TRACY	3.1
BANTA	2.9
WINSHIP	1.5
SAN JOAQUIN RIVER DRAWBRIDGE	3.2
TO-R LATHROP	4.6
FRENCH CAMP	1.6
T. S. Ry. Crossing	3.2
A. T. & S. F. Crossing	
S. E. R. R. Crossing	
TO-R STOCKTON	1.4
STOCKTON TOWER No. 4	
W. P. Crossing	0.4
EL PINAL	0.8
JARN	1.4
AKERS	0.1
End of Double Track	
CASTLE	1.5
TOMSPUR	2.1
ARMSTRONG	3.1
C. C. T. Co. Crossing LODI	1.8
URGON	1.1
ACAMPO	3.3
FOREST LAKE	2.2
GALT	3.8
NEED	2.0
ARNO	2.0
McCONNELL	3.4
ELK GROVE	2.8
MEADOWS	3.3
FLORIN	3.0
POLK	1.2
BRIGHTON	

Centralised Traffic Control System

Lathrop Subdivision											WESTWARD			EASTWARD			Lathrop Subdivision			
FIRST CLASS											SECOND CLASS			THIRD CLASS			STATIONS			
Distance from Brighton	279 Stockton	231 Passenger	55 Tehachapi	51 San Joaquin	53 Passenger	60 West Coast		405 Freight	420 Freight	455 Freight					Capacity of sidings in car lengths		Time Table No. 229 August 1, 1939			
Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily Ex. Sunday					Distance from San Francisco via Niles		Lodi Branch			
TO-R TRACY 3.1	62.4 s 7.26 AM	s 9.43 AM	s 10.02 AM	s 6.29 PM	s 7.21 PM			9.10 PM		8.00 PM					BKWOYP	103.3	TO-R LODI 1.8	39.3		
BANTA 2.9	59.3 f 9.37															105.1	C. C. T. Co. Crossing 0.1	37.5		
WINSHIP 1.5	56.4														10	105.2	ROMA 1.9	37.4		
SAN JOAQUIN RIVER DRAWBRIDGE 3.2	54.9														17 P	107.1	VICTOR 3.6	35.5		
TO-R LATHROP 4.6	51.7 7.12	s 9.25	9.46 AM	6.13 PM	7.05 PM	9.43 PM		8.40 PM	11.15 PM	7.25					P	110.7	LOCKEFORD 4.0	31.9		
FRENCH CAMP 1.6	47.1 f 9.08														P	114.7	CLEMENTS 6.1	27.9		
T. S. Ry. Crossing 3.2	45.5														P	120.8	WALLACE 5.6	21.8		
A. T. & S. F. Crossing S. E. R. R. Crossing															P	126.4	HELISMA 2.9	16.2		
TO-R STOCKTON 1.4	42.8 s 6.57	s 8.50					s 9.13		10.50	7.05 PM					P	129.3	NORVAL 0.9	13.3		
STOCKTON TOWER No. 4 W. P. Crossing 0.4	40.9														17 P	130.2	TO VALLEY SPRING 4.5	12.4		
EL PINAL 0.8	40.5														9 P	134.7	TOYON 4.3	7.9		
JARN 1.4	39.7														P	139.0	MACNIDER 3.6	3.6		
AKERS 0.1	38.3														YWP	142.6	KENTUCKY HOUSE 0.0	0.0		
End of Double Track	38.2															39.3)				
CASTLE 1.5	36.6																			
TOMSPUR 2.1	35.1																			
ARMSTRONG 3.1	33.0																			
C. C. T. Co. Crossing LODI 1.8	29.9 6.40 AM	s 8.32					s 8.54													
URGON 1.1	28.1																			
ACAMPO 3.3	27.0 f 8.22																			
FOREST LAKE 2.2	23.7 f																			
GALT 3.8	21.5 s 8.17						8.38													
NEED 2.0	17.7 f																			
ARNO 2.0	15.7 f																			
MCCONNELL 3.4	13.7 f																			
ELK GROVE 2.8	10.3 s 8.03						8.26													
MEADOWS 3.3	7.5																			
FLORIN 3.0	4.2 s 7.56						8.20													
POLK 1.2	1.2																			
BRIGHTON	0.0		7.50 AM				8.15 PM		9.30 PM											
(62.4)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sunday	Leave Daily	Leave Daily Ex. Sunday										
Time over District.....		(0.46)	(1.53)	(0.16)	(0.16)	(0.16)	(1.28)	(0.30)	(21.40)	(1.45)	(1.00)									
Average Speed per Hour.....		42.39	33.13	40.12	40.12	40.12	35.25			29.54	20.10									
Single track over San Joaquin River Drawbridge; trains will be governed by interlocking signals.											ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE PASSENGERS			Time Table No. 229 August 1, 1939			Lathrop Subdivision			
No. 60 will not stop at station at Lathrop but will use east leg of wye to the Merced Subdivision.											Train	At	Receive or Discharge	To or Beyond	From or Beyond	Distance from San Francisco via Niles	Distance from Woodbridge	TO-R GALT 5.0	27.1	
No. 60 reduce speed to 15 miles per hour at Elk Grove to dispatch mail.											60	Any Station	Receive	Modesto	Roseville			C. C. T. Co. Crossing VANSTOW 5.3	22.1	
											60	Any Station	Discharge					OILAY 10.3	16.8	

EASTWARD

Capacity of sidings in car lengths	SECOND CLASS				FIRST CLASS				
		420 Freight	410 Freight		60 West Coast	52 San Joaquin	54 Passenger	58 Sequoia	50 Sequoia
		Leave Daily	Leave Daily Ex. Sunday		Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Monday	Leave Monday Only
Eastward 57 Fresno 50 IWP		11.15 PM	2.00 AM		9.43 PM	10.04 AM	9.25 AM	2.31 AM	2.11 AM
I P		11.35	2.20		s 9.53		9.37	s 2.42	s 2.20
74 P		11.40	2.30		9.56	10.12	9.42	2.45	2.23
118 P		11.46	2.40		10.00			s 2.53	s 2.31
78 P		11.51 PM	2.50		10.04	10.19	9.49	s 3.01	s 2.37
87 P									
No. 1, 98 No. 2, 113 No. 3, 127 BKWYP		12.05 AM	3.15		s 10.17	s 10.31	s 10.03	s 3.23	s 2.58
I P									
70 P		12.15	3.25		10.24	10.36	10.09	s 3.33	s 3.07
67 P		12.20	3.30		10.28			3.38	3.12
81 BP		12.30	3.45		s 10.38	s 10.47	s 10.22	s 3.52	s 3.26
92 P		12.40	4.00		10.46		10.28	f 4.00	f 3.34
79 WP		12.48	4.25		f 10.54	10.58	10.35	s 4.09	s 3.44
70 P		1.00	4.50		f 11.04	11.05	10.44	f 4.22	f 3.54
33									
130 P		1.08	5.00		11.09		10.48		
90 BKWOTP		1.40	5.15 AM		s 11.30	s 11.15	s 10.57	s 5.00	s 4.15
70 P		2.10			11.40	11.21	11.04	f 5.18	f 4.25
74 P		2.20			11.44			f 5.26	f 4.30
70 P		2.32			11.51	11.31	11.14	f 5.33	f 4.37
37 WP					f 11.55 PM			s 5.37	s 4.41
74 P		2.42				12.01 AM	11.37	11.20	f 5.44
69 WTP		2.49						f 4.47	f 5.48
100 P		2.55			12.07	11.43	11.26	5.51	5.07
145 P		3.07			s 12.16	s 11.50	s 11.35	s 6.01	s 5.16
75 P		3.20			12.23	11.57 AM	11.42	6.09	5.24
78 WP		3.29			12.29	12.03 PM	11.48	f 6.17	f 5.31
P									
Term. Yard WP		3.40			12.36	12.10	11.55 AM	6.23	5.38
Term. Yard BKWOTY P		4.00 AM			s 12.48 AM	s 12.20 PM	s 12.05 PM	s 6.35 AM	s 5.50 AM
	Arrive Daily	Arrive Daily Ex. Sunday			Arrive Daily	Arrive Daily	Arrive Daily Ex. Monday	Arrive Monday Only	
	(4.45) 24.05	(3.15) 17.72			(3.05) 36.52	(2.16) 49.67	(2.40) 42.22	(4.04) 27.69	(3.39) 30.84

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS

Train	At	Receive or Discharge	To (or beyond)	From (or beyond)
54	Manteca, Ripon, Salida, Ceres, Livingston, Atwater, Chowchilla	Receive Discharge	Bakersfield	Lathrop Stockton
60	Any station	Discharge	Lathrop	Bakersfield
55	Chowchilla, Atwater, Livingston and Manteca	Receive and Discharge		

Merced Subdivision

WESTWARD

Distance from San Francisco Via Antioch	Time Table No. 229 August 1, 1939					Distance from Fresno	FIRST CLASS					423 Freight	SECOND CLASS					
	STATIONS						Arrive Daily	59 West Coast	55 Tehachapi	51 San Joaquin	53 Passenger		405 Freight	421 Freight	421 Freight			
	TO-R LATHROP	0.9 W. P. Crossing	3.0	TO MANTECA	2.6			6.13 PM	s 6.50 PM	9.20 AM	8.35 PM	10.55 PM						
92.9	93.8	108.7	106.1	102.2	99.1	92.4	TO-R MODESTO	1.6	T. S. Ry. Crossing	2.7	9.37	6.43	9.08	8.25	10.45			
112.6	111.7	108.7	106.1	102.2	99.1	92.4	TO-R MODESTO	1.6	T. S. Ry. Crossing	2.7	9.37	6.43	9.08	8.25	10.45			
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	ORES	3.4	6.05	8.20	6.35	9.48				
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	KEYES	5.4	6.01	8.15	6.29	9.42				
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	DELHI	4.5	8.43	7.57	6.03	9.20				
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	LIVINGSTON	6.8	8.38	7.50	5.56	9.09				
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	ATWATER	1.6	5.39	7.40	5.45	8.59				
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	BUHACH	2.6		7.32	5.37	8.52				
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	FERGUS	3.1		7.32	5.37	8.52				
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	MEROED	6.1	5.37	8.24	7.26	5.30 PM	8.47			
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	LINGARD	3.9	5.18		7.12		8.32			
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	ATHLONE	6.4	5.14	8.06	7.05		8.26			
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	MINTURN	1.3	5.08	8.00	4.56	6.55		8.16		
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	CHOWCHILLA	4.8		4.54						
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	FAIRMEAD	3.5	5.02	4.38	6.46		8.06			
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	BERENDA	2.7	4.58	7.50				6.37		
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	NOTARB	4.7	4.55					6.32		
114.7	117.4	120.8	131.9	136.4	144.8	150.5	TO-R TURLOCK	5.7	MADERA	6.3	4.49	7.43	6.24			7.47		
114.7	117.4	120.8	131.9	136.4	144.8	150.5</												

