

ACTING TERMINAL SUPERINTENDENT
T. F. GOODWIN.....Oakland

ASST. TERMINAL SUPERINTENDENTS
F. J. DIGNON.....Oakland
M. A. JENSEN.....Oakland

TRAINMASTERS

A. J. FERRARA.....Oakland Pier
A. W. KILBORN.....Oakland Pier
R. R. ROBINSON.....Suisun-Fairfield
L. W. MONEY.....Stockton
N. B. EDDLESTONE.....Tracy

ASSISTANT TRAINMASTERS

A. G. BAYS.....Pittsburg
I. O. UNDERHILL.....Livermore

TERMINAL TRAINMASTERS

W. S. CHAMNEY.....Oakland
W. J. CLENDENNING.....Oakland
J. H. LONG.....Oakland
J. T. WALL.....Oakland
J. T. AREY.....Port Costa
J. F. SCHETTER.....Tracy

ROAD FOREMEN OF ENGINES

S. H. BRAY.....West Oakland
B. E. STONE.....Tracy

ENGINEMEN INSTRUCTORS

J. H. SUSKE.....West Oakland
E. L. COOPER.....Tracy

**ASSISTANT TRAINMASTER—
DIVISION EXAMINER**

W. S. HOOSON.....Oakland

CHIEF TRAIN DISPATCHERS

J. B. WATTS.....Oakland Pier
S. C. W. HANSEN.....Stockton

F. E. KALBAUGH
Assistant Superintendent, Oakland Pier

W. E. EASTMAN
Acting Assistant Superintendent, Stockton

C. F. HEATH
Assistant Superintendent, Oakland Pier

SOUTHERN PACIFIC COMPANY



WESTERN DIVISION TIMETABLE

241

EFFECTIVE SUNDAY, JUNE 2, 1946
AT 12:01 A. M.
PACIFIC STANDARD TIME

**FOR THE GOVERNMENT AND INFORMATION
OF EMPLOYEES ONLY**

J. W. CORBETT,
General Manager.

**R. E. HALLAWELL,
H. R. HUGHES,**
Assistant General Managers.

G. C. BAKER,
General Superintendent of Transportation.

C. H. GRANT,
Superintendent of Transportation.

E. D. MOODY,
Superintendent

HOSPITAL DEPARTMENT SURGEONS

LOCATION	NAME	TITLE	LOCATION	NAME	TITLE
San Francisco	Dr. W. W. Washburn	Chief Surgeon	Sacramento	Dr. W. N. Becker	District Physician and Surgeon
San Francisco	Dr. Clinton Horn	Medical Examiner, 65 Market St.	Sacramento	Dr. J. Roy Jones	Oculist and Aurist
Oakland	Dr. Harry H. Appeldorn	Division Surgeon	Roseville	Dr. L. E. Jones	District Physician and Surgeon
Oakland	Dr. F. H. Tebbe	District Physician and Surgeon	Roseville	Dr. J. F. McAnnally	Asst. Dist. Physician and Surgeon
Oakland	Dr. J. H. Milliken	District Physician and Surgeon	Roseville	Dr. C. Angella	Asst. Dist. Physician and Surgeon
Oakland	Dr. George Mainwaring	District Physician and Surgeon	Tracy	Dr. J. E. Longley	District Physician and Surgeon
Oakland	Dr. Edmund H. Padden	Oculist	Tracy	Dr. H. K. Wilson	Asst. Dist. Physician and Surgeon
Oakland	Dr. Milton Shutes	Oculist and Aurist	Stockton	Dr. H. T. Quinn	District Physician and Surgeon
East Oakland	Dr. R. James Walker	District Physician and Surgeon	Stockton	Dr. E. G. Hermosillo	Asst. Dist. Physician and Surgeon
West Oakland	Dr. D. W. Stomberg	District Physician and Surgeon	Stockton	Dr. D. R. Powell	Oculist and Aurist
West Oakland	Dr. C. Jackemy	District Physician and Surgeon	Lodi	Dr. L. J. Peterson	District Physician and Surgeon
North Oakland	Dr. N. P. Dunne	District Physician and Surgeon	Lodi	Dr. R. L. Owens	District Physician and Surgeon
Fruitvale	Dr. J. W. Seamell	District Physician and Surgeon	Lockeford	Dr. N. P. Barbour	Emergency Surgeon
Fruitvale	Dr. L. E. Lacey	District Physician and Surgeon	Galt	Dr. V. E. Greer, Jr.	District Physician and Surgeon
Fruitvale	Dr. G. W. Dygert	District Physician and Surgeon	Ione	Dr. Hugo Childress	Emergency Surgeon
Fruitvale	Dr. O. T. Leftwich	Oculist and Aurist	Elk Grove	Dr. Paul W. Frame	District Physician and Surgeon
Elmhurst	Dr. E. L. Armstrong	District Physician and Surgeon	Oakdale	Dr. E. E. Chouret	District Physician and Surgeon
Berkeley	Dr. J. R. Masterson	District Physician and Surgeon	Manteca	Dr. K. W. Hidy	Emergency Surgeon
Berkeley	Dr. A. M. McIntosh	District Physician and Surgeon	Manteca	Dr. Curtis M. Galt	Emergency Surgeon
Berkeley	Dr. A. J. Fleisher	District Physician and Surgeon	Modesto	Dr. Fred R. DeLappe	District Physician and Surgeon
Albany	Dr. Douglas Ream	District Physician and Surgeon	Modesto	Dr. H. R. Wilson	District Physician and Surgeon
Richmond	Dr. L. Fraser	District Physician and Surgeon	Modesto	Dr. J. A. Porter	Oculist and Aurist
Richmond	Dr. W. E. Cunningham	District Physician and Surgeon	Ceres	Dr. F. K. Lord	Emergency Surgeon
Alameda	Dr. A. L. Guerra	District Physician and Surgeon	Turlock	Dr. M. C. Collins	District Physician and Surgeon
Alameda	Dr. D. D. Stafford	District Physician and Surgeon	Livingston	Dr. Charles L. Garvin	District Physician and Surgeon
San Leandro	Dr. G. T. Honaker	District Physician and Surgeon	Mered	Dr. E. R. Fountain	District Physician and Surgeon
Hayward	Dr. F. A. Brown	District Physician and Surgeon	Mered	Dr. W. E. Fountain	Asst. Dist. Physician and Surgeon
Crockett	Dr. J. M. McCullough	District Physician and Surgeon	Chowchilla	Dr. Herbert O. Leff	Emergency Surgeon
Vallejo	Dr. Burton F. Jones	District Physician and Surgeon	Chowchilla	Dr. A. B. Bigler	Emergency Surgeon
Napa	Dr. D. H. Murray	District Physician and Surgeon	Madera	Dr. R. R. Dearborn	District Physician and Surgeon
St. Helena	Dr. M. M. Booth	District Physician and Surgeon	Madera	Dr. K. W. Butler	Assoc. District Phys. and Surgeon
Calistoga	Dr. Frank McGreane	District Physician and Surgeon	Fresno	Dr. J. D. Morgan	District Physician and Surgeon
Santa Rosa	Dr. A. B. Herriek	District Physician and Surgeon	Fresno	Dr. C. A. James	Asst. Dist. Physician and Surgeon
Santa Rosa	Dr. E. T. Noall	District Physician and Surgeon	Fresno	Dr. O. B. Doyle	Asst. Dist. Physician and Surgeon
Santa Rosa	Dr. G. L. Patterson	Oculist and Aurist	Fresno	Dr. L. G. Price	Oculist
Benicia	Dr. N. J. Crisp	District Physician and Surgeon	Fresno	Dr. Wayne A. Hunt	Aurist
Benicia	Dr. A. C. Atwood	Asst. Dist. Physician and Surgeon	Patterson	Dr. E. G. Allen	District Physician and Surgeon
Martinez	Dr. Edwin Merrithew	District Physician and Surgeon	Crows Landing	Dr. E. G. Allen	District Physician and Surgeon
Martinez	Dr. G. L. Coates	Asst. Dist. Physician and Surgeon	Newman	Dr. A. M. Roscoe	District Physician and Surgeon
Concord	Dr. E. B. Todd	Emergency Surgeon	Newman	Dr. James E. Thompson	Asst. Dist. Physician and Surgeon
Walnut Creek	Dr. M. C. Bolender	Emergency Surgeon	Gustine	Dr. A. W. Gustafson	Emergency Surgeon
Danville	Dr. John Blemer	Emergency Surgeon	Los Banos	Dr. L. R. Hillyer	District Physician and Surgeon
Pittsburg	Dr. Claude L. Kerns	Emergency Surgeon	Kerman	Dr. J. C. Drake	District Physician and Surgeon
Antioch	Dr. L. B. Weatherbee	District Physician and Surgeon	Pleasanton	Dr. Harold J. Shanks	District Physician and Surgeon
Byron	Dr. J. W. Hammond	District Physician and Surgeon	Livermore	Dr. Paul Dolan	District Physician and Surgeon
Suisun-Fairfield	Dr. Felix R. Rossi, Jr.	District Physician and Surgeon	Centerville	Dr. G. S. Holeman	District Physician and Surgeon
Vacaville	Dr. M. P. Stansbury	District Physician and Surgeon	Irvington	Dr. E. M. Grimmer	Emergency Surgeon
Esparto	Dr. W. D. Garcelon	Emergency Surgeon	San Jose	Dr. D. R. Threlfall	District Physician and Surgeon
Dixon	Dr. O. P. Floreth	District Physician and Surgeon	San Jose	Dr. R. C. Sheretz	Asst. Dist. Physician and Surgeon
Davis	Dr. T. E. Cooper	Emergency Surgeon	San Jose	Dr. John M. Hohl	Asst. Dist. Physician and Surgeon
Davis	Dr. Leo A. Cronan	Emergency Surgeon	San Jose	Dr. Phillip Jordan	Oculist and Aurist
Sacramento	Dr. A. M. Henderson	Division Surgeon			
Sacramento	Dr. W. W. Cress	Division Surgeon			
Sacramento	Dr. A. F. Wallace	District Physician and Surgeon			
Sacramento	Dr. Manuel L. Azevedo	District Physician and Surgeon			

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

HOSPITALS

GENERAL HOSPITAL	SAN FRANCISCO
EMERGENCY HOSPITAL	SACRAMENTO
EMERGENCY HOSPITAL	WEST OAKLAND

MARTINEZ SUBDIVISION

EASTWARD

FIRST CLASS

Capacity of sidings in car lengths	FIRST CLASS									Mile Post Location	Timetable No. 241 June 2, 1946		Distance from Oakland Pier	
	102	244	246	28	56	52	224	204	262		STATIONS			
	Streamliner City of San Francisco Leave ★ See Note	Statesman Leave Sunday and Holidays	Statesman Leave Daily Ex. Sunday and Holidays	San Francisco Overland Limited Leave Daily	Passenger Leave Daily	San Joaquin Daylight Leave Daily	Senator Leave Daily	Passenger Leave Daily	Passenger Leave Daily		SAN FRANCISCO			
	PM 4.30 4.50	PM 2.00 2.20	PM 1.30 1.50	AM 11.30 11.50 AM	AM 10.00 10.20	AM 8.00 8.20	AM 7.30 7.50	AM 4.30 4.50			OAKLAND PIER			
											Ferry			
											OAKLAND PIER			
Oakland yard	BKWIP	PM 5.00	PM 2.25	PM 2.00	12.01	10.35	8.25	7.56	5.30	3.5	TO-R OAKLAND PIER		0.0	
	BKWOITYP									(4.9)	TO-R WEST OAKLAND		(1.4)	
	IP	s 5.07	s 2.34	s 2.09	s 12.09	s 10.44	s 8.33	s 8.02	s 5.42	5.5	OAKLAND (16th Street)		2.0	
	IP									7.0	TO SHELLMOUND		3.5	
	P	s 5.16	s 2.43	s 2.20	s 12.19	s 10.54	s 8.42	s 8.10	s 5.56	9.2	BERKELEY		5.7	
	P	5.24	s 2.53	s 2.32	12.27	s 11.05	s 8.52	8.18	s 6.11	15.0	RICHMOND		11.5	
Port Costa yard	WP									16.6	SAN PABLO		13.1	
	P									19.8	SOBRANTE		16.3	
	E 105 W 95	P 5.32	f 3.04	s 2.43	12.37	f 11.17	9.03	8.28	s 6.26	23.0	TO PINOLE		19.5	
	P		s 3.12	s 2.56	s 12.49	s 11.33	s 9.14	8.36	s 6.44	28.9 29.0	CROCKETT		25.4	
	BKWOTP		f 3.17	s 3.01		s 11.38			s 6.49	31.1	R PORT COSTA		27.5	
	M 116	P								33.1	OZOL		29.5	
	WP	5.48	s 3.28	s 3.11	12.59	s 11.45 AM	s 9.25 AM	8.44	s 7.10	34.7 31.7	TO MARTINEZ		31.1	
	M 118	WP		3.36	3.19	1.07			8.51	7.18	38.0	BAHIA		37.4
	E 83 Yard Limits W 87 BKWOYP	6.04	s 3.53	s 3.40	1.18				9.02	s 7.45	48.9	TO-R SUISUN-FAIRFIELD		48.3
	M 88	WYP		f 4.05	f 3.53	1.29			9.13	s 8.03	59.4	ELMIRA		58.8
M 74	WP		f 4.15	s 4.08	1.39			9.21	s 8.15	67.5	DIXON		66.9	
E 80 Yard Limits W 81 KWIYP	6.24	s 4.28	s 4.26	1.49				s 9.32	s 8.38	75.6	TO-R DAVIS		75.0	
M 96	P		4.34	4.33	1.55			9.37	8.44	80.4	WEBSTER		79.8	
Sacramento yard	IP									86.9	SNry Crossing		86.3	
	BKWOTIP	s 6.40 PM	s 4.50 PM	s 4.50 PM	s 2.10 PM			s 9.50 AM	s 9.00 AM	89.0	TO-R SACRAMENTO		88.4	
	Arrive ★ See Note	Arrive Sunday and Holidays	Arrive Daily Ex. Sunday and Holidays	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		(88.4)			
	(1.40) 53.40	(2.25) 36.51	(2.50) 31.20	(2.09) 41.12	(1.10) 26.66	(1.00) 31.10	(1.54) 46.53	(3.30) 25.23	(0.20) 40.20		Time over District.....			
											Average Speed per Hour.....			

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

RULE 5. Schedule time and train-order time at stations between Oakland Pier and Sacramento apply at station sign.

RULES 86 and 93: Third class trains, extra trains and engines must clear time of Nos. 101 and 102 not less than 15 minutes.

Third-class trains, extra trains and engines must be clear of main track and insulated joints at passing points for Nos. 27 and 28.

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

When Signal 328 displays yellow aspect, trains must not exceed 15 MPH from this signal to track magnet located 550 feet west of semi-automatic signal, opposite white concrete marker block.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS				
Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
204	Fierce, Cygnus, Teal, Jacksnipe, Tolenas, Tremont	Any Station	Any Station	Daily

Nos. 204 and 246 stop at Rodeo, Oleum and Selby.
No. 204 reduce speed to 10 MPH at Giant on Sunday to dispatch papers.
No. 56 stop at Selby.

MARTINEZ SUBDIVISION

Timetable No. 241 June 2, 1946		WESTWARD											
		FIRST CLASS											
		25	21	23	19	57	101	247	11	13	16	27	
STATIONS		Distance from Sacramento	Fast Mail	Pacific Limited	Challenger	Klamath	Owl	Streamliner City of San Francisco	El Dorado	Cascade	Beaver	West Coast	San Francisco Overland Limited
		Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily
Mile Post Location	OAKLAND PIER	92.0	AM 5.50	AM 7.50	AM 8.20	AM 8.20	AM 8.50	AM 9.15	AM 9.50	AM 11.20	AM 11.50		PM 2.20
	OAKLAND PIER	88.5	5.30	7.30	8.00	8.00	8.30	8.55	9.30	11.00	11.30		2.00
3.5	TO-R OAKLAND PIER	88.5	AM	AM	AM	AM	AM	AM	AM	AM	AM		PM
(4.9)	(TO-R WEST OAKLAND)	(87.1)	s 5.15	s 7.15	s 7.35	s 7.40	s 8.15	s 8.40	s 9.23	s 10.50	s 11.10		s 1.50
5.5	OAKLAND (16th Street)	86.5	s 5.05	s 7.05	s 7.27	s 7.33	s 8.07	s 8.34	s 9.16	s 10.42	s 11.02		s 1.42
7.0	TO SHELLMOUND	85.0											
9.2	BERKELEY	82.8	s 4.45	s 6.45	s 7.09	s 7.15	s 7.54	s 8.25	s 9.04	s 10.28	s 10.47		s 1.28
15.0	RICHMOND	77.0	s 4.14	s 6.25	s 6.52	s 7.00	s 7.42	8.14	8.52	10.15	10.33		1.16
16.6	SAN PABLO	75.4											
19.8	SOBRANTE	72.2											
23.0	TO PINOLE	69.0	3.54	6.05	6.35	6.45	7.27	8.06	8.41	10.05	10.23		1.05
28.9	CROCKETT	63.1	s 3.45	s 5.55	s 6.25	s 6.35	s 7.18			9.57	10.15		s 12.55
29.0	R PORT COSTA	61.0							s 8.30				
31.1	OZOL	59.0											
34.7	TO MARTINEZ	57.4	3.26	s 5.37	s 6.08	s 6.20	7.05 AM	7.50	s 8.24	9.47	s 10.05		12.42
31.7	BAHIA	51.0	3.17	5.23	5.55	6.08			8.14	9.38	9.53		12.33
38.0	TO-R SUISUN-FAIRFIELD	40.1	3.06	f 5.10	5.43	f 5.56		7.34	s 8.03	9.28	9.43		12.23
48.9	ELMIRA	29.6	2.56	4.56	5.30	5.44			7.52	9.17	9.32		12.13
59.4	DIXON	21.5	2.48	4.44	5.21	f 5.35			7.44	9.09	9.24		12.05 PM
67.5	TO-R DAVIS	13.4	2.40	f 4.32	5.10	5.25 AM		7.14	s 7.36	9.00 AM	9.15 AM	s 10.40	11.57 AM
75.6	WEBSTER	8.6	2.35	4.22	5.01				7.30			10.32	11.51
80.4	SNRy Crossing	2.1											
86.9	TO-R SACRAMENTO	0.0	2.25 AM	4.10 AM	4.50 AM			7.00 AM	7.20 AM			10.20 AM	11.40 AM
89.0	(88.5)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
	Time over District		(2.50)	(3.05)	(2.45)	(2.15)	(1.10)	(1.40)	(2.03)	(1.50)	(1.55)	(0.20)	(2.10)
	Average Speed per Hour		31.23	28.70	32.18	33.38	26.66	53.10	43.17	40.96	39.18	40.20	40.84

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

RULE 5. Schedule time and train-order time at stations between Oakland Pier and Sacramento apply at station sign.

RULES 86 and 93: Third class trains, extra trains and engines must clear time of Nos. 101 and 102 not less than 15 minutes.

Third-class trains, extra trains and engines must be clear of main track and insulated joints at passing points for Nos. 27 and 28.

Automatic train control westward track from 100 ft. east of Signal 357 to Martinez.

When Signal 347 displays yellow aspect, trains must not exceed 15 MPH from this signal to track magnet located 1250 feet east of semi-automatic signal, opposite white mark on bridge.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS

Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
21	Any Station		Ogden	Daily
23	Davis, Dixon, Suisun-Fairfield		Reno	Daily
13	Crockett		Portland	Daily

No. 25 reduce speed to 15 MPH at Suisun-Fairfield to dispatch mail.

No. 23 reduce speed to 10 MPH at Davis to dispatch mail.

MARTINEZ SUBDIVISION

EASTWARD

FIRST CLASS

Capacity of sidings in car lengths	FIRST CLASS										Mile Post Location	Timetable No. 241 June 2, 1946	Distance from Oakland Pier
	20 Klamath	24 Challenger	22 Pacific Limited	18 Oregonian	58 Owl	248 El Dorado	14 Beaver	12 Cascade	15 West Coast				
	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily		STATIONS	
	PM 8.00 8.20	PM 8.00 8.20	PM 6.00 6.20	PM 6.00 6.20	PM 6.00 6.20	PM 5.30 5.50	PM 5.00 5.20	PM 5.00 5.20				SAN FRANCISCO	
												OAKLAND PIER	3.5
Oakland yard	BKWIP	PM 8.45	PM 8.35	PM 6.45	PM 6.40	PM 6.35	PM 5.57	PM 5.35	PM 5.30		3.5	TO-R OAKLAND PIER	0.0
	BKWOITYP										(4.9)	(TO-R WEST OAKLAND)	(1.4)
	IP	s 8.58	s 8.45	s 6.57	s 6.51	s 6.45	s 6.04	s 5.44	s 5.38		5.5	OAKLAND (16th Street)	2.0
	IP										7.0		
	P	s 9.11	s 8.57	s 7.09	s 7.02	s 6.55	s 6.13	s 5.55	s 5.48		9.2	TO SHELLMOUND	3.5
	P	s 9.24	s 9.10	s 7.23	s 7.15	s 7.07	6.21	6.03	5.56		15.0	BERKELEY	5.7
Port Costa yard	WP										16.6	RICHMOND	11.5
	P										19.8	SAN PABLO	13.1
	E 105 W 95	P 9.35	9.21	7.35	7.27	7.18	6.31		6.06		23.0	SOBRANTE	16.3
	P	s 9.50	s 9.35	s 7.51	s 7.40	s 7.30	s 6.40	6.21	6.14		28.9	TO PINOLE	19.5
	BKWOTP	9.53	9.38						6.17		29.0	CROCKETT	25.4
	M 116	P									33.1	R PORT COSTA	27.5
	WP	s 10.05	s 9.50	8.05	s 7.54	s 7.40 PM	s 6.50	s 6.32	6.23		34.7	TO OZOL	29.5
	M 118	WP	10.13	9.58	8.13	8.02		6.58	6.40	6.31	38.0	TO MARTINEZ	31.1
	E 83 Yard Limits W 87	BKWOYP	10.29	10.14	8.27	8.15		s 7.10	6.51	6.42	48.9	BAHIA	37.4
	M 88	WYP	10.42	10.27	8.39	8.27		7.21	7.02	6.53	59.4	TO-R SUISUN-FAIRFIELD	48.3
Sacramento yard	M 74	WP	10.53	10.38	8.47	8.36		7.29	7.12	7.02	67.5	ELMIRA	58.8
	E 80 Yard Limits W 81	KWIYP	s 11.05 PM	10.52	9.00	s 8.50 PM		s 7.40	s 7.25 PM	s 7.15 PM	75.6	DIXON	66.9
	M 96	P		11.00	9.06			7.46		6.36	80.4	TO-R DAVIS	75.0
	IP										86.9	WEBSTER	79.8
	BKWOTIP		s 11.15 PM	s 9.20 PM				s 8.00 PM		s 6.50 PM	89.0	SNRy Crossing	86.3
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		TO-R SACRAMENTO	88.4
	(2.20) 32.14	(2.40) 33.15	(2.35) 34.22	(2.10) 34.61	(1.05) 28.71	(2.03) 43.12	(1.50) 40.91	(1.45) 42.85	(0.20) 40.20			(88.4)	
												Time over District.....	
												Average Speed per Hour.....	

RULE 5. Schedule time and train-order time at stations between Oakland Pier and Sacramento apply at station sign.

RULES 86 and 93: Third class trains, extra trains and engines must clear time of Nos. 101 and 102 not less than 15 minutes.

Third-class trains, extra trains and engines must be clear of main track and insulated joints at passing points for Nos. 27 and 28.

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

When Signal 328 displays yellow aspect, trains must not exceed 15 MPH from this signal to track magnet located 550 feet west of semi-automatic signal, opposite white concrete marker block.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS

Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
14	Crockett	Portland		Daily
18	Suisun-Fairfield	Portland		Daily
22	Martinez, Suisun-Fairfield	Ogden		Daily
24	Suisun-Fairfield, Dixon, Davis	Sparks		Daily
20	Suisun-Fairfield, Elmira, Dixon	Woodland		Daily

MARTINEZ SUBDIVISION

Timetable No. 241 June 2, 1946		Distance from Sacramento		WESTWARD							
				FIRST CLASS							
				229	243	17	55	223	51	241	261
STATIONS		Governor	Governor	Oregonian	Passenger	Senator	San Joaquin Daylight	Sierra	Passenger		
Mile Post Location			Arrive Daily Ex. Sunday and Holidays	Arrive Sunday and Holidays	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		
0.0	SAN FRANCISCO 3.5	92.0	PM 5.50	PM 5.50	PM 7.20	PM 7.20	PM 7.50	PM 8.30	PM 10.20		
3.5	OAKLAND PIER	88.5	5.30	5.30	7.00	7.00	7.30	8.10	10.00		
3.5	TO-R OAKLAND PIER 1.4	88.5	PM 5.20	PM 5.20	PM 6.40	PM 6.50	PM 7.22	PM 7.58	PM 9.52		
(4.9)	TO-R WEST OAKLAND 0.6	(87.1)									
5.5	OAKLAND (16th Street) 1.5	86.5	s 5.13	s 5.13	s 6.32	s 6.42	s 7.15	s 7.51	s 9.45		
7.0	TO SHELLMOUND 2.2	85.0									
9.2	BERKELEY 5.8	82.8	s 5.01	s 5.01	s 6.16	s 6.27	s 7.05	s 7.39	s 9.32		
15.0	RICHMOND 1.6	77.0	s 4.48	s 4.50	s 6.00	s 6.12	6.54	s 7.28	s 9.19		
16.6	SAN PABLO 3.2	75.4									
19.8	SOBRANTE 3.2	72.2									
23.0	TO PINOLE 5.9	69.0	s 4.34	4.38	5.46	f 5.55	6.44	7.15	9.03		
28.9	CROCKETT 2.1	63.1	s 4.24	s 4.29	s 5.37	s 5.44		s 7.07	s 8.54		
29.0	R PORT COSTA 2.0	61.0	s 4.14	f 4.25	5.29	s 5.34			s 8.44		
31.1	TO OZOL 1.6	59.0									
33.1	TO MARTINEZ 6.4	57.4	s 4.08	s 4.19	s 5.23	5.28 PM	s 6.27	6.55 PM	s 8.38		
34.7	BAHIA 10.9	51.0	3.55	4.09	5.12		6.16		8.27		
38.0	TO-R SUISUN-FAIRFIELD 10.5	40.1	s 3.45	s 3.59	s 5.01		6.06		s 8.17		
48.9	ELMIRA 8.1	29.6	f 3.29	f 3.48	4.48		5.56		8.05		
59.4	DIXON 8.1	21.5	s 3.20	f 3.40	4.40		5.48		s 7.56		
67.5	TO-R DAVIS 4.8	13.4	s 3.09	s 3.31	4.30 PM		5.40		s 7.46		
75.6	WEBSTER 6.5	8.6	3.00	3.25			5.35		s 10.20 10.12		
80.4	SNRY Crossing 2.1	2.1									
86.9	TO-R SACRAMENTO	0.0	2.50 PM	3.15 PM			5.25 PM	7.30 PM	10.00 PM		
89.0	(83.5)		Leave Daily Ex. Sunday and Holidays	Leave Sunday and Holidays	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily		
	Time over District		(2.30)	(2.05)	(2.10)	(1.22)	(1.57)	(1.03)	(2.22)		
	Average Speed per Hour		35.40	42.48	34.66	22.75	45.38	29.62	37.32		

RULE 5. Schedule time and train-order time at stations between Oakland Pier and Sacramento apply at station sign.

RULES 86 and 93. Third-class trains, extra trains and engines must clear time of Nos. 101 and 102 not less than 15 minutes.

Third-class trains, extra trains and engines must be clear of main track and insulated joints at passing points for Nos. 27 and 28.

Automatic train control westward track from 100 ft. east of Signal 357 to Martinez.

When Signal 347 displays yellow aspect, trains must not exceed 15 MPH from this signal to track magnet located 1250 feet east of semi-automatic signal, opposite white mark on bridge.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS				
Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
229	Cygnus	Any Station ...	Suisun	Daily Ex. Sun. & Hol.
229	Selby, Oleum, Rodeo	Any Station ...	Any Station ...	Daily Ex. Sun. & Hol.
17	Dixon	Any Station ...	Red Bluff	Daily
241	Teal	Any Station ...	Any Station ...	Tues. & Sat.

No. 17 reduce speed to 10 MPH at Elmira on Sunday to receive mail.

MARTINEZ SUBDIVISION

EASTWARD

Capacity of sidings in car lengths	THIRD CLASS			SECOND CLASS		FIRST CLASS		Mile Post Location	Timetable No. 241 June 2, 1946	Distance from Oakland Pier
	476 Freight	410 Freight	464 Freight	442 C. C. M.	26 Passenger	Leave Daily	Leave Daily			
	Leave Daily	Leave Daily	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday	Leave Daily	Leave Daily	PM 8.40 9.00		STATIONS	
							PM 9.20	3.5		SAN FRANCISCO	Oakland Ferry
								(4.9)	3.5	OAKLAND PIER
										0.0
										1.4
										2.0
										3.5
										5.7
										11.5
										13.1
										16.3
										19.5
										25.4
										27.5
										29.5
										31.1
										37.4
										48.3
										58.8
										66.9
										75.0
										79.8
										86.3
										88.4
										(88.4)
										Time over District.....
										Average Speed per Hour.....
										(4.45) 18.71
										(1.30) 20.66
										(7.00) 3.78
										(3.00) 29.17
										(2.50) 31.20

TO-R OAKLAND PIER	1.4	0.0
(TO-R WEST OAKLAND)	0.6	(1.4)
OAKLAND (16th Street)	1.5	2.0
TO SHELLMOUND	2.2	3.5
BERKELEY	5.8	5.7
RICHMOND	1.6	11.5
SAN PABLO	3.2	13.1
SOBRANTE	3.2	16.3
TO PINOLE	5.9	19.5
CROCKETT	2.1	25.4
R PORT COSTA	2.0	27.5
OZOL	1.6	29.5
TO MARTINEZ	6.3	31.1
BAHIA	10.9	37.4
TO-R SUISUN-FAIRFIELD	10.5	48.3
ELMIRA	8.1	58.8
DIXON	8.1	66.9
TO-R DAVIS	4.8	75.0
WEBSTER	6.5	79.8
SNRY Crossing	2.1	86.3
TO-R SACRAMENTO		88.4

Oakland yard
Port Costa yard
Sacramento yard

A. B. S.
Automatic Train Control
Automatic Block System
Double Track

RULE 5. Schedule time and train-order time at stations between Oakland Pier and Sacramento apply at station sign.

RULES 86 and 93. Third-class trains, extra trains and engines must clear time of Nos. 101 and 102 not less than 15 minutes. Third-class trains, extra trains and engines must be clear of main track and insulated joints at passing points for Nos. 27 and 28. Automatic train control eastward track from Martinez to westward dwarf signal 300 ft. east of draw span. When Signal 328 displays yellow aspect, trains must not exceed 15 MPH from this signal to track magnet located 550 feet west of semi-automatic signal, opposite white concrete marker block.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS				
Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
26	Elmira, Dixon.....	Roseville.....	Any Station....	Daily
26	Cygnus.....		Berkeley.....	Sat. & Sun.

MARTINEZ SUBDIVISION

Mile Post Location	Timetable No. 241 June 2, 1946	Distance from Sacramento	WESTWARD												
			THIRD CLASS												
			465 Freight	475 Freight											
			Arrive Daily Ex. Sunday	Arrive Daily											
	SAN FRANCISCO 3.5	92.0													
	OAKLAND PIER 3.5	88.5													
	TO-R OAKLAND PIER 1.4	88.5													
	(TO-R WEST OAKLAND) 0.6	(87.1)	PM 2.00	AM 1.00											
	OAKLAND (16th Street) 1.5	86.5													
	TO SHELLMOUND 2.2	85.0													
	BERKELEY 5.8	82.8													
	RICHMOND 1.6	77.0													
	SAN PABLO 3.2	75.4													
	SOBRANTE 3.2	72.2													
	TO PINOLE 5.9	69.0													
	CROCKETT 2.1	63.1													
	R PORT COSTA 2.0	61.0	7.00 AM												
	OZOL 1.6	59.0													
	TO MARTINEZ 6.4	57.4													
	BAHIA 10.9	51.0													
	TO-R SUISUN-FAIRFIELD 10.5	40.1													
	ELMIRA 8.1	29.6													
	DIXON 8.1	21.5													
	TO-R DAVIS 4.8	13.4													
	WEBSTER 6.5	8.6													
	SNRy Crossing 2.1	2.1													
	TO-R SACRAMENTO (88.5)	0.0													
			Leave Daily Ex. Sunday	Leave Daily											
			(7.00)	(5.00)											
			3.78	17.50											
	Time over District.....														
	Average Speed per Hour.....														

RULE 5. Schedule time and train-order time at stations between Oakland Pier and Sacramento apply at station sign.

RULES 86 and 93: Third class trains, extra trains and engines must clear time of Nos. 101 and 102 not less than 15 minutes.

Third-class trains, extra trains and engines must be clear of main track and insulated joints at passing points for Nos. 27 and 28.

Automatic train control westward track from 100 ft. east of Signal 357 to Martinez.

When Signal 347 displays yellow aspect, trains must not exceed 15 MPH from this signal to track magnet located 1250 feet east of semi-automatic signal, opposite white mark on bridge.

ADDITIONAL STATIONS		
NAME	Mile Post	Capacity
Emeryville.....	6.6	P
Paraffine.....	7.4	..
Stockyards.....	7.8	P
Bates..... (Spur)	11.9	8
Steg.....	13.1	P
Giant..... (Spur)	18.9	19 P
Hercules.....	23.8	P
Rodeo..... (Spur)	25.5	22 P
Oleum.....	26.3	95 P
Tormey..... (Spur)	27.1	45 P
Selby..... (Spur)	27.5	61 P
Eckley.....	30.1	P
Nevada Dock.....	32.2	P
Army Point.. (on spur)	33.8	P
Benicia..... (on spur)	32.4	P
Pierce.....	40.1	..
Cygnus.....	42.2	P
Teal.....	43.2	..
Jacksnipe.....	45.1	..
Tolenas.....	51.9	76 P
Vanden.....	54.0	..
Cannon.....	55.4	117
Batavia..... (Spur)	64.2	14
Tremont.....	71.8	47 P
Chiles..... (Spur)	77.1	11
Swingle..... (Spur)	79.1	18
Mikon..... (Spur)	86.3	15
Washington.....	88.3	..

MARTINEZ SUBDIVISION

EASTWARD

Capacity of sidings in car lengths		THIRD CLASS			FIRST CLASS			Mile Post Location	Timetable No. 241 June 2, 1946	Distance from Martinez
		410 Freight			58 Owl	56 Passenger	52 San Joaquin Daylight			
		Leave Daily			Leave Daily	Leave Daily	Leave Daily		STATIONS	
Port Costa yard	WIP	PM 11.45			PM 7.43	AM 11.50	AM 9.27	34.7	TO MARTINEZ	D.T. 0.0
	P	11.50			7.46	11.53	9.30	36.0	1.3 MOCOCO	
64	YP	PM 11.55			7.49	s AM 11.57		38.1	TO-R AVON	3.4
	N 82 Yard Limits S 116 WYP	AM 12.05			7.53	f PM 12.02	9.36	41.3	TO PORT CHICAGO	6.6
Pittsburg yard	50 P	12.15			7.57	12.07		44.8	3.5 McAVOY	10.1
	86 BWP	12.45			s 8.01	s 12.11	s 9.43	48.9	TO-R PITTSBURG	14.2
	55 YP	12.52			8.07	12.20	9.47	50.8	1.9 LOS MEDANOS	16.1
	64 P	1.00			8.11	s 12.30		53.5	TO ANTIOCH	18.8
	78 P	1.10				12.35		57.3	3.8 NEROLY	22.6
	52 WP	1.20			f 8.20	s 12.45	9.58	61.7	TO BRENTWOOD	27.0
	82 P	1.30			8.27	s 12.54		66.9	5.2 BYRON	32.2
	46 P	1.42			8.33	1.00		71.6	4.7 HERDLYN	36.9
	53 P	1.50			8.38	1.05		75.7	4.1 BETHANY	41.0
	42 P	1.57			8.43	1.09	10.14	79.1	3.4 JANNEY	44.4
	Tracy yard BKWOTYP	2.10 AM			s 8.50 PM	s 1.15 PM	s 10.20 AM	82.2	TO-R TRACY	47.5
		Arrive Daily			Arrive Daily	Arrive Daily	Arrive Daily		(47.5)	
		(2.25) 19.65			(1.07) 42.53	(1.25) 33.53	(0.53) 53.77		.....Time over District.....	
									.....Average Speed per Hour.....	

RULE 5. Schedule time and train-order time at Mococo apply at end of double track.

Schedule time and train-order time for westward trains at Port Chicago apply at west switch north siding, and for eastward trains apply at east switch south siding. North siding is first track north of main track (on bay side), and south siding is first track south of main track (on station side).

RULES 86 and 93. Third class trains, extra trains and engines, except trains handling passenger equipment only, must clear time of Nos. 51 and 52 not less than 10 minutes and must be clear of main track and insulated joints at meeting and passing points for Nos. 51 and 52.

Capacity of sidings in car lengths		Mile Post Location	Timetable No. 241 June 2, 1946		Distance from Radum
			EAST- WARD	WEST- WARD	
			San Ramon Branch		
			STATIONS		
64	YP	38.1	TO-R	AVON	29.7
	WP	42.5	TO	CONCORD	25.3
		45.8		LAS JUNTAS	22.0
	P	48.2	TO	WALNUT CREEK	19.6
		54.8		DANVILLE	13.0
27		57.7		SAN RAMON	10.1
Yard Limits		63.6		DOUGHERTY	4.2
		66.4		ASCO	1.4
	IYP	67.8	TO	RADUM	0.0
				(29.7)	

ADDITIONAL STATIONS		
NAME	Mile Post	Capacity
San Ramon Branch		
Galindo.....(Spur)	41.0	2
Hookston.....	45.1	17
Alamo.....	52.6	..

MARTINEZ SUBDIVISION

Timetable No. 241 June 2, 1948		WESTWARD									
		FIRST CLASS									
		57 Owl	55 Passenger	51 San Joaquin Daylight							
STATIONS		Distance from Tracy	Arrive Daily	Arrive Daily	Arrive Daily						
34.7	TO MARTINEZ 1.3	47.5	AM s 7.00	PM s 5.22	PM s 6.52						
36.0	MOCOCO 2.1	46.2									
38.1	TO-R AVON 3.2	44.1	6.54	s 5.15							
41.3	TO PORT CHICAGO 3.5	40.9	6.50	s 5.10	6.42						
44.8	McAVOY 4.1	37.4	6.46	5.05							
48.9	TO-R PITTSBURG 1.9	33.3	s 6.41	s 4.59	s 6.35						
50.8	LOS MEDANOS 2.7	31.4									
53.5	TO ANTIOCH 3.8	28.7	6.33	s 4.39	6.28						
57.3	NEROLY 4.4	24.9		4.34							
61.7	TO BRENTWOOD 5.2	20.5	6.25	s 4.29	6.20						
66.9	TO BYRON 4.7	15.3	6.19	s 4.19							
71.6	HERDLYN 4.1	10.6	6.14	4.12							
75.7	BETHANY 3.4	6.5	6.09	4.07	6.07						
79.1	JANNEY 3.1	3.1	6.05	4.02							
82.2	TO-R TRACY	0.0	6.00 AM	3.57 PM	6.00 PM						
	(47.5)		Leave Daily	Leave Daily	Leave Daily						
	.....Time over District.....		(1.00)	(1.25)	(0.52)						
	.....Average Speed per Hour.....		47.50	33.53	54.80						

RULE 5. Schedule time and train-order time at Mococo apply at end of double track.

Schedule time and train-order time for westward trains at Port Chicago apply at west switch north siding, and for eastward trains apply at east switch south siding. North siding is first track north of main track (on bay side), and south siding is first track south of main track (on station side).

RULES 86 and 93. Third class trains, extra trains and engines, except trains handling passenger equipment only, must clear time of Nos. 51 and 52 not less than 10 minutes and must be clear of main track and insulated joints at meeting and passing points for Nos. 51 and 52.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS				
Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
57	Brentwood.....	Berkeley.....	Fresno.....	Daily

ADDITIONAL STATIONS		
NAME	Mile Post	Capacity
Nichols.....	43.0	61 P
Shell Point.....	46.8	48 P
Jersey..... (Spur)	55.0	22
Newlove..... (Spur)	56.0	24
Arbor..... (Spur)	59.4	13
Byron Hot Springs....	68.9	..

MARTINEZ SUBDIVISION

EASTWARD				Mile Post Location	Timetable No. 241 June 2, 1946 Napa Branch STATIONS	Distance from Calistoga	WESTWARD	
Capacity of sidings in car lengths	SECOND CLASS		Freight				THIRD CLASS	
	438	440					439	441
	Leave Daily	Leave Daily Ex. Sunday					Arrive Daily	Arrive Daily Ex. Sunday
Yard Limits BKWOYP	AM 9.30	AM 1.00	50.5	TO-R SUISUN-FAIRFIELD	47.8	PM 1.50	PM 5.45	
39 WP	9.45	1.15	44.8	5.7 CORDELIA	42.1	1.35	5.30	
23 P	9.55	1.25	41.0	3.8 CRESTON	38.3	1.25	5.20	
Yard Limits WYP	10.10 AM	1.45	37.2	TO-R NAPA JCT.	34.5	1.10 PM	5.05	
Yard Limits 50 W		2.15 AM	45.5	TO NAPA	26.2		4.30 PM	
30			47.8	2.3 UNION	23.9			
Yard Limits 21 KT			54.0	TO YOUNTVILLE	17.7			
			71.7	TO-R CALISTOGA	0.0			
	Arrive Daily	Arrive Daily Ex. Sunday		(47.8)		Leave Daily	Leave Daily Ex. Sunday	
	(0.40)	(1.15)		.....Time over District.....		(0.40)	(1.15)
	19.80	17.28		.....Average Speed per Hour.....		19.80	17.28

ADDITIONAL STATIONS		
NAME	Mile Post	Capacity
Napa Branch		
Subet. (Spur)	47.9	9
Thomasson ... (Siding)	46.2	26
Rocktram.	42.8	21
Imola. (Spur)	44.2	3
Oak Knoll. (Spur)	50.2	3
Oakville.	57.5	26
Rutherford.	59.4	20
Zinfandel. (Spur)	61.2	3
Thomann.	62.1	40
St. Helena.	63.6	22
Krug.	64.5	6
Barro. (Spur)	65.3	6
Bale. (Spur)	67.5	5W
Larkmead. (Spur)	68.3	12
Maple.	69.0	9W
Schellville Branch		
Buchli.	42.2	7
Ramal. (Spur)	45.7	10
Winters Branch		
Hartley. (Spur)	68.5	6
Allendale.	70.3	13
Norton.	80.3	3
Arroz. (Spur)	82.8	3
Citrona. (Spur)	83.6	7
Madison. (Spur)	86.8	31

EASTWARD				Mile Post Location	Timetable No. 241 June 2, 1946 Schellville Branch STATIONS	Distance from Schellville	WESTWARD	
Capacity of sidings in car lengths	SECOND CLASS		Freight				THIRD CLASS	
	438	439					439	439
	Leave Daily	Leave Daily Ex. Sunday					Arrive Daily	Arrive Daily Ex. Sunday
Yard Limits 35 WYP	AM 10.30	37.2	TO-R NAPA JCT.	11.3	PM 12.50			
68	10.35	38.0	0.8 LOMBARD	10.5	12.45			
P		40.7	2.7 BRAZOS	7.8				
Yard Limits Y	11.10 AM	48.5	TO-R SCHELLVILLE	0.0	12.10 PM			
	Arrive Daily		(11.3)		Leave Daily			
	(0.40)	17.25		.....Time over District.....	(0.40)		
				.....Average Speed per Hour.....	17.25		

Capacity of sidings in car lengths	EASTWARD	Timetable No. 241 June 2, 1946 Vallejo Branch STATIONS	WESTWARD
	Mile Post Location		Distance from Vallejo
Yard Limits 35 WYP	37.2	TO-R NAPA JCT.	7.1
21	34.4	2.8 FLOSDEN	4.3
Yard Limits WT	30.1	TO-R VALLEJO	0.0
		(7.1)	

Capacity of sidings in car lengths	EASTWARD	Timetable No. 241 June 2, 1946 Winters Branch STATIONS	WESTWARD
	Mile Post Location		Distance from Esparto
WY P	59.4 59.6	ELMIRA	30.3
	63.7	4.1 VACAVILLE	26.2
WT 20	76.0	12.3 WINTERS	13.9
W	89.9	13.9 ESPARTO	0.0
		(30.3)	

Capacity of sidings in car lengths	EASTWARD	Timetable No. 241 June 2, 1946 Union Branch STATIONS	WESTWARD
	Mile Post Location		Distance from Union
	48.8	WEST NAPA	2.0
30	50.8 47.8	2.0 UNION	0.0
		(2.0)	

LOS BANOS SUBDIVISION

EASTWARD				Mile Post Location	Timetable No. 241 June 2, 1946	Distance from Fresno Yard	WESTWARD						
SECOND CLASS							THIRD CLASS						
Capacity of sidings in car lengths	430	432					403	405	401				
	Freight	Freight					Freight	Freight	Freight				
	Leave Daily	Leave Daily		Arrive Daily	Arrive Daily	Arrive Daily							
N 111 S 81	Yard Limits WYP	AM 9.15	AM 12.55	193.0	TO-R	KERMAN	18.2	AM 3.30	AM 11.40	PM 7.40			
	P	9.30	1.10	200.5	TO	BIOLA	10.7	3.17	11.27	7.25			
Fresno yard	IP	9.45	1.25	208.6		BIOLA JCT.	2.6	3.00	11.10	7.08			
	BKWP	9.55 AM	1.35 AM	211.2	TO-R	FRESNO YARD	0.0	2.50 AM	11.00 AM	7.00 PM			
		Arrive Daily	Arrive Daily			(18.2)		Leave Daily	Leave Daily	Leave Daily			
		(0.40) 27.30	(0.40) 27.30			.....Time over District.....		(0.40) 27.30	(0.40) 27.30	(0.40) 27.30			
						.....Average Speed per Hour.....							

RULE 5. Schedule time and train-order time for Biola line trains at Kerman apply to north siding, and for Pratton line trains to south siding. Trains to and from Los Banos Subdivision via Biola Jct. will be governed by interlocking signals between Biola Jct. and west switch No. 1 drill track Fresno yard, and will use No. 1 drill track to enter or leave Fresno yard.

ADDITIONAL STATIONS		
NAME	Mile Post	Capacity
Biola line West Acres.....	206.0	4

LATHROP SUBDIVISION

Capacity of sidings in car lengths	EAST- WARD	Timetable No. 241 June 2, 1946		WEST- WARD
	Mile Post Location			Distance from Kentucky House
		Lodi Branch		
		STATIONS		
Yard Limits BKWOYP	103.3	TO-R	LODI	39.3
11	105.2		1.9 ROMA	37.4
33 P	110.7		5.5 LOCKEFORD	31.9
7 Yard Limits P	130.2	TO	19.5 VALLEY SPRING	12.4
Yard Limits YWP	142.6		12.4 KENTUCKY HOUSE	0.0
(39.3)				

Capacity of sidings in car lengths	EAST- WARD	Timetable No. 241 June 2, 1946		WEST- WARD
	Mile Post Location			Distance from Ione
		Ione Branch		
		STATIONS		
Yard Limits WYP	111.7	TO-R	GALT	27.1
	116.7		5.0 CCTCo Crossing	22.1
Yard Limits WTP	138.8	TO-R	22.1 IONE	0.0
(27.1)				

Capacity of sidings in car lengths	EAST- WARD	Timetable No. 241 June 2, 1946		WEST- WARD	
	Mile Post Location			Distance from Woodbridge	
		Lodi Branch			
		STATIONS			
Yd. Limits	BKWOYP	103.3	TO-R	LODI	2.5
		105.8		2.5 WOODBIDGE	0.0
(2.5)					

Capacity of sidings in car lengths	EAST- WARD	Timetable No. 241 June 2, 1946		WEST- WARD
	Mile Post Location			Distance from Montpellier
		Oakdale Branch		
		STATIONS		
Stockton yard BKWOITYP	90.9	TO-R	STOCKTON	48.9
28 YP	103.8		12.9 PETERS	36.0
50 Yard Limits WP	122.4	TO-R	18.6 OAKDALE	17.4
34 P	139.8		17.4 MONTPELLIER	0.0
(48.9)				

ADDITIONAL STATIONS		
NAME	Mile Post	Capacity
Lodi Branch		
Victor.....	107.1	17 P
Clements.....	114.7	10 P
Wallace.....	120.8	27 P
Hellisma.....	126.4	14
Norval..... (Spur)	129.3	4
Toyon.....	134.7	11 P
Macnider.....	139.0	11 P
Oakdale Branch		
Orford..... (Spur)	96.0	5
Holden..... (Spur)	100.6	5
Farmington.....	108.2	13 P
Gotri..... (Spur)	111.5	7
Valley Home.....	116.7	15 P
Adela..... (Spur)	120.6	18
Claribel.....	126.3	46
Waterford.....	132.4	50 P
Hickman.....	134.0	42 P
Ione Branch		
Clay.....	122.0	..
Carbondale.....	132.3	38 P
Lignite..... (Spur)	133.0	5
Edwin..... (Spur)	134.8	27
Clarksona..... (Spur)	135.2	13
Dagon..... (Spur)	137.7	14

LATHROP SUBDIVISION

EASTWARD

Capacity of sidings in car lengths	THIRD CLASS			SECOND CLASS	FIRST CLASS					Mile Post Location	Timetable No. 241 June 2, 1946	Distance from Tracy
	421	425	423	402	261	53	56	52	59			
	Freight	Freight	Freight	B. M.	Passenger	Sacramento Daylight	Passenger	San Joaquin Daylight	West Coast			
Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Monday	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily			
Tracy yard BKWOTYP				AM 12.01	PM 6.15	PM 5.00	PM 1.25	AM 10.24		70.8		0.0
IP										78.3		7.5
Yard Limits WY W 79 Fresno 83 IP	PM 11.25	PM 2.45	AM 7.20	AM 12.20	s 6.32	5.20 5.50	s 1.41 PM	10.38 AM	AM 6.35	81.5		10.7
Stockton yard I										87.7		16.9
	PM 11.50	3.10	7.40		s 7.00	s 6.05			s 6.47 7.00	90.9		20.1
IP										92.3		21.5
W										93.9		23.1
P										95.0		24.2
125 P					f					96.6		25.8
125 P					f					100.2		29.4
Yard Limits 129 BKWOYP					s 7.30	s 6.23			s 7.20	103.3		32.5
125 P					s					106.2		35.4
126 P					f					109.5		38.7
Yard Limits 175 WYP					s 7.55	6.35			s 7.35	111.7		40.9
125 P					f					115.5		44.7
128 P					f					119.5		48.7
135 P					s 8.15				7.52	122.9		52.1
125 P					f					125.7		54.9
137 WP					f 8.35				8.01	129.0		58.2
Sacro- mento yard 138	IP									132.0		61.2
	WIP	1.05 AM	4.30 PM	8.55 AM		f 8.45 PM	7.10 PM		8.10 AM	133.2		62.4

STATIONS		Distance from Tracy
TO-R	TRACY		0.0
	7.5 San Joaquin River Drawb'ge	7.5
R	3.2 LATHROP	10.7
	6.2 TSRy Crossing	16.9
TO-R	STOCKTON	20.1
	1.4 STOCKTON TOWER No. 4	21.5
	1.6 AKERS	23.1
	1.1 End of Double Track	24.2
	1.6 CASTLE	25.8
	3.6 ARMSTRONG	29.4
	3.1 LODI	32.5
	2.9 ACAMPO	35.4
	3.3 FOREST LAKE	38.7
	2.2 GALT	40.9
	3.8 NEED	44.7
	4.0 McCONNELL	48.7
	3.4 ELK GROVE	52.1
	2.8 MEADOWS	54.9
	3.3 FLORIN	58.2
	3.0 POLK	61.2
	1.2 BRIGHTON	62.4

Time at Sacramento and Elvas for information only.
See Sacramento Division timetable for train movements between Sacramento and Brighton.

Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Monday	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	ELVAS	SACRAMENTO
(1.40) 31.20	(1.45) 29.54	(1.35) 32.65	(0.19) 33.78	PM 8.50	PM 7.15	PM 9.00	PM 7.25	AM 8.17	AM 8.30	(62.4)	
										Time over District.....	
										Average Speed per Hour.....	

ADDITIONAL STATIONS		
NAME	Mile Post	Capacity
Banta.....	73.9	77 P
Winship..... (Spur)	76.8	9
French Camp.....	86.1	77 P
El Pinal.....	92.7	6 P
Tomspur..... (Spur)	98.1	6
Urgon..... (Spur)	105.1	31 P
Arno.....	117.5	16 P

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS				
Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
59	Any Station.....	Sacramento.....	Fresno.....	Daily
261	French Camp, Urgon, Arno.....	Any Station.....	Any Station.....	Daily

No. 59 reduce speed to 15 MPH at Acampo and Elk Grove to dispatch mail.
No. 56 stop at Banta, when necessary, to exchange mail.
No. 261 stop at French Camp and Acampo daily except Sunday and Holidays to exchange mail.

LATHROP SUBDIVISION

Mile Post Location	Timetable No. 241 June 2, 1946	Distance from Brighton	WESTWARD								
			FIRST CLASS					THIRD CLASS			
			262 Passenger	54 Sacramento Daylight	55 Passenger	51 San Joaquin Daylight	60 West Coast	420 Freight	426 Freight		
			Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		
STATIONS											
70.8	TO-R TRACY 7.5	62.4	AM 10.00	AM 11.05	PM 3.47	PM 5.55					
78.3	San Joaquin River Drawb'ge 3.2	54.9									
81.5	R LATHROP 6.2	51.7	s 9.40	10.50 10.25	3.31 PM	5.40 PM	PM 9.26	AM 10.55	PM 6.45		
87.7	TSRy Crossing 3.2	45.5									
90.9	TO-R STOCKTON 1.4	42.3	s 9.25	s 10.05			s 9.14	10.35	6.25		
92.3	STOCKTON TOWER No. 4 1.6	40.9									
93.9	AKERS 1.1	39.3									
95.0	End of Double Track 1.6	38.2									
96.6	CASTLE 3.6	36.6									
100.2	ARMSTRONG 3.1	33.0									
103.3	LODI 2.9	29.9	s 8.45	s 9.41			s 8.47				
106.2	ACAMPO 3.3	27.0	f								
109.5	FOREST LAKE 2.2	23.7	f								
111.7	GALT 3.8	21.5	s 8.23				8.32				
115.5	NEED 4.0	17.7	f								
119.5	McCONNELL 3.4	13.7	f								
122.9	ELK GROVE 2.8	10.3	s 8.02				8.18				
125.7	MEADOWS 3.3	7.5									
129.0	FLORIN 3.0	4.2	s 7.52	9.06			8.11				
132.0	POLK 1.2	1.2									
133.2	BRIGHTON	0.0	7.45 AM	9.00 AM			8.05 PM	9.15 AM	5.00 PM		

Time at Sacramento and Elvas for information only.
See Sacramento Division timetable for train movements between Sacramento and Brighton.

	ELVAS		AM 7.40	AM 8.55		PM 7.58			
	SACRAMENTO		7.30 AM	8.45 AM		7.45 PM			
	(62.4)		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	
	.....Time over District.....		(2.15)	(2.05)	(0.16)	(0.15)	(1.21)	(1.40)	(1.45)
	.....Average Speed per Hour.....		27.73	29.90	40.72	42.80	38.29	31.20	29.54

No. 60 will not stop at station at Lathrop but will use east leg of wye to Merced Subdivision.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS				
Train	At	Receive To (or Beyond)	Discharge From (or Beyond)	Frequency
60 262	Any Station	Modesto	Sacramento	Daily
	French Camp, Urgan, Arno	Any Station	Any Station	Daily

No. 60 reduce speed to 15 MPH at Elk Grove to dispatch mail.
No. 55 stop at Banta, when necessary, to exchange mail.
No. 262 stop at Acampo and French Camp daily except Sunday and Holidays to exchange mail.