EASTWARD			Merced Subdivision			WESTWARD			EASTWARD			Merced Subdivision			WESTWARD		
Capacity of sidings in car lengths			THIRD CLASS			Distance from San Francisco Via Niles	Time Table No. 229 August 1, 1939	Oakdale Branch	THIRD CLASS			Distance from Merced	Time Table No. 229 August 1, 1939	Raymond Branch	THIRD CLASS		
			454 Freight			Leave Daily Ex. Sunday			455 Freight			Arrive Daily Ex. Sunday			20.9		
Yard BKWOTY P			4.00 AM	90.9	TO-R STOCKTON W. P. Crossing C. C. T Co. Crossing 5.1	72.0	6.30 PM		WT P			176.5	R BERENDA 3.3	20.9			
Spur				96.0	ORFORD 0.7	66.9			I			179.8	TO KISMET TOWER A. T. & S. F. Crossing 4.0	17.6			
Spur			4.13	96.7	CHARLESTON 1.0	66.2	6.15					183.8	TALBOT 4.1	13.6			
Spur				97.7	SIBLEY 0.6	65.2						187.9	DAULTON 2.9	9.6			
Spur				98.3	WALTHALL 2.3	64.6						190.8	JESBEL 4.2	6.6			
Spur				100.6	HOLDEN 3.2	62.3						195.0	HERBERT 1.2	2.4			
23 WYP			4.30	103.8	PETERS 4.4	59.1	6.00		WTP			196.2	KNOWLES JCT. 1.2	1.2			
P			4.45	108.2	FARMINGTON 3.3	54.7	5.47					(20.9)	RAYMOND 0.0	0.0			
Spur				111.5	GOTRI 2.6	51.4											
16			4.50	114.1	COMETA 2.6	48.8	5.32										
P			5.00	116.7	VALLEY HOME 3.9	46.2	5.25										
Spur				120.6	ADELA 1.8	42.3											
47 WP			5.30 AM	122.4	TO-R OAKDALE A. T. & S. F. Crossing 3.9	40.5	5.00 PM										
44				126.3	OLARIBEL 6.1	36.6											
P				132.4	TO WATERFORD 1.6	30.5											
P				134.0	HICKMAN 5.8	28.9											
34 P				139.8	MONTPELLIER 6.2	23.1											
14 P				146.0	RYER 1.5	16.9											
Spur P				147.5	BASEL 1.3	15.4											
P				148.8	ABUNDDEL 3.7	14.1											
18 P				152.5	AMSTERDAM 4.7	10.4											
P				157.2	NAIRN 1.0	5.7						196.2	KNOWLES JCT. 2.0	2.8			
Spur				158.2	FERRIN 1.7	4.7						198.2	HILLSIDE 0.3	0.3			
I				159.9	BATTURS 1.2	3.0						198.5	KNOWLES 0.0	0.0			
1				161.1	A. T. & S. F. Crossing 1.8	1.8						(2.3)					
BKWOTP				162.9	TO-R MEROED 0.0	0.0											
					(72.0)		Leave Daily Ex. Sunday										
					..... Time over District.....												
					..... Average Speed per Hour												
					(1.30)												
					21.00												

EASTWARD			Merced Subdivision			WESTWARD			EASTWARD			Merced Subdivision			WESTWARD		
Capacity of sidings in car lengths			Distance from San Francisco Via Niles			Distance from Milton			Capacity of sidings in car lengths			Distance from San Francisco Via Antioch			Distance from Dairyland		
23 WYP			103.8		PETERS 5.7	11.5			37 WP			168.2	TO CHOWCHILLA 4.4	10.1			
T			109.5		WAVERLY 5.8	5.2			Spur			172.6	ASH 1.5	5.7			
			115.3		MILTON (11.5)	0.0						174.1	OVEJA 1.2	4.2			
												175.3	TILLMAN 1.9	3.0			
									Spur			177.2	PLAINS 1.1	1.1			
												178.3	DAIRYLAND (10.1)	0.0			

EASTWARD			Merced Subdivision			WESTWARD					
Capacity of sidings in car lengths			Distance from San Francisco Via Antioch			Capacity of sidings in car lengths			Distance from Raymond		

DIVISION MILEAGE

MAIN LINES

Oakland Pier to West Oakland.....	C. P. Ry.....	1.01
West Oakland to Washington, via Martinez.....	S. P. R. R.....	86.20
Davis to end Western Division.....	S. P. R. R.....	1.32
Martinez to Tracy.....	S. P. R. R.....	47.62
Tracy to Biola Junction.....	C. P. Ry.....	116.89
Oakland Pier to Tracy, via Niles.....	C. P. Ry.....	67.45
Lathrop to Polk.....	C. P. Ry.....	50.30
Elmhurst to Santa Clara.....	S. P. C. Ry.....	30.26
End Coast Division to Niles Junction.....	C. P. Ry.....	14.85
Niles to San Jose.....	C. P. Ry.....	16.08
Tracy to Fresno.....	S. P. R. R.....	124.18
Kerman to Biola Junction.....	(S. P. R. R.....) (F. T. Co.....)	5.84 8.69
Total Main Lines.....		570.89

BRANCHES

Alvarado.....	C. P. Ry... Halvern to Alvarado.....	2.63
Capay.....	S. P. R. R... Elmira to Capay.....	33.17
Chowchilla.....	V. E. R. R... Chowchilla to Dairyland.....	10.23
Ione.....	S. P. R. R... Galt to Ione.....	26.91</td

SPECIAL INSTRUCTIONS



RULE 2. Designated Watch Inspectors:
 S. A. Pope, Manager of Time Service, 65 Market Street, San Francisco.
 Oakland.....E. W. Becker, 3357 E. 14th St.
 Oakland.....H. Bullard, 1194 Seventh Street
 Oakland.....E. S. Griffin, 214 Easton Bldg.
 Oakland.....Don J. Allphin, 5836 Foothill Blvd.
 Alameda.....A. O. Gott
 Berkeley.....W. R. Burke, 2199 Shattuck Avenue
 Berkeley.....Ernest L. Dorrett, 1823 Solano Avenue
 Richmond.....O. A. Poulsen
 Stockton.....C. Mantele, 129 N. Sutter St.
 Lodi.....Jack Labes
 Benicia.....Curt S. Appel
 Suisun-Fairfield.....Chas. J. Wiener
 Vallejo.....G. E. Bangle Co.
 Calistoga.....Albert Mercer
 Winters.....C. E. Wyatt
 Sacramento.....H. T. Harger, 1022 K St.
 Roseville.....H. T. Harger
 Martinez.....John G. Beard
 Pittsburg.....H. A. Minasian
 Tracy.....R. Von Dack & Son
 Livermore.....C. Harlie Power
 San Jose.....Kochers, 169 So. First St.
 San Jose.....W. H. Turick, 275 So. First St.
 Newman.....Ernest Beall
 Los Banos.....John B. Machado
 Fresno.....Bert Fuller, 1335 Fulton St.
 Fresno.....A. L. Colvin, 1211 Fulton St.
 Madera.....Robert J. Wellman
 Merced.....R. C. Haun
 Modesto.....W. P. Shoemake
 Turlock.....D. F. Hall

RULE 4. Designated Holidays:

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

RULE 10 (J). Round yellow slow boards indicate by black figures the speed restrictions applying to Diesel-powered streamlined trains "CITY OF SAN FRANCISCO" and to trains Nos. 51, 52, 53 and 54 between M. P. 43.5 and Tracy and between Lathrop and Fresno when handled by P-10 class or lighter engines which have been cross counterbalanced for speeds of 75 M.P.H. or over. Speeds indicated by oval white slow boards apply to those trains unless a round yellow slow board authorizing a higher speed is displayed on same post below the oval slow board.

RULE 14 (d). As specified below, four long and one short sounds of whistle will be indication that flagman may return from West as prescribed by Rule 99:

Martinez, Trains on Tracy line.
 Newark and Santa Clara, Trains on Elmhurst-Santa Clara line.
 Niles, Trains on Oakland-Tracy line.
 Merced, Trains on Oakdale line.
 Fresno, Trains on Los Banos Subdivision.
 Biola Jet., Trains on Los Banos Subdivision.

RULE 14 (e). As specified below, six long sounds of whistle will be indication that flagman may return from East as prescribed by Rule 99:

Martinez, Trains on Tracy line.
 Elmhurst, Newark and Santa Clara, Trains on Elmhurst-Santa Clara line.
 Niles, Trains on Milpitas line.
 Napa Jct., Trains on Schellville line.
 Suisun-Fairfield, Trains on Napa Jct. line.
 Davis, Trains on Woodland line.
 Galt, Trains on Ione line.
 Lodi, Trains on Valley Spring and Woodbridge lines.
 Stockton, Trains on Merced Subdivision.
 Peters, Trains on Milton line.
 Lathrop, Trains on Merced Subdivision.
 Tracy, Trains on Los Banos Subdivision.
 Berenda, Trains on Raymond line.
 Kerman, Trains on Biola line.

Ingle, Trains on Riverdale line.
RULE 14 (f). Whistle signal must be sounded and bell kept ringing when entering or leaving the Sugar Co.'s yard at Alvarado or approaching their road crossing.

RULES 17 and 17 (C). Headlights of engines standing at the end of wharf at Oakland Pier must be concealed when steamers are entering slip. Headlights of eastward trains must be concealed while standing at Oakland Pier and must be dimmed until Oakland Pier tower has been passed.

RULES 17 and 19. Night signals will be displayed through tunnels.

RULE S-17. In limits of Centralized Traffic Control System this rule will not apply to movement on controlled sidings.

RULE 21 (C). Passenger engines to handle trains from Oakland Pier may display indicators before leaving West Oakland.

Indicators of engines on trains arriving Oakland Pier may be displayed until engine reaches roundhouse at West Oakland, where same must be removed immediately on arrival at delivery track.

RULE 28. In double track territory signals will be placed to right of track according to direction of movement of train to be flagged. Trains in opposite direction will not be required to observe signals so placed.

RULE 30. Between the hours of 9:00 p. m. and 6:00 a. m. engine bells must not be rung except in emergency while passing through or switching in city limits of Napa.

RULE D-71. Trains and engines may move between Oakland Pier and Elmhurst with the current of traffic irrespective of timetable superiority.

Freight trains and yard engines must not leave Magnolia Tower with less than five minutes clearance ahead of first-class trains and must avoid delaying passenger trains.

Westward trains arriving Stockton Tower No. 4 will continue to Stockton Station irrespective of timetable superiority moving with current of traffic.

Trains may move between Brighton and Polk irrespective of timetable superiority when signal indication permits them to proceed.

Trains and engines may move between Calwa Tower and Clinton Avenue Fresno Yard with the current of traffic irrespective of timetable superiority, but must avoid delaying passenger trains.

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

RULE 83. A positive observation check may be made by westward trains on double track between Fresno and Fresno Yard, to be applied at end of double track.

Trains approaching each other between these stations must reduce speed sufficiently to permit identification.

Eastward trains must comply with Rule 14 (k) when approaching trains on opposite track.

Westward trains receiving proceed indication through West Zone, or permission from Signal Operator to pass Signal SA813 if displaying "STOP", will move from Lathrop to Tracy irrespective of timetable superiority. Eastward trains on receiving proceed indication through East Zone, or, if in siding, at Signal 828, or permission from Signal Operator to pass that signal if displaying "STOP" will move from Lathrop to Tower No. 4, Stockton, irrespective of timetable superiority.

RULES 83 and 83 (A). Westward second class, third class and extra trains passing Sacramento will not comply with Rules 83 and 83 (A) at Sacramento.

A proceed signal from switch tender at Front Street, Sacramento, green flag by day or green light by night, and in addition proceed indication displayed in Signal SA 887 located at east end of Sacramento River Bridge, will be authority for westward second class, third class and extra trains to move irrespective of time-table superiority from Sacramento to Davis train order office.

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

Modesto.....Sacramento 12th St. Avon.....Pittsburg
 Turlock.....Newark.....Los Banos.....Suisun-Fairfield
 Davis.....Port Costa.....Livermore.....West Oakland

At Sacramento: First-class trains and passenger extras register at Passenger Station.

At Ingle: Trains originating and terminating.

At Kerman: Trains originating and terminating.

At Martinez: Westward trains and trains originating and terminating.

At Oakdale: Trains originating and terminating.

Extra trains will register at Stockton, Lathrop, Merced, Napa Junction, Niles Tower and Niles.