MERCED SUBDIVISION

EASTWARD

Capacity of sidings in car lengths	THIRD CLASS		SECOND CLASS		FIRST CLASS			Mile Post Location	Timetable No. 241 June 2, 1946	Distance from Lathrop		
	426	420		402	60	56	52					
	Freight	Freight		B. M	West Coast	Passenger	San Joaquin Daylight					
	Leave Daily	Leave Daily		Leave Daily Ex. Monday	Leave Daily	Leave Daily	Leave Daily					
Yd. Lmts. Fresno 53	WYIP	PM 6.45	AM 10.55		AM 12.20		PM 9.26	PM 1.42	AM 10.38	92.9	TO-R LATHROP	0.0
	IP									93.8	0.9 WPRR Crossing	0.9
72	P	6.53	11.03		12.28		f 9.34	s 1.52		96.8	TO MANTECA	3.9
112	P	6.58	11.08				9.37	1.56	10.54	99.4	2.6 CALLA	6.5
79	P	7.05	11.15		12.37		9.41	s 2.03		103.3	TO RIPON	10.4
79	P	7.12	11.22		12.43		9.45	s 2.10		106.4	3.1 SALIDA	13.5
Nos. 1-98, 2-110, 3-125 Yd. Lmts. BKWOYP		7.25	11.35		1.05		s 10.00	s 2.30	s 11.11	113.1	TO-R MODESTO	20.2
	IP									114.7	1.6 TSRy Crossing	21.8
66	P	7.35	11.45		1.14		10.06	s 2.37	11.17	117.4	2.7 CERES	24.5
67	P	7.43	AM 11.53				10.10	f 2.43		120.8	3.4 KEYES	27.9
78 Yard Limits	P	7.53	PM 12.03		1.26		s 10.19	s 2.56	s 11.28	126.2	TO TURLOCK	33.3
91	P	8.03	12.13				10.26	f 3.03		131.9	5.7 DELHI	39.0
80	WP	8.13	12.21		1.42		f 10.34	s 3.13	11.38	136.4	TO LIVINGSTON	43.5
70	P	8.24	12.31				f 10.42	f 3.24		143.2	TO ATWATER	50.3
125	P	8.33	12.38		2.00		10.48	3.30		147.4	4.2 FERGUS	54.5
147 Yard Limits BKWOTP		8.52	12.50 1.10		2.28		s 11.05	s 3.55	AM 11.54 PM 12.01	150.5	TO-R MERCED	57.6
71	P	9.10	1.22		2.43		11.15	f 4.03		156.6	6.1 LINGARD	63.7
74	P	9.20	1.31				11.20	f 4.15		160.5	3.9 ATHLONE	67.6
78	P	9.35	1.43		3.00		11.27	f 4.24	12.11	166.9	6.4 MINTURN	74.0
	WYP						f 11.30	s 4.30		168.2	TO CHOWCHILLA	75.3
73	P	9.46	1.54				11.36	f 4.37		173.0	4.8 FAIRMEAD	80.1
70	WTP	9.52	2.02					f 4.43	12.20	176.5	3.5 BERENDA	83.6
98	P	10.00	2.10		3.20		11.42	4.48		179.2	2.7 NOTARB	86.3
139 Yard Limits	P	10.10	2.20		3.30		s 11.52	s 5.00	s 12.30	183.9	TO MADERA	91.0
77	P	10.20	2.31		3.40		AM 12.01	5.10	12.37	190.2	6.3 IRRIGOSA	97.3
78	P	10.30	2.41		3.50		12.08	f 5.18	12.43	195.6	5.4 HERNDON	102.7
Fresno yard	IP									199.2	3.6 BIOLA JCT.	106.3
	BKWP	10.45 PM	2.55 PM		4.00 AM		12.16	5.28	12.50	201.8	TO-R FRESNO YARD	108.9
	BKWOTYP						s 12.28 AM	s 5.40 PM	s 1.00 PM	205.5	TO-R FRESNO	112.6
		Arrive Daily	Arrive Daily		Arrive Daily Ex. Monday		Arrive Daily	Arrive Daily	Arrive Daily		(112.6)	
		(4.00) 27.31	(4.00) 27.31		(3.40) 30.70		(3.02) 37.12	(3.58) 28.39	(2.22) 47.57		.....Time over District.....	
											.....Average Speed per Hour.....	

Automatic Block System

RULES 86 and 93. Second and third-class trains, extra trains and engines, except trains handling passenger equipment only, must clear time of Nos. 51 and 52 not less than 10 minutes and must be clear of main track and insulated joints at meeting and passing points for Nos. 51 and 52.

ADDITIONAL STATIONS			ADDITIONAL STATIONS		
NAME	Mile Post	Capacity	NAME	Mile Post	Capacity
Fresno line			Fresno line		
Coronet..... (Spur)	100.6	28	Sierra Vista... (Spur)	165.8	24
Covell.....	108.1	16	Borden.....	186.7	25
Alcant.....	129.3				
Arena..... (Spur)	138.9	16			
Buhach..... (Spur)	144.8	25			
Creagan..... (Spur)	151.9	21			
Labranza, ... (Spur)	163.3	4			

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS			
Train	AT	Receive To (or Beyond)	Discharge From (or Beyond)
60	Any Station.....	.....	Stockton.....
			Frequency
			Daily

No. 56 make an additional stop on flag at mail crane 1650 feet east of station building Keyes, to exchange mail.
 No. 56 reduce speed to 10 MPH at Delhi and Atwater to dispatch papers.
 No. 60 reduce speed to 5 MPH at Chowchilla to receive mail.

MERCED SUBDIVISION

Mile Post Location	Timetable No. 241 June 2, 1946	Distance from Fresno	WESTWARD									
			FIRST CLASS			THIRD CLASS						
			59 West Coast Arrive Daily	55 Passenger Arrive Daily	51 San Joaquin Daylight Arrive Daily	423 Freight Arrive Daily	425 Freight Arrive Daily	421 Freight Arrive Daily				
92.9	TO-R LATHROP 0.9	112.6	AM 6.35	PM 3.30	PM 5.30		AM 7.20	PM 2.45	PM 11.25			
93.8	WPRR Crossing 3.0	111.7										
96.8	TO MANTECA 2.6	108.7	6.25	s 3.23			7.12	2.32	11.12			
99.4	CALLA 3.9	106.1	6.21	3.15	5.22		7.07	2.26	11.07			
103.3	TO RIPON 3.1	102.2	6.17	s 3.10			7.01	2.20	10.59			
106.4	SALIDA 6.7	99.1	6.13	s 3.05			6.56	2.10	10.54			
113.1	TO-R MODESTO 1.6	92.4	s 6.05	s 2.55 2.30	s 5.08		6.45	1.58	10.44			
114.7	TSRy Crossing 2.7	90.8										
117.4	CERES 3.4	88.1		s 2.21	5.00		6.34	1.46	10.34			
120.8	KEYES 5.4	84.7	5.49	f 2.16			6.28	1.40	10.27			
126.2	TO TURLOCK 5.7	79.3	s 5.40	s 2.00	s 4.51		6.20	1.31	10.19			
131.9	DELHI 4.5	73.6		f 1.51			6.09	1.22	9.45			
136.4	TO LIVINGSTON 6.8	69.1	5.29	s 1.45	4.40		5.59	1.14	9.35			
143.2	TO ATWATER 4.2	62.3	5.22	s 1.25			5.39	1.04	9.10			
147.4	FERGUS 3.1	58.1	5.18	1.15			5.32	12.56	9.00			
150.5	TO-R MERCED 6.1	55.0	s 5.13	s 1.10	s 4.27		5.27	12.50	8.52			
156.6	LINGARD 3.9	48.9	4.58	12.53			5.14	12.30	8.35			
160.5	ATHLONE 6.4	45.0	4.54	12.47	4.15		5.06	12.22	8.28			
166.9	MINTURN 1.3	38.6	4.48	12.40			4.48	12.11 PM	8.18			
168.2	TO CHOWCHILLA 4.8	37.3		s 12.38								
173.0	FAIRMEAD 3.5	32.5		f 12.28	4.03		4.30	11.45 AM	8.07			
176.5	BERENDA 2.7	29.0	4.38	12.20			4.24	11.39	8.00			
179.2	NOTARB 4.7	26.3		12.09			4.19	11.34	7.55			
183.9	TO MADERA 6.3	21.6	s 4.30	s 12.03 PM	s 3.53		4.11	11.26	7.47			
190.2	IRRIGOSA 5.4	15.3	4.19	11.51 AM			4.00	11.15	7.35			
195.6	HERNDON 3.6	9.9	4.14	f 11.45	3.41		3.50	11.05	7.25			
199.2	BIOLA JCT. 2.6	6.3										
201.8	TO-R FRESNO YARD 3.7	3.7	4.08	11.38	3.35		3.40 AM	10.55 AM	7.15 PM			
205.5	TO-R FRESNO	0.0	4.00 AM	11.30 AM	3.28 PM							
	(112.6)		Leave Daily	Leave Daily	Leave Daily		Leave Daily	Leave Daily	Leave Daily			
	.....Time over District.....		(2.35)	(4.00)	(2.02)		(3.40)	(3.50)	(4.10)			
	.....Average Speed per Hour.....		43.52	28.12	55.45		30.70	29.37	26.14			

RULES 86 and 93. Second and third-class trains, extra trains and engines, except trains handling passenger equipment only, must clear time of Nos. 51 and 52 not less than 10 minutes and must be clear of main track and insulated joints at meeting and passing points for Nos. 51 and 52.

No. 59 will not stop at station at Lathrop but will use east leg of wye to Lathrop Subdivision.

No. 59 reduce speed to 30 MPH at Chowchilla to dispatch mail. No. 55 make an additional stop on flag at mail crane 1650 feet east of station building Keyes, to exchange mail.

NILES SUBDIVISION

EASTWARD

Capacity of sidings in car lengths	THIRD CLASS						SECOND CLASS		Mile Post Location	Timetable No. 241 June 2, 1946	Distance from Redwood Jct.
				408	406	472	402	444			
				Freight	Freight	Freight	B. M.	C. C. M.			
			Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sunday	Leave Daily Ex. Sunday		STATIONS		
	WIYP		AM 9.30		AM 1.20	PM 8.40	PM 8.00	26.2	TO-R REDWOOD JCT.	0.0	
								27.5	1.3 End of Double Track	1.3	
64	P		9.37		1.27	8.47		29.5	2.0 HENDERSON	3.3	
51	P		9.45		1.34	8.54		33.9	4.4 DUMBARTON	7.7	
100	Yard Limits WIYP		10.05	AM 6.05	1.55	9.20	8.20	37.2	TO-R 3.3 NEWARK	11.0	
51	P		10.15	6.10	2.00	9.25		40.1	2.9 CENTERVILLE	13.9	
80	P	Yard Limits	10.25	6.25	2.03	9.28	8.26	41.7	1.6 SHINN	15.5	
			10.27	6.30	2.05	9.30	8.28 PM	42.4	TO-R 0.7 NILES TOWER	16.2	
			10.30	6.33	2.07	9.32		43.0 29.6	0.6 NILES JCT.	16.8	
76	P		10.35	6.38	2.12	9.37	31.7	2.1 FARWELL	18.9		
91	P		10.46	6.49	2.22	9.47	35.6	3.9 SUNOL	22.8		
73	P		10.57	7.00	2.33	9.58	40.9	TO 5.3 PLEASANTON	28.1		
	IYP						42.0	TO 1.1 RADUM	29.2		
1-110, 2-105	YP	Yard Limits	11.01	7.04	2.37	10.02	43.0	1.0 ELIOT	30.2		
1-79, 2-80	BKWP		11.10	7.12	2.46	10.11	46.9	TO-R 3.9 LIVERMORE	34.1		
72	P		11.17	7.19	2.53	10.18	50.5	3.6 ULMAR	37.7		
88	WTP		11.30	7.29	3.05	10.30	55.0	TO 4.5 ALTMONT	42.2		
72	P		11.40	7.40	3.17	10.42	59.5	4.5 CAYLEY	46.7		
69	P		AM 11.52	7.52	3.30	10.55	63.1	3.6 MIDWAY	50.3		
	Tracy yard BKWOTYP		PM 12.05	8.10 AM	3.45 AM	11.10 PM	70.8	TO-R 7.7 TRACY	58.0		
			Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily Ex. Sunday		(58.0)		
			(2.35) 22.45	(2.05) 22.56	(2.25) 24.00	(2.30) 23.20	(0.28) 34.71		.....Time over District.....	
									.....Average Speed per Hour.....	

RULE 5. Schedule time and train-order time at Redwood Jct. apply at end of double track.
 Schedule time and train-order time on Elmhurst-Santa Clara line at Newark apply at siding east of station building. Siding extends from initial switch at east end to crossover only.
 West end of house track at Newark, between crossover 300 feet west of station building and west switch is designated Passenger siding for use by passenger trains when authorized by train order, and must be left clear.
 Siding of Centerville-Redwood Jct. line at Newark is west of crossing of Elmhurst-Santa Clara line.

Schedule time and train-order time for eastward trains having authority to main track at Eliot apply at crossover designated as California link.
 Schedule time and train-order time for westward trains at Livermore apply at west end siding No. 1, and for eastward trains apply at east end siding No. 2. Westward trains taking siding will use siding No. 2 and eastward trains taking siding will use siding No. 1 unless otherwise instructed. Siding No. 1 extends from station building westward 4600 feet, and siding No. 2 extends from switch 2000 feet east of station building eastward 4000 feet. Connection between siding No. 1 and siding No. 2 must be left clear.

MERCED SUBDIVISION

Capacity of sidings in car lengths	EASTWARD		WESTWARD		Capacity of sidings in car lengths	EASTWARD		WESTWARD		
	Mile Post Location	STATIONS	Mile Post Location	STATIONS		Mile Post Location	STATIONS	Mile Post Location	STATIONS	
70	WTP	176.5	R	BERENDA	11.4	WYP	168.2	TO	CHOWCHILLA	10.1
	I	179.8	TO	3.3 KISMET TOWER	8.1		178.3	TO	10.1 DAIRYLAND	0.0
12		183.8		4.0 TALBOT	4.1					
		187.9		4.1 DAULTON	0.0					
				(11.4)					(10.1)	

ADDITIONAL STATIONS		
NAME	Mile Post	Capacity
Chowchilla Branch		
Ash	172.6	..
Tillman	175.3	..
Plains	177.2	5

NILES SUBDIVISION

Mile Post Location	Timetable No. 241 June 2, 1946		Distance from Tracy	WESTWARD										
				THIRD CLASS										
				401 Freight	429 Freight	409 Freight	433 Freight	413 Freight	437 Freight					
STATIONS				Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily					
26.2	TO-R REDWOOD JCT. 1.3	D.P.	58.0	AM 3.10		AM 10.55		PM 6.40						
27.5	End of Double Track 2.0		56.7											
29.5	HENDERSON 4.4		54.7	3.04		10.49		6.34						
33.9	DUMBARTON 3.3		50.3	2.56		10.41		6.26						
37.2	TO-R NEWARK 2.9		47.0	2.49		10.34		6.19						
40.1	CENTERVILLE 1.6		44.1	2.43		10.28		6.13						
41.7	SHINN 0.7		42.5	2.40		10.25		6.10						
42.4	TO-R NILES TOWER 0.6		41.8	2.38	AM 3.08	10.23	AM 11.05	6.08	PM 6.38					
43.0	NILES JCT. 2.1		41.2	2.37	3.07	10.22	11.04	6.07	6.37					
29.6	FARWELL 3.9		39.1	2.33	3.03	10.18	11.00	6.03	6.33					
31.7	SUNOL 5.3		35.2	2.22	2.53	10.08	10.46	5.53	6.23					
40.9	TO PLEASANTON 1.1		29.9	2.12	2.42	9.57	10.30	5.42	6.12					
42.0	TO RADUM 1.0		28.8											
43.0	ELIOT 3.9		27.8	2.08	2.37	9.53	10.26	5.38	6.08					
46.9	TO-R LIVERMORE 3.6		23.9	2.00	2.30	9.45	10.18	5.30	6.00					
50.5	ULMAR 4.5		20.3	1.53	2.23	9.38	10.11	5.23	5.53					
55.0	TO ALTAMONT 4.5		15.8	1.42	2.12	9.27	10.00	5.12	5.42					
59.5	CAYLEY 3.6		11.3	1.32	2.02	9.17	9.47	5.02	5.32					
63.1	MIDWAY 7.7		7.7	1.20	1.50	9.05	9.35	4.50	5.20					
70.8	TO-R TRACY		0.0	1.00 AM	1.30 AM	8.45 AM	9.15 AM	4.30 PM	5.00 PM					
(58.0)				Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily					
.....Time over District.....				(2.10)	(1.38)	(2.10)	(1.50)	(2.10)	(1.38)					
.....Average Speed per Hour.....				26.76	25.69	26.76	22.80	26.76	25.69					

EASTWARD					Mile Post Location	Timetable No. 241 June 2, 1946		Distance from San Jose Yard	WESTWARD		ADDITIONAL STATIONS		
THIRD CLASS						STATIONS			SECOND CLASS				
Capacity of sidings in car lengths	437 Freight	433 Freight	429 Freight	Leave Daily		Leave Daily	Leave Daily		444 C. C. M.	Arrive Daily Ex. Sunday			
Yd.Lem.S.	70	KWYP			29.2	TO-R NILES 0.6	18.5	PM 8.30					
		IYP	PM 6.38	AM 11.05	AM 3.08	29.8	TO-R NILES TOWER 3.0	17.9	8.28 PM				
	33	P	6.48	11.15	3.18	IRVINGTON 7.9	14.9						
	37	P	7.08	11.35	3.38	MILPITAS 2.6	7.0						
		P				WAYNE 4.4	4.4						
		San Jose yard BKWOITYP	7.30 PM	11.57 AM	4.00 AM	R SAN JOSE YARD	0.0						
				Arrive Daily	Arrive Daily	Arrive Daily	(18.5)						
				(0.52)	(0.52)	(0.52)							
				21.60	21.60	21.60							
.....Time over District.....									(0.02)				
.....Average Speed per Hour.....									15.00				

RULE 5. Schedule time and train-order time at Redwood Jct. apply at end of double track.

Schedule time and train-order time on Elmhurst-Santa Clara line at Newark apply at siding east of station building. Siding extends from initial switch at east end to crossover only.

West end of house track at Newark, between crossover 300 feet west of station building and west switch is designated Passenger siding for use by passenger trains when authorized by train order, and must be left clear.

Siding of Centerville-Redwood Jct. line at Newark is west of crossing of Elmhurst-Santa Clara line.

Schedule time and train-order time for eastward trains having authority to main track at Eliot apply at crossover designated as California link.

Schedule time and train-order time for westward trains at Livermore apply at west end siding No. 1, and for eastward trains apply at east end siding No. 2. Westward trains taking siding will use siding No. 2 and eastward trains taking siding will use siding No. 1 unless otherwise instructed. Siding No. 1 extends from station building westward 4600 feet, and siding No. 2 extends from switch 2000 feet east of station building eastward 4000 feet. Connection between siding No. 1 and siding No. 2 must be left clear.

NILES SUBDIVISION

EASTWARD

Capacity of sidings in car lengths	THIRD CLASS		FIRST CLASS					Mile Post Location	Timetable No. 241 June 2, 1946	Distance from Oakland Pier
	422	418	74	336	40	2	250			
	Freight	Freight	Oakland Lark	Oakland C. M. E.	W. P. Passenger	W. P. Passenger	Passenger			
	Leave Daily	Leave Daily Ex. Sunday	Leave Daily	Leave Daily Ex. Sat., Sun.	Leave Daily	Leave Daily	Leave Daily			
			PM 8.00		PM 4.00	AM 9.00	AM 7.00			
			8.20		4.20	9.20	7.20			
			PM 8.28		PM 4.40	AM 9.40	AM 7.25	3.5		
Oakland yard	BKWIP							4.9		
	BKWOITYP	PM 8.45	AM 9.00		PM 7.30			5.9		
	IP					4.48 PM	9.48 AM	6.7		
	P			s 8.43				s 7.41	6.7	
	YIP			s 8.50				s 7.48	9.7	
	WP	9.30	9.25	8.55	7.50			7.53	13.4	
70	WP	9.44	10.00	9.05	8.01		8.02	20.2		
64	P	9.55	11.00	9.11	8.10		8.09	25.3		
Psg. 24 Yd. Lmt. 80 WIYP		10.10	11.20 AM	9.19	8.42		s 8.18	30.6		
80	P	10.20		9.24	8.52		8.24	34.1		
	P			9.30			8.30	39.1		
53	P	10.38		f 9.35	9.05		8.34	41.7		
San Jose yard KIP		10.45 PM		9.40 PM	9.15 PM		8.40 AM	44.8		

STATIONS		Distance from Oakland Pier
SAN FRANCISCO	3.5	
OAKLAND PIER		
TO-R OAKLAND PIER	1.4	0.0
TO-R WEST OAKLAND	1.0	1.4
MAGNOLIA TOWER	0.8	2.4
OAKLAND (First Street)	3.0	3.2
FRUITVALE	3.7	6.2
TO-R ELMHURST	6.8	9.9
RUSSELL	5.1	16.7
TO ALVARADO	5.3	21.8
TO-R NEWARK	3.5	27.1
ALBRAE	5.0	30.6
ALVISO	2.6	35.6
TO AGNEW	3.1	38.2
TO-R SANTA CLARA		41.3

Time at San Jose for information only.
See Coast Division timetable for train movements between Santa Clara and San Jose.

				9.50 PM			8.45 AM	SAN JOSE	
Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily	Arrive Daily Ex. Sat., Sun.	Arrive Daily	Arrive Daily	Arrive Daily	(41.3)		
(2.00)	(2.20)	(1.12)	(1.45)	(0.08)	(0.08)	(1.15)	Time over District.....		
19.95	10.01	34.41	22.80	18.00	18.00	33.04	Average Speed per Hour.....		

EASTWARD

WESTWARD

Capacity of sidings in car lengths		Mile Post Location	Timetable No. 241 June 2, 1946		Distance from Niles Jct.	SECOND CLASS
					PM 9.08	
Oakland yard	WP	13.4	TO-R ELMHURST	16.2		
	P	14.8	TO SAN LEANDRO	14.8		
	35	P	LORENZO	12.1		
	100	P	HAYWARD	9.5	8.52	
	32	P	DECOTO	3.1		
	Yard Limits	70	KWYP	TO-R NILES	0.4	8.30 PM
			NILES JCT.	0.0		
			(16.2)		Leave Daily Ex. Sunday	
					(0.38)	
					24.94	

RULE 5. Schedule time and train-order time for westward trains via Decoto at Niles apply at junction switch located 550 feet west of station building.

RULE 5. Schedule time and train-order time on Elmhurst-Santa Clara line at Newark apply at siding east of station building. Siding extends from initial switch at east end to crossover only.

West end of house track at Newark, between crossover 300 feet west of station building and west switch is designated Passenger siding, for use by passenger trains when authorized by train order, and must be left clear. Passenger siding at Newark has capacity of engine and 13 passenger cars.

Siding of Centerville-Redwood Jct. line at Newark is west of crossing of Elmhurst-Santa Clara line.

Sections of WPRR first-class trains may display signals between Oakland Pier and Magnolia Tower (WPRR Chestnut Jct.), in either direction without train-order authority.

Registration of sections of WPRR first-class trains terminating at WPRR Chestnut Jct. and moving to WPRR Oakland Yard, may be phoned from WPRR Oakland Yard to Operator SP, Oakland Pier, for entry on register at Oakland Pier.

No. 74 stop on flag at Drawbridge Friday and Saturday.

ADDITIONAL STATIONS		
NAME	Mile Post	Capacity
Santa Clara line		
East Oakland.....	8.3	P
Mulford.....	15.5	20 P
Robert.....	17.8	20 P
Mt. Eden.....	21.5	21 P
Baumberg..... (Spur)	23.0	10
Hall..... (Spur)	26.2	9 P
Drawbridge.....	36.5	P
Niles line		
Estudillo.....	16.5	35 P
Halvern.....	24.0	..
Pabrico..... (Spur)	27.6	11

NILES SUBDIVISION

Mile Post Location	Timetable No. 241 June 2, 1946	Distance from Santa Clara	WESTWARD									
			FIRST CLASS					SECOND CLASS		THIRD CLASS		
			39 W. P. Passenger	335 Oakland C. M. W.	73 Oakland Lark	1 W. P. Passenger	255 Passenger	444 C. C. M.		419 Freight	407 Freight	417 Freight
Arrive Daily	Arrive Daily Ex. Sun., Mon	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday		Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday			
0.0	SAN FRANCISCO 3.5	44.8	AM 8.50		AM 9.50	PM 5.20	PM 6.50					
3.5	OAKLAND PIER	41.3	8.30		9.30	5.00	6.30					
3.5	TO-R OAKLAND PIER 1.4	41.3	AM 8.05		AM 9.20	PM 4.40	PM 6.28					
4.9	TO-R WEST OAKLAND 1.0	39.9		AM 8.50			PM 9.30	AM 5.30		PM 5.50		
5.9	MAGNOLIA TOWER 0.8	38.9	7 55 AM			4 28 PM						
6.7	OAKLAND (First Street) 3.0	38.1			s 9.05		s 6.18					
9.7	FRUITVALE 3.7	35.1			s 8.50		s 6.06					
13.4	TO-R ELMHURST 6.8	31.4		8.20	8.42		5.56	9 08 PM	5.00		5.25	
20.2	RUSSELL 5.1	24.6		8.02	8.33		5.46		4.45		4.50	
25.3	TO ALVARADO 5.3	19.5		7.48	8.27		5.39		4.35		4.30	
30.6	TO-R NEWARK 3.5	14.2		7.39	8.18		5.31		4.20	AM 6.05	3.30 PM	
34.1	ALBRAE 5.0	10.7		7.32	8.06		5.24		4.00	5.58		
39.1	ALVISO 2.6	5.7			f 8.01							
41.7	TO AGNEW 3.1	3.1		7.20	f 7.57		5.14		3.40		5.47	
44.8	TO-R SANTA CLARA	0.0		7 15 AM	7 52 AM		5 10 PM		3 30 AM		5 40 AM	

Time at San Jose for information only.
See Coast Division timetable for train movements between Santa Clara and San Jose.

SAN JOSE				7 10 AM	7 47 AM		5 05 PM					
(41.3)			Leave Daily	Leave Daily Ex. Sun., Mon	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex. Sunday		Leave Daily	Leave Daily	Leave Daily Ex. Sunday
.....Time over District.....			(0.10)	(1.35)	(1.28)	(0.12)	(1.18)	(0.22)		(2.00)	(0.25)	(2.20)
.....Average Speed per Hour.....			14.40	25.20	28.14	12.00	31.75	23.18		19.95	34.08	10.01

RULE 5. Schedule time and train-order time on Elmhurst-Santa Clara line at Newark apply at siding east of station building. Siding extends from initial switch at east end to crossover only. West end of house track at Newark, between crossover 300 feet west of station building and west switch is designated Passenger siding, for use by passenger trains when authorized by train order, and must be left clear. Passenger siding at Newark has capacity of engine and 13 passenger cars. Siding of Centerville-Redwood Jct. line at Newark is west of crossing of Elmhurst-Santa Clara line. Sections of WPRR first-class trains may display signals between Oakland Pier and Magnolia Tower (WPRR Chestnut Jct.), in either direction without train-order authority. Registration of sections of WPRR first-class trains terminating at WPRR Chestnut Jct. and moving to WPRR Oakland Yard, may be phoned from WPRR Oakland Yard to Operator SP, Oakland Pier, for entry on register at Oakland Pier.

No. 73 stop on flag at Drawbridge Wednesday and Saturday.