Rules 83 (A) and 83 (D) will not apply to Merced Subdivision trains originating or terminating at Lathrop when using east leg of wye.

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

Elmhurst.....	Regular Trains
Niles.....	Nos. 279 and 280
Niles Tower.....	All Trains
Redwood Junction.....	All Trains
Newark.....	Nos. 259, 258, 407 and 406
Santa Clara.....	All trains at Santa Clara Tower
Martinez.....	Westward Trains

RULE 83 (B).—Continued.

Stockton.....Second class and extra trains except those originating and terminating
 Lathrop.....All trains on Lathrop Subdivision
 Merced subdivision trains originating or terminating at Lathrop using west leg of wye.
 Merced, All trains except those originating and terminating Davis.....Nos. 23 and 24

RULE 83 (D). Western Division trains via Agnew receiving train orders at San Jose Passenger Station applying to Western Division will not comply with Rule 83 (D) at Santa Clara Tower.

Western Division trains, via Sacramento or Brighton (except first-class), originating at Roseville, will obtain separate Sacramento and Western Division clearances and receive their train orders applying to Western Division at Roseville, and will not comply with Rule 83 (D) at Sacramento.

Trains originating Sacramento will obtain clearance at Sacramento "H" office located on second floor of Sacramento Passenger Station.

Rule 83 (D) will not apply to westward trains from Merced subdivision at Lathrop when there are no train orders to be delivered to such trains at Lathrop.

RULE 83 (E). A train when authorized by train order, may check the register against an extra train, and proceed if such extra train appears on the register with the number and date of its restricting order registered in column captioned "Signals".

When a train is so authorized to check the register, it must register and place the restricting order number and date in column captioned "Signals."

RULE 84. Proceed signal 12 (c) must be used to start trains from Oakland Pier except Streamliner "CITY OF SAN FRANCISCO" and the "FORTY-NINER" when communicating signal may be used.

RULES 86 and 87. Second and inferior class trains and extra trains must clear time of Streamliner "CITY OF SAN FRANCISCO" No. 101 and No. 102 not less than fifteen (15) minutes.

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

Oakland	Port Chicago	Fresno	Los Banos
Port Costa	Pittsburg	Redwood Jct.	Kerman
Suisun-Fairfield	Tracy	Newark	Oakdale
Davis	Lathrop	Niles	Valley Spring
Sacramento	Modesto	Livermore	Kentucky House
South Vallejo	Turlock	Stockton	Ione
Napa Jct.	Merced	Lodi	Raymond
Napa	Madera	Galt	San Jose
Calistoga	Schellville		

Oakland Yard: Between Oakland Pier and yard limit sign east of South San Leandro and yard limit sign east of Elmhurst on Elmhurst-Santa Clara line, Stonehurst, San Pablo, including Richmond Transfer and Richmond Belt Railway and Interurban Electric lines.

Port Costa Yard: Extends from Mile Post 28.2 west of Crockett to Mile Post 37.2 west of Avon, Martinez to Benicia Junction and Benicia Junction to Benicia.

Tracy: Eastward passenger trains arriving Tracy via Port Costa line must obtain signal from Yardmaster or his representative before passing Signal 820 located just west of "C" Street crossing.

Eastward passenger trains arriving Tracy via Niles line must receive signal from Yardmaster or his representative before passing Signal 704.

Fresno Yard: Limits are defined by yard limit signs at the following points:

Kerman Line.....	Mile Post 206.32.
Merced Line.....	Mile Post 199.08.
Bakersfield Line.....	Mile Post 210.81.
Exeter Main Track.....	Mile Post 208.15.
Clovis Branch.....	Mile Post 209.6.

Westward trains or engines must receive proceed signal from yardman at Kern Street; and Eastward trains or engines must receive proceed signal from yardman at Merced Street.

Trains arriving and departing via Los Banos line at Fresno will receive proceed signal from herald at Divisadero Street, green flag by day and green light by night.

Trains or engines will not move against current of traffic on double track between Divisadero Street and Clinton Avenue and between Cherry Avenue and Calwa Tower, Fresno, except on authority of Yardmaster. When making movements against current of traffic, trains or engines must be preceded by flagman over railway and street crossings at grade where wigwags are installed, protecting these crossings during movements.

Within yard limits, engines must clear the main track not less than fifteen (15) minutes for Streamliner "CITY OF SAN FRANCISCO" No. 101 and No. 102.

RULE 95. Train Orders issued under Form F reading to or from Santa Clara will apply over the Coast Division into and out of San Jose.

SPECIAL INSTRUCTIONS

RULE D-97 (A). Will apply on double track between Oakland Pier and Sacramento and between Oakland Pier and Elmhurst and between Tracy and Stockton Tower No. 4, and between Martinez and Mococo.

RULE 98. RAILROAD CROSSINGS AT GRADE NOT INTERLOCKED:

Napa Valley Railway, 1900 feet east of Napa Junction on Schellville line, STOP.
 Napa Valley Railway, 3600 feet east of Napa Junction on Napa line, STOP.
 Napa Valley Railway, 3200 feet west of Union, on Buchli-Union line, STOP.
 Napa Valley Railway, 600 feet west of Napa, on Napa line, STOP.
 Sacramento Northern Railway, 4000 feet east of Hookston on Avon-Radum line, STOP.
 A. T. & S. F. R. R. at Oakdale, STOP.
 Central California Traction Co. at Roma, STOP.
 Central California Traction Co. at Vanstow, STOP.
 Western Pacific Railway, between Elmhurst and Stonehurst, STOP.
 Western Pacific Railway at 42nd Ave., Oakland, STOP and FLAG.
 Key Route crossing Santa Fe lead east of Santa Fe Interchange, Oakland, STOP.

Surryne Drill crossing, Santa Fe lead east of Santa Fe Interchange, Oakland: Passenger trains of Santa Fe must approach crossing under control and not exceed 10 miles per hour over crossing, and if visibility is impaired or if trains are on or approaching crossing on drill track, must STOP and not proceed until it is safe to do so.

All trains, motors, or engines except passenger trains of either railroad STOP and FLAG.

Yard engines must be protected before crossing Western Pacific Ry. on Stonehurst line and at Third and Fallon Streets; East Bay Transit Co. at Ward Street on Shattuck Avenue line; Interurban Electric lines at Parker Street on Ninth Street line and Pacific Avenue, Alameda on Encinal line.

DRAWBRIDGES INTERLOCKED OR GOVERNED BY BLOCK SIGNALS:

Martinez-Benicia Bridge.....Suisun Bay
 Sacramento.....Sacramento River
 Cygnus.....Cordelia Slough
 Avon.....Pacheco Slough
 Dumbarton.....San Francisco Bay
 West of Newark.....Newark Slough
 Between Albrae and Alviso.....Warm Springs Creek—Coyote Creek
 San Joaquin River Bridge.....San Joaquin River
 Brazos.....Napa River

DRAWBRIDGE NOT INTERLOCKED:

Drawbridge not interlocked over San Joaquin river on spur track in connection with Stockton Port Belt Ry., Stockton, normal position of bridge, OPEN. Enginemen will sound whistle signal 14 (j) when wish bridge to be closed for movement.

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

Switching must not be performed over Main and Olive Street crossings, Turlock, between hours of 12 noon and 1:00 p. m. All switching between these hours must be performed from west end of melon and house tracks.

By ordinance of the Town of Newman, it is a misdemeanor to switch the house track between Merced and Fresno Streets from five minutes before arrival to five minutes after departure of passenger trains.

Stockton Yard: When making movements eastward on Scott's Avenue, before crossing El Dorado Street, following will govern:

With engine ahead pulling cars, stop and proceed.
 With cars being shoved, stop and proceed with yardman flagging movement over El Dorado Street.

No train, engine, motor or car shall be operated over any crossing where special signs appear, reading:

**STOP—FLAG HIGHWAY TRAFFIC, or
 CAUTION—FLAG HIGHWAY TRAFFIC**

unless same be first brought to a stop or caution observed (as indicated by sign) and traffic on crossing protected by member of train crew or other competent employee acting as flagman.

RULE 104. THE NORMAL POSITION OF SWITCHES AT THE END OF DOUBLE TRACK AND AT JUNCTIONS, WILL BE AS FOLLOWS:

Elmhurst....(End of double track) for Eastward track.
 Junction Switch for Niles line.

Whistle Signals:
 For Santa Clara line, one short, two long.
 For Tracy line, one long, one short, one long.
 For Stonehurst line, one short, one long, one short.

Niles.....West end, for Oakland-Tracy line.
 Operator at Niles when on duty from 4:00 p. m. to 12:00 mn. daily except Sundays and holidays, and 4:30 p. m. to 9:30 p. m. Sundays and holidays, will handle junction switch located 550 feet west of station building and cross-over switch located 250 feet west of station building for trains to enter or leave the Niles-San Jose main track. Whistle signal for this route, one long, two short and one long.

Westward trains using cross-over located 250 feet west of station building will be governed by indication of Signal 287. Eastward trains using cross-over will receive a green flag by day and a green light by night.

Avon.....San Ramon Branch, for siding.
Napa Junction.....Suisun-Fairfield-Napa line, for South Vallejo line.
Union.....Crossover switch at west end of siding, for Buchli Union line.

Buchli.....For Schellville line.
Suisun-Fairfield.....Napa line, for siding.
Elmira.....Capay line, for east leg of wye.
Tracy.....West end, for Martinez line.

Lodi.....East end, for Lathrop Subdivision.
 Woodbridge line, for Lathrop Subdivision.

Galt.....Ione line, for siding Lathrop Subdivision.

Ingle.....Riverdale line, for siding on Los Banos Subdivision.
Kerman.....Caruthers line, for main track Los Banos Subdivision.

Merced.....Oakdale line, for main track Merced Subdivision.
Berenda.....Raymond line, for main track Merced Subdivision.

Biola Junction.....Los Banos Subdivision, for main track Merced Subdivision.

Fresno Yard.....Clinton Ave. (End of double track). For Eastward track. This is an oil buffer spring switch.

Fresno.....Los Banos line, for Eastward track. This is an oil buffer spring switch.

Peters.....Milton line, for Stockton-Oakdale main track.
Martinez. The junction switch of the eastward tracks is located 614 feet east of Martinez passenger station, and normal line-up will be for Bridge line. Train-order operator will handle this switch for eastward trains via Tracy line.

The junction switch of the westward tracks is located 1580 feet east of Martinez passenger station, and the normal line-up will be for the Bridge line. This is an oil buffer spring switch.

Crossover located 300 feet east of Signal SA 346 near east end of the bridge will be known as "Upper Crossover."

Crossover located 2700 feet east of Mile Post 35 near foot of grade on eastward track will be known as "Lower Crossover."

Whistle Signals:—For the Bridge line, one short, two long.
 For Tracy line, one long, one short, one long.

Mococo.....(End of double track)—For westward track. This is an oil buffer spring switch.

RULE 104 (A). Conductors and engine foremen must personally know that main track switches used by them are left locked when clearing main track for Streamliner CITY OF SAN FRANCISCO No. 101 and No. 102.

RULE 105. LATHROP sidings are designated as follows:

Westward siding is the siding leading from the westward main track 1500 feet east of corral and re-entering main track just east of water tank. Eastward siding is the siding leaving eastward main track about opposite corral and re-entering eastward main track at extreme east end of Lathrop yard, and speed must not exceed 20 miles per hour through this siding.

Fresno siding is the siding leaving eastward main track at extreme west end of Lathrop yard and entering Merced Subdivision main track at automatic signal 932.

RULE 107. More than one train should not occupy tracks between Franklin and Washington Streets, Oakland, at the same time. If necessary for two trains to occupy this territory, one train only should be moving. Passenger trains to have preference.

Electric trains have preference over main line trains at Fruitvale.