Capacity of sidings in car lengths		EAST-WARD	Timetable No. 241 June 2, 1946		WEST-WARD
		Mile Post Location	Stonehurst Branch		Distance from Stonehurst
			STATIONS		
Oakland Yard	WP	13.4	TO	ELMHURST 0.9	0.9
		14.3		STONEHURST	0.0
(0.9)					

RULE 2. Watch inspectors:

S. A. Pope, Manager of Time Service, 65 Market St., San Francisco.	E. J. Land, 745 Third St. San Francisco.
San Francisco.....	I. S. Preston, 357 Phelan Bldg. Oakland.....
Oakland.....	E. W. Becker, 3357 E. 14th St. Oakland.....
Oakland.....	L. L. Hoffman, 740 Broadway Oakland.....
Oakland.....	E. S. Griffin, 214 Easton Bldg. Oakland.....
Alameda.....	Don J. Allphin, 5836 Foothill Blvd. Alameda.....
Berkeley.....	A. O. Gott Service & Post, 2179 Shattuck Ave. Berkeley.....
Berkeley.....	Ernest L. Dorrett, 1823 Solano Ave. Richmond.....
Richmond.....	O. A. Poulsen, 1317 McDonald Ave. Stockton.....
Stockton.....	C. Mantele, 129 N. Sutter St. Lodi.....
Lodi.....	John Shulie Benicia.....
Benicia.....	Curt S. Appe Vallejo.....
Vallejo.....	G. E. Bangle Co. Calistoga.....
Calistoga.....	A. J. Sorini Winters.....
Winters.....	C. E. Wyatt Sacramento.....
Sacramento.....	H. T. Harger, 1028 K St. Roseville.....
Roseville.....	W. F. Sugden Martinez.....
Martinez.....	John G. Beard Pittsburg.....
Pittsburg.....	Messrs. H. A. Minasian & H. A. Clark Tracy.....
Tracy.....	L. H. Jolley Livermore.....
Livermore.....	C. Harlie Power San Jose.....
San Jose.....	Kochers, 160 So. First St. Newman.....
Newman.....	Ernest Beall Los Banos.....
Los Banos.....	John B. Machado Fresno.....
Fresno.....	C. P. Clayton, Room 215, Pacific Southwest Bldg. Madera.....
Madera.....	J. W. Brooks Merced.....
Merced.....	W. McElherron Modesto.....
Modesto.....	W. P. Shoemaker Turlock.....
Turlock.....	D. F. Hall

RULE 2 (A). Watches subject to inspection must be presented monthly between first and fifteenth, instead of semi-monthly, to a designated inspector.

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, fourth Thursday in November.
 Christmas Day, December 25th.

RULE 10 (H). Where yellow signals are displayed within limits of a length of track over which a maximum speed is designated in train-order or timetable bulletin and no maximum speed is otherwise specified for the particular section of track protected by these yellow signals, trains must not exceed 15 MPH thereover.

RULE 10 (J). Certain slow boards have the word "SIGNAL" above the figures. Such slow boards in approach to a distant signal indicate the speed that must not be exceeded while engine is passing the distant signal three-fourths mile beyond slow board, unless distant signal can plainly be seen to be displaying proceed indication; and such slow boards in approach to a home signal indicate the speed that must not be exceeded while approaching home signal three-fourths mile beyond the slow board, until indication of home signal can plainly be seen.

RULE 15. Second paragraph is changed to read as follows:

"The explosion of two torpedoes is a signal to proceed with caution for not less than one mile."

RULE 17. Mars signal light on engines shall be used when engine is moving at night, and in foggy or stormy weather. It must be dimmed or extinguished approaching passenger stations, and at other points as prescribed by rules.

RULE 26 is revised to read as follows:

"A blue signal or sign reading 'Men at Work' displayed on engineer's side of cab of an engine, or at one or both ends of a car, cut of cars, or at the rear of a train, indicates that workmen are under or about same and the engine, car, cut of cars, or train must not be coupled to nor moved by any method, nor other equipment placed so as to obstruct the view of the blue signal or sign.

"Blue signal or sign must not be removed by any person except the one placing the signal or sign, or someone, authorized by him to do so.

"On designated tracks (repair, cleaning, servicing, etc.) where employes work, a sign reading "Stop—Men at Work" must be placed on the track and switches leading to such track locked; and from sunset to sunrise a blue light must also be displayed. Employes placing such sign and locking switches, only are authorized to change same.

"When repair work is to be done under or about an engine or cars in a train, where movement of same would endanger employes engaged in such work, and a blue signal or sign is not available, the enginemen of engine handling train must be notified by employe engaged in such work and a complete understanding had to prevent movement. After work is completed the same employe must notify enginemen."

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

RULE 98. Cars must not be kicked or shoved over railroad crossings not protected by interlocking, unless movement is properly protected.

RULE 99. Third, fourth and sixth paragraphs are changed to read as follows:

"If recalled from a point less than one-half mile from rear of his train, he must, if safety to train requires, leave lighted fusee at proper intervals and, if conditions warrant, also place two torpedoes on the rail three rail-lengths apart.

"If not recalled, one-half mile from rear of train he must place one torpedo on the rail; one mile from rear of train, or when recalled, if one-half mile or more from rear of train, he must place two torpedoes on the rail three rail-lengths apart. If conditions such as curves, foggy or stormy weather or descending grade require, he must continue back a greater distance, placing two additional torpedoes.

"When flagman has reached the required flagging distance and has placed torpedoes as required, he may then return to the single torpedo where he must remain until relieved by another flagman or recalled. When recalled, he may remove the single torpedo and return, leaving lighted fusee at such intervals as conditions warrant."

RULE 99 (C). Will apply on Berenda, Chowchilla, Ione, Lodi, Oakdale and Winters Branches; on Napa Branch between Napa and Calistoga, and on San Ramon Branch between Avon and Dougherty.

RULE 103 (A). 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 employe acting as flagman.

RULE 105. Abbreviations used for sidings: "E" for eastward, "W" for westward, "M" for middle.

RULE 107. Freight trains and engines must avoid passing between stations and loading tracks when passenger trains are closely approaching from opposite direction on double track, and care must be exercised by non-stopping passenger trains when approaching stations at about the same time that other passenger trains are approaching from the opposite direction. When practicable non-stopping trains are to be given preference, but each train must be operated in a manner to avoid confusion and hazard of personal injury.

RULE 210 is modified to provide that when using revised Train Order Form CS-2600, which has the words "Repeated and Complete" printed at bottom of the form, operator will write or typewrite the time and his or her last name in the space provided on the order, after it has been made complete by train dispatcher.

RULE 221. First sentence of third paragraph is amended as follows:

"When a train-order is to be delivered to an approaching train, or orders are held for any other train in the same direction, except those originating, the operator must not clear the signal."

RULE 271 is revised to read as follows:

"Automatic block signals will bear number plates attached to signal masts. Automatic semaphore home signal arms will be painted red and will be distinguished by white stripe near end of semaphore arm.

"The number plate on a distant light signal will bear the prefix 'D'.

"Interlocking signals will not bear number plates.

"Absolute signals will not bear number plates, but will have plates bearing the letter 'A'.

"Interlocking and absolute semaphore home signal arms will be painted red.

"Aspects as illustrated or referred to in these rules are shown by the position of semaphore arms or color of lights, or both, as seen from an approaching train. Other combinations may be used."

RULE 295 is revised to read as follows:

"Interlocking or absolute signals may be made part of the automatic block system adjoining interlocking or centralized traffic control limits. When so arranged they will be designated 'semi-automatic' and distinguished by a plate bearing the letters 'SA'. Trains stopped by such signals must observe interlocking or centralized traffic control rules within the interlocking or centralized traffic control limits, and Rule 509, 509 (F), or 509 (J), as the case may be, within the automatic portion of the block beyond interlocking or centralized traffic control limits."

RULE 297. Following paragraph is added:

"A train, if delayed in the block, must proceed with caution to the next signal."

RULE 505. AUTOMATIC BLOCK SYSTEM ELECTRIC SWITCH LOCKS

Where electric switch locks are installed, lock box door must not be opened if movement is to be made into a track leading from main track until engine or car is standing within 150 feet of the switch; or if movement is to be made from such track, or through a crossover to a main track, until switch indicator indicates block clear on opposite track. Within C.T.C. limits dispatcher's permission must also be obtained before lock box door is opened.

After lock box door is opened lock lever cannot be moved to opposite position to release switch for hand throwing until indicator in lock box indicates "unlocked".

Lock lever must not be returned to locked position until all movements over the switch are completed, switch returned to normal position and locked, after which lock box door must be closed and locked. Within C.T.C. limits dispatcher must also be notified by telephone when completed.

When switch indicators indicate "block occupied", instructions posted inside lock box for operation of push button to start time-release must be complied with if movement is to be made to main track while approach circuit is occupied by another train, in addition to providing flag protection when necessary.

Emergency lock release to be used only in case of electrical or mechanical failure, as indicated by failure of time-release to function after several minutes. When necessary to break seal on emergency lock release, dispatcher must be notified immediately, and movement made only after flag protection provided on both tracks.

RULE 535. A spring switch with facing point lock must not be trailed through unless switch target displays the letters "SS" in normal position, or switch has been lined for the movement.

When a signal with triangular number plate protecting a spring switch with facing point lock displays stop indication, member of crew must open and close spring switch by hand, removing any obstruction. If signal does not then display proceed indication, switch must be hand thrown for the movement.

When a spring switch or spring derail is hand thrown, trainman so setting same must again set it for normal position after movement has been completed, unless he has arranged for another trainman to do so.

RULE 536. Wheels of tenders must not be considered as engine wheels.

RULE 605. INTERLOCKING

Trains and engines must not enter main track within interlocking limits where no signal governs such movement until permission has been obtained from signal operator, and must then run with caution not exceeding 12 MPH to the next signal.

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.

At all interlocking plants, when route lined is not to be used, following signal will be sounded by engineers: o o — o o.

RULES 705 and 707 are revised to read as follows:

"LETTER TYPE INDICATORS

"705. Within block system limits, at locations specified in timetable, letter type indicators may be used. These indicators will be attached to an automatic block signal, and will display indications by illuminated letters, which will supersede the superiority of trains within defined limits.

"S—Take siding (Fig. 1).

"M—Proceed on main track (Fig. 2).

"Other letters, or combinations of letters may be used.

"S-707. When the letter 'M' is displayed, train is thereby given superiority over all trains to the fouling point of the switch at which an opposing train may enter siding or receiving track, and will hold main track at the station, but must observe any restrictions that may be imposed by automatic block or other signals.

"D-707. When the letter 'M' is displayed approaching a siding, or at the initial switch of a siding, train will hold main track; when displayed on a siding near the leaving end of siding, train will enter main track and in either case train is thereby given superiority over all following trains to the point designated in timetable but must observe any restriction that may be imposed by automatic block or other signals."

GENERAL REGULATIONS

RULE 822. Riding on leading foot-board or pilot step of engine when passing over highways, crossings or on streets is forbidden.

RULE 825. Fifth paragraph applies to wooden outfit cars the same as to other cars, except that diner should not be separated from kitchen car.

RULE 837. Fifth paragraph is revised to read as follows:

"Cars standing on grade must not be coupled onto, in descending direction, without knowing sufficient hand brakes are set to prevent uncontrolled movement of any such cars should coupling fail or cars not be securely coupled together."

RULE 849. Steam valve on Pullman troop sleepers cannot be opened while train is in motion, and when such car is on rear of train steam line must not be cut in any portion of train until valve is closed on the car on each side of coupling to be opened, to avoid burning by steam.

RULE 873. Sanders must not be operated within 150 feet of any power operated switch.

RULE 827. TRAIN INSPECTION

Trains, including military trains, made up in part of freight cars or caboose equipped with cast iron wheels are required to comply with rules and timetable instructions applying to freight trains as they relate to stopping for train inspection, and speed restrictions.

Cars bearing placards denoting contents are explosive, inflammable, poisonous, or otherwise dangerous, must be given careful inspection at all points where train inspection is made.

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

AIR BRAKE RULES

RULE 9. Passenger trains of more than 25 cars must be handled under freight train rules.

MISCELLANEOUS

4. Helper service:

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

Engines weighing more than 235,000 pounds on drivers will not be placed behind steel underframe cabooses.

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

Except as provided below, one helper may be placed on head end, but not more than two engines will be used on head end of any freight train. When additional helpers are required, they will be placed back in train, and cut in ahead of any cars of wooden frame construction. Westward between Tracy and Niles if train consists of more than 49 cars, and eastward if train consists of more than 75 cars when only one helper is required it will be placed on rear ahead of caboose and any wooden frame cars, and when practicable should be placed behind a loaded car.

Where coupling of engines is not permitted, such engines must be separated by at least ten cars.

Air will be cut in all helper engines, and engine must not be cut off when train is in motion.

When used as helpers, AC, AM or MM class engines must not be coupled together, nor may more than two F, Mt, or heavier class be coupled together. When coupled in rear of train, larger engines must be placed ahead of smaller engines. When yard engine is used on head end to help a train between Port Costa and Bahia, it must be coupled behind road engine. If tonnage requires more power, additional helpers of not to exceed two coupled in each case, must be separated by at least four cars.

Helpers must not be operated backing except in emergency, and in such case engines should not push through a backing engine if it can be avoided.

Helper engines coupled in middle or rear of train must be cut off from forward portion before taking water. On grades, road engine and helper must not be cut off from train at the same time without hand brakes being securely set.

4 (a). Pushing trains out of yards:

No engine will be placed behind a wooden underframe caboose or other wooden frame equipment.

Engines weighing more than 235,000 pounds on drivers will not be placed behind steel underframe cabooses.

Air will not be coupled through pusher engine, except when pushing trains between Port Costa and Bahia, air must be coupled through pusher engine. Eastward trains must stop with rear of train to clear Upper Crossover to cut pusher engine off.

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

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

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

7. Capacity of siding between clearance points is based on an average car length of 49 feet not including engines and caboose.

10. When a sign reading "Occupied Outfit Cars" is attached to switch lock, the outfit cars must not be coupled to, nor moved, until occupants have been notified, and permission given by foreman or his representative.

Engines having blind drivers must not exceed 6 MPH over switches having self-guarded frogs and switch-point protectors.

20. Handling of freight cars in trains behind passenger cars is prohibited except passenger equipment may be placed in head end of mixed trains when carrying personnel and equipment in connection with military and naval movements. This does not refer to a baggage, express, or mail car, or a caboose.

Baggage, express, mail, refrigerator or other head end cars must not be handled on rear of passenger trains unless trainmen can pass through, except between Oakland Pier and Pittsburg.

21. Employes are warned that it is dangerous to ride on top or sides of cars while passing points where impaired clearance exists, and that they must protect themselves from injury.

There are numerous structures with impaired clearance on yard and station tracks on the division, and employes must be familiar with their locations and avoid personal injury.

SPEED RESTRICTIONS

*List of CCB (cross counter-balanced) engines:

All P-8 class, except eng. 2470;

F-1 class: 3611, 3612, 3615, 3616, 3617, 3619, 3620, 3625, 3629, 3634, 3636, 3638, 3643, 3647, 3652;

F-3 class: 3653, 3654, 3655, 3656, 3657, 3658, 3660, 3661, 3662, 3663, 3664, 3665, 3666, 3667;

F-4 class: 3668, 3670, 3671, 3672, 3674, 3675, 3676, 3677, 3678, 3679, 3681, 3682, 3683, 3684, 3685, 3686, 3687, 3688, 3689, 3690, 3692, 3693, 3695, 3696, 3697, 3698, 3699, 3701, 3702, 3703, 3704, 3705, 3706, 3707, 3709, 3711, 3715, 3716, 3717;

F-5 class: 3718, 3720, 3721, 3722, 3723, 3727, 3728, 3732, 3734, 3737, 3742, 3752, 3753, 3755, 3760, 3762, 3763, 3764, 3765, 3766, 3767, 3768, 3769;

AC-6 class: 4126, 4127, 4128, 4130, 4131, 4132, 4133, 4135, 4136, 4137, 4138, 4139, 4140, 4141, 4142, 4143, 4144, 4146, 4147, 4148, 4149, 4150.

MAXIMUM SPEED PERMITTED CERTAIN ENGINES

Maximum speed for C-15-17-32, Mk-10-11 and MM-3 class engines 35 MPH when handling freight and mixed trains.

Maximum speed for gas-electric cars running light forward, 50 MPH, but must not exceed speed permitted when handling passenger trains.

Maximum speed for S and SE class engines, 20 MPH, but must not exceed speed permitted freight and mixed trains and light engines.

Engines backing must not exceed 20 MPH on all curves, and when approaching highway crossings at grade.

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

Engines with tenders having water capacity 7,000 gallons or less, except Classes 70-R-1 and 70-SC-1, must not exceed 50 MPH.

Diesel electric switch engines running forward, with train or light, may make maximum speed as shown below, except must not exceed speed permitted freight and mixed trains. These engines when backing may make speed shown below, except must not exceed speed permitted E class engines backing where such permitted speed is less than 30 MPH:

Classification	Running Forward		Running Backward With Train or Light
	With Train	Light	
DES-200	30	30	30
DES-1 to 7—100 to 107....	40	40	40

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

When all weight has been removed from any one pair of drivers	20 MPH
When all weight has been removed from only one wheel from any pair of drivers.....	30 MPH
When engine truck is removed	20 MPH
When main rod only is removed.....	30 MPH
When side rod only is removed.....	30 MPH
When both main and side rods are removed.....	20 MPH
When hauled in train with all rods on.....	30 MPH

MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT

MPH

Trains handling wooden pile-drivers; locomotive cranes with boom disconnected and heavy end forward; steam shovels and ditchers transported on their own wheels; and car-top ditchers when blocking and tie-down cables are removed:	
On tangent main tracks, except.....	35
SPMW 4044	25
On tangent branch tracks.....	25
On all curves 5 MPH less than speed authorized. Where slow boards in place, 5 MPH less than shown on slow boards, except where speed indicated is 15 MPH or less be governed by slow boards.	
Trains handling locomotive cranes with boom disconnected and light end forward (must not be handled in this manner except in emergency):	
On tangent main tracks.....	20
On curves and on branch tracks.....	15
Trains handling locomotive cranes with boom in place, either end forward (to be handled in work train when practicable):	
On tangent main tracks.....	25
On curves and on branch tracks.....	15
Trains handling steel pile-drivers may make maximum freight train speed.	
Trains handling relief outfit with steam derrick:	
On tangent main tracks.....	35
On tangent branch tracks, except.....	25
Nos. 7000 and 7010 on San Ramon Branch.....	10
Nos. 7000 and 7010 must not operate between Larkmead and Calistoga on Napa Branch.	
No. 7010 must not operate between Edwin and Ione on Ione Branch.	
No. 7000 must not operate between Edwin and Ione on Ione Branch unless authorized by Superintendent. If movement authorized, speed of 15 MPH must not be exceeded.	
Nos. 7014 and 7025 must not operate on any branch except Schellville Branch; Napa Branch between Suisun-Fairfield and Napa River bridge 45.62 at Napa; and on Vallejo Branch between Napa Jct. and MP 30.6.	
On all curves, 5 MPH less than speed authorized. Where slow boards in place, 5 MPH less than shown on slow boards, except where speed indicated is 15 MPH or less be governed by slow boards.	

Passenger trains handling steel wheel box cars in series 5810 to 5874, and foreign line steel wheel box cars equipped for movement in passenger trains, but not equipped with high speed trucks, must not exceed 60 MPH. Wooden equipment must not be handled in regular passenger trains. Extra passenger trains handling wooden coaches or chair cars must not exceed 40 MPH.

Trains pushing or backing passenger equipment must not exceed 15 MPH.

The following head-end cars will be considered streamlined equipment: 4119, 5065 to 5070, 5123 to 5125, 5127 to 5138, 5161 to 5163, 6083, 6085.

Maximum speed of deadhead equipment or passenger trains with standard caboose is 50 MPH.

Nos. 444 and 442 (CCM) and No. 402 (BM) may make maximum speed of 50 MPH using ordinary box cars, in territory where maximum freight and mixed train speed is shown as 40 MPH.

Trains consisting of engine and caboose only restricted to freight train speed.

RULE 10 (J). Round yellow slow boards indicate by black figures the speed restrictions applying to Diesel-powered Streamliner Nos. 101 and 102.

RULE 11 (A). Lighted fusees must not be left burning on Suisun Bay bridge.

RULE 14 (d). As specified below, — — — — o will be indication that flagman may return from west as prescribed by Rule 99: Martinez.....Trains on Tracy line.

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

- MartinezTrains on Tracy line.
- Napa Jct.....Trains on Schellville line.
- Suisun-Fairfield...Trains on Napa Jct. line.
- DavisTrains on Woodland line.

RULE 14 (m). Whistle will not be sounded one mile before reaching stations between Oakland Pier and San Pablo.

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

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, and must be removed immediately on arrival at delivery track.

RULE 30. Between the hours of 9:00 PM and 6:00 AM engine bell must not be rung, except in emergency, in city limits of Napa.

RULE 82 (A). Second and third-class and extra trains to or from Western Division passing Sacramento will not obtain clearance at Sacramento.

Trains enroute Western Division via Sacramento or Brighton originating at Roseville, must obtain two clearances, one endorsed Sacramento Division, the other endorsed Western Division. Train orders addressed to such trains at Roseville will apply the same as if addressed to them at Brighton or Sacramento.

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

- West Oakland.....
 - Port Costa.....
 - Suisun-Fairfield.....
 - Davis.....
 - Avon.....
 - Pittsburg.....
- } Trains originating
or terminating

Sacramento. Trains originating or terminating, except second and third-class and extra trains passing Sacramento to or from Western Division.

Sacramento, 12th St. Eastward trains via Brighton and trains originating or terminating.

Extra trains will register at Napa Jct.

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

Davis.....All trains to or from West Valley Subdivision, Sacramento Division.

RULE 84. Proceed signal 12 (c) must be used to start trains from Oakland Pier, except Streamliner No. 102 when communicating signal may be used.

RULE 93. When freight cars are moved from one point to another on main track within Oakland yard limits at night, a red light must be displayed on rear of rear car.

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

West MP		East MP
	Oakland (Martinez line).....	17.35
	" (Niles line).....	15.82
	" (Alvarado line).....	14.01
27.97	Port Costa.....	39.24
	" (Benicia spur).....	End track
	" (Tracy line).....	37.08
47.05	Suisun-Fairfield.....	52.45
	" (Napa Jct. line).....	45.75
74.20	Davis.....	77.37
	" (Tehama line).....	76.94
85.51	Sacramento.....	95.35
131.60	" (Stockton line).....	136.33
39.53	Port Chicago.....	42.93
46.31	Pittsburg.....	51.68
80.70	Tracy (Martinez-Los Banos line).....	85.64
69.19	" (Niles-Lathrop line).....	74.37
39.14	Napa Jct. (Creston-Calistoga line).....	38.21
	" (Schellville line).....	38.86
	" (Vallejo line).....	36.37
44.34	Napa.....	46.46
70.82	Calistoga.....	End track
47.72	Schellville (Lombard-Ignacio line).....	38.94
	" (Sonoma line).....	49.70
31.81	Vallejo.....	End track

RULE D-97 (A). Will apply between following points:
Oakland Pier and Sacramento;
Martinez and Mococo.

RULE 98. Railroad crossings at grade not interlocked: Trains and engines must approach with caution, and may move over the following crossings without stopping, if crossing clear and no movement approaching on intersecting line:

Benicia. Government Ry., crossing of Benicia spur near Benicia arsenal. If signal 340 or 341 displays stop indication, flag protection must be provided on intersecting track before movement made over crossing.

Napa Jct. Big balloon track crossing of Calistoga-Vallejo main track. Schellville line trains using big balloon track need not stop.

Stop not less than ten feet, nor more than fifty feet from the following crossings and send flagman ahead who must ascertain that no movement is approaching on intersecting line before giving signal to proceed:

Oakland. AT&SFRy crossing of yard track at 20th & Kirkham Sts.

Oakland. AT&SFRy crossing of Surryne drill track, east of Santa Fe interchange.

Oakland. OTRy crossing of SP lead to Santa Fe interchange at 34th & Wood Sts.

Oakland. AT&SFRy two crossings of SP connection to OTRy interchange at 34th & Wood Sts.

Berkeley. Shipyard Ry crossing of yard track at 9th & Parker Sts.

Berkeley. Key System crossing yard track at Ward St. and Shattuck Ave.

Richmond. AT&SFRy crossing of SP and PMCorp leads at 27th St. & Seaver Ave. at Shipyard No. 2.

Richmond. AT&SFRy shipyard lead from Santa Fe 8th St. yard, crossing two Seaver Ave. drill tracks, near 14th St.

Stop clear of derails at the following crossings and send flagman ahead who must ascertain that no movement is approaching on intersecting line, then operate derail lever to close derails before giving signal to proceed. Restore derails after each movement over crossing.

Berkeley. Shipyard Ry crossings of two drill tracks at 9th & Harrison Sts. Derails are electrically locked. Obtain key from locked box.

Stege. Shipyard Ry crossings of Dump track.

Stop clear of the following crossings, then proceed if no movement approaching on intersecting line:

Napa Jct. Calistoga-Vallejo main track crossing of big balloon track. Calistoga-Vallejo line trains must stop.

Las Juntas. SNRy, crossing of San Ramon Branch.

RULE 103 (A). Bates. When any of the crossovers are used in vicinity of MP 11, switches must not be left open longer than necessary to complete move, as automatic crossing gates at Buchanan St., Albany, will remain down as long as one of these switches is open.

Vallejo. Approach crossing of Delano Ave. with caution. Crossing not protected by automatic crossing signal.

Suisun-Fairfield. When necessary for freight trains to make stop blocking crossings east of passenger station, they must be opened with least possible delay.

Napa. When switching on or across any street crossing, member of crew must protect crossing.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows:

- AvonSan Ramon line, for siding.
- Suisun-Fairfield..Napa Jct. line, for westward siding.
- Napa Jct.Schellville line, for Calistoga-Vallejo line at MP 37.35.
- Napa Jct.Suisun-Fairfield line, for Vallejo line, at MP 37.25.
- UnionCrossover switch near west end siding, for West Napa line.
- SchellvilleNapa Jct. line, for NWPRR main track.
- Tracy.....Niles line, for Martinez line.
- Tracy.....End double track, for eastward track.
- Tracy.....Los Banos line, for Niles line.

Napa Jct. Track known as little balloon is Schellville line main track, but east switch of little balloon track must be left lined for through movement between Schellville line and big balloon track.

Wye connection between Suisun-Fairfield line and Calistoga line is not main track, and switches at each end of this wye track must be left lined for the respective main track movements.

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 Nos. 101 and 102.

RULE 105. Suisun-Fairfield. Eastward siding is first track south of eastward main track and leaves eastward main track 2280 feet east of MP 47 and to be used by eastward trains; westward siding is first track north of westward main track and leaves westward main track 3000 feet west of MP 50 and to be used by westward trains; such trains will enter this siding at crossover just west of freight house.

Davis. Eastward siding is first track south of eastward main track and enters eastward main track 1200 feet east of Davis Tower and to be used by eastward trains. Westward siding is first track north of westward main track and enters westward main track 1960 feet west of MP 77 and to be used by westward trains.

RULE 107. Station train indicators west of Crockett and Martinez displaying the illuminated word "Train", indicate a passenger train on westward track at station.

RULE 221. Light will not be displayed in train-order signals on Winters, Napa and San Ramon branches, except when train-order operator is on duty.

Trains must obtain clearance before leaving Napa Jct. and Napa.

Shellmound is train-order office for eastward second-class, third-class and extra trains only. When Signal 66SA or 68SA indicates proceed, such trains must approach prepared to receive train orders.

Eastward second and third-class and extra trains must obtain clearance before leaving Shellmound.

West Oakland and Avon are train-order offices for trains originating only.

RULE D-251. Will apply as follows:

On westward track Sacramento to Davis train-order office, provided proceed signal received from yardman at Front St., Sacramento (green flag by day, green light by night), except will not supersede the superiority of No. 101.

Proceed indication displayed by train-order signal at Davis and by eastward interlocking signal east of Davis Tower will be authority for eastward second and third-class and inferior trains to move irrespective of timetable superiority of Nos. 262 and 15 from Davis to Sacramento.

RULE 505. AUTOMATIC BLOCK SYSTEM

Tracy. Signals are numbered as automatic and are under control of switch tender. When "stop" is indicated, trains must stop and not proceed until "proceed" is indicated or proceed signal is given with green flag or green light by switch tender.

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

Westward movements from Lathrop Subdivision governed by Signal 713 located 300 feet east of puzzle switch, the top light governs movement on main track and the lower light governs movement to hill or local yard, and dwarf light signal 715 located on right of eastward track 300 feet east of puzzle switch governs movement to all routes.

Westward movement from Los Banos Subdivision governed by Signal 823, located 300 feet east of puzzle switch, top arm governs movement on main track and lower arm governs movement to hill or local yard.

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

Trains and engines stopped by Signal 709 may then proceed with caution if proceed signal received from yardman.

RULE 510. Following block signals equipped with a triangular number plate displaying the letter "P", have included in their control limits some special protective device:

Eastward Signals	Westward Signals
P-374	Spring switch, Napa Jct.....
P-356}	
P-358}	Spring switch, Mococo..... P-359

RULE 516. Overlap posts:

Port Chicago.....Eastward trains.
 Nichols (150 feet east of west switch).....Eastward trains.
 Los Medanos (250 feet west of Signal 509)..Westward trains.

RULE 535. SPRING SWITCHES

Spring switches equipped with facing point locks are located as follows, and speed indicated must not be exceeded while passing over them in facing movement, or in trailing through them:

Location	Normal Position	MPH	
		Facing	Trailing
Mococo...End double track...Westward track...		35	35

Spring switches not equipped with facing point locks are located as follows, and speed indicated must not be exceeded while passing over them in facing movement, or in trailing through them:

Location	Normal Position	MPH	
		Facing	Trailing
Martinez..Junction switch.....Bridge line.....		25	35
NapaJct...West end big balloon...Suisun-Fairfield main track....		15	15

Spring switches are also located on other tracks as follows:

West Oakland. Two on incoming engine leads, east of roundhouse; two on outgoing freight engine lead, near tin shop, and one on outgoing engine lead west of roundhouse.

Oakland Pier. West end of tracks 4, 5 and 6.

Stege. On stem of wye.

Tracy. Spring derail on sewer lead, just west of roundhouse leads.

RULE 605. INTERLOCKING

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 current of traffic signal operator must know that track to be used is clear of opposing engines and trains.

Oakland Pier. Limits extend eastward to automatic Signal 40 on eastward main track and to home signal 450 feet east of Signal 40 on westward main track on Martinez line, and to automatic Signal 42 on both main tracks on Niles line, and on yard tracks 9 and 10 to Signal 44; and on yard tracks 11, 12 and 13 to home signal 175 feet east of Maritime overpass.

When siren whistle is sounded, all movement must stop and await proper signal.

The last signal governing movement into any track except tracks 17, 18, 19 and 20 is a two-arm dwarf signal. When home signal displays proceed indication, and approach signal displays yellow aspect, it indicates that movement is to be made into a track occupied by engines or cars. Responsibility for collision will rest with train or engine entering.

Sixteenth St. Tower, Oakland. Limits extend from eastward signal 1500 feet west of 14th St., to Signal Bridge 204.

Whistle signals:

To West Oakland yard, o — —.

From Santa Fe interchange to Oakland Pier, —.

To Santa Fe interchange, o — o.

Telephone to Sixteenth St. Tower and West Oakland Tower are on lattice pole 1733, 250 feet east of Signal Bridge 200, and on signal case 30 feet west of junction of freight tracks 1 and 2, to be used when necessary to obtain permission to pass signals as prescribed by Rule 663 (b).

Shellmound. Limits extend from Signal Bridge 205 to Signal Bridge 206.

Whistle signal:

To West Oakland yard from freight track 2, o — —.

Martinez. Limits extend on eastward main track from home signal 600 feet east of station building to westward dwarf signals 938 feet east of station building on Tracy line and on Suisun Bay bridge line.

Limits extend on westward main track from signals 2350 feet east of station building on Tracy line and on Suisun Bay bridge line, to Signal 343 at east end of Ozol siding. Crossover switches west of station building, and switches leading from spurs to westward main track within these limits are not interlocked, and permission of signal operator must be obtained before fouling westward main track at any of these switches.

Whistle signals:

To Bridge line, o — —. To Tracy line, — o —.

Suisun Bay Bridge, Martinez. Bridge zone limits extend on both tracks from home signals 800 feet east of draw span to home signals 550 feet west of draw span.

East end zone limits extend on eastward track only, from semi-automatic signal near upper crossover to westward dwarf signal at Benicia line connection.

Signal operator's permission must be obtained before moving from Benicia line to eastward main track; then if switch indicator indicates block clear, derail and junction switch may be thrown and movement governed by dwarf signal.

Upper crossover is not interlocked, but movement must not be made through crossover without signal operator's permission, unless switch indicator indicates block clear. Signal 345 will govern movement through crossover.

Davis. Limits on eastward and westward main tracks extend from home signal 2200 feet west of tower to signal bridge 1700 feet east of tower, and on Woodland line to signal bridge 1200 feet east of tower.

Whistle signals:

To or from Sacramento from or to Woodland line, o — —.

Western Division eastward trains to enter siding, — o —.

Mikon. SNRy crossing. Signal operator on duty 8:30 AM to 5:30 PM, less meal hour, daily except Sunday and holidays. During other hours signals and derails lined for SP movement.

Sacramento River Drawbridge. Eastward trains failing to receive green aspect in approach Signal 878 must stop west of city limit sign, 1030 feet east of Signal 878, unless semi-automatic signal indicates "proceed".

Brazos Drawbridge over Napa River. Signal operators on duty 12:01 AM to 4:00 PM. No movement over bridge permitted during other hours unless signal operator on duty. Derails in main track within interlocking limits east and west of draw span.

AUTOMATIC INTERLOCKING

Stege. Shipyard Ry double track crossing of Stauffer Chemical spur and both legs of wye.

Stop at interlocking signal and if switch indicator indicates intersecting line clear, operate push-button to obtain proceed indication in signal. Signals automatically return to stop indication after each movement over crossing.

RULE 705. LETTER TYPE INDICATORS

Indicators located as follows:

Illuminated Letter	On Signal	Approaching	Authorizes and Requires Movement as Follows
S.....	767...	Davis...	Enter siding. Applies to freight trains only.
M.....	245...	Pinole..	Proceed to Shellmound.
S.....	245...	Pinole..	Enter siding.

GENERAL REGULATIONS

RULE 824. Tracy. Before engine is detached from train from Martinez line not less than four hand brakes must be set on west end.

RULE 825. Tracy. Train crews must not release brakes on outbound trains until engine is coupled and brake pipe is charged.

RULE 827. TRAIN INSPECTION

Passenger trains operating between Oakland Pier and Gerber making station stop at Davis, must approach at not to exceed 8 MPH to allow forward brakeman to detrain on station side where rear of train will stop. He will then make rolling inspection of train, then walk length of train on opposite side making standing inspection, giving careful attention to running gear and journal boxes, and entrain on station side.

AIR BRAKE RULES

RULE 2. Running test must be made immediately after engine is detached from trains arriving Oakland Pier.

RULE 17. Retainers must be used on freight and mixed trains as follows:

One retainer for every 160 Ms in train, San Ramon to Walnut Creek.

With 20 or more cars and tonnage averaging over 150 Ms per operative brake, use 10 retainers on head end of train, or more if requested by engineer, Creston to Napa Jct., and Creston to Cordelia.

FREIGHT TRAINS

RULE 25. Rear end test must be made immediately prior to departure from:

- Napa Jct.....Trains via Cordelia.
- Cordelia.....Eastward trains that stop.
- Creston.....Trains that stop.

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

PASSENGER TRAINS

RULE 39. Running test must be made as follows:

Westward trains for Oakland Pier, at 16th St. station, Oakland. Equipment being handled between Oakland Pier and West Oakland, in either direction, as soon as practicable after starting.

Eastward trains via Bahia, at Martinez, but may be made at Ozol if no stop is to be made at Martinez.

Westward trains, at Bahia.

MISCELLANEOUS

1. Emergency water supply only, at Pittsburg.

Water supply at Bahia for yard engines. If necessary for road engines to take water, take only enough to reach next water supply.

Eastward freight trains take water at Davis in preference to Swanston.

Take water at Vallejo, Napa or Cordelia instead of at Napa Jct., if practicable.

4 (a). When eastward freight train is to pick up pusher engine at Port Costa, train brakes must be applied on arrival, and must not be released until pusher engine has coupled in.

5. The working track between Port Costa and MP 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.

6. Engines or trains using wye at Napa Jct. must approach from Suisun-Fairfield line and go around via Napa line.

10. Engines listed must not operate on tracks shown below:

Class of Engine	Restricted Tracks
Engines over 162,000 pounds on drivers.....	Cordelia—Winery spur. Napa Jct.—Calistoga line wye.
All.....	Ramal—Beyond stock chute on corral.
Engines over 135,000 pounds on drivers.....	Vacaville—Other than main track.
Engines over 162,000 pounds on drivers.....	Dixon—Alfalfa meal track.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371.....	Tremont—Corral track.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371.....	Newlove—Spur. Tracy — Brewery track; Holly Sugar spur.

Load limit (car and contents):

Napa Br., between Suisun and Yountville.....	210,000 pounds
Napa Br., between Yountville and Calistoga.....	169,000 pounds
Union Br.....	169,000 pounds
Winters Br., between Elmira and Winters.....	210,000 pounds
Winters Br., between Winters and Esparto.....	169,000 pounds
San Ramon Br., between Avon and San Ramon.....	169,000 pounds
San Ramon Br., between San Ramon and Radum.....	210,000 pounds
Schellville and Vallejo Branches.....	210,000 pounds

15. Trains must not pass switchtenders' stations at Sixth and Seventh Streets, Sacramento, without receiving signal from switch-tender to proceed (green flag by day and green light by night) and must move with caution between Sacramento River bridge and Seventh Street.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

Mile Post	At or Near	Description
OAKLAND PIER - SACRAMENTO		
3.5	Oakland Pier....	Posts supporting trainshed.....Side
6.6	Emeryville.....	W. U. pole line, near Park Ave.....Side
14.5	Richmond.....	AT&SFRy overhead bridge.....Overhead
16.0	San Pablo.....	AT&SFRy overhead bridge.....Overhead and side
16.6	San Pablo.....	Westward water column.....Side
22.1	Pinole.....	Rock bluff, eastward track.....Side
23.7	Hercules.....	Industrial Ry overhead bridge....Overhead
24.4	Hercules.....	Rock bluff, eastward track.....Side
26.7	Oleum.....	Tunnel No. 1.....Overhead and side
27.7	Selby.....	Tunnel No. 2.....Overhead and side
31.2	Port Costa.....	Water column, eastward track.....Side
34.7	Martinez.....	Alhambra slough bridge.....Side
33.3	Martinez.....	Suisun Bay bridge, vertical pipes.....Side
37.2	Bahia.....	Wagon bridge, westward track...Overhead
38.0	Bahia.....	Water tank spout, eastward track....Side
59.4	Elmira.....	Water column, eastward track.....Side
75.8	Davis.....	Signal bridge, Woodland line....Overhead
88.5	Washington....	Sacramento River drawbridge.....Side
WINTERS BRANCH		
63.6	Vacaville.....	Ulatis Creek bridge.....Side
75.8	Winters.....	Putah Creek bridge.....Side
76.0	Winters.....	Water tank spout.....Side
NAPA BRANCH		
46.5	Thomasson.....	Suisun Creek bridge.....Side
46.0	Thomasson.....	Tunnel.....Overhead
67.5	Bale.....	Water tank spout.....Side
69.5	Maple.....	Napa River bridge.....Side
MARTINEZ - TRACY		
37.9	Avon.....	Pacheco slough bridge.....Side
43.1	Nichols.....	Wagon bridge.....Overhead and side
43.2	Nichols.....	AT&SFRy overhead bridge.....Overhead and side
48.8	Pittsburg.....	Signal bridge.....Overhead
SHELLVILLE BRANCH		
40.7	Brazos.....	Drawbridge over Napa River.....Side
SAN RAMON BRANCH		
42.5	Concord.....	Water tank.....Side
44.6	Hookston.....	Walnut Creek bridge....Overhead and side
45.8	Las Juntas....	SNRy trolley wires.....Overhead
49.2	Walnut Creek..	San Ramon Creek bridge..Overhead and side
57.0	San Ramon....	San Ramon Creek bridge..Overhead and side

Windows of occupied passenger cars must be kept closed, and passengers warned of close clearance when passing over Brazos River drawbridge.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS

	With Caution Not Exceeding MPH
Through sidings, yard and other side-tracks, crossovers, turnouts and slip switches, except:.....	10
Port Costa and MP 28, on working track.....	15
Shellmound to Richmond, on yard track 1.....	15
Los Medanos, on Camp Stoneman spur, except.....	15
On Stoneman wye with engine backing.....	10

MAXIMUM SPEED PERMITTED WHEN HANDLING CERTAIN EQUIPMENT

Streamliner Nos. 101 and 102 must not exceed speed permitted other passenger trains when operating against the current of traffic, or when handled by steam power.

When electro-pneumatic brakes are not functioning on Nos. 101 and 102, and necessary to handle train with automatic air brakes, speed must not exceed 90 MPH in territory where maximum speed is shown as 95 MPH.

Nos. 51 and 52 when handled by P-7-8-10 class engines which have been cross counter-balanced, may run not to exceed 65 MPH in territory where maximum speed of 60 MPH is authorized in Speed Restrictions.

SPEED RESTRICTIONS: Maximum speed of Passenger trains must not exceed 50 MPH and Freight and Mixed trains 35 MPH except as otherwise provided for herein, or by bulletin, train order or fixed signal.

Maximum speed of any train with an engine not shown in Speed Restriction table, 35 MPH, and is further restricted to maximum speed shown for Freight and Mixed trains if less than 35 MPH.

Page No.	TERRITORY	WITH TRAIN — ENGINE RUNNING FORWARD									LIGHT ENGINE RUNNING FORWARD				ENGINE BACKING WITH TRAIN OR LIGHT			
		PASSENGER									FREIGHT AND MIXED	E P A Mt GS	T-26-32-37-40 F (if CCB*)	M T-1-8-9-23-28-31-36-57-58 C-2-4-5-8-9-10-18-19-26-27-28-29 AC-1-2-3-6 (if not CCB*) SP	C-15-17-32 TW Mk-2-4-10-11 MM-3	E A T P C TW	Mk F Mt GS SP	M AC AM-2 MM-3 Gas-elec. cars
		STREAM-LINER DIESEL POWER UNIT	P-8 (if CCB*) P-7-10-12 GS Mt	E A P-1-3-4-5-8-11 P-8 (if not CCB*)	T -26-32-37-40	AC-4-5-7-8-9-10-11-12 AC-6 (if CCB*)	T-1-8-9-23-28-31-36-57-58 Mk-5-6-7-8-9 F (if CCB*) SP Gas-elec. cars	M AM-2	C-2-4-5-8-9-10-18-19-26-27-28-29 Mk-2-4 TW F (if not CCB*) AC-1-2-3-6 (if not CCB*)	C-15-17-32 Mk-10-11 MM-3								
2-3-4 5-6-7	Between Oakland Pier and MP 17.3, except.....	45	45	45	45	45	45	45	40	35	30	45	40	35	30	30	25	
	Across freight leads to West Oakland.....	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
	On both leads to West Oakland across main tracks	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	
	MP 16-MP 17.....	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	25	
	Between MP 17.3 and MP 27.9, except.....	80	65	65	60	55	50	45	40	35	40	45	40	35	30	30	25	
	MP 21.5-MP 27.9 on tangents.....	60	50	50	50	50	50	45	40	35	40	45	40	35	30	20	20	
	MP 21.5-MP 27.9 on curves.....	45	40	40	40	40	40	40	40	35	35	40	40	35	30	20	20	
	Between MP 27.9 and MP 35.3, except.....	45	45	45	45	45	45	45	40	35	30	45	40	35	30	20	20	
	Passing Port Costa station building.....	45	40	40	40	40	40	40	40	35	20	40	40	35	30	20	20	
	*Over grade crossings Martinez city limits, except..	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	
	*Eastward trains via Suisun Bay bridge.....	20	20	20	20	20	20	20	20	20	20	20	20	20	20	15	15	
	Over Span No. 12 (lift span) Suisun Bay bridge 33.3	30	30	30	30	30	30	30	30	30	30	30	30	30	30	20	20	
	Between MP 35.3 and MP 85.5, except.....	95	70	65	60	55	50	45	40	35	40	45	40	35	30	30	25	
	MP 35.3-MP 47.0.....	75	60	60	60	55	50	45	40	35	40	45	40	35	30	30	25	
	MP 47.0-MP 49.0.....	45	45	45	45	45	45	45	40	35	30	45	40	35	30	20	20	
	Over crossings east and west of passenger station Dixon	70	70	65	60	55	50	45	40	35	35	40	40	35	30	30	25	
	MP 74.2-MP 77.3.....	45	40	40	40	40	40	40	40	35	30	40	40	35	30	20	20	
	Davis passenger station-MP 76.69 on Woodland line	40	40	40	40	40	40	40	40	35	30	40	40	35	30	20	20	
Between MP 85.5 and Sacramento, except.....	45	45	45	45	45	45	45	40	35	30	45	40	35	30	30	25		
Over SNRy crossing, Mikon.....	40	40	40	40	40	40	40	40	35	30	40	40	35	30	20	20		
MP 87.8-Sacramento River drawbridge.....	35	35	35	35	35	35	35	35	35	35	35	35	35	30	30	25		
Over Sacramento River drawbridge.....	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10		
10	Between Elmira and Winters.....		25	25	25	.....	25	25	25	25	25	25	25	25	20	15	
	Between Winters and Esparto.....														15	20		
	Between Suisun-Fairfield and Cordelia.....		40	40	40	40	40	40	40	35	25	30	30	30	20	20		
	Between Cordelia and Napa Jct.....		35	35	35	35	35	35	35	35	25	35	35	30	15	15		
	Between Napa Jct. and MP 53.5, except.....														15	15		
	MP 39.75-MP 40.25.....														15	15		
	Over highway crossing, Rocktram.....														10	10		
	*MP 45.2-MP 47.1, city limits, Napa.....														25	15		
	Between MP 53.5 and Calistoga.....														20	15		
	Between Charter Oak and Fulton Sts., St. Helena														20	15		
	Between Napa Jct. and Vallejo, except.....														25	15		
	Over Tennessee St. crossing, Vallejo.....														15	15		
Between Napa Jct. and Schellville, except.....		35	35	35	.....	25	35	25	25	25	35	35	25	15	15		
Over Brazos drawbridge, and on Schellville wye...		10	10	10	.....	10	10	10	10	10	10	10	10	10	10	10	
Between Union and West Napa.....											8			8	8			
8-9	Martinez to Mococo on eastward track.....		45	45	45	45	45	45	40	35	30	45	40	35	30	20		
	Mococo to Martinez on westward track.....		30	30	30	30	30	30	30	30	20	30	30	30	20	20		
	Between Mococo and MP 41.0.....		60	60	60	55	50	45	40	35	40	45	40	35	30	20		
	Between MP 41.0 and MP 80.7, except.....		65	65	60	55	50	45	40	35	40	45	40	35	30	25		
	*Over Railroad Ave., Pittsburg.....		25	25	25	25	25	25	25	25	25	25	25	25	25	25		
8-9-11 14-15 18-19	Between yard limit signs at Tracy on Martinez, Niles and Los Banos lines, and overpass east of puzzle switch on Lathrop line, except.....		45	45	45	45	45	45	40	35	30	45	40	35	30	25		
	Between C St. crossing on Martinez and Niles line and end double track on Lathrop line and MP 83 on Los Banos line.....		10	10	10	10	10	10	10	10	10	10	10	10	10	10		
	Between Avon and Radum, except.....			15	15	.....	15	15	15	15	15	15	15	15	15	15	
Over bridges 44.64, 49.22 and 56.99.....			10	10	.....	10	10	10	10	10	10	10	10	10	10		

*Regulated by city ordinance.

SPECIAL INSTRUCTIONS — MARTINEZ SUBDIVISION

MARTINEZ SUBDIVISION

RATING OF ENGINES—In Ms of 1000 lbs. Back of Tender.

NOMINAL CLASS	ENGINE NUMBERS	Oakland and Martinez Martinez and Tracy	Martinez to Bridge Summit	Bridge Summit to Sacramento	Sacramento to Martinez	Suisun-Fairfield to Napa Jct.	Napa Jct. to Suisun-Fairfield	Napa Jct. and Larkmead	Larkmead and Calistoga Union and West Napa
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022.....	3200	1000	2150	1950	....	....	....	....
DES-100 to 107	1300 to 1395.....	4500	1600	3350	3100	....	....	....	....
E-23	1500 and 1502.....	3350	1400	2950	2800	800	1100	1300	1300
M-4	1617 to 1713.....	4450	1900	3900	3700	1100	1500	1800	1800
M-6, 8	1721 to 1803, 1823 to 1825.....	5250	2250	4550	4350	1300	1800	2100	....
M-9, 11	1804 to 1822, 1826 to 1831 and 1836.....	5500	2400	4850	4600	1400	1900	2250	....
M-11	1832 to 1835.....	5700	2500	5000	4800	1450	2000	2300	....
T-1	2242 to 2271.....	3800	1650	3300	3150	950	1300	1500	1500
T-8, 9	2161, 2174 and 2178.....	2750	1150	2400	2250	650	920	1050	1050
T-23	2301 to 2310.....	5500	2350	4800	4550	1350	1900	2200	....
T-26	2283 to 2299.....	4800	2000	4200	3900	1150	1600	1900	....
T-28, 31	2311 to 2362.....	6000	2600	5250	5000	1500	2100	2450	....
T-32, 40	2363 to 2384.....	6150	2600	5350	5000	1500(A)	2100(A)	2500(A)	....
T-36	2103.....	4050	1750	3550	3400	1000	1400	1650	1650
T-37	2105 and 2106.....	5450	2350	4800	4600	1350	1900	2200	....
T-57, 58	2385 and 2386.....	4950	2150	4300	4100	1250	1700	2000	....
P-1, 3, 5	{2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460}	4950	2050	4300	4000	1150	1600	1950(D)	....
P-1	2400, 2403 to 2407 and 2415.....	4950	2150	4300	4000	1200	1700	....	....
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	5450	2400	4750	4400	1350	1900	2300(D)	....
P-6	2453, 2454 and 2458.....	6100	2550	5350	4950	1500	2100	....	....
P-7	2476 and 2477.....	6500	2800	5700	5450	1600	2250	....	....
P-8, 10	2461 to 2474, 2478 to 2483.....	6800	2850	5900	5550	....	....	....	....
P-8, 10	2475, 2484 to 2491.....	6800	3050	5900	5550	....	....	....	....
P-11	3100 to 3109.....	5250	2250	4550	4350	1300	1800	2100	....
P-12	3120 to 3129.....	6900	2900	6000	5750	....	....	....	....
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469.....	6600	2900	5750	5550	1700	2300	2650	....
C-15, 32	2500, 2505 to 2507.....	4250	1850	3700	3550	1100	1450	1700	1700
C-17	2510 and 2511.....	5200	2300	4550	4350	1350	1850	2150	....
C-18	3400 to 3409.....	6050	2650	5300	5100	1550	2150	2500	....
C-19	3410 to 3426.....	6300	2750	5550	5300	1650	2200	2600	....
TW-1	2900 to 2913.....	5050	2200	4400	4200	1300	1750	2050	....
TW-2, 3	2932 to 2952.....	4050	1750	3550	3400	1000	1400	1600	....
TW-4, 6	2926 to 2931 and 2957.....	3850	1650	3350	3200	960	1300	1550	....
TW-8	2914 to 2923.....	5550	2450	4900	4650	1400	1950	2250	....
A-3	3029.....	3900	1550	3400	3050	850	1200	1500	....
A-3	3025, 3036, 3052 and 3057.....	3900	1650	3400	3050	910	1300	1550	....
A-6	3000 to 3003.....	4800	2100	4150	3750	1150	1650	1850	....
Mk-2, 4	3201 to 3240.....	7650	3350	6700	6400	1900	2650	3000(B)	....
Mk-5, 6	3241 to 3277.....	8450	3650	7350	7000	2150	2900	3400(B)	....
Mk-7, 8, 9	3300 to 3324.....	9200	4050	8050	7750	2400	3250	3750(C)	....
Mk-10	3295.....	7100	3100	6200	5950	1850	2500	2900(D)	....
Mk-11	3297 and 3298.....	6800	3000	5950	5700	1750	2411	2800(D)	....
F-1	3600 to 3652.....	9600	4200	8400	8050	NOTES: (A) Engine 2371 not permitted on these branches. (B) Applies to engines 3201, 3203 to 3206 inc., 3211, 3213, 3214, 3224, 3227, 3229, 3236, 3237, 3241, 3247, 3251, 3253, 3255, 3259, 3266, 3268, 3271, 3273 and 3274 only between Napa Jct. and Yountville; not permitted to operate beyond Yountville. Other Mk-2, 4, 5, 6 Class engines not permitted to operate beyond Napa River Bridge 45.62. (C) Mk 7, 8, 9 Class engines not permitted to operate beyond Napa River Bridge 45.62. (D) P-1, 3, 4, 5 and Mk-10, 11 Class engines not permitted to operate beyond Yountville.			
F-3	3653 to 3667.....	11000	4850	9650	9250				
F-4, 5	3668 to 3769.....	11000	5150	9650	9250				
AM-2	3900 to 3911.....	10900	4750	9550	9100				
MM-3	3930 and 3931.....	12800	5600	11200	10700				
AC-1, 2, 3	4000 to 4048.....	13300	5900	11650	11150				
AC-4, 5	4100 to 4125.....	17300	7650	15100	14500				
AC-6 to 12	3800 to 3811, 4126 to 4294.....	18300	8050	16000	15300				
Mt-1, 3, 4, 5	4300 to 4376.....	9000	4050	7850	7400				
Mt-2	4385 to 4390.....	9750	4200	8500	8150				
GS-1, 2	4400 to 4415.....	9600	4300	8400	7900				
GS-3, 4, 5, 6	4416 to 4469.....	10200	4400	8900	8500				
SP-1, 2, 3	5000 to 5048.....	12950	5700	11350	10850				
Allowance for Empty and Underloaded Cars	Less than 45 Ms.....	6	6	6	6	3	3	3	3
	45 Ms to 55 Ms.....	3	3	3	3	3	3	3	3
	More than 55 Ms.....	0	0	0	0	0	0	0	0

ENGINES FOR WHICH NO RATING IS SHOWN IN THE RATING OF ENGINES TABLE WILL NOT BE PERMITTED TO OPERATE IN THAT TERRITORY UNLESS AUTHORIZED BY SUPERINTENDENT.

MARTINEZ SUBDIVISION

RATING OF ENGINES—In Ms of 1000 lbs. Back of Tender.