Station platform indicator 2200 feet west of station at Crockett indicates whether or not platform at Crockett is occupied by other trains. Eastward trains to be governed thereby.

RULE 206 (A). Merced Subdivision trains (from Stockton) originating on east leg of wye at Lathrop, may be authorized by train order at Stockton, and a clearance will not be necessary at Lathrop.

Lathrop Subdivision trains (from Merced Subdivision) originating on east leg of wye at Lathrop need not obtain clearance at Lathrop.

RULE 221. Light will not be displayed in train-order signals on Capay, Napa, San Ramon, Oakdale, and Lodi branches and at Biola except when train orders are to be delivered.

Trains must obtain a clearance before leaving Newark, Stockton, Merced, Napa Junction, Niles and Kismet Tower.

Trains using west leg of wye to Merced Subdivision must obtain clearance before leaving Lathrop.

RULE 825. Marker posts have been installed and cars must not be left within 250 feet of either side of crossing of Highway No. 180 at Floyd.

AUTOMATIC BLOCK SYSTEM

RULE 509. A train or engine, when backing out of a siding or other track in block system limits, will, unless backed to clear block signal, proceed as if signal be in stop position.

When stopped by a block signal which governs movement over a drawbridge, train must be preceded by flagman over drawbridge.

RULE 512 (A). Where switch indicators and dwarf signals are used, movements to main track will be governed as follows:

If indicator indicates block clear, switches may be lined. When first switch or derail is lined, signal will indicate Stop. When second switch or derail is lined, signal will indicate Proceed if block is clear. When signal indicates Stop after proper line-up has been made, a train must not move to main track except as provided by Rules 509 and 99.

RULE 516. Overlap posts are located at:

Port Chicago.....	Eastward trains.
Nichols (150 feet east of west switch).....	Eastward trains.
Wayne (Highway Crossing).....	Eastward trains.
Hayward (2500 feet east of signal 187).....	Westward trains.
Livermore (1275 feet east of signal 473).....	Westward trains.
Livermore (850 feet west of signal 470).....	Eastward trains.
Manteca (2300 feet east of west switch).....	Eastward trains.
Floyd (1500 feet east of west switch).....	Eastward trains.

TRACY

Signals are numbered as automatic signals and are under control of switchtender. When "Stop" is displayed, trains must stop and not proceed until "Proceed" is indicated or proceed signal is given with green flag or green light by switchtender.

Eastward movements are governed by dwarf light signals 710, 712 and 714.

Westward movements from Lathrop Subdivision are governed by high light type signal 713 located 300 feet east of Puzzle Switch, the high light governing movements on main track and the low light governing movements to Hill or Local Yard, and dwarf light signal 715 located on right of eastward track 300 feet east of Puzzle Switch governing movements to all routes.

Westward movements from Los Banos Subdivision are governed by semaphore type signal 823, located 300 feet east of Puzzle Switch, top arm governing movements on main track and lower arm governing movements to Hill or Local Yard.

Westward freight trains stopped by Signal 717, located just east of highway crossing east of Tracy, will use telephone located on this signal and call switch tender at Puzzle switch and be governed by his instructions.

ELMHURST

Signals are numbered as automatic signals and are under control of switch-tender. When "Stop" is displayed, trains must stop and not proceed until "Proceed" is indicated or proceed signal is given with yellow flag or yellow light by switch-tender.

FRESNO

West switch and derail of running track, Fresno Yard near Biola Jct., the Biola main track junction switch and derail, and switch No. 2 track west of Ashland Ave. are hand operated by using the switch levers on side of electric switch machines.

Signals governing movements from Biola Branch and from the west end of No. 1 track will indicate stop until derails and switches have been properly lined for route desired, when signals will indicate proceed.

SPECIAL INSTRUCTIONS

SPECIAL SIGNALS

Following block signals equipped with a triangular number plate have included in their control limits a special protective device. When these signals indicate "STOP" careful inspection must be made of track or structures, as indicated below, and it must be known that it is safe for passage of trains before proceeding:

No.	950	High water alarm, Merced subdivision.
965	"	"
1074	"	"
1091	"	"
1372	"	"
1395	"	"
1936	"	"
1951	"	"
526	Protection from rock slide, Niles subdivision.	
543	"	"
423	Protection for oil buffer switch at Shinn.	
359	"	" Mococo.
374	"	" Napa Junction.

OIL BUFFER SPRING SWITCHES

When a block signal in advance of a facing point oil buffer spring switch indicates "STOP", careful examination of switch must be made before passing over it. When making trailing point movement and train is stopped on switch, a reverse movement must not be made, nor the slack taken until the switch has been thrown by hand. When movement has been completed through switch, reverse movement must not be made until point closes.

Running switches are prohibited and sand, blow-off cocks and injectors must not be used nor boosters started, while passing over these switches. Sand must not be used at location rail lubricators.

Switches are located as follows and speed indicated must not be exceeded when passing over such switches:

M.P.H.

San Joaquin River Drawbridge:		M.P.H.
West End...	Trailing eastward	25
	Facing westward	35
East End...	Trailing westward	35
	Facing eastward	25
Lathrop....	Trailing eastward	25
	from siding	20
	Facing westward	35
Shinn.....	Trailing eastward	8
	Facing westward	35
Fresno, Clinton Ave., end double track:	Fresno, Junction Los Banos line:	
	Trailing westward	35
	Facing eastward	25
		Trailing eastward 15
		Facing westward 10

INTERLOCKING

Movements governed by short-arm or dwarf signals must be made with caution and position of switches observed, as such signals govern movements for various routes.

On double track within Oakland yard limits signal operator may arrange to move trains from one tower to another against the current of traffic, after having an understanding by telephone for each movement. Before moving trains against the current of traffic signal operator must know that track to be used is clear of opposing engines and trains.

At all interlocking plants, when route lined is not to be used, following signal will be sounded by engineers: Two short, one long, two short.

OAKLAND PIER TOWER

Limits extend eastward to signal bridge 102 on tracks 1, 2, 3 and 4, and to signal bridge 105 on tracks 5, 6, 7, 8, 9 and 10.

When siren whistle on Oakland Pier tower is sounded all engines and trains moving within district controlled by this tower must stop and await proper signal.

The last signal which a train may receive entering any track at Oakland Pier is a double-arm home and distant dwarf signal. If home signal is in proceed position and distant signal at caution it indicates train is entering track occupied by cars. Responsibility for collision will rest with train entering.

SIXTEENTH STREET TOWER—Oakland

Limits extend from signal bridge 200 to signal bridge 204. Whistle signal for movement to West Oakland yard, one short, two long.

From Santa Fe Interchange to Oakland Pier, one long. To Santa Fe Interchange, one short, one long, one short.

Enginemen, trainmen and yardmen on electric line may accept hand signal from tower window to move against fixed signals.

Telephones connected to 16th Street and West Oakland Towers are located on Lattice Pole 1733, 250 feet east of Bridge 200 and on signal case 30 feet west of junction of Tracks 1 and 2, to be used when necessary to obtain permission to pass signals as per Rule 663 (b).

SHELLMOUND TOWER

Limits on main tracks extend from signal bridge 205 to signal bridge 206. Whistle signal for westward trains approaching Shellmound tower on track No. 2, for West Oakland yard, one short, two long.

LIMITS OF WEST OAKLAND TOWER—First and Cedar Streets, Oakland

On First Street main tracks extend from signal bridge 110 to signal bridge 112.

On Oakland Pier-Sacramento line extend from light signal on trolley pole 3183 500 feet west of West Oakland Freight Lead crossing to westward signals 300 feet east of signal bridge 200.

On West Oakland Freight Lead extend from westward signals 300 feet east of signal bridge 200 to signal bridge 112 on First Street line and to three-arm signal 500 feet west of First Street crossing leaving West Oakland Yard.

MAGNOLIA TOWER—First and Chestnut Streets, Oakland

Limits on eastward main track extend from home signal 1600 feet west of Western Pacific crossing to dwarf signal 200 feet east of crossing, on westward main track from home signal 500 feet east of Western Pacific crossing to dwarf signal 480 feet west of crossing.

FRUITVALE TOWER—Fruitvale

Limits on main tracks extend from signal bridge 123 to signal bridge 127.

RADUM TOWER—Junction of Niles-Tracy Line and Radum-Avon Line

Limits on main track extend from home signal at west Wye switch to home signal at east Wye switch and on Radum-Avon line to home signal at Wye switch.

Normal position of the interlocking signals for the Niles-Tracy line and Western Pacific main track will be in proceed position in both directions.

If a train on the Niles-Tracy line should find the interlocking signals in the "stop" position, it will flag through the limits of inoperative signal if no signal operator on duty.

Signal operator on duty at Radum Tower 9:00 a. m. to 12:00 noon, and 1:00 p. m. to 10:00 p. m., daily except Sundays.

After these hours when necessary for train movement from Niles-Tracy line to Radum-Avon line, or vice versa, it will be necessary to call the signal operator who resides at Pleasanton to operate signals and switches for such movements and in case unable to locate signal operator at Pleasanton, confer with Train Dispatcher.

NILES TOWER—Crossing of Western Pacific Ry

Limits extend from two-light signal fifteen feet east of the east junction wye switch at east end of Niles yard Tracy Line to the junction switch of the Centerville-Redwood Junction line and from the Niles-San Jose Junction switch to the junction switch of the San Jose-Centerville-Redwood Junction line.

Whistle Signals:—For San Jose, one short, two long.

For Centerville, one long, one short, one long.

For Niles, one short, one long, one short.

For Tracy, one long, one short, one long, one short.

Engines leaving trains and running light into Niles yard for water, one short, one long, one short, one long.

NEWARK TOWER

Limits extend from two-light signal fifty feet east of the wye switch on the Centerville line to two-light signal 1150 feet east of the wye switch on the Santa Clara line and to two-light signal 650 feet west of the wye switch on Elmhurst line and dwarf signals on Redwood Junction line near Newark station.

Whistle Signals:—For Santa Clara, one short, two long.

For Santa Clara siding, one short, two long, one short.

For Redwood Junction, one long, one short, one long, one short.

For Dumbarton siding, one long, one short, one long, two short.

For Centerville, one long, one short, one long.

For Elmhurst, one short, one long, one short.

LIMITS OF MARTINEZ-BENICIA BRIDGE INTERLOCKING PLANT EXTEND AS FOLLOWS: BRIDGE ZONE

On westward track from westward home signal 800 feet east of draw span to eastward dwarf signal 550 feet west of draw span.

On eastward track from eastward home signal 550 feet west of draw span to westward dwarf signal 800 feet east of draw span.

EAST END ZONE

On eastward track from signal SA 346 near Upper Crossover to westward dwarf signal at east switch of Lower Crossover.

Telephones connecting with interlocking station are located at Upper Crossover and at Lower Crossover.

Westward trains and engines intending to move from running track through lower crossover against the current of traffic on eastward main track to upper crossover must not throw either switch of lower crossover until signal operator on bridge has been communicated with and his permission given by display of clear indication in switch indicator located at east switch of crossover. Switches may then be thrown and the movement will be governed by indication of interlocking dwarf signal at east

switch of crossover. This dwarf signal will remain dark until one of the crossover switches is thrown whereupon it will indicate "Stop." After second switch of crossover is thrown it will indicate "Proceed" providing signal operator has cleared it.

Trains and engines moving westward on eastward main track through upper crossover will first call signal operator on phone unless switch indicator at east switch of crossover shows clear indication. If indicator shows clear indication switches may be thrown and movement will then be governed by automatic dwarf signal 345.