NOMINAL CLASS	ENGINE NUMBERS	Napa Jct. to Schellville Napa Jct. to Vallejo San Ramon to Radum	Schellville to Napa Jct.	Vallejo to Napa Jct. Elmira to Winters	Winters to Elmira	Winters and Esparto	Radum to San Ramon	Avon to San Ramon	San Ramon to Avon
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022.....	.....	.....	.....	.....	.....	.....	.....	.....
DES-100 to 107	1300 to 1395.....	.....	.....	.....	.....	.....	.....	.....	.....
E-23	1500 and 1502.....	4040	1350	1500	1720	4000	1890	1230	4040
M-4	1617 to 1713.....	5300	1820	2040	2300	4950	2500	1680	5300
M-6, 8	1721 to 1803, 1823 to 1825.....	6200	2140	2400	2700	.....	2970	2000	.....
M-9, 11	1804 to 1822, 1826 to 1831 and 1836.....	6550	2280	2550	2870	.....	3100	2100	.....
M-11	1832 to 1835.....	6820	2370	2660	2980	.....	3250	2200	.....
T-1	2242 to 2271.....	4500	1550	1750	1960	4300	2150	1430	4500
T-8, 9	2161, 2174 and 2178.....	3270	1100	1240	1390	3100	1540	1000	3270
T-23	2301 to 2310.....	6500	2250	2520	2830	.....	3100	.....	.....
T-26	2283 to 2299.....	5730	1950	2200	2470	.....	2720	.....	.....
T-28, 31	2311 to 2362.....	7170	2480	2790	3130	.....	3430	.....	.....
T-32, 40	2363 to 2384.....	7300(A)	2530(A)	2830(A)	3180(A)	.....	3500(A)	.....	.....
T-36	2103.....	4800	1680	1880	2110	4600	2300	1550	4800
T-37	2105 and 2106.....	6500	2250	2530	2840	.....	3100	.....	.....
T-57, 58	2385 and 2386.....	5880	2040	2280	2560	.....	2800	.....	.....
P-1, 3, 5	{2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460	5900	1990	2240	2520	.....	2780	.....	.....
P-1	2400, 2403 to 2407 and 2415.....	6200	2090	.....	.....	.....	2910	.....	.....
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	6410	2180	2460	2770	.....	3050	.....	.....
P-6	2453, 2454 and 2458.....	7300	2490	.....	.....	.....	3460	.....	.....
P-7	2476 and 2477.....	7700	2660	.....	.....	.....	3690	.....	.....
P-8, 10	2461 to 2474, 2478 to 2483.....	.....	.....	.....	.....	.....	.....	.....	.....
P-8, 10	2475, 2484 to 2491.....	.....	.....	.....	.....	.....	.....	.....	.....
P-11	3100 to 3109.....	6330	2150	.....	.....	.....	3000	.....	.....
P-12	3120 to 3129.....	.....	.....	.....	.....	.....	.....	.....	.....
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469.....	7800	2720	3050	3420	7400	3750	2500	7800
C-15, 32	2500, 2505 to 2507.....	5050	1760	1970	2200	4750	2400	1600	5050
C-17	2510 and 2511.....	6200	2180	2440	2730	5870	3000	2020	6200
C-18	3400 to 3409.....	7230	2530	2830	3180	6850	3480	.....	.....
C-19	3410 to 3426.....	7530	2630	2950	3300	7100	3620	.....	.....
TW-1	2900 to 2913.....	6000	2100	2350	2630	5700	2880	1950	6000
TW-2, 3	2932 to 2952.....	4800	1670	1880	2100	4550	2310	1540	4800
TW-4, 6	2926 to 2931 and 2957.....	4600	1570	1770	1990	4350	2180	1450	4600
TW-8	2914 to 2923.....	6650	2310	2590	2900	6300	3180	2150	6650
A-3	3029.....	4700	1550	1750	1980	.....	2180	.....	.....
A-3	3025, 3036, 3052 and 3057.....	4900	1620	1830	2070	.....	2290	.....	.....
A-6	3000 to 3003.....	5700	1910	2150	2430	.....	2670	.....	.....
Mk-2, 4	3201 to 3240.....	8800(B)	3050	3430(B)	3850(B)	.....	4230(B)	.....	.....
Mk-5, 6	3241 to 3277.....	10000(B)	3470	3900(B)	4370(B)	.....	4800(B)	.....	.....
Mk-7, 8, 9	3300 to 3324.....	10750(B)	3820	4180(B)	.....	.....	.....	.....	.....
Mk-10	3295.....	8450	2960	3120	3700	.....	4060	.....	.....
Mk-11	3297 and 3298.....	8100	2850	3190	3570	.....	3900	.....	.....
F-1	3600 to 3652.....	.....	.....	.....	.....	.....	.....	.....	.....
F-3	3653 to 3667.....	.....	.....	.....	.....	.....	.....	.....	.....
F-4, 5	3668 to 3769.....	.....	.....	.....	.....	.....	.....	.....	.....
AM-2	3900 to 3911.....	.....	.....	.....	.....	.....	.....	.....	.....
MM-3	3930 and 3931.....	.....	.....	.....	.....	.....	.....	.....	.....
AC-1, 2, 3	4000 to 4048.....	.....	.....	.....	.....	.....	.....	.....	.....
AC-4, 5	4100 to 4125.....	.....	.....	.....	.....	.....	.....	.....	.....
AC-6 to 12	3800 to 3811, 4126 to 4294.....	.....	.....	.....	.....	.....	.....	.....	.....
Mt-1, 3, 4, 5	4300 to 4376.....	.....	.....	.....	.....	.....	.....	.....	.....
Mt-2	4385 to 4390.....	.....	.....	.....	.....	.....	.....	.....	.....
GS-1, 2	4400 to 4415.....	.....	.....	.....	.....	.....	.....	.....	.....
GS-3, 4, 5, 6	4416 to 4469.....	.....	.....	.....	.....	.....	.....	.....	.....
SP-1, 2, 3	5000 to 5048.....	.....	.....	.....	.....	.....	.....	.....	.....
Allowance for Empty and Underloaded Cars	Less than 45 Ms..... 45 Ms to 55 Ms..... More than 55 Ms.....	.....	.....	.....	.....	.....	.....	.....	.....

NOTES:

(A) Engine 2371 not permitted on these branches.

(B) Mk-7, 8, 9 and Mk-2, 4, 5, 6 Class engines, except engines 3201, 3203 to 3206 inc. 3211, 3213, 3214, 3224, 3227, 3229, 3236, 3237, 3241, 3247, 3251, 3253, 3255, 3259, 3266, 3268, 3271, 3272 and 3274 not permitted to operate between Floden and Vallejo, San Ramon and Radum, Elmira and Winters.

ENGINES FOR WHICH NO RATING IS SHOWN IN THE RATING OF ENGINES TABLE WILL NOT BE PERMITTED TO OPERATE IN THAT TERRITORY UNLESS AUTHORIZED BY SUPERINTENDENT.

RULE 14 (d). As specified below, — — — — o will be indication that flagman may return from west as prescribed by Rule 99:
 FresnoTrains on Pratton line.
 Biola Jct.....Trains on Biola line.

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

TracyTrains on Los Banos line.
 Kerman.....Trains on Biola line.
 IngleTrains on Riverdale line.

RULE 83 (A). Only trains originating or terminating will register at Los Banos, Ingle and Fresno yard.
 Only extra trains will register at Kerman.

RULE 83 (B). Extra trains may register by ticket at Kerman.

RULE 93. Yard limits in which the provisions of Rule 93 will apply are established at the following points:

West MP		East MP
80.70	Tracy (Martinez-Los Banos line).....	85.64
69.19	" (Niles-Lathrop line).....	74.37
139.61	Los Banos	142.01
192.46	Kerman	194.53
206.04	Fresno (Pratton-Selma line).....	210.81
208.44	" (Biola-Exeter line)	208.15
199.07	" (Merced-Clovis line).....	209.60

Fresno. Trains moving between Tulare St. and Merced St. (east and west of passenger station) must receive proceed signal from yardman (green flag or green light) between those points.

Westward trains via Pratton line must receive proceed signal from yardman (green flag or green light) before passing Divisadero Street.

RULE 103 (A). House track at Newman must not be switched between Merced and Fresno Sts. from five minutes before arrival to five minutes after departure of passenger trains.

While switching over Fourth St., Los Banos, on back track and west middle, a member of crew must protect the crossing.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows:

Tracy.....Niles line, for Martinez line.
 Tracy.....End double track, for eastward track.
 Tracy.....Los Banos line, for Niles line.
 IngleRiverdale line, for siding.
 KermanBiola line, for Pratton line.
 Fresno Yard ...End double track, for eastward track.
 FresnoPratton line, for eastward main track.

RULE 105. Kerman. North siding is siding north of main track extending from MP 192.9 to MP 194.1, and to be used by trains to and from Biola line only; east switch to be lined normally for movement to and from Biola line. Westward trains from Biola line, unless otherwise required by train order, will use north siding. Eastward trains to Biola line will enter Biola line at junction switch, unless west switch of north siding is lined for siding, and proceed signal is received from operator (green flag by day, green light by night).

South siding is siding south of main track extending from MP 192.8 to MP 193.8.

RULE 221. Fresno yard is a train-order office for trains originating only.

RULE 505. AUTOMATIC BLOCK SYSTEM

Tracy. Signals are numbered as automatic and are under control of switch tender. When "stop" is indicated, trains must stop and not proceed until "proceed" is indicated or proceed signal is given with green flag or green light by switch tender.

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

Westward movements from Lathrop Subdivision governed by Signal 713 located 300 feet east of puzzle switch, the top light governs movement on main track and the lower light governs movement to hill or local yard, and dwarf light signal 715 located on right of eastward track 300 feet east of puzzle switch governs movement to all routes.

Westward movement from Los Banos Subdivision governed by Signal 823, located 300 feet east of puzzle switch, top arm governs movement on main track and lower arm governs movement to hill or local yard.

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

Trains and engines stopped by Signal 709 may then proceed with caution if proceed signal received from yardman.

RULE 516. Overlap posts:

Floyd (1500 feet east of west switch).....Eastward trains.

RULE 535. SPRING SWITCHES

Tracy. Spring derail on sewer lead, just west of roundhouse leads.

RULE 605. INTERLOCKING

Lyoth. WPRR crossing. Whistle signal:

To enter or leave storage track, o — o.

Biola Jct. Limits extend from signal 675 feet west of junction switch on Merced line and signal 575 feet west of junction switch on Biola line, to westward signal 930 feet east of junction switch on main track, and to dwarf signal at derail west end No. 1 drill track.

Junction switch, derail on Biola line 535 feet west of junction switch, and derail and switch at west end No. 1 drill track are dual control switches, operated from train-order office Fresno yard. Telephones in concrete battery house Biola Jct., and at derail on Biola line to communicate with signal operator when necessary. Instructions governing hand operation of dual control switches when authorized by signal operator are posted in telephone booths.

Signal governing movement from No. 1 drill track displays green aspect for movement to Merced line; yellow aspect for movement to Biola line.

GENERAL REGULATIONS

RULE 825. Cars must not be left within 250 feet of highway crossing at Floyd.

Train crews must not release brakes on outbound trains at Tracy until engine is coupled and brake pipe is charged.

RULE 827. TRAIN INSPECTION

Passenger trains making station stop at Los Banos must approach at not to exceed 8 MPH to allow forward brakeman to detrain on station side where rear of train will stop. He will then make rolling inspection of train, then walk length of train on opposite side making standing inspection, giving careful attention to running gear and journal boxes and entrain on station side.

MISCELLANEOUS

10. Engines listed must not operate on tracks shown below:

Class of Engine	Restricted Tracks
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371.....	Tracy—Brewery; Holly Sugar spur.
"	Patterson—Patterson Ranch spur.
"	Crows Landing—Yancey Lbr. spur.
"	Newman—Golden State Creamery spur; Lumber Co. spur.
"	Gustine—California Milk spur and Carnation Co. loading tracks.
"	Los Banos — Builders Lbr. spur; Union Oil spur; Golden State Creamery spur.
Mt-2, GS, F, SP, AM, MM, AC, and Eng. 2371.....	Los Banos—Wye.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

Mile Post	At or Near	Description
140.2	Los Banos.....	Warehouse opposite east leg of wye....Side

SPEED RESTRICTIONS: Maximum speed of Passenger trains must not exceed 50 MPH and Freight and Mixed trains 35 MPH except as otherwise provided for herein, or by bulletin, train order or fixed signal.

Maximum speed of any train with an engine not shown in Speed Restriction table, 35 MPH, and is further restricted to maximum speed shown for Freight and Mixed trains if less than 35 MPH.

Page No.	TERRITORY	WITH TRAIN — ENGINE RUNNING FORWARD							LIGHT ENGINE RUNNING FORWARD				ENGINE BACKING WITH TRAIN OR LIGHT			
		PASSENGER							FREIGHT AND MIXED	E P A Mt GS	T-26-32-37-40 F (if CCB*)	M T-1-8-9-23-28-31-38-57-58 C-2-4-5-8-9-10-18-19-26-27-28-29 F (if not CCB*) SP	C-15-17-32 TW Mk-2-4-10-11 AC AM-2 MIM-3	E A T P C TW	Mk F Mt GS SP	M AC AM-2 MIM-3 Gas-elec. cars
		P-8 (if CCB*)	E A P-1-3-4-5-6-11 P-8 (if not CCB*)	T -26 -32 -37 -40	AC-4-5-7-8-9-10-11-12 AC-8 (if CCB*)	T-1-8-9-23-28-31-36-57-58 Mk-5-6-7-8-9 F (if CCB*) SP Gas-elec. cars	M AM-2	C-2-4-5-8-9-10-18-19-26-27-28-29 Mk-2-4 TW F (if not CCB*) AC-1-2-3-8 (if not CCB*)								
8-9-11 14-15 18-19	Between yard limit signs at Tracy on Martinez, Niles and Los Banos lines, and overpass east of puzzle switch on Lathrop line, except Between C St. crossing on Martinez and Niles line and end double track on Lathrop line and MP 83 on Los Banos line	45 10	45 10	45 10	45 10	45 10	45 10	40 10	35 10	30 10	45 10	40 10	35 10	30 10	30 10	25 10
11-12	Between Tracy and Fresno, except Over WPRR crossing, Lyoth Within Los Banos yard limits *Along or across street crossings, Los Banos Between Kerman and Biola Jet., except Through junction switch and crossover to Biola line	55 40 45 20 30 25	55 40 45 20 30 25	55 40 45 20 30 25	55 40 45 20 30 25	50 40 45 20 30 25	45 40 45 20 30 25	40 40 40 20 30 25	35 35 35 20 30 25	40 25 30 20 30 25	45 40 45 12 30 25	40 40 40 12 30 25	35 35 35 12 30 25	30 30 30 12 30 25	30 20 30 12 20 20	25 20 25 12 20 20

*Regulated by city ordinance.

**SPEED RESTRICTIONS
UNLESS OTHERWISE FURTHER RESTRICTED**

MAXIMUM SPEED PERMITTED CERTAIN ENGINES

Class of Engine	Station—Territory—Track or Structure	MPH
GS-6	Between MP 93.5 and MP 98.0, Los Banos line	50
GS-6	Between MP 108.0 and MP 120.0, Los Banos line	50
GS-6	Between MP 126.9 and MP 131.3, Los Banos line	50
GS-6	Between MP 176.0 and MP 177.0, Los Banos line	50

**SPEED RESTRICTIONS
FOR OTHER THAN MAIN TRACKS**

	With Caution Not Exceeding MPH
Through sidings, yard and other side-tracks, crossovers, turnouts and slip-switches	10

LOS BANOS SUBDIVISION

RATING OF ENGINES—In Ms of 1000 lbs. Back of Tender.

NOMINAL CLASS	ENGINE NUMBERS	Tracy and Fresno Kerman and Biola Jct.
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022.....	3200
DES-100 to 107	1300 to 1395.....	4500
E-23	1500 and 1502.....	3350
M-4	1617 to 1713.....	4450
M-6, 8	1721 to 1803, 1823 to 1825.....	5250
M-9, 11	1804 to 1822, 1826 to 1831 and 1836.....	5500
M-11	1832 to 1835.....	5700
T-1	2242 to 2271.....	3800
T-8, 9	2161, 2174 and 2178.....	2750
T-23	2301 to 2310.....	5500
T-26	2283 to 2299.....	4800
T-28, 31	2311 to 2362.....	6000
T-32, 40	2363 to 2384.....	6150
T-36	2103.....	4050
T-37	2105 and 2106.....	5450
T-57, 58	2385 and 2386.....	4950
P-1, 3, 5	{2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, } 2437 to 2452, 2459 and 2460	4950
P-1	2400, 2403 to 2407 and 2415.....	4950
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	5450
P-6	2453, 2454 and 2458.....	6100
P-7	2476 and 2477.....	6500
P-8, 10	2461 to 2474, 2478 to 2483.....	6800
P-8, 10	2475, 2484 to 2491.....	6800
P-11	3100 to 3109.....	5250
P-12	3120 to 3129.....	6900
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469.....	6600
C-15, 32	2500, 2505 to 2507.....	4250
C-17	2510 and 2511.....	5200
C-18	3400 to 3409.....	6050
C-19	3410 to 3426.....	6300
TW-1	2900 to 2913.....	5050
TW-2, 3	2932 to 2952.....	4050
TW-4, 6	2926 to 2931 and 2957.....	3850
TW-8	2914 to 2923.....	5550
A-3	3029.....	3900
A-3	3025, 3036, 3052 and 3057.....	3900
A-6	3000 to 3003.....	4800
Mk-2, 4	3201 to 3240.....	7650
Mk-5, 6	3241 to 3277.....	8450
Mk-7, 8, 9	3300 to 3324.....	9200
Mk-10	3295.....	7100
Mk-11	3297 and 3298.....	6800
F-1	3600 to 3652.....	9600
F-3	3653 to 3667.....	11000
F-4, 5	3668 to 3769.....	11000
AM-2	3900 to 3911.....	10900
MM-3	3930 and 3931.....	12800
AC-1, 2, 3	4000 to 4048.....	13300
AC-4, 5	4100 to 4125.....	17300
AC-6 to 12	3800 to 3811, 4126 to 4294.....	18300
Mt-1, 3, 4, 5	4300 to 4376.....	9000
Mt-2	4385 to 4390.....	9750
GS-1, 2	4400 to 4415.....	9600
GS-3, 4, 5, 6	4416 to 4469.....	10200
SP-1, 2, 3	5000 to 5048.....	12950
Allowance for Empty and Underloaded Cars	Less than 45 Ms.....	6
	45 Ms to 55 Ms.....	3
	More than 55 Ms.....	0

ENGINES FOR WHICH NO RATING IS SHOWN IN THE RATING OF ENGINES TABLE WILL NOT BE PERMITTED TO OPERATE IN THAT TERRITORY UNLESS AUTHORIZED BY SUPERINTENDENT.

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

Galt.....Trains on Ione line.
Lodi.....Trains on Valley Spring and Woodbridge lines.
Stockton...Trains on Oakdale line.
Lathrop....Trains on Merced line.
Tracy.....Trains on Los Banos line.

RULE 14 (k). Will not apply in C.T.C. system.

RULE 82 (A). Westward regular trains from Lathrop Subdivision to Merced Subdivision will assume the corresponding number and schedule at Lathrop without clearance.

Westward sections and extra trains authorized at Stockton by train-order for movement on Merced Subdivision may leave Lathrop without clearance.

Trains from Merced Subdivision will assume the corresponding number and schedule on Lathrop Subdivision and may leave Lathrop without clearance.

Trains from Merced Subdivision for movement eastward on Lathrop Subdivision may leave Lathrop without clearance.

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

Trains from Western Division at Brighton may assume corresponding schedules, or sections of schedules, on Sacramento Division without clearance.

Trains to Western Division at Brighton, originating at Sacramento, may leave Sacramento with Western Division clearance only.

Trains enroute Western Division via Sacramento or Brighton originating at Roseville, must obtain two clearances, one endorsed Sacramento Division, the other endorsed Western Division. Train orders addressed to such trains at Roseville will apply the same as if addressed to them at Brighton or Sacramento.

RULE 83. Sections of No. 60 having received their authority at Stockton, or east of Stockton, need not ascertain that preceding sections of the same schedule have left Lathrop.

Identification may be made by westward trains between Stockton and Lathrop to be applied at Lathrop on Merced Subdivision. Reduce speed sufficiently to permit identification and comply with Rule 14 (k).

RULE 83 (A). Extra trains will register at Stockton and Lathrop.

Trains originating or terminating on east leg of wye at Lathrop will not register at Lathrop.

Only extra trains originating or terminating will register at Oakdale.

Only trains originating or terminating, other than third-class and extra trains passing Sacramento to or from Western Division will register at Sacramento.

Only eastward trains via Brighton, and trains originating or terminating, will register at Sacramento, 12th St.

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

Lathrop.....All trains on Lathrop Subdivision and Merced Subdivision trains originating or terminating using west leg of wye.

Stockton.....Third-class and extra trains, except those originating or terminating.

Sacramento, 12th St...Eastward trains via Brighton.

RULE 93. Yard limits in which the provisions of Rule 93 will apply, except within C.T.C. limits, are established at the following points:

West MP		East MP
80.70	Tracy (Martinez-Los Banos line).....	85.64
69.19	" (Niles-Lathrop line).....	74.37
80.56	Lathrop (Tracy-Stockton line).....	83.04
	" (Merced line).....	94.02
85.07	Stockton.....	93.72
	" (Oakdale line).....	94.41
120.23	Oakdale.....	122.92
101.57	Lodi.....	104.25
	" (Victor line).....	104.45
	" (Woodbridge line).....	End track
111.10	Galt.....	113.21
	" (Ione line).....	112.91
85.51	Sacramento.....	95.35
131.60	" (Stockton line).....	136.33
129.04	Valley Spring.....	130.50
141.94	Kentucky House.....	End track
138.28	Ione.....	End track

RULE 95. Train orders issued by Western Division under Form F, reading to or from Brighton, will apply over the Sacramento Division into or out of Sacramento or Roseville.

Nos. 421, 423 and 425 and sections of those schedules from Western Division at Brighton may continue display of indicators through to Roseville, and register at Roseville accordingly.

RULE D-97 (A). Will apply between Tracy and Stockton Tower No 4.

RULE 98. Railroad crossings at grade not interlocked: Trains and engines must approach with caution, and may move over the following crossings without stopping, if crossing clear and no movement approaching on intersecting line:

Stockton.....CCTCo., crossing of Oakdale Branch near MP 92.0.

Lodi.....CCTCo., crossing of Brighton line at MP 103.2.
Lodi.....CCTCo., crossing of Woodbridge line.

Stop clear of the following crossings, then proceed if no movement approaching on intersecting line:

Lodi.....CCTCo., crossing of yard tracks west of station building.

Roma.....CCTCo., crossing of Valley Spring line.
Oakdale.....AT&SFry, crossing of Oakdale Branch.
MP 116.7 on

Ione Branch..CCTCo., crossing of Ione Branch.
Drawbridge not interlocked:

Stockton. Drawbridge over San Joaquin River, on spur connecting with SPBry. Drawbridge normally open for river traffic. SP movement must stop. Sound whistle signal 14 (j) for bridge to be lined.

RULE 103 (A). Stockton. When making movements eastward on Scotts Avenue, before crossing El Dorado Street, following will govern:

With engine ahead pulling cars, stop and proceed.

With cars being pushed, stop and proceed with yardman protecting movement over El Dorado Street.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows:

Tracy.....Niles line, for Martinez line.

Tracy.....End double track, for eastward track.

Tracy.....Los Banos line, for Niles line.

Lodi.....Woodbridge line, for Lathrop line.

Lodi.....Valley Spring line, for yard track.

Galt.....Ione line, for straight leg of wye.

RULE 105. Lathrop. Westward siding leaves westward main track 1500 feet east of corral and enters main track just east of water tank and to be used by westward trains.

Fresno siding leaves eastward main track at extreme west end of Lathrop yard and enters Merced Subdivision main track at Signal 932 and to be used by trains to or from Merced Subdivision.

RULE 204. Trains of Lathrop or Merced Subdivision, with the same conductor and engineer operating through Lathrop may be issued train orders on one subdivision that affect their movement on the other, or both subdivisions.

RULE 204 (A). Operator Stockton must furnish engineers of eastward freight trains an extra copy of Sacramento Division train orders, to be delivered to helper engineer when helper is picked up.

RULE 221. Trains must obtain clearance before leaving Stockton.

Light will not be displayed in train-order signals on Oakdale and Lodi Branches, except when train-order operator is on duty.

RULE D-251. Will apply as follows:

On eastward track, Lathrop to Stockton Tower No. 4.

On westward track, Stockton Tower No. 4 to Stockton.

Lathrop to Tracy.

RULE 505. AUTOMATIC BLOCK SYSTEM

Tracy. Signals are numbered as automatic and are under control of switch tender. When "stop" is indicated, trains must stop and not proceed until "proceed" is indicated or proceed signal is given with green flag or green light by switch tender.

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

Westward movements from Lathrop Subdivision governed by Signal 713 located 300 feet east of puzzle switch, the top light governs movement on main track and the lower light governs movement to hill or local yard, and dwarf light signal 715 located on right of eastward track 300 feet east of puzzle switch governs movement to all routes.

Westward movement from Los Banos Subdivision governed by Signal 823, located 300 feet east of puzzle switch, top arm governs movement on main track and lower arm governs movement to hill or local yard.

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

Trains and engines stopped by Signal 709 may then proceed with caution if proceed signal received from yardman.

Lathrop. Trains and engines stopped by Signal 828 may apply Rule 509 only after obtaining permission of train-order operator.

RULE 535. SPRING SWITCHES

Tracy. Spring derail on sewer lead, just west of roundhouse leads.

RULE 605. INTERLOCKING

San Joaquin River Drawbridge. Derails in eastward main track 892 feet west of lift span, and in westward main track 1208 feet east of lift span. Signal operator on duty 8:00 AM to 12:00 Noon, and 1:00 PM to 5:00 PM. During other hours signals and derails lined for trains.

Lathrop. East zone. Limits extend from SA signal 575 feet west of west switch of crossover to SA signal 65 feet east of east switch of crossover.

West zone. Limits extend from 360 feet west of junction switch to 340 feet east of junction switch.

South zone. Limits extend from 225 feet west of junction switch to 65 feet east of junction switch.

W. P. zone. Limits extend between semi-automatic signals either side of WPRR crossing.

Telephones at interlocking signals governing entrance to East, West and South zones, and in door of concrete shelter at WPRR crossing.

Speed of 25 MPH must not be exceeded through switches of East zone and 15 MPH through switches of West zone.

French Camp Tower—Tidewater Southern Ry. crossing 1.6 miles east of French Camp. Signal operator on duty 6:00 PM to 10:00 PM and 11:00 PM to 3:00 AM daily except Sundays and holidays. 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 not on duty. During hours signal operator on duty, this switch 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, when on duty, and will be given in accordance with Rule 628; Whistle signal, — — — o may be used.

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

Stockton Tower No. 2—AT&SFRy crossing, Sacramento and Taylor Streets, Stockton. Sound whistle signals as follows for:

Westward main track, o o — —.
Eastward main track, — o — —.
Middle track, o — — —.
Old siding, — — o o.
Gauns track, o — o.
Houser-Haines track, o o — o.

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 St., Stockton.

Stockton Tower No. 4. WPRR crossing MP 92.3. Limits on eastward main track extend from signal 660 feet west of crossing to absolute signal at beginning of C.T.C. 900 feet east of crossing; and on westward main track from signal at end of C.T.C. 900 feet east of crossing to dwarf signal 200 feet west of crossing.

Switches and derails on Gulf Red Cedar spur and Gilmore Oil spur are hand-throw and equipped with electric lock controlled by signal operator.

Whistle signal:

For crossover, — o —.

Polk. West switch and eastward signals operated by signal operator at Elvas, and their use governed by Sacramento Division special instructions.

RULE 760. CENTRALIZED TRAFFIC CONTROL SYSTEM

Limits extend from east limit of Stockton Tower No. 4 at east crossover, to interlocking signal just west of west switch at Polk eastward and from absolute signal just east of west switch Polk to east interlocking limit at Stockton Tower No. 4 westward.

On double track between end of double track east of Akers and east interlocking limits at Stockton Tower No. 4 movements may be made in either direction on either track being governed by absolute and automatic signals. Rule 509 applicable to single track will apply on both tracks.

RULE 762. Flag protection to rear, as prescribed by Rule 99, is required by eastward trains standing, or delayed, on main track with rear of train between Signal 1122 and east switch Galt; and by westward trains standing, or delayed, on main track with rear of train between Signal 1121 and west switch.

RULE 763. Revised to read as follows:

"Train indicators, signals and markers must be displayed through centralized traffic control limits. Rule S-17, Fig. 7 of Rule 19, and Rule 19 (A) will not apply on controlled sidings."

GENERAL REGULATIONS

RULE 825. Train crews must not release brakes on outbound trains at Tracy until engine is coupled and brake pipe charged.

AIR BRAKE RULES

RULE 17. Retainers must be used on freight and mixed trains on descending grades as follows:

Toyon to ½ mile east of

Valley Spring. 1 valve for every 150 Ms in train.

Norval to Helisma. 1 valve for every 150 Ms in train.

FREIGHT TRAINS

RULE 25. Rear end test must be made immediately prior to departure from:

Toyon. All trains.

PASSENGER TRAINS

RULE 39. Running test must be made as follows:

Eastward trains on Lathrop Subdivision, leaving Tracy, Lathrop and Stockton.

Westward trains, leaving Akers, Stockton and Lathrop.

MISCELLANEOUS

1. Engines of Sierra Ry. will take water from SP supply at Oakdale, using SP main track. Trains and engines must move with caution between F and G Sts, Oakdale, expecting to find main track occupied.

Emergency water supply only at Lathrop on westward track.

6. Cars must not be left on straight leg of wye, Lathrop, to block tool house or crossover.

Engines will be turned on Santa Fe wye at Oakdale, operating over Sierra Railway main track from Oakdale to Santa Fe Junction, being governed by current Sierra Railway timetable (copy may be procured from SP agent), and will procure clearance from Sierra Railway operator when on duty, before leaving Oakdale; and 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 in phone box at SP station. Every precaution for safety must be observed, flagging if conditions require.

10. Engines listed must not operate on tracks shown below:

Class of Engine	Restricted Tracks
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371.....	Tracy—Brewery; Holly Sugar spur.
Mt-2, GS, F, SP, AM, MM, AC, and Eng. 2371.....	Lathrop—Tracks leading to Lend-Lease.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371.....	Lathrop—Fresno No. 2 track; beet track; slop track.
"	Stockton—Tracks 2 and 3 (except to pick up or set out); west end of tracks 2, 3 and 4 in classification yard.
GS, F, SP, AM, MM, AC.....	Stockton—Turntable lead.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371.....	Lodi—Tracks 5 and 6; crossover between tracks 3 and 5; west end of track 5 to Walnut St.
Mt-2, GS, F, SP, AM, MM, AC, and Eng. 2371.....	Lodi—Wye (no restriction on west end of wye between siding and oil column).
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371.....	Urgon—Spur.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371.....	Galt — Crossover between controlled siding and oil track; wye.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371.....	Elk Grove — Elk Grove Winery spur.
"	Florin—Florin Fruit Growers spur.
"	Polk—Tracks 1 and 2, U. S. Army Signal Depot.

Earl Fruit track Lodi must not be used beyond 500 ft. from east end and 775 ft. from west end.

Load limit (car and contents):

Oakdale and Lodi Branches.....210,000 pounds.
Ione Branch, between Galt and Edwin.....210,000 pounds.
Ione Branch, between Edwin and Ione.....169,000 pounds.

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 must move with caution between Sacramento River bridge and Seventh Street.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

Mile Post	At or Near	Description
TRACY - BRIGHTON		
90.7	Stockton	Water column, westward track.....Side
104.3	Lodi	Mokelumne River bridge.....Side
129.0	Florin	Water tank spout.....Side
LODI BRANCH		
110.7	Lockeford...	Brick platform at Locke warehouse.....Side
IONE BRANCH		
132.2	Carbondale..	Clay shed.....Side
136.7	Dagon	Sutter Creek bridge.....Overhead and side

SPEED RESTRICTIONS

UNLESS OTHERWISE FURTHER RESTRICTED

MAXIMUM SPEED PERMITTED CERTAIN ENGINES

Class of Engine	Station—Territory— Track or Structure	MPH
GS, F, AC, Mt-2.....	Bridge 76.57, on Tracy-Lathrop line.....	25
GS, F, AC, Mt-2.....	Bridge 104.38, Mokelumne River.....	25
GS, F, AC, Mt-2.....	Bridge 119.14, Consumnes River.....	25
GS-6	Westward track, MP 93.9 to MP 92.8 on Tracy-Brighton line.....	50

SPEED RESTRICTIONS
FOR OTHER THAN MAIN TRACKS

	With Caution Not Exceeding MPH
Through sidings, yard and other side-tracks, crossovers, turnouts and slip-switches, except:.....	10
Through controlled sidings in C.T.C.....	25
*On all yard tracks within city limits, Stockton.....	8

*Regulated by city ordinance.

MAXIMUM SPEED PERMITTED
WHEN HANDLING CERTAIN EQUIPMENT

Nos. 51 and 52 when handled by P-7-8-10 class engines which have been cross counter-balanced may run not to exceed 65 MPH in territory where maximum speed of 60 MPH is authorized in Speed Restrictions table.

SPEED RESTRICTIONS: Maximum speed of Passenger trains must not exceed 50 MPH and Freight and Mixed trains 35 MPH except as otherwise provided for herein, or by bulletin, train order or fixed signal.

Maximum speed of any train with an engine not shown in Speed Restriction table, 35 MPH, and is further restricted to maximum speed shown for Freight and Mixed trains if less than 35 MPH.

Page No.	TERRITORY	WITH TRAIN — ENGINE RUNNING FORWARD								LIGHT ENGINE RUNNING FORWARD				ENGINE BACKING WITH TRAIN OR LIGHT			
		PASSENGER								FREIGHT AND MIXED	E P A Mt GS	T-26-32-37-40 F (if CCB*)	M T-1-8-9-23-28-31-36-57-58 C-2-4-5-8-9-10-18-19-28-27-28-29 Mk-2-4 TW F (if not CCB*) AC-1-2-3-6 (if not CCB*)	C-15-17-32 Mk-10-11 MM-3	E A T P C TW	Mk F Mt GS SP	M AC AM-2 MM-3 Gas-elec. cars
		P-8 (if CCB*)	E A P-1-3-4-5-6-11 P-7-10-12 GS Mt	T -26 -32 -37 -40	AC-4-5-7-8-9-10-11-12 AC-6 (if CCB*)	T-1-8-9-23-28-31-36-57-58 Mk-5-6-7-8-9 F (if CCB*) SP Gas-elec. cars	M AM-2	C-2-4-5-8-9-10-18-19-28-27-28-29 Mk-2-4 TW F (if not CCB*) AC-1-2-3-6 (if not CCB*)									
8-9-11 14-15 18-19	Between yard limit signs at Tracy on Martinez, Niles and Los Banos lines, and overpass east of puzzle switch on Lathrop line, except..... Between C St. crossing on Martinez and Niles line and end double track on Lathrop line and MP 83 on Los Banos line..	45 10	45 10	45 10	45 10	45 10	45 10	40 10	35 10	30 10	45 10	40 10	35 10	30 10	30 10	25 10	
14-15	Between Tracy and Lathrop, except..... Over San Joaquin River Drawbridge..... Between Lathrop and French Camp Tower..... Between French Camp Tower and Stockton Tower No. 4, except *MP 88.7 - MP 92.0 (city limits), Stockton..... Between Stockton Tower No. 4 and end double track, MP 95.0. Through turnout, end double track, MP 95.0..... Between MP 95.0 and MP 102.0..... Between MP 102.0 and MP 104.0..... Between MP 104.0 and MP 131.7..... Between MP 131.7 and Brighton.....	60 40 55 45 20 25 65 30 65 40	60 40 55 45 20 55 65 30 65 40	60 40 55 45 20 55 60 30 60 40	55 40 55 45 20 55 50 30 50 40	50 40 50 45 20 45 40 30 45 40	45 40 45 40 20 45 40 30 45 40	40 40 40 40 20 40 35 30 40 40	35 35 35 30 20 35 35 30 35 35	40 40 40 30 20 45 30 35 45 20	40 40 40 40 20 40 35 30 40 40	35 35 35 30 20 35 30 35 35 35	30 30 30 30 20 25 30 30 30 30	30 20 30 30 20 25 30 30 30 30	30 20 30 30 20 20 30 30 30 30	25 20 25 25 20 25 25 25 25 25	
13	Between Galt and Ione, except..... MP 125.5 - MP 127.1..... Over Dry Creek Bridge 135-I, and Sutter Creek Bridge 136-E. Between Stockton and Montpellier, except..... Between Wilson Way and Sacramento St., Stockton..... Between switches, Peters..... Between Lodi and Woodbridge..... Between Lodi and MP 121.4, Valley Spring line..... Between MP 121.4 and MP 132.3..... Between MP 132.3 and MP 139.7..... Between MP 139.7 and Kentucky House.....									30 25 15 30 8 10 10 25 20 15 20				20 15 15 20 8 10 10 15 15 15 15	20 15 15 20 8 10 10 15 15 15 15		
16-17	Between Lathrop, on west leg of wye and SA signal east of WPRR Crossing..... On east leg of outer wye, Lathrop..... Between MP 93.9 and Biola Jct., except..... MP 113.6-MP 130.5; MP 160.3-MP 194.6..... West end No. 2 siding - East end No. 3 siding, Modesto.... Over TSry crossing, MP 114.7..... Signal 1252 - Signal 1263, Turlock..... Entering intersections at Olive St., Marshall St., and Main St., Turlock..... Over Merced River bridge 134.84, except..... with GS, F, AC, Mt-2 Class engines..... Signal 1498 - Signal 1513, Merced..... Fresno River bridge Madera - East end siding Madera..... Between west interlocking limit Biola Jct. and Fresno, except. Over switch end double track MP 201.9 Fresno Yard eastward *Along or across street crossings, Fresno.....	30 15 65 60 45 40 45 30 50 25 45 40 40 25 45 40 25 20	30 15 65 60 45 40 45 30 50 25 45 40 40 45 45 45 40 20	30 15 55 55 45 40 45 30 50 25 45 40 40 25 45 45 25 20	30 15 50 50 45 40 45 30 50 25 45 40 40 25 45 45 25 20	30 15 45 45 40 40 45 30 45 25 45 40 40 25 45 45 25 20	30 15 40 40 45 40 45 30 45 25 45 40 40 25 45 45 25 20	30 15 40 40 45 40 45 30 45 25 45 40 40 25 45 45 25 20	20 15 40 40 35 35 30 30 35 25 30 30 30 25 30 30 25 20	30 15 45 40 40 40 40 30 45 25 40 40 40 25 40 40 12 12	30 15 40 40 40 40 40 30 45 25 40 40 40 25 40 40 12 12	30 15 35 30 35 30 30 30 35 25 35 30 30 25 35 30 12 12	30 15 30 30 30 30 30 30 30 25 30 30 30 25 30 30 12 12	20 15 30 30 30 30 30 30 30 25 30 30 30 25 30 30 12 12			
18	Between Berenda and Daulton..... Between Chowchilla and Ash..... Between Ash and Dairyland.....									20 20 10				15 20 10	15 20 10		

*Regulated by city ordinance.

SPECIAL INSTRUCTIONS — LATHROP AND MERCED SUBDIVISIONS

LATHROP SUBDIVISION

RATING OF ENGINES—In Ms of 1000 lbs. Back of Tender.

NOMINAL CLASS	ENGINE NUMBERS	Tracy and Brighton	Stockton and Montpellier	Lodi to Wallace Toyon to Macnider	Wallace to Toyon Macnider to Kentucky House	Macnider to Toyon	Valley Spring to Norval	Kentucky House to Macnider Toyon to Valley Spring Norval to Lodi	Lodi and Woodbridge
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022.....	3200	.....	.....	.....	.....	.....	.....	.....
DES-100 to 107	1300 to 1395.....	4500	.....	.....	.....	.....	.....	.....	.....
E-23	1500 and 1502.....	3350	2300	2600	560	1050	1650	3350	3740
M-4	1617 to 1713.....	4450	3050	3450	800	1450	2200	4450	5000
M-6, 8	1721 to 1803, 1823 to 1825.....	5250	3600	4050	910	1600	2600	5250	5850
M-9, 11	1804 to 1822, 1826 to 1831 and 1836.....	5500	3800	4250	970	1700	2750	5500	6200
M-11	1832 to 1835.....	5700	3950	4450	1050	1900	2900	5750	6450
T-1	2242 to 2271.....	3800	2600	2950	680	1200	1900	3800	4200
T-8, 9	2161, 2174 and 2178.....	2750	1850	2100	460	860	1350	2750	3270
T-23	2301 to 2310.....	5500	3750	4250	1000	1750	2750	5500	6150
T-26	2283 to 2299.....	4800	3300	3750	850	1550	2400	4850	5400
T-28, 31	2311 to 2362.....	6000	4150	4650	1050	1850	2950	6000	6800
T-32, 40	2363 to 2384.....	6150	4200(A)	4650(A)	1050(A)	1850(A)	2950(A)	6150(A)	6900(A)
T-36	2103.....	4050	2800	3150	760	1350	2050	4050	4550
T-37	2105 and 2106.....	5450	3750	4250	1000	1800	2750	5500	6100
T-57, 58	2385 and 2386.....	4950	3400	3850	910	1600	2500	4950	5480
P-1, 3, 5	{2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460}	4950	3350	3850	.....	.....	.....	.....	.....
P-1	2400, 2403 to 2407 and 2415.....	4950	.....	.....	.....	.....	.....	.....	.....
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	5450	4000	4200	.....	.....	.....	.....	.....
P-6	2453, 2454 and 2458.....	6100	.....	.....	.....	.....	.....	.....	.....
P-7	2476 and 2477.....	6500	.....	.....	.....	.....	.....	.....	.....
P-8, 10	2461 to 2474, 2478 to 2483.....	6800	.....	.....	.....	.....	.....	.....	.....
P-8, 10	2475, 2484 to 2491.....	6800	.....	.....	.....	.....	.....	.....	.....
P-11	3100 to 3109.....	5250	.....	.....	.....	.....	.....	.....	.....
P-12	3120 to 3129.....	6900	.....	.....	.....	.....	.....	.....	.....
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469.....	6600	4550	5150	1250	2200	3350	6600	7400
C-15, 32	2500, 2505 to 2507.....	4250	2900	3300	800	1400	2150	4250	4750
C-17	2510 and 2511.....	5200	3600	4050	1000	1750	2650	5250	5870
C-18	3400 to 3409.....	6050	4200	4750	1150	2000	3100	6100	6850
C-19	3410 to 3426.....	6300	4350	4950	1200	2100	3200	6350	7100
TW-1	2900 to 2913.....	5050	3450	3950	950	1650	2550	5100	5700
TW-2, 3	2932 to 2952.....	4050	2800	3150	740	1300	2050	4100	4600
TW-4, 6	2926 to 2931 and 2957.....	3850	2650	3000	690	1250	1900	3850	4350
TW-8	2914 to 2923.....	5550	3850	4350	1050	1850	2800	5600	6300
A-3	3029.....	3900	2650	3000	.....	.....	.....	.....	.....
A-3	3025, 3036, 3052 and 3057.....	3900	2900	3150	.....	.....	.....	.....	.....
A-6	3000 to 3003.....	4800	3550	3700	.....	.....	.....	.....	.....
Mk-2, 4	3201 to 3240.....	7650	5100(B)	5800(B)	1350(B)	2550(B)	3800(B)	7500(B)	8400(B)
Mk-5, 6	3241 to 3277.....	8450	5800(C)	6600(C)	1550(C)	2850(C)	4300(C)	8400(C)	9450(C)
Mk-7, 8, 9	3300 to 3324.....	9200	.....	.....	.....	.....	.....	.....	.....
Mk-10	3295.....	7100	4900	5600	1350	2430	3650	7100	8000
Mk-11	3297 and 3298.....	6800	4700	5350	1300	2350	3500	6800	7650
F-1	3600 to 3652.....	9600	.....	.....	.....	.....	.....	.....	.....
F-3	3653 to 3667.....	11000	.....	.....	.....	.....	.....	.....	.....
F-4, 5	3668 to 3769.....	11000	.....	.....	.....	.....	.....	.....	.....
AM-2	3900 to 3911.....	10900	.....	.....	.....	.....	.....	.....	.....
MM-3	3930 and 3931.....	12800	.....	.....	.....	.....	.....	.....	.....
AC-1, 2, 3	4000 to 4048.....	13300	.....	.....	.....	.....	.....	.....	.....
AC-4, 5	4100 to 4125.....	17300	.....	.....	.....	.....	.....	.....	.....
AC-6 to 12	3800 to 3811, 4126 to 4294.....	18300	.....	.....	.....	.....	.....	.....	.....
Mt-1, 3, 4, 5	4300 to 4376.....	9000	.....	.....	.....	.....	.....	.....	.....
Mt-2	4385 to 4390.....	9750	.....	.....	.....	.....	.....	.....	.....
GS-1, 2	4400 to 4415.....	9600	.....	.....	.....	.....	.....	.....	.....
GS-3, 4, 5, 6	4416 to 4469.....	10200	.....	.....	.....	.....	.....	.....	.....
SP-1, 2, 3	5000 to 5048.....	12950	.....	.....	.....	.....	.....	.....	.....
Allowance for Empty and Underloaded Cars	Less than 45 Ms.....	6	6						
	45 Ms to 55 Ms.....	3	3						
	More than 55 Ms.....	0	0						

NOTES:
 (A) Engine 3271 not permitted on these branches.
 (B) Applies to Engines 3201, 3203 to 3206, 3211, 3213, 3214, 3224, 3227, 3229, 3236 and 3237 only.
 (C) Applies to Engines 3241, 3247, 3251, 3253, 3255, 3259, 3266, 3268, 3271, 3272 and 3274 only.

ENGINES FOR WHICH NO RATING IS SHOWN IN THE RATING OF ENGINES TABLE WILL NOT BE PERMITTED TO OPERATE IN THAT TERRITORY UNLESS AUTHORIZED BY SUPERINTENDENT.

LATHROP AND MERCED SUBDIVISIONS

RATING OF ENGINES—In Ms of 1000 lbs. Back of Tender.

NOMINAL CLASS	ENGINE NUMBERS	Gait to Edwin	Edwin to Ione	Ione to Edwin	Edwin to Gait	Lathrop and Fresno	Chowchilla and Dairyland	Bereuda to Deulton	Deulton to Bereuda
DES-1, 2, 3, 4, 5, 6, 7 DES-100 to 107 E-23 M-4 M-6, 8 M-9, 11 M-11	1000 to 1022..... 1300 to 1395..... 1500 and 1502..... 1617 to 1713..... 1721 to 1803, 1823 to 1825..... 1804 to 1822, 1826 to 1831 and 1836..... 1832 to 1835.....	..... ..... 1190 1620 1900 2040 2120	..... ..... 1190 1620 ..... ..... .....	..... ..... 4040 5300 ..... ..... .....	..... ..... 4040 5300 6200 6550 6820	3200 4500 3350 4450 5250 5500 5700	..... ..... 3990 5250 ..... ..... .....	..... ..... 1500 2040 2400 2550 2650	..... ..... 4040 5300 6200 6550 6820
T-1 T-8, 9 T-23 T-26 T-28, 31 T-32, 40 T-36 T-37 T-57, 58	2242 to 2271..... 2161, 2174 and 2178..... 2301 to 2310..... 2283 to 2299..... 2311 to 2362..... 2363 to 2384..... 2103..... 2105 and 2106..... 2385 and 2386.....	1384 970 2000 1740 2220 2260(A) 1500 2000 1820	1384 970 1500	4500 3270 4800	4500 3270 6500 5730 7170 7300(A) 4800 6500 5880	3800 2750 5500 4800 6000 6150 4050 5450 4950	4450 3220 4750	1750 1240 2520 2200 2790 2830(A) 1880 2530 2280	4500 3270 6500 5730 7170 7300(A) 4800 6500 5880
P-1, 3, 5 P-1 P-4 P-6 P-7 P-8, 10 P-8, 10 P-11 P-12	{2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460 2400, 2403 to 2407 and 2415..... 2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436 2453, 2454 and 2458..... 2476 and 2477..... 2461 to 2474, 2478 to 2483..... 2475, 2484 to 2491..... 3100 to 3109..... 3120 to 3129.....	..... ..... ..... ..... ..... ..... ..... ..... .....	..... ..... ..... ..... ..... ..... ..... ..... .....	..... ..... ..... ..... ..... ..... ..... ..... .....	..... ..... ..... ..... ..... ..... ..... ..... .....	4950 4950 5450 6100 6500 6800 6800 5250 6900	..... ..... ..... ..... ..... ..... ..... ..... .....	..... ..... ..... ..... ..... ..... ..... ..... .....
C-5, 8, 9, 10, 26 to 29 C-15, 32 C-17 C-18 C-19 TW-1 TW-2, 3 TW-4, 6 TW-8	2513 to 2599, 2624 to 2860, 3440 to 3469..... 2500, 2505 to 2507..... 2510 and 2511..... 3400 to 3409..... 3410 to 3426..... 2900 to 2913..... 2932 to 2952..... 2926 to 2931 and 2957..... 2914 to 2923.....	2430 1570 1950 2270 2360 1870 1500 1400 2060	..... 1570 1400 .....	..... 5050 4600	7800 5050 6200 7230 7530 6000 4800 4600 6650	6600 4250 5200 6050 6300 5050 4050 3850 5550	7750 5000 6150 7180 7480 5950 4750 4550 6600	3050 1970 2440 2830 2950 2350 1880 1770 2590	7800 5050 6200 7230 7530 6000 4800 4600 6650
A-3 A-3 A-6 Mk-2, 4 Mk-5, 6 Mk-7, 8, 9 Mk-10 Mk-11	3029..... 3025, 3036, 3052 and 3057..... 3000 to 3003..... 3201 to 3240..... 3241 to 3277..... 3300 to 3324..... 3295..... 3297 and 3298.....	..... ..... ..... 2720(B) 3100(C) 2650 2550	..... ..... ..... ..... ..... ..... ..... ..... .....	..... ..... ..... ..... ..... ..... ..... ..... .....	..... ..... ..... 8800(B) 10000(C) 8450 8100	3900 3900 4800 7650 8450 9200 7100 6800	..... ..... ..... ..... ..... ..... ..... ..... .....	..... ..... ..... 3430(B) 3900(C) 3320 3190	..... ..... ..... 8800(B) 10000(C) 8450 8100
F-1 F-3 F-4, 5 AM-2 MM-3 AC-1, 2, 3 AC-4, 5 AC-6 to 12	3600 to 3652..... 3653 to 3667..... 3668 to 3769..... 3900 to 3911..... 3930 and 3931..... 4000 to 4048..... 4100 to 4125..... 3800 to 3811, 4126 to 4294.....	..... ..... ..... ..... ..... ..... ..... .....	..... ..... ..... ..... ..... ..... ..... .....	..... ..... ..... ..... ..... ..... ..... .....	..... ..... ..... ..... ..... ..... ..... .....	9600 11000 11000 10900 12800 13300 17300 18300	........................................	........................................	........................................
Mt-1, 3, 4, 5 Mt-2 GS-1, 2 GS-3, 4, 5, 6 SP-1, 2, 3	4300 to 4376..... 4385 to 4390..... 4400 to 4415..... 4416 to 4469..... 5000 to 5048.....	..... ..... ..... ..... .....	..... ..... ..... ..... .....	..... ..... ..... ..... .....	..... ..... ..... ..... .....	9000 9750 9600 10200 12950	.........................	.........................	.........................
Allowance for Empty and Underloaded Cars	Less than 45 Ms..... 45 Ms to 55 Ms..... More than 55 Ms.....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	6 3 0	...............	...............	...............

NOTES:
 (A) Engine 3371 not permitted on these branches.
 (B) Applies to Engines 3201, 3203 to 3206, 3211, 3213, 3214, 3224, 3227, 3229, 3236, and 3237 only.
 (C) Applies to Engines 3241, 3247, 3251, 3253, 3255, 3259, 3266, 3268, 3271, 3272 and 3274 only.

ENGINES FOR WHICH NO RATING IS SHOWN IN THE RATING OF ENGINES TABLE WILL NOT BE PERMITTED TO OPERATE IN THAT TERRITORY UNLESS AUTHORIZED BY SUPERINTENDENT.

SPECIAL INSTRUCTIONS—MERCED SUBDIVISION

RULE 14 (d). As specified below, — — — — o will be indication that flagman may return from west as prescribed by Rule 99:
 FresnoTrains on Pratton line.
 Biola Jct.....Trains on Biola line.

RULE 14 (e). As specified below, — — — — — will be indication that flagman may return from east as prescribed by Rule 99:
 Lathrop Trains on Merced line.
 Berenda.....Trains on Daulton line.

RULE 82 (A). Westward regular trains from Lathrop Subdivision to Merced Subdivision will assume the corresponding number and schedule at Lathrop without clearance.

Westward sections and extra trains authorized at Stockton by train-order for movement on Merced Subdivision may leave Lathrop without clearance.

Trains from Merced Subdivision will assume the corresponding number and schedule on Lathrop Subdivision and may leave Lathrop without clearance.

Trains from Merced Subdivision for movement eastward on Lathrop Subdivision may leave Lathrop without clearance.

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

RULE 83. Sections of No. 60 having received their authority at Stockton, or east of Stockton, need not ascertain that preceding sections of the same schedule have left Lathrop.

Identification may be made by westward trains between Stockton and Lathrop to be applied at Lathrop on Merced Subdivision; and by westward trains between Fresno and Fresno Yard to be applied at end of double track Fresno Yard. Reduce speed sufficiently to permit identification and comply with Rule 14 (k).

After receiving check of register for westward first-class train leaving Fresno, westward inferior trains may leave Fresno Yard not less than 15 minutes after registered departure time of such first-class train from Fresno and may run ahead of such first-class train from Fresno Yard to Notarb. A first-class train passing Fresno Yard 15 minutes or more after registered departure time from Fresno will run expecting to find a train running ahead Fresno Yard to Notarb.

RULE 83 (A). Only trains originating or terminating will register at Fresno Yard, Modesto and Merced.

Trains originating or terminating on east leg of wye at Lathrop will not register at Lathrop.

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

Lathrop.....All trains on Lathrop Subdivision and Merced Subdivision trains originating or terminating using west leg of wye.

RULE 93. Yard limits in which the provisions of Rule 93 will apply are established at the following points:

West MP		East MP
80.56	Lathrop (Tracy-Stockton line).....	83.04
	" (Merced line).....	94.02
109.94	Modesto.....	114.93
124.98	Turlock.....	127.32
149.55	Merced.....	151.42
182.67	Madera.....	185.38
206.04	Fresno (Pratton-Selma line).....	210.81
208.44	" (Biola-Exeter line).....	208.15
199.07	" (Merced-Clovis line).....	209.60

Fresno. Trains moving between Tulare St. and Merced St. (east and west of passenger station) must receive proceed signal from yardman (green flag or green light) between those points.

Westward trains via Pratton line must receive proceed signal from yardman (green flag or green light) before passing Divisadero Street.

RULE 103 (A). Turlock. Switching must not be done over Main and Olive Street crossings between hours of 12 noon and 1.00 PM.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows:

BerendaDaulton line, for house track.
 Chowchilla... Dairyland line, for house track.
 Fresno Yard . End double track, for eastward track.
 FresnoPratton line, for eastward main track.

RULE 105. Lathrop. Westward siding leaves westward main track 1500 feet east of corral and enters main track just east of water tank and to be used by westward trains.

Fresno siding leaves eastward main track at extreme west end of Lathrop yard and enters Merced Subdivision main track at Signal 932 and to be used by trains to or from Merced Subdivision.

Modesto. Siding No. 1 leaves main track 1740 feet east of MP 110 and enters main track 1800 feet east of MP 111 and to be used by eastward trains.

Siding No. 2 leaves main track 2000 feet east of MP 111 and enters main track 2243 feet east of MP 112, and must not be blocked without the authority of the conductor of the Modesto switcher crew while that crew is on duty at Modesto unless otherwise provided.

Siding No. 3 leaves main track 3432 feet east of MP 113 and enters main track 2112 feet east of MP 112 and to be used by westward trains.

RULE 204. Trains of Lathrop or Merced Subdivision, with the same conductor and engineer operating through Lathrop may be issued train orders on one subdivision that affect their movement on the other, or both subdivisions.

RULE 221. Fresno Yard is train-order office for trains originating only.

Trains must obtain clearance before leaving Merced and Kismet Tower.

RULE D-251. Will apply as follows:

On both main tracks. .Between Fresno Yard and Calwa Tower.

RULE 505. AUTOMATIC BLOCK SYSTEM

Lathrop. Trains and engines stopped by Signal 828 may apply Rule 509 only after obtaining permission of train-order operator.

RULE 516. Overlap posts:

Manteca (2300 ft. east of west switch).....Eastward trains.

RULE 605. INTERLOCKING

Lathrop. East zone. Limits extend from 575 feet west of west switch of crossover to 65 feet east of east switch of crossover.

West zone. Limits extend from 360 feet west of junction switch to 340 feet east of junction switch.

South zone. Limits extend from 225 feet west of junction switch to 65 feet east of junction switch.

W. P. zone. Limits extend between semi-automatic signals either side of WPRR crossing.

Telephones at interlocking signals governing entrance to East, West, and South zones, and in door of concrete shelter at WPRR crossing.