LIMITS OF MARTINEZ STATION INTERLOCKING PLANT EXTEND AS FOLLOWS:

On westward tracks of Tracy line and Bridge line, from westward home signals 2400 feet east of passenger station to westward signal 343 at east switch of West Siding. The two signals, one directing the movement of the Tracy westward main track and the other directing movement of the bridge westward main track, will be operated by the operator in the Martinez train order office.

On eastward track from two-light signal 600 feet east of Martinez passenger station to westward dwarf signals 938 feet east of Martinez passenger station on both Bridge and Tracy lines.

Telephones connecting with interlocking station are located at each end of interlocking limits.

DAVIS TOWER

Limits on double track extend from home signal 1200 feet west of tower to signal bridge, 1700 feet east of tower; on Woodland line to signal bridge 1200 feet north of tower.

Whistle signal to and from Sacramento, for the Woodland line, one short, two long.

Whistle signal for Western Division, eastward trains desiring to enter siding at Davis, one long, one short, one long.

MIKON TOWER—Crossing Sacramento Northern Railway

Limits on double track extend 500 feet each side of crossing.

Signal operator on duty 6:55 a.m. to 12:55 a.m. Between 12:55 a.m. and 6:55 a.m. signals will be placed and derails lined for movements on Southern Pacific tracks.

SAN JOAQUIN RIVER DRAW BRIDGE TOWER—

San Joaquin River Bridge between Banta and Lathrop

Limits on eastward track extend from home signal 450 feet west of west switch to dwarf signal 350 feet east of east switch; on westward track from home signal 450 feet east of east switch to dwarf signal 350 feet west of west switch.

Both switches are oil buffer spring switches.

LIMITS OF LATHROP STATION INTERLOCKING PLANT EXTEND AS FOLLOWS: EAST ZONE

From Signal SA818 on bracket pole 575 feet west of west switch of crossover to Signal SA821, 65 feet east of east switch of crossover.

WEST ZONE

From Signal SA814, 360 feet west of junction switch to signals SA813 and SA815, 340 feet east of junction switch.

SOUTH ZONE

From Signals SA924 and SA936, 225 feet west of junction switch to Signal SA937, 65 feet east of junction switch.

Permission to pass signal 828 from east siding when at stop will be procured from signal operator.

Telephones connecting with signal office located at home interlocking signals governing entrance to each zone and at east switch of eastward siding.

Speed of 25 miles per hour must not be exceeded through switches of East Zone and 10 miles per hour through switches of West Zone.

FRENCH CAMP TOWER—Tidewater Southern R. R. Crossing 1.6 miles east of French Camp

Limits on eastward track extend from home signal 750 feet west of crossing to dwarf signal 600 feet east of crossing; on westward track from home signal 600 feet east of crossing to dwarf signal 350 feet west of crossing.

Signal Operator on duty 6:00 p. m. to 10:00 p. m. and 11:00 p. m. to 3:00 a. m. Signals will be left in proceed position and switch and derail to stock yard spur will be left for normal handling by trainmen when Signal Operator is off duty.

During hours when Signal Operator is on duty, switch leading to Union Stockyards track will be electrically locked and controlled by Signal Operator.

Trains entering this track must restore switch and derail and lock same. Before leaving this track, permission must be obtained from Signal Operator and will be given in accordance with Rule 628. It may be called for by use of Whistle Signal, three long and one short.

Engineers will sound whistle signal 14 (m) when they wish to enter or pass through this plant when Signal Operator on duty.

SPECIAL INSTRUCTIONS

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STOCKTON TOWER No. 2—A. T. & S. F. Crossing, Sacramento and Taylor Streets, Stockton

Limits on double track extend from signal bridge 800 feet west of crossing to signal bridge 800 feet east of crossing.

Engineers will sound whistle signals as follows when they wish switches lined for:

Westward main track, two short, two long.
Eastward main track, one long, one short, one long.
Middle track, one short, two long.
Siding, two long, two short.
Gauns track, one short, one long, one short.
Houser-Haines track, two short, one long, one short.

One short sound of tower siren (o) will be signal for all train movements to stop.

Two short sounds repeated several times (oo oo oo) will be signal for yard and train crews to clear the plant at once.

STOCKTON TOWER No. 3—Western Pacific R. R. Crossing Weber Avenue and Union Street, Stockton

Limits on main track extend from home signal 500 feet east of crossing to home signal 150 feet west of crossing, on either leg of wye.

STOCKTON TOWER No. 4—Western Pacific R. R. Crossing, 4 mile west of El Pinal

Limits on eastward track extend from two-light signal 660 feet west of crossing to single-light signal 900 feet east of crossing. Westward track from two-light signal 900 feet east of crossing to dwarf signal 200 feet west of crossing.

Switches and derails on tracks of Gulf Red Cedar Products Company and Gilmore Oil Company are hand operated with electric lock controlled by Signal Operator.

When engineers wish to use crossover they will sound whistle signal, one long, one short, one long.

MODESTO TOWER—Tidewater Southern Railway Crossing 1.8 miles east of Modesto

Limits extend from home signal 500 feet east of crossing to home signal 500 feet west of crossing.

No Signal Operator on duty. Signals and derails lined for Southern Pacific movement. Instructions governing operation of plant posted in tower.

LATHROP TOWER—Western Pacific R. R. Crossing 9 mile east of Lathrop on Merced Subdivision

Limits extend from home signal 600 feet east of crossing to home signal 450 feet west of crossing.

Engineers of eastward trains will sound whistle signal, one long, one short, when they wish to enter or pass through this plant.

LYOTH TOWER—Western Pacific R. R. Crossing, Lyoth

Limits on main track extend from home signal 650 feet east of crossing to home signal 700 feet west of crossing.

Engineers will sound whistle signal, one short, one long, one short, when wish to enter or leave siding.

MERCED TOWER No. 1—A. T. & S. F. R. R. Crossing 1.8 miles west of Merced on Oakdale Line

Limits extend from home signal 550 feet east of crossing to home signal 550 feet west of crossing.

Signal Operator on duty from 9:00 a. m. to 12 noon and 1.00 p. m. to 6:00 p. m.

During hours when Signal Operator not on duty, signals will be placed at proceed and derails lined for A. T. & S. F. R. R. and will be necessary to call Signal Operator, who resides in Merced, to operate the plant. Trainmen to confer with Train Dispatcher who will make necessary arrangements.

KISMET TOWER—A. T. & S. F. R. R. Crossing Raymond Line 3.3 miles east of Berenda

Limits extend from home signal 400 feet east of crossing to home signal 400 feet west of crossing.

POLK

Switch and eastward signals at Polk are operated from Elvas Tower and their use is governed by Sacramento Division interlocking rules.

TRAIN AND AIR INSPECTION

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

AIR BRAKE RULE 2. Immediately after engine is detached from trains arriving Oakland Pier make running test to ascertain if brakes are in operative condition when proceeding to the wharf.

AIR BRAKE RULE 24. Rear end test on freight trains must be made immediately prior to departure from:

Altamont.....	Trains that stop.
Toyon.....	All trains.
Napa Junction.....	Trains via Cordelia.
Cordelia.....	Eastward trains that stop.
Creston.....	Trains that stop.

Freight trains may pass Altamont or Creston without stopping for purpose of rear end air test if proceed signals are given by trainmen after complying with Air Brake Rule 4. Speed must be reduced to 8 miles per hour. Helper engineers will reduce working steam sufficiently in advance so that lead engineer may control speed by gravity.

AIR BRAKE RULE 33. One retainer for each 150 Ms handled must be turned up on westward freight and mixed trains between Toyon and one-half mile east of Valley Spring, and between Norval and Helisma.

Retainers must be used between Mile Posts 195 and 190 on Raymond Branch as follows: One retainer for each 100 Ms handled in train. The required number of retainers must be turned up on head end of train.

When necessary retainers will be used between Altamont and Midway, Altamont and Ulmar, Creston and Cordelia, Creston and Napa Junction. Nothing less than ten retainers will be used.

AIR BRAKE RULE 39. Running test on passenger trains must be made:

Oakland, 16th St....Westward trains for Oakland Pier

Also equipment being handled between Oakland Pier and West Oakland.

On Lathrop Subdivision eastward passenger trains will make running test leaving Tracy, Lathrop and Stockton only and westward passenger trains leaving Akers, Stockton and Lathrop only.

On Martinez Subdivision will not be necessary to make running test for drawbridges at Cygnus and Avon.

MISCELLANEOUS

1. In all cases where it is necessary to make a short move to reach water or oil column, including that required to spot second engine of double header, engines of trains of more than 30 cars must be cut off before spotting at column.

Westward freight trains taking water at Merced between 7:00 a. m. and 6:00 p. m. will stop east of east crossing.

Engines of Sierra Railway Co. will take water from Southern Pacific supply at Oakdale, necessitating use of main track by Sierra engines for this purpose. All trains and engines must move with caution between "F" and "G" Streets, Oakdale, expecting to find main track occupied.

2. Two yardmen must be with engine when handling two cars or more at Oakland Pier. In no instance shall both yardmen ride on the same platform.

4. Pushing trains out of yards:

(a) No locomotive will be placed behind a wooden underframe carboose or other wooden frame equipment.

(b) Locomotives weighing more than 235,000 pounds on the drivers will not be placed behind steel underframe cabooses.

(c) Air will not be coupled through the pusher engine except when pushing trains between Port Costa and Benicia Jct. in either direction air must be coupled through pusher engine. Stop must be made when detaching pusher.

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

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

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

5. In helper service:

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

(b) Locomotives weighing more than 235,000 pounds on the drivers will not be placed behind steel underframe cabooses.

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

6. The working track between Port Costa and Mile Post 28.2 west of Crockett may be used by westward freight trains, displaying markers as per Rule 19, same as though moving against current of traffic.

7. Engines or trains using the wye at Napa Junction must approach from the Suisun-Fairfield line and go around via the Napa line.

Cars must not be left on straight leg of wye at Lathrop so as to block the tool house or crossover.

Engines will be turned on Santa Fe wye at Oakdale. In doing so, engines will operate over Sierra Railway main track from Oakdale to Santa Fe Junction, being governed by current Sierra Railway timetable (copy can be secured from SP Agent), and will secure clearance from Sierra Railway operator before leaving Oakdale, during such time as operator on duty; also be governed by Special Rule No. 3, Sierra Railway timetable reading as follows:

"All trains will approach yard limits of stations shown with trains under full control, expecting to find main track obstructed. This does not give switching engines right over any train."

Sierra switch key may be found in telephone box at S. P. station.

Every precaution for safety must be observed, flagging if conditions require.

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

10. Engines must not enter west end of No. 4 track at Kaiser Paving Company, Radum, and must not enter east end of this track more than five car lengths from east switch, and will hold on to enough cars when doing work on this track to prevent engine going beyond this point.

Crews working in this yard will look out for gravel and second-hand sacks piled in between tracks.

Halvern-Alvarado line cannot be used beyond point 2500 feet from switch of Sugar Plant on Alvarado end and 500 feet from switch of siding on Halvern end.

SPECIAL INSTRUCTIONS

10—Cont'd. Engines heavier than those shown herein will not be permitted to operate on following lines or tracks:

Schellville Branch.....	MK 4
Vallejo Branch.....	M 9
Napa Branch, Napa Jct. to Union.....	C
Napa Branch, Union to Calistoga.....	M 4
Buchli Union Branch.....	M 4
Capay Branch, Winters to Capay.....	M 4
San Ramon Branch, Avon to San Ramon.....	M 4
Ione Branch.....	M 9
Lodi Branch.....	C
Stockton, Tracks 2 and 3 except to pick up and set out cars.....	C
Oakdale Branch.....	MK 6
Milton Branch.....	E 23
Chowchilla Branch.....	M 4
Raymond Branch, Berenda to Daulton.....	T 40
Raymond Branch, Daulton to Raymond.....	M 4
Tremont, Corral Track.....	C
Alvarado, Alameda Sugar Co. Spur.....	MK 6
Alviso, Cannery Spur.....	C
Agnew, Distillery Spur.....	C
Ravenswood and Dumbarton Spurs.....	C
Lodi, Tracks 5 and 6 and link from track 3 to track 5.....	C
Manteca, Spreckles Sugar Spur.....	C
Livingston, Spur to Shed 101.....	C
Madera, Winery Spur.....	MK 4
Timba and Kearney Spurs.....	M 9

11. MAIN TRACKS

Main tracks between Oakland Pier and Bay Street (Oakland), numbering from the north, are designated as 1, 2, 7, 8, 9 and 10, and used as follows:

- No. 1—Westward Trains, via Oakland (Sixteenth Street).
2—Eastward Trains, via Oakland (Sixteenth Street).
7—Westward Trains, via Oakland (First Street).
8—Eastward Trains, via Oakland (First Street).
9—Westward running track from passenger yard (First Street).
10—Eastward running track to passenger yard (First Street).

Main tracks between Oakland 16th Street and Shellmound Tower, numbering from the Bay, are designated as 1, 2, 3, 4, 5, and 6, and used as follows:

- No. 1—Westward Freight Trains.
2—Eastward Freight Trains.
3—Westward Passenger Trains.
4—Eastward Passenger Trains.
5—{ Eastward electric trains Oakland 16th St. to 22nd St. Junction.
 { Westward electric trains 34th St. Junction to Shellmound.
6—{ Westward electric trains Oakland 16th St. to 22nd St. Junction.
 { Eastward electric trains 34th St. Junction to Shellmound.

Tracks between East Oakland and Sather will be designated as 1, 2, 3 and 4 and used as follows:

- No. 1—Westward Electric Trains.
2—Eastward Electric Trains.
3—Westward Steam Trains.
4—Eastward Steam Trains.

15. Trains must not pass switchtenders' stations at Sixth and Seventh Streets, Sacramento, without receiving signal from switchtender to proceed, green flag by day and green light by night, and will move with caution between Sacramento River Bridge and Seventh Street.

20. Handling of freight cars in trains behind passenger cars carrying passengers prohibited.

Baggage, express, mail, refrigerators or other head end cars must not be handled on rear of passenger trains unless trainmen can pass through them.

SPEED RESTRICTIONS

Maximum speed of any passenger train must not exceed 50 miles per hour except as otherwise provided for.
Maximum speed of any freight or mixed train must not exceed 35 miles per hour except as otherwise provided for.

Speed Restrictions in Miles Per Hour, Will Apply as Follows:

Page No.	BETWEEN	PASSENGER						FREIGHT	Engines and Motors Backing	Switch Engines S-SE Type	LIGHT ENGINES RUNNING FORWARD			
		Maximum Except Stream-liner Diesel Power	Stream-liner Diesel Power Unit	With T 1, 2, T 7 to 23, 28, 31, 36 MK 5, 6, 7, 8, 9 M	With SP 1, 2, 3, F 1, 3, MM 2 & AM AC 4, 5, 6 C 2 to 10 C 18 to 29 Incl.	With C12, 15, 17: MC 2, 4, 6 AC 1, 2, 3, TW	Freight and Mixed Maximum				T 1, 2, 7 to 23, MK 2, 4, 10 MC 2, 4, 8 AC 1, 2, 3, 4, 5, 6 MM 2, AM 2 TW	T 1, 2, 7 to 23, C 2 to 10 incl. C 18 to 29 incl. MK 5, 6, 7, 8, 9 F 1, 3, 4, 5, 6 SP 1, 2, 3 M	T 26, 32, 37, 40	Mt 1, 3, 4, 5 GS 1 E P A
2, 3, 4, 5	Oakland and Berkeley, University Ave. (except)	50	60	50	45	40	35	30	20	20	30	35	40	45
2, 3, 4, 5	Across new freight line West Oakland.....	20	20	20	20	20	20	20	20	20	20	20	20	20
2, 3, 4, 5	Berkeley, University Ave. and M.P. 21.5 (except)	65	80	50	45	40	40	30	20	30	30	35	40	45
2, 3, 4, 5	M.P. 13.8 and M.P. 15.6.....	45	45	45	45	40	40	30	20	30	30	35	40	45
2, 3, 4, 5	M.P. 21.5 and Port Costa, Tangent.....	50	60	50	45	40	40	30	20	30	30	35	40	45
2, 3, 4, 5	M.P. 21.5 and Port Costa, on Curves.....	40	45	40	40	40	40	25	20	30	30	30	30	30
2, 3, 4, 5	Passing Port Costa Station.....	40	50	40	40	40	20	20	20	20	20	20	20	20
2, 3, 4, 5	Port Costa and M.P. 28.2 on Working Track.....	.....	.....	.....	.....	.....	15	15	15	15	15	15	15	15
2, 3, 4, 5	Port Costa and Martinez, Tangent.....	50	60	50	45	40	35	30	20	30	30	35	40	45
2, 3, 4, 5	Port Costa and Martinez, on Curves.....	45	50	45	45	40	30	25	20	30	30	30	30	30
2, 3, 4, 5	Eastward Track, Martinez to M.P. 35.....	45	45	45	45	40	35	30	20	30	30	35	35	35
2, 3, 4, 5	Eastward Track, M.P. 35 to Mikon.....	70	95	50	45	40	40	30	20	30	30	35	40	45
2, 3, 4, 5	Eastward Track, Mikon to Sacramento.....	60	80	50	45	40	40	30	20	30	30	35	40	45
2, 3, 4, 5	Westward Track, Sacramento to Mikon.....	60	80	50	45	40	40	30	20	30	30	35	40	45
2, 3, 4, 5	Westward Track, Mikon to east end steel viaduct 35-B.....	70	95	50	45	40	40	30	20	30	30	35	40	45
2, 3, 4, 5	Westward Track, east end steel viaduct 35-B to Martinez.....	45	45	45	45	40	35	30	20	30	30	35	35	35
2, 3, 4, 5	Suisun-Fairfield Yard, both tracks.....	50	50	50	45	40	35	25	20	30	30	35	35	35
2, 3, 4, 5	Davis Yard, both tracks.....	40	50	40	40	40	35	25	20	30	30	35	35	35
2, 3, 4, 5	Sacramento Northern Ry. Crossing, both tracks.....	40	40	40	40	40	40	30	20	25	25	25	25	25
2, 3, 4, 5	Sacramento River Drawbridge, both tracks.....	20	20	20	20	20	20	20	20	20	20	20	20	20
6	End of Double Track Mococo to Martinez, Westward Track.....	30	.....	30	30	30	20	20	20	20	20	20	20	20
6	Martinez to End of Double Track Mococo, Eastward Track.....	50	.....	50	45	40	35	20	20	30	35	40	45	45
6	End of Double Track Mococo and M.P. 43½.....	50	.....	50	45	40	35	30	20	30	35	40	45	45
6	M.P. 43½ and Tracy.....	60	.....	50	45	40	40	30	20	30	35	40	45	45
6	Shell Point, Chemical Spur.....	.....	.....	.....	.....	.....	10	10	10	10	10	10	10	10
7	Avon and San Ramon (except).....	20	.....	.....	.....	.....	20	15	15	.....	20	.....	20	20
7	Over Bridges 44-E near Hookston and 49-C west of Rady.....	10	.....	.....	.....	.....	10	10	10	.....	10	.....	10	10
7	Over Bridge 57-A east of Osage.....	10	.....	.....	.....	.....	10	10	10	.....	10	.....	10	10
7	San Ramon and Radum.....	20	.....	.....	.....	.....	20	20	20	20	20	20	20	20
7	Elmira and Winters.....	30	.....	30	30	30	30	20	15	30	30	30	30	30
7	Winters and Capay.....	15	.....	.....	.....	.....	15	15	15	.....	15	.....	15	15
7	Suisun-Fairfield and Cordelia.....	40	.....	40	30	30	25	20	15	25	25	25	25	25
7	Cordelia Winery Spur.....	.....	.....	35	25	25	25	15	10	10	.....	.....	.....	.....
7	Cordelia and Napa Junction.....	35	.....	35	25	25	25	15	15	25	25	25	25	25
7	Napa Junction and Union except.....	25	.....	.....	.....	.....	25	15	15	25	25	25	25	25
7	Crossing east of Napa Station and Calistoga Road Crossing east of Napa.....	8	.....	.....	.....	.....	8	8	8	8	8	8	8	8
7	Union and Calistoga.....	20	.....	.....	.....	.....	20	15	15	20	20	20	20	20
7	Napa Junction and South Vallejo.....	25	.....	25	25	25	25	15	15	25	25	25	25	25
7	Napa Junction and Schellville (except).....	25	.....	25	25	25	25	15	15	25	25	25	25	25
7	Napa River Drawbridge.....	10	.....	10	10	10	10	10	10	10	10	10	10	10
7	Buchli and Union.....	10	.....	.....	.....	.....	10	10	10	.....	10	.....	10	10
6, 8, 9, 11, 12, 13	From Road Crossing east end of Junction switch on Los Banos Subdivision and end of double track on Lathrop Subdivision; to the road crossings at Tracy west of station on Niles line and on Martinez line.....	10	.....	10	10	10	10	10	10	10	10	10	10	10
8, 9	Oakland and Tracy (except).....	50	.....	50	45	40	35	25	20	30	35	40	45	45
8, 9	On curve west of and across new freight line West Oakland.....	20	.....	20	20	20	20	20	20	20	20	20	20	20
8, 9	Halvern and Alvarado.....	10	.....	10	.....	.....	10	10	10	.....	10	.....	10	10
8, 9	Niles and M.P. 34.5.....	35	.....	35	30	25	25	15	15	25	25	25	25	25
8, 9	M.P. 52 and M.P. 53.5.....	30	.....	30	25	25	25	15	15	25	25	25	25	25
8, 9	M.P. 53.5 and M.P. 55.5.....	40	.....	40	30	30	25	15	15	25	25	25	25	25
8, 9	M.P. 55.5 and M.P. 58.5.....	30	.....	30	25	25	25	15	15	25	25	25	25	25
8, 9	M.P. 58.5 and M.P. 61.....	35	.....	35	30	30	25	15	15	25	25	25	25	25
8, 9	M.P. 61 and Midway.....	40	.....	40	30	30	25	15	15	25	25	25	25	25

The term "freight car" does not include a baggage, express or mail car, or a caboose.

Streamliner will not exceed speed allowed other passenger trains when operating against the current of traffic or when handled with steam power.

SPECIAL INSTRUCTIONS

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SPEED RESTRICTIONS—Continued

Speed Restrictions in Miles Per Hour, Will Apply as Follows:

FORWARD

Page No.	BETWEEN	Maximum	PASSENGER		FREIGHT	Engines and Motors Backing	Switch Engines S-SE Type	LIGHT ENGINES RUNNING FORWARD				
			With T 1, 2, 7 to 23, 28, 31, 36 MK 5, 6, 7, 8, 9 M	With SP 1, 2, 3, F 1, 3, 4, 5, 6 MM 2&4 AM AC 4, 5, 6 C 2 to 10 C 18 to 29 Incl.				C 12, 15, 17 MK 2, 4, 10 MC 2, 4, 6 C 18 to 29 Incl. AC 1, 2, 3, 4, 5, 6 MM 2, AM 2 TW	T 1, 2, 7 to 23, 28, 31, 36 C 2 to 10 Incl. MK 5, 6, 7, 8, 9 F 1, 3, 4, 5, 6 SP 1, 2, 3 M	T 26, 32, 37, 40	Mt 1, 3, 4, 5 GS 1 E P A	
37.	Mt 1, 3, 4, 5 GS 1 E P A	10	Elmhurst and Santa Clara (except).....	50	50	45	40	35	30	35	40	45
	Newark Yard.....	10	40	40	40	40	20	15	25	25	25	25
	Over Warm Springs and Coyote Drawbridges	10	15	15	15	15	15	15	15	15	15	15
	Distillery Spur, Agnew.....	10	6	6	6	6	6	6	6	6	6	6
	Niles and San Jose via Milpitas (except).....	10	40	40	40	25	20	20	20	25	25	25
	San Jose Yard.....	10	20	20	20	20	20	20	20	20	20	20
	Trains with AC, F-4 and F-5 Engines.....	10	20	20	20	20	20	20	20	20	20	20
	Niles and Newark.....	10	50	45	40	35	25	20	30	35	40	45
	Newark and Redwood Junction (except).....	10	40	40	40	40	30	20	30	35	40	45
	Newark Slough Drawbridge.....	10	20	20	20	20	20	20	20	20	20	20
	San Francisco Bay Bridge.....	10	30	30	30	30	30	20	30	30	30	30
	Dumbarton Salt and Ravenswood Spurs.....	10	8	8	8	8	8	8	8	8	8	8
	Tracy and Fresno (except).....	11	55	50	45	40	40	30	30	35	40	45
	Over W. P. Crossing, Lyoth.....	11	40	40	40	40	25	25	20	25	25	25
	Kearney and Timba Spurs.....	11	10	10	10	10	10	10	10	10	10	10
	Biola Junction and Kerman (except).....	11	30	30	30	30	20	20	30	30	30	30
	Passenger Trains Handled by Motor.....	11	35	30	30	30	20	20	30	30	30	30
	Kerman and Caruthers.....	45	25	25	25	25	20	20	20	25	25	25
	Tracy and Lathrop (except).....	12, 13	60	50	45	40	40	30	30	35	40	45
	San Joaquin River Drawbridge.....	12, 13	15	15	15	15	15	15	15	15	15	15
	Lathrop and Stockton.....	12, 13	55	50	45	40	40	30	30	35	40	45
	Stockton and End of Double Track, M.P. 95.....	12, 13	55	50	45	40	35	30	30	35	40	45
	End of Double Track and M.P. 113.....	12, 13	50	50	45	40	40	30	30	35	40	45
	M.P. 113 and M.P. 132.....	12, 13	65	50	45	40	40	30	30	35	40	45
	M.P. 132 and Brighton.....	12, 13	50	50	45	40	40	30	30	35	40	45
	Eastward trains through C. T. C. S. switch at	12, 13	25	25	25	25	20	20	25	25	25	25
	End of double track.....	12, 13	25	25	25	25	20	20	25	25	25	25
	Westward trains at End of double track through	12, 13	25	25	25	25	25	20	25	25	25	25
	control switch to Eastward Track.....	12, 13	25	25	25	25	20	20	25	25	25	25
	Through Controlled Sidings in C. T. C. S. under	12, 13	25	25	25	25	20	20	25	25	25	25
	Through Controlled Sidings in C.T.C.S. under Caution Indication.....	12, 13	12	12	12	12	12	12	12	12	12	12
	Galt and Ione (except).....	13	30	30	30	20	15	15	30	30	30	30
	M.P. 125.5 and M.P. 125.7.....	13	25	25	25	15	15	15	25	25	25	25
	M.P. 126.5 and M.P. 126.7.....	13	25	25	25	15	15	15	25	25	25	25
	M.P. 127.0 and M.P. 127.1.....	13	20	20	20	15	15	15	20	20	20	20
	Sutter Creek Bridge between Clarksona and Dagon.....	13	15	15	15	15	15	15	15	15	15	15
	Lodi and Woodbridge.....	13	10	10	10	10	10	10	10	10	10	10
	Lodi and M.P. 121.4.....	13	25	25	25	15	15	25	25	25	25	25
	M.P. 121.4 and M.P. 132.3.....	13	20	20	20	15	15	20	20	20	20	20
	M.P. 132.3 and M.P. 139.7.....	13	15	15	15	15	15	15	15	15	15	15
	M.P. 139.7 and Kentucky House.....	13	20	20	15	15	20	20	20	20	20	20
	West leg wye leading to Fresno main track	14	30	30	30	20	20	20	20	20	20	20
	Lathrop to and over W. P. Crossing.....	14	15	15	15	15	15	15	15	15	15	15
	East leg outer wye Lathrop.....	14	65	50	45	40	40	30	30	35	40	45
	W. P. Crossing and Biola Jct. (except).....	14	45	45	45	40	30	20	30	30	30	30
	Over Highway Crossing east of Manteca Sta.	14	45	45	45	40	30	20	30	30	30	30
	Spreckles Sugar Spur, Manteca.....	14	10	10	10	10	10	10	10	10	10	10
	Over Highway Crossing and Street Crossing west of Livingston Station.....	14	45	45	45	40	30	20	30	30	30	30
	Sugar Pine Spur, Madera.....	14	10	10	10	10	10	10	10	10	10	10
	Winery Spur, Madera.....	14	20	20	20	20	20	20	20	20	20	20
	Biola Junction and Fresno.....	14	50	45	40	35	30	20	30	35	40	45
	Stockton and Merced (except).....	15	30	30	30	30	20	15	30	30	30	30
	Peters, between Switches.....	15	10	10	10	10	10	10	10	10	10	10
	Peters and Milton (except).....	15	15	15	15	15	15	15	15	15	15	15
	Cars in excess of 110,000 Net Weight.....	15	12	12	12	12	12	12	12	12	12	12
	Berenda and Daulton.....	15	20	20	20	15	15	20	20	20	20	20
	Daulton and Raymond.....	15	15	15	15	15	15	15	15	15	15	15
	Knowles and Knowles Junction.....	15	15	15	15	15	15	15	15	15	15	15
	Chowchilla and Dairyland.....	15	10	10	10	10	10	10	10	10	10	10

SPEED OF TRAINS REGULATED BY ORDINANCE THROUGH CITY LIMITS

PAGE	LOCATION	Pas- ser- ger	Freight	Engine Backing

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SPECIAL INSTRUCTIONS

When all weight has been removed from any one pair drivers on an engine, speed must not exceed 20 M.P.H.

When all weight has been removed from one wheel of any pair drivers on an engine, speed must not exceed 30 M.P.H.

Trains shoving or backing passenger equipment must not exceed 15 M.P.H.

Motor cars running backward must not exceed 10 M.P.H. through yards and over highway crossings.

Trains handling relief outfit must not exceed 25 M.P.H. main line or 20 M.P.H. on branch lines.

Speed of trains carrying locomotive crane with boom in place, must not exceed 25 M.P.H. on straight track and 15 M.P.H. around curves, and on branch lines must not exceed 15 M.P.H. Locomotive cranes must be handled in trains with heavy end forward.

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

Wooden passenger-carrying cars, wooden baggage, express and other head end cars, unless equipped with steel center sills and steel platforms must not be used in passenger trains.

Speed of trains handling such cars restricted as follows: When consist includes not more than three wooden passenger carrying cars, maximum speed must not exceed 50 M.P.H. When consist includes more than three wooden passenger carrying cars maximum speed must not exceed 40 M.P.H.

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

SPEED TABLE

SPEED PER HOUR	1 MILE IN MINUTES SECONDS								
6	10.00	25	2.24	39	1.33	53	1.08	68	0.53
8	7.30	26	2.18	40	1.30	54	1.06	69	0.52
10	6.00	27	2.13	41	1.27	55	1.05	70	0.51
12	5.00	28	2.08	42	1.25	56	1.04	72	0.50
15	4.00	29	2.04	43	1.23	57	1.03	74	0.49
16	3.45	30	2.00	44	1.21	58	1.02	75	0.48
17	3.31	31	1.56	45	1.20	59	1.01	76	0.47
18	3.20	32	1.52	46	1.18	60	1.00	78	0.46
19	3.09	33	1.49	47	1.16	61	0.59	80	0.45
20	3.00	34	1.45	48	1.15	62	0.58	82	0.44
21	2.51	35	1.42	49	1.13	63	0.57	84	0.43
22	2.43	36	1.40	50	1.12	64	0.56	85	0.42
23	2.36	37	1.37	51	1.10	65	0.55	90	0.40
24	2.30	38	1.34	52	1.09	67	0.54	95	0.38

LOCATION OF OVERHEAD AND SIDE STRUCTURES
NOT STANDARD CLEARANCE

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

Bulletins may be issued from time to time referring to impaired clearances not listed below.

Mile Post	AT OR NEAR	DESCRIPTION
OAKLAND PIER—TRACY VIA MARTINEZ		
3.5	Oakland Pier	Posts supporting shed.....Side
5.0	Oakland, 8th to 11th Streets	Freight Slip.....Side
5.5	Oakland, 16th St.	Piling supporting overhead.....Side
6.6	Emeryville	Structures of Pacific Coast Canning Co. ....Side
6.6	Emeryville	Structures on track No. 6 between signal bridges 204 and 205.....Side
6.6	Emeryville	Transmission Pole 1770 near switch leading to Judson Iron Works.....Side
6.6	Emeryville	Machine shops Judson Iron Works....Overhead and Side
6.6	Emeryville	Uphrmed Warehouse.....Side
7.5	Stock Yards	Fertilizer spur.....Side
13.1	Stege	Buildings end of track No. 2.....Side
14.5	Richmond	A. T. & S. F. Crossing.....Overhead and Side
16.5	San Pablo	A. T. & S. F. Crossing.....Overhead and Side
16.6	San Pablo	Eastward and Westward Water Columns.....Side
16.6	San Pablo	Rheem Mfg. Co. Spur.....Side
26.5	Oleum	Loading tracks, Union Oil Co. ....Side
26.7	Oleum	Tunnel No. 1.....Overhead and Side
27.7	Tormey	Tunnel No. 2.....Overhead and Side
29.0	Crockett	Sugar Co. warehouse.....Side
29.0	Crockett	Cal. Haw. S. R. Co. ....Overhead
30.1	Eckley	Platforms of brick company.....Side
30.5	Port Costa	Bldgs.; Bankers, California and Grangers Warehouse. ....Side
31.8	Nevada Dock	Platforms of brick company.....Side
31.8	Nevada Dock	Long and short cable, empty and house track No. 1....Side
34.7	Martinez	Warehouse, Anderson Co.—Cars to be left outside.....Overhead and Side
34.7	Martinez	Alhambra Slough.....Side
43.2	Nichols	Wagon bridge.....Overhead
43.2	Nichols	A. T. & S. F. crossing.....Overhead and Side
43.2	Nichols	General Chemical Co., ore house on spur.....Side
46.5	Shell Point	Tracks Nos. 1 and 7.....Overhead and Side
MARTINEZ—SACRAMENTO		
38.0	Benicia Junction	Water tank spout.....Side
59.4	Elmira	Warehouse.....Side
71.8	Tremont	Gravel loading chute.....Side
88.3	Washington	Sacramento River Bridge.....Side

OAKLAND PIER—TRACY VIA NILES

3.5	Oakland Pier	Posts supporting shed.....Side
4.9	West Oakland	Buildings and platform at Creosote Wks. Overhead and Side
4.9	West Oakland	Freight platforms and tracks, Kirkham St., freight yds. Side
7.0	Oakland, 1st St.	Warehouse track, Howard Co. ....Side
9.0	23rd Avenue	Pacific Wire and Steel Co., spur.....Side
9.7	Fruitvale	California Cotton Mills.....Overhead and Side
10.3	Sather	Steel bridge over estuary.....Wire Overhead and Side
12.5	Lorenzo	Clorox Chemical Company spur. ....Overhead and Side
20.1	Hayward	Cherry Creek.....Overhead and Side
28.2	Niles	Hunt Bros., canneries.....Side
42.0	Radum	New bunkers of Niles Sand and Gravel Co. ....Side
46.9	Livermore	Kaiser Paving Co. Tracks.....Side
		(Livermore Brick Co., sheds and loading platform over high line track.....Overhead and Side

ELMHURST—SANTA CLARA

41.7	Agnew	Track leading into distillery.....Overhead and Side
39.1	Alviso	Bay Side Canning Co. ....Side

AVON—RADUM

44.6	Concord	Bridge.....Overhead and Side
45.8	Las Juntas	Trolley wire, Interchange track.....Overhead
49.6	Widbero	Walnut Creek.....Overhead and Side
57.0	Osage	Bridge.....Overhead and Side

SUISUN-FAIRFIELD AND SOUTH VALLEJO—CALISTOGA

46.2	Thomasson	[E. B. & A. L. Stone Co., rock crushing].....Overhead and Side
45.5	Napa	Water tank spout.....Side
67.5	Bale	Water tank spout.....Side
71.7	Calistoga	Water tank spout.....Side
42.8	Rocktram	Bunkers of Basalt Rock Co., outer spur. ....Overhead and Side
30.0	South Vallejo	[Building and platforms of Sperry Flour].....Overhead and Side
30.0	South Vallejo	Co., tracks 1 to 6 inclusive.....Side
		Horan Spur, bulkhead leaning.....Side

ELMIRA—CAPAY

76.0	Winters	Fruit shed.....Overhead and Side
76.0	Winters	Water tank spout.....Side

TRACY-BRIGHTON, TRACY-FRESNO, LATHROP-FRESNO
AND BRANCHES

82.0	Tracy	Gates to Holly Sugar Co., spur.....Side
78.3	Banta-Lathrop	San Joaquin River Bridge.....Overhead and Side
81.5	Lathrop	Water Tank.....Side
90.9	Stockton	Delta Warehouse.....Side
90.9	Stockton	Delta Platform.....Side
90.9	Stockton	Irvin Warehouse, west end Hazelton Ave. ....Side
90.9	Stockton	Union Mills, Farmers' Union Milling Co. and California Navigation and Imp. Co. buildings on waterfront track Weber Avenue.....Side
100.7	Holden-Peters	Mormon Slough Bridge.....Side
148.5	Ryer-Arundel	Meredo River Bridge.....Side
103.3	Lodi	R. H. Water Tank. ....Side
103.3	Lodi	Car standing at door No. 1 of Hilvert Shed will not clear man on west side of car on adjacent track.....Side
104.3	Lodi-Urgon	Mokelumne River Bridge.....Side
110.7	Lockeford	Erick platform at Locks warehouse.....Side
134.8	Edwin	Clay loading chutes.....Overhead and Side
100.4	Westley	Sutter Creek Bridge.....Overhead and Side
119.5	Newman	Water Tank.....Side
140.2	Los Banos	Warehouse north of loading track opposite east leg Y switch.....Side
104.3	Ripon-Salida	Stanislaus River Bridge.....Side
113.1	Modesto	Standard Paving Co., spur.....Side
134.9	Delhi-Livingston	Meredo River Bridge.....Overhead and Side
136.4	Livingston	Water Tank.....Side
195.6	Herndon	Water Tank.....Side
198.5	Knowles	Rock Platform.....Side

To avoid hazard of impaired clearance leave no car spotted on west house track east of east end of Lathrop Freight Station. All cars left spotted on west end Lathrop team track must be at least 4 car lengths east of west switch of team track.

Also when cars are being moved through west switch to team tracks at Lathrop, cars should not be moved through east switch to west of west house track account impaired clearance.

RATING OF LOCOMOTIVES—WESTERN DIVISION. In M's of 1,000 pounds back of Tender.

Revised January, 1939.

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NOMINAL CLASS	OFFICIAL CLASS	ENGINE NUMBERS	Boiler Pressure	Oakland and Tracy via Antioch	Martinez	Bridge Summit	Sacramento to Martinez	Oakland and San Jose via Niles	Niles and Redwood	Tracy to Niles	Niles to Tracy	Suisun-Fairfield to Napa Jct.	Napa Jct. to Suisun-Fairfield-Napa Jct.	Calistoga to Napa Jct.	Stockton and Merced via Oakdale Branch	AVERAGE TARE WEIGHTS OF PASSENGER TRAIN CARS			
																CLASS	NOT AIR-CONDITIONED	AIR-CONDITIONED	
All-Steel	Steel Under-frame	All-Steel Cooling Season	All-Steel Heating Season																
M-4	M-63 20/28 126	1617 to 1713.....	190	4300	1850	3750	3550	3350	5050	1350	1450	1100	1450	1750	2950	Baggage—60 ft.....	93,070	.....	.....
M-4	M-63 20/28 135-S	1617 to 1713.....	190	4450	1900	3900	3700	3450	5250	1400	1500	1100	1500	1800	3050	"—86 ft.....	127,610	.....	.....
M-8	M-63 21/28 159-S	1720 to 1724, 1770 to 1779	200	5250	2250	4550	4350	4100	6150	1650	1750	1300	1800	2100	3600	"—70 ft.....	122,820	.....	.....
M-6	M-63 21/28 150-S	1725 to 1769, 1780 to 1803	210	5500	2400	4850	4600	4300	6500	1750	1850	1400	1900	2250	3800	"—70 ft. (With Auto. End Door).....	125,800	.....	.....
M-9	M-63 21/28 150-S	1806 to 1822.....	210	5500	2400	4850	4600	4300	6500	1750	1850	1400	1900	2250	3800	"—(Dynamo).....	98,730	.....	.....
M-9	M-63 21/28 156-S	1826 & 1827.....	210	5500	2400	4850	4600	4300	6500	1750	1850	1400	1900	2250	3800	Baggage & Mail—60 ft.....	103,620	87,120	.....
T-26	T-69 21/28 152-S	2283 to 2300.....	200	4800	2000	4200	3900	3750	5550	1500	1600	1150	1600	1900	3300	"—86 ft.....	124,760	.....	.....
T-23	T-63 21/28 156-S	2301 to 2310.....	210	5500	2350	4800	4550	4300	6450	1750	1850	1350	1900	2200	3750	"—70 ft.....	129,140	.....	.....
T-23	T-63 21/28 163-SF	2311 to 2362.....	210	6000	2600	5250	5000	4700	7100	1900	2000	1500	2100	2450	4150	"—Passenger.....	103,590	103,875	103,875
T-28, 31	T-63 22/28 162-S	2363 to 2384.....	210	6150	2600	5350	5000	4800	7100	1950	2050	1500	2100	2500	4200	"—A. R. E. No. 40-154.....	74,000	.....	.....
T-32, 40	T-69 23/28 174-S	2383 to 2400.....	210	6450	2400	4750	4400	4550	6250	1650	1750	1350	1900	2300	4000	"—A. R. E. No. 152-224.....	78,000	89,000	110,000
P-1, 3, 5	P-77 22/28 141-S	2400 to 2452, 2459, 2460.....	210	4950	2050	4300	4000	3850	5700	1500	1600	1150	1600	1950	3350	"—500-506.....	83,000	.....	.....
P-1	P-77 22/28 152-SF	2400 to 2427.....	210	4950	2150	4300	4000	4150	5700	1500	1600	1200	1700	2100	3600	"—P. F. E. 500-799.....	83,000	.....	.....
P-1	P-77 22/28 160/B-54-S	2400 to 2437.....	210	5450	2400	4750	4400	4550	6250	1650	1750	1350	1900	2300	4000	Express, Horse.....	133,050	.....	.....
P-4	P-77 22/28 163/B-54-SF	2400 to 2437.....	210	5450	2400	4750	4400	4550	6250	1650	1750	1350	1900	2300	4000	Postal.....	112,120	.....	.....
C-9, 10	C-57 22/30 200-SF	2513 to 2599, 2698 to 2860.....	210	6600	2900	5750	5550	5150	7850	2100	2200	1700	2300	2650	4550	Postal Storage—40 ft.....	74,530	105,120	105,120
C-9, 10	C-57 22/30 194-S	2624 to 2679.....	210	6600	2900	5750	5550	5150	7850	2100	2200	1700	2300	2650	4550	Assembly (ACI).....	146,210	122,300	168,950
C-8	C-57 22/30 192-S	2680 to 2693.....	210	6600	2900	5750	5550	5150	7850	2100	2200	1700	2300	2650	4550	Club (ACI).....	170,700	155,370	164,700
C-5	C-57 22/30 187-S	2680 to 2693.....	210	6600	2900	5750	5550	5150	7850	2100	2200	1700	2300	2650	4550	Official (NAC).....	132,900	132,900	182,800
C-5	C-57 22/30 185-S	2680 to 2693.....	210	6600	2900	5750	5550	5150	7850	2100	2200	1700	2300	2650	4550	(ACW) Cars 107-128.....	195,040	195,040	195,040
A-3	A-81 20/28 112-S	3025 to 3040, 3042 to 3071.....	210	3900	1550	3400	3050	3050	4400	1150	1200	850	1200	1500	2650	Chair—60 ft.....	100,620	.....	.....
A-3	A-81 20/28 116-SF	3025 to 3040, 3042 to 3071.....	210	3900	1650	3400	3050	3300	4400	1150	1200	910	1300	1650	2900	"—72 ft.....	138,000	138,000	132,000
A-3	A-81 20/28 116/B-59-S	3025 to 3040, 3042 to 3071.....	210	3900	1650	3400	3050	3300	4400	1150	1200	910	1300	1650	2900	"—72 ft. (ACW).....	165,000	165,000	157,800
A-3	A-81 20/28 120/B-64-SF	3000 to 3003.....	210	4800	2100	4150	3750	4050	5400	1450	1550	1150	1650	2050	3550	"—Streamline—Single (ACS).....	158,700	158,700	120,900
MK-2, 4	MK-57 23/30 206-S	3200 to 3240.....	210	7650	3350	6700	6400	5950	9100	2400	2550	1900	2650	3050	5250	"—74 ft. (AC).....	205,400	205,400	172,600
MK-2, 4	MK-57 23/30 222-SF	3200 to 3240.....	210	7650	3350	6700	6400	5950	9100	2400	2550	1900	2650	3050	5250	"—74 ft. (AC).....	180,915	180,915	173,125
MK-4	MK-57 23/30 230-SF	3241 to 3277.....	210	8450	3650	7350	7000	6600	9950	2700	2850	2150	2900	3400	5800	"—74 ft. (AC).....	197,944	197,944	181,800
MK-5, 6	MK-63 26/28 210-S	3241 to 3277.....	210	8450	3650	7350	7000	6600	9950	2700	2850	2150	2900	3400	5800	"—74 ft. (AC).....	136,100	136,100	130,100
MK-5, 6	MK-63 26/28 231-SF	3241 to 3277.....	210	8450	3650	7350	7000	6600	9950	2700	2850	2150	2900	3400	5800	"—74 ft. (AC).....	137,640	137,640	137,640
MK-5, 6	MK-63 26/28 233-SF	3241 to 3277.....	210	8450	3650	7350	7000	6600	9950	2700	2850	2150	2900	3400	5800	"—74 ft. (AC).....	151,000	151,000	151,000
MK-7, 8, 9	MK-63 29/30 247-S	3300 to 3324.....	176	9200	4050	8050	7750	7200	10900	2950	3150	2400	3250	3750					

MAP
OF THE
WESTERN DIVISION
SOUTHERN PACIFIC COMPANY

MAY 1931.

R.M.H.

SCALE IN MILES

10 0 10 20 30

Revised to Jan. 1, 1939