Speed of 25 MPH must not be exceeded through switches of East zone and 15 MPH through switches of West zone.

Modesto Tower. TSRY crossing, MP 114.7. Signal operator on duty 9:00 AM to 12:00 noon, and 1:00 PM to 6:00 PM, daily except Sunday and holidays. During other hours signals and derrails lined for SP movement. Instructions governing operation of interlocking posted in tower.

Kismet Tower. AT&SFRy crossing.

Biola Jct. Limits extend from signal 675 feet west of junction switch on Merced line and signal 575 feet west of junction switch on Biola line, to westward signal 930 feet east of junction switch on main track, and to dwarf signal at derail west end No. 1 drill track.

Junction switch, derail on Biola line 535 feet west of junction switch, and derail and switch at west end No. 1 drill track are dual control switches, operated from train-order office Fresno Yard. Telephones in concrete battery house Biola Jct., and at derail on Biola line to communicate with signal operator when necessary. Instructions governing hand operation of dual control switches when authorized by signal operator are posted in telephone booths.

Signal governing movement from No. 1 drill track displays green aspect for movement to Merced line; yellow aspect for movement to Biola line.

RULE 827. TRAIN INSPECTION

Passenger trains making station stop at Modesto must approach at not to exceed 8 MPH to allow forward brakeman to detrain on station side where rear of train will stop. He will then make rolling inspection of train, then walk length of train on opposite side making standing inspection, giving careful attention to running gear and journal boxes and entrain on station side.

MISCELLANEOUS

1. When stopping to take water at Modesto, eastward freight trains leave train clear of L St., and westward trains clear of G St. When stopping to take water at Merced, westward freight trains between 7:00 AM and 6:00 PM leave train east of crossing just east of station building.

Emergency water supply only at Lathrop on westward track.

6. Cars must not be left on straight leg of wye, Lathrop, to block tool house or crossover.

During cotton season, cars will be spotted on main track at Pierce Road crossing, one mile west of Plains, Chowchilla Branch.

10. Engines listed must not operate on tracks shown below:

Class of Engine	Restricted Tracks
Mt-2, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Lathrop—Tracks leading to Lend-lease.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Lathrop—Fresno No. 2 track; beet track; slop track. Manteca—Spreckels Sugar spur.
Engines over 163,000 pounds on drivers	Turlock—Track opposite peanut shed.
"	Atwater—Industry track north of highway.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371	Livingston—Spur to Shed 101.
Engines over 135,000 pounds on drivers	Minturn—House track. Berenda—Corral track.
Engines 2371, 2400, 2403 to 2407 inc., 2415, P-6, 7, 8, 10, 11, 12, 14, Mt, GS, F, SP, AM, MM, AC, and Mk over 210,000 pounds on drivers	Madera—Winery spur.

Load limit (car and contents):
Berenda and Chowchilla Branches.....210,000 pounds

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

Mile Post	At or Near	Description
LATHROP - FRESNO		
134.8	Livingston	Merced River bridge.....Overhead and side

Sugar beet dump at Spreckels Sugar Beet Factory Manteca uncovered and care should be exercised by trainmen while working thereon.

SPEED RESTRICTIONS UNLESS OTHERWISE FURTHER RESTRICTED MAXIMUM SPEED PERMITTED CERTAIN ENGINES

Class of Engine	Station—Territory—Track or Structure	MPH
GS, F, AC, Mt-2	Bridge 113.92, Tuolumne River	25
GS, F, AC, Mt-2	Bridge 134.84, Merced River	25*
GS, F, AC, Mt-2	Bridge 194.52, San Joaquin River west of Herndon	25*

*Two engines of these classes must not operate double-headed over these structures.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS With Caution Not Exceeding MPH

Through sidings, yard and other side-tracks, crossovers, turnouts and slip-switches, except:	10
Madera, on winery spur	20

SPECIAL INSTRUCTIONS—NILES SUBDIVISION

RULE 14 (d). As specified below, — — — — o will be indication that flagman may return from west as prescribed by Rule 99: Newark and Santa Clara. Trains on Elmhurst-Santa Clara line. Niles.....Trains on Elmhurst-San Jose line.

RULE 14 (e). As specified below, — — — — — will be indication that flagman may return from east as prescribed by Rule 99: Elmhurst-Newark-Santa Clara...Trains on Elmhurst-Santa Clara line. Niles.....Trains on Milpitas line.

RULE 14 (l). 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.

RULE 14 (m). Whistle will not be sounded one mile before reaching stations between: Oakland Pier and Elmhurst.

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

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, and must be removed immediately on arrival at delivery track.

RULE 82 (A). Trains receiving Western Division clearance at San Jose may leave Santa Clara without clearance.

RULE 83. Identification may be made by eastward trains between Redwood Jct. and end of double track to be applied at end of double track. Reduce speed sufficiently to permit identification and comply with Rule 14 (k).

RULE 83 (A). Only trains originating or terminating will register at West Oakland, Newark and Livermore.

Only extra trains will register at Niles Tower and Niles. Trains originating or terminating San Jose yard will register at Santa Clara.

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

- Elmhurst.....Regular trains.
- Niles.....All trains.
- Niles Tower....All trains.
- Redwood Jct....All trains.
- Newark.....Nos. 407 and 406.
- Santa Clara.....All trains at Santa Clara Tower.

RULE 84. Proceed signal 12 (c) must be used to start trains from Oakland Pier.

RULE 93. When freight cars are moved from one point to another on main track within Oakland yard limits at night, a red light must be displayed on rear of rear car.

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

West MP		East MP
	Oakland (Martinez line).....	17.35
	" (Niles line).....	15.82
	" (Alvarado line).....	14.01
80.70	Tracy (Martinez-Los Banos line).....	85.64
69.19	" (Niles-Lathrop line).....	74.37
24.44	Redwood Jct. (San Mateo-Newark line).....	28.22
	" (Palo Alto line).....	27.17
35.36	Newark (Centerville-Redwood Jct. line).....	38.51
28.79	" (Alvarado-Santa Clara line).....	32.25
41.29	Niles (Tracy-Redwood Jct. line).....	30.67
27.37	" (Hayward-Milpitas line).....	30.95
41.70	Eliot.....	45.40
	" (San Ramon line).....	63.25
45.89	Livermore.....	48.66
43.47	San Jose (Palo Alto-Coyote line).....	56.00
44.85	" " (Milpitas line).....	
43.74	" " (Alviso line).....	

Tracy. Eastward trains from Niles line must receive proceed signal from yardman before passing Signal 704.

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

Nos. 401, 409 and 413 and sections of those schedules will be cleared at Redwood Jct. according to their identification arriving at that point, and are authorized to display this identification to Bay-shore without train-order authority, clearance for sections to show "No signals" or "Green signals" following train number.

RULE D-97 (A). Will apply between Oakland Pier and Elmhurst.

RULE 98. Railroad crossings at grade not interlocked: Stop not less than ten feet, nor more than fifty feet from the following crossings and send flagman ahead in each direction on intersecting track sufficient distance to stop any movement in either direction, after which movement may be made over crossing:

- Oakland. WPRR crossing of yard track at 3rd and Fallon Sts.
- Oakland. WPRR crossing of yard track at 42nd Ave.

Stop not less than ten feet, nor more than fifty feet from the following crossings and send flagman ahead who must ascertain that no movement is approaching on intersecting line before giving signal to proceed:

- Oakland. WPRR crossing on Stonehurst Branch.

Stop clear of derails at the following crossings and send flagman ahead who must ascertain that no movement is approaching on intersecting line, then operate derail lever to close derails before giving signal to proceed. Restore derails after each movement over crossing:

- East Oakland. WPRR crossing of Kaiser lead near 7th Ave. Stop clear of the following crossings, then proceed if no movement approaching on intersecting line:

- Alameda. Belt Line Ry, crossing yard track between Alameda & Pacific Ave.

- Alameda. Belt Line Ry, crossing yard track between Eagle Ave. & Tynan St.

Trains and engines must approach with caution, and may move over the following crossings without stopping, if crossing clear and no movement approaching on intersecting line:

- Alameda. A.A.F. In-transit Depot, Government Ry crossing of yard track leading to United Engineering Co.

RULE 103 (A). Oakland. When moving against current of traffic flagman must protect crossing before moving over 5th, 19th, 29th Aves., and High St.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows:

- Elmhurst.....End of double track, for eastward track; Alvarado line, for Niles line; Stonehurst line, for house track extension.

Switches handled by operator.

- Whistle signals: For Alvarado line, o — —.
- For Niles line, — o —.
- For Stonehurst line, o — o.

Niles.....Niles Tower line, for Elmhurst-Livermore line.

Westward trains from Niles Tower line intending to use crossover over west of station building must remain clear of crossover until both switches have been lined, then be governed by indication in Signal 287.

Tracy.....Niles line, for Martinez line.

Tracy.....End double track, for eastward track.

Tracy.....Los Banos line, for Niles line.

RULE 105. Eliot. Siding No. 1 is first track north of main track. Siding No. 2 is second track north of main track and connects with Siding No. 1 at both ends.

RULE 221. West Oakland is a train-order office for trains originating only.

Nos. 250 and 74, and eastward extra trains consisting of passenger equipment only to Coast Division, may leave Santa Clara without clearance.

Trains must obtain clearance before leaving Newark and Niles

RULE D-251. Will apply as follows:
On both main tracks, between Oakland Pier and Elmhurst.

RULE 505. AUTOMATIC BLOCK SYSTEM

Elmhurst. Signals are numbered as automatic and are under control of train-order operator. When signals display stop indication, trains must stop, and not proceed until signal displays proceed indication, or proceed signal is given by operator with yellow flag by day or yellow light by night.

Tracy. Signals are numbered as automatic and are under control of switch tender. When "stop" is indicated, trains must stop and not proceed until "proceed" is indicated or proceed signal is given with green flag or green light by switch tender.

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

Westward movements from Lathrop Subdivision governed by Signal 713 located 300 feet east of puzzle switch, the top light governs movement on main track and the lower light governs movement to hill or local yard, and dwarf light signal 715 located on right of eastward track 300 feet east of puzzle switch governs movement to all routes.

Westward movement from Los Banos Subdivision governed by Signal 823, located 300 feet east of puzzle switch, top arm governs movement on main track and lower arm governs movement to hill or local yard.

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

Trains and engines stopped by Signal 709 may then proceed with caution if proceed signal received from yardman.

RULE 510. Following block signals equipped with a triangular number plate displaying the letter "P", have included in their control limits some special protective device:

Eastward Signals	Westward Signals
Spring switch, Shinn.....	P-423
P-526 Rock slide detector fence, MP 53.5.....	P-543

RULE 516. Overlap posts:
Hayward (3600 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.

RULE 535. SPRING SWITCHES

Spring switches not equipped with facing point locks are located as follows, and speed indicated must not be exceeded while passing over them in facing movement, or in trailing through them:

Location	Normal Position	MPH	
		Facing	Trailing
Redwood Jct...End double track..	Westward track..	25	25
Shinn	East end siding...Main track	15	15

Spring switches are also located on other tracks as follows:

West Oakland. Two on incoming engine leads, east of roundhouse; two on outgoing freight engine lead, near tin shop, and one on outgoing engine lead west of roundhouse.

Oakland Pier. West end of tracks 4, 5 and 6.

Tracy. Spring derail on sewer lead, just west of roundhouse leads.

RULE 605. INTERLOCKING

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 current of traffic signal operator must know that track to be used is clear of opposing engines and trains.

Oakland Pier. Limits extend eastward to automatic Signal 40 on eastward main track and to home signal 450 feet east of Signal 40 on westward main track on Martinez line, and to automatic Signal 42 on both main tracks on Niles line, and on yard tracks 9 and 10 to Signal 44; and on yard tracks 11, 12 and 13 to home signal 175 feet east of Maritime overpass.

When siren whistle is sounded, all movement must stop and await proper signal.

The last signal governing movement into any track except tracks 17, 18, 19 and 20 is a two-arm dwarf signal. When home signal displays proceed indication, and approach signal displays yellow aspect, it indicates that movement is to be made into a track occupied by engines or cars. Responsibility for collision will rest with train or engine entering.

Niles Tower. Limits extend from dwarf signal on Niles line and signal on Tracy line 1685 feet from WPRR crossing, to Signal 300 on Milpitas line and to Signal P-423 on Centerville line, and also includes Milpitas-Centerville leg of wye.

Junction switch at Niles Jct. is remotely controlled by signal operator at Niles Tower. When necessary to hand throw this switch permission must be obtained from signal operator and switch must be cranked over. Instructions for operation posted on crank box opposite switch.

Derail near east end of yard track No. 1 at Niles is electrically locked and under control of signal operator at Niles Tower. Instructions for operation by hand when authorized by signal operator are posted inside of lock box.

Whistle signals:

- To San Jose, o — —
- To Centerville, — o —.
- To Niles, o — o.
- To Tracy, — o — o.

Engines from trains to Niles for water, o — o —.

Newark. Limits extend from signal 50 feet east of wye switch on Centerville line to signal 1150 feet east of wye switch on Santa Clara line, and to signal 650 feet west of wye switch on Elmhurst line, and to dwarf signals on Redwood Jct. line near Newark station building.

Switches and derails at west end of extension of Santa Clara line siding and east end of house track are electrically locked and controlled by signal operator. Instructions for operation posted inside of lock box.

Whistle signals:

- To Santa Clara, o — —.
- To Santa Clara line siding, o — — o.
- To Santa Clara line siding extension, —.
- To Redwood Jct., — o — o.
- To Dumbarton line siding, — o — o o.
- To Centerville, — o —.
- To Elmhurst, o — o.

Newark Slough drawbridge, MP 34.53 on Redwood Jct. line. No signal operator regularly on duty. Signals and derails lined for train movement except when signal operator occasionally on duty. If signals display stop indication and derails properly lined, train may follow flagman through interlocking limits.

San Francisco Bay drawbridge, MP 32.53 on Redwood Jct. line. Derails in main track within interlocking limits east and west of draw span.

SPECIAL INSTRUCTIONS—NILES SUBDIVISION

West Oakland (First and Cedar Sts.). Limits on Niles line extend from Signal Bridge 110 to Signal Bridge 112. Limits on eastward main track on Martinez line extend from signal 500 feet west of freight lead crossing to 1700 feet east of freight lead crossing. Limits on westward main track on Martinez line extend from 1600 feet east of freight lead crossing to 450 feet east of Signal 40. Limits on eastward and westward freight leads extend from westward signals 2000 feet east of Martinez line main track crossing to Signal Bridge 112 on Niles line, and to westward signals on passenger yard leads 40, 50 and 60.

Magnolia Tower (First and Chestnut Sts.). Limits extend on eastward main track from signal 1600 feet west of WPRR crossing to dwarf signal 500 feet east of WPRR crossing, and on westward main track from signal 500 feet east of WPRR crossing to dwarf signal 480 feet west of crossing.

Fruitvale. Limits on main track extend from Signal Bridge 123 to Signal Bridge 127 on westward track, and to westward dwarf signal 680 feet west of Signal Bridge 127 on eastward track.

Radum. Limits on main tracks extend from home signal at west wye switch to home signal at east wye switch on Niles-Tracy line, and to home signal at wye switch on Radum-San Ramon line.

Interlocking signals for Niles-Tracy line and for WPRR main track will normally display proceed indication for both directions.

If a train on Niles-Tracy line is stopped by interlocking signal when no signal operator on duty, train may flag through interlocking limits.

GENERAL REGULATIONS

RULE 824. Tracy. Before engine is detached from train from Niles line not less than three hand brakes must be set on cut west of C St., and four must be set on east end of train.

RULE 825. Train crews must not release hand brakes on out-bound trains at Tracy until engine is coupled and brake pipe is charged.

AIR BRAKE RULES

RULE 2. Running test must be made immediately after engine is detached from trains arriving Oakland Pier.

RULE 17. Retainers must be used on freight and mixed trains as follows:

With 20 or more cars, and tonnage averaging over 150 Ms per operative brake, use 10 retainers on head end of train, or more if requested by engineer, Altamont to Midway

FREIGHT TRAINS

RULE 25. Rear end test must be made immediately prior to departure from:

Altamont.....Trains that stop.

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

PASSENGER TRAINS

RULE 39. Running test must be made as follows:

Westward trains for Oakland Pier, immediately after passing Magnolia Tower.

Equipment being handled between West Oakland and Oakland Pier, as soon as practicable after starting.

MISCELLANEOUS

10. Engines listed must not operate on tracks shown below:

Class of Engine	Restricted Tracks
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371.....	Ravenswood—Spurs. Newark—Hillard, Leslie and Morton Salt spurs; West- vaco Chemical spur.
Engines over 135,000 pounds on drivers	Eliot—Wye.
Mk-7-8-9, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371.....	Mulford — Automotive Fibers spur.
"	Alvarado—Sugar spurs.
Mk, Mt, GS, F, SP, AM, MM, AC, P, and Eng. 2371.....	Alviso — Cannery spur; Shell spur.
"	Agnew—Distillery spur.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

Mile Post	At or Near	Description
REDWOOD JCT. - TRACY		
28.9	Henderson....	Highway underpass.....Side
32.5	Dumbarton ...	San Francisco Bay drawbridge.....Side
34.5	Dumbarton ...	Newark Slough drawbridge.....Side
42.9	Niles Jct.....	Highway underpass.....Side
30.8	Dresser.....	Alameda Creek bridge.....Side
31.5	Farwell	Alameda Creek bridge..... Overhead and side
38.3	Pleasanton....	WPRR overhead bridge..... Overhead
55.4	Altamont.....	Highway overhead bridge. Overhead and side
57.9	Altamont.....	Tunnel.....Side
ELMHURST - NILES		
18.2	Lorenzo	San Lorenzo Creek bridge. Overhead and side
24.2	Halvern	WPRR overhead bridge..... Overhead
29.4	Niles.....	Highway underpass.....Side
OAKLAND PIER - SANTA CLARA		
3.5	Oakland Pier..	Posts supporting trainshed.....Side
36.2	Drawbridge...	Warm Springs Slough bridge.....Side
36.8	Drawbridge...	Coyote Creek bridge.....Side
NILES - SAN JOSE YARD		
29.4	Niles Tower....	Street underpass.....Side

SPEED RESTRICTIONS UNLESS OTHERWISE FURTHER RESTRICTED MAXIMUM SPEED PERMITTED CERTAIN ENGINES

Class of Engine	Station—Territory— Track or Structure	MPH
GS, F, AC, Mt-2.....	Bridge 31.56, Alameda Creek, west of Farwell.....	25*
GS, F, AC, Mt-2.....	Bridge 36.87, Sunol Creek, east of Sunol	25
GS, F, AC, Mt-2.....	Bridge 18.16, San Lorenzo Creek, Niles line	25*

*Two engines of these classes must not operate double-headed over these structures.

Trains must not exceed 20 MPH when passing other trains being serviced between Cedar and Kirkham Sts., Oakland.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS With Caution Not Exceeding MPH

Through sidings, yard and other side-tracks, crossovers, turnouts and slip-switches, except:.....	10
Ravenswood, on spur.....	8

SPEED RESTRICTIONS: Maximum speed of Passenger trains must not exceed 50 MPH and Freight and Mixed trains 35 MPH except as otherwise provided for herein, or by bulletin, train order or fixed signal.

Maximum speed of any train with an engine not shown in Speed Restriction table, 35 MPH, and is further restricted to maximum speed shown for Freight and Mixed trains if less than 35 MPH.

Page No.	TERRITORY	WITH TRAIN — ENGINE RUNNING FORWARD										LIGHT ENGINE RUNNING FORWARD				ENGINE BACKING WITH TRAIN OR LIGHT			
		PASSENGER										FREIGHT AND MIXED	E P A Mt GS	T-26-32-37-40 F (if CCB*)	M T-1-8-9-23-28-31-36-57-58 C-2-4-5-8-9-10-18-19-26-27-28-29 F (if not CCB*)	C-15-17-32 TW Mk-2-4 10-11 AC AM-2 MM-3	E A T P C TW	Mk F Mt GS SP	M AC AM-2 MM-3 Gas-elec. cars
		P-8 (if CCB*) P-7-10-12 GS Mt	E A P-1-3-4-5-6-11 P-8 (if not CCB*)	T -26 -32 -37 -40	AC-4-5-7-8-9-10-11 AC-8 (if CCB*)	T-1-8-9-23-28-31-36-57-58 Mk-5-6-7-8-9 F (if CCB*) SP Gas-elec. cars	M AM-2	C-2-4-5-8-9-10-18-19-26-27-28-29 TW Mk-2-4 F (if not CCB*) AC-1-2-3-6 (if not CCB*)	C-15-17-32 Mk-10-11 MM-3										
18-19	Between Redwood Jct. and Niles Jct., except.....	50	50	50	50	50	45	40	35	40	45	40	35	30	20	20			
	Between MP 31.51 and MP 33.0, San Francisco Bay Bridge..	30	30	30	30	30	30	30	30	30	30	30	30	30	20	20			
	Over Newark Slough Drawbridge and approaches, MP 34.53..	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20			
	Between Niles Jct. and Tracy, except.....	35	35	35	35	35	35	35	35	35	35	35	35	30	20	20			
	Niles Jct. - MP 37.1.....	25	25	25	25	25	25	25	25	25	25	25	25	20	20	20			
	Within Eliot yard limits on Niles Jct.-Tracy line.....	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20			
	*MP 46.1 - MP 47.6 (city limits) Livermore.....	25	25	25	25	25	25	25	25	20	20	20	20	20	20	20			
	MP 52.0 - MP 63.0.....	25	25	25	25	25	25	25	25	25	25	25	25	20	20	20			
8-9-11 14-15 18-19	Between yard limit signs at Tracy on Martinez, Niles and Los Banos lines, and overpass east of puzzle switch on Lathrop line, except.....	45	45	45	45	45	45	40	35	30	45	40	35	30	30	25			
	Between C St. crossing on Martinez and Niles line and end double track on Lathrop line and MP 83 on Los Banos line..	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10			
	Between Niles and San Jose Yard, except.....	40	40	40	40	40	40	40	35	25	40	40	35	30	20	20			
	With GS, Mt, AC or F class engines.....	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15			
	Passing Niles Tower, and within San Jose yard limits.....	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15			
20-21	Between Oakland Pier and MP 10.5, except.....	30	30	30	30	30	30	30	30	30	30	30	30	30	30	25			
	On curve west of and across freight leads West Oakland....	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20			
	On both leads to West Oakland across main tracks.....	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15			
	Over Adeline St. crossing, Oakland.....	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20			
	*Between Market St. and Oak St. Oakland.....	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15			
	Between MP 10.5 and Elmhurst.....	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25			
	Over Junction switch Elmhurst.....	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15			
	Between Elmhurst and MP 25.0 (Alvarado line), except.....	60*	60	55	55	50	45	40	35	35	45	40	35	30	30	25			
	On curve at MP 13.5.....	35	35	35	35	35	35	35	35	35	25	25	25	25	25	25			
	Between MP 25.0 and east switch Newark, except.....	50*	50	50	50	50	45	40	35	35	45	40	35	30	30	25			
	On curve at MP 29.2.....	40	40	40	40	40	40	40	40	35	35	40	40	35	30	25			
	Within Newark yard limits.....	40	40	40	40	40	40	40	40	35	25	40	40	35	30	15			
	Between east switch Newark and MP 43.7, except.....	60	60	55	55	50	45	40	35	35	45	40	35	30	30	25			
	MP 36.0 - east end of bridge 36.83.....	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25			
	On curve at MP 39.2.....	40	40	40	40	40	40	40	40	35	35	40	40	35	30	25			
	Between MP 43.7 and Santa Clara.....	50	50	50	50	50	45	40	35	35	45	40	35	30	20	20			
	*Over Stockton Ave., and Emory St., San Jose, 10:00 PM to 6:00 AM.....	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12			
	Between Elmhurst and MP 29.6, Niles Jct. except.....	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25			
	Over Davis St., San Leandro.....	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15			

*GS and Mt class engines restricted to 45 MPH.

*Regulated by city ordinance.

SPECIAL INSTRUCTIONS — NILES SUBDIVISION

NILES SUBDIVISION

RATING OF ENGINES—In Ms of 1000 lbs. Back of Tender.

NOMINAL CLASS	ENGINE NUMBERS	Oakland and Santa Clara	Oakland and San Jose Yard via Niles	Niles and Redwood Jct.	Tracy to Niles	Niles to Tracy
DES-1, 2, 3, 4, 5, 6, 7	1000 to 1022.....	3200	1950	3200	800	850
DES-100 to 107	1300 to 1395.....	4500	3100	4500	1250	1350
E-23	1500 and 1502.....	3350	2600	4000	1000	1050
M-4	1617 to 1713.....	4450	3450	5250	1400	1500
M-6, 8	1721 to 1803, 1823 to 1825.....	5250	4100	6150	1650	1750
M-9, 11	1804 to 1822, 1826 to 1831 and 1836.....	5500	4300	6500	1750	1850
M-11	1832 to 1835.....	5700	4450	6800	1800	1900
T-1	2242 to 2271.....	3800	2950	4500	1150	1250
T-8, 9	2161, 2174 and 2178.....	2750	2100	3250	830	880
T-23	2301 to 2310.....	5500	4300	6450	1750	1850
T-26	2283 to 2299.....	4800	3750	5550	1500	1600
T-28, 31	2311 to 2362.....	6000	4700	7100	1900	2000
T-32, 40	2363 to 2384.....	6150	4800	7100	1950	2050
T-36	2103.....	4050	3150	4800	1300	1350
T-37	2105 and 2106.....	5450	4250	6500	1700	1800
T-57, 58	2385 and 2386.....	4950	3850	5850	1550	1650
P-1, 3, 5	{2408, 2411 to 2413, 2416 to 2418, 2423, 2425 to 2435, 2437 to 2452, 2459 and 2460}	4950	3850	5700	1500	1600
P-1	2400, 2403 to 2407 and 2415.....	4950	4150	5700	1500	1600
P-4	2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	5450	4550	6250	1650	1750
P-6	2453, 2454 and 2458.....	6100	4750	7050	1900	2000
P-7	2476 and 2477.....	6500	5050	7750	2050	2150
P-8, 10	2461 to 2474, 2478 to 2483.....	6800	5300	7950	2050	2200
P-8, 10	2475, 2484 to 2491.....	6800	5700	7950	2050	2200
P-11	3100 to 3109.....	5250	4100	6150	1650	1750
P-12	3120 to 3129.....	6900	5350	8100	2100	2200
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469.....	6600	5150	7850	2100	2200
C-15, 32	2500, 2505 to 2507.....	4250	3300	5050	1350	1400
C-17	2510 and 2511.....	5200	4050	6200	1700	1800
C-18	3400 to 3409.....	6050	4750	7200	1950	2050
C-19	3410 to 3426.....	6300	4950	7500	2000	2150
TW-1	2900 to 2913.....	5050	3950	6000	1600	1700
TW-2, 3	2932 to 2952.....	4050	3150	4800	1250	1350
TW-4, 6	2926 to 2931 and 2957.....	3850	3000	4600	1200	1250
TW-8	2914 to 2923.....	5550	4350	6600	1750	1850
A-3	3029.....	3900	3050	4400	1150	1200
A-3	3025, 3036, 3052 and 3057.....	3900	3300	4400	1150	1200
A-6	3000 to 3003.....	4800	4050	5400	1450	1550
Mk-2, 4	3201 to 3240.....	7650	5950	9100	2400	2550
Mk-5, 6	3241 to 3277.....	8450	6600	9950	2700	2850
Mk-7, 8, 9	3300 to 3324.....	9200	7200	10900	2950	3150
Mk-10	3295.....	7100	5550	8450	2300	2400
Mk-11	3297 and 3298.....	6800	5300	8050	2200	2300
F-1	3600 to 3652.....	9600	7500	11400	3050	3250
F-3	3653 to 3667.....	11000	8600	13100	3550	3750
F-4, 5	3668 to 3769.....	11000	9150	13100	3550	3750
AM-2	3900 to 3911.....	10900	8500	12900	3500	3700
MM-3	3930 and 3931.....	12800	10000	15200	3950	4300
AC-1, 2, 3	4000 to 4048.....	13300	10400	15800	4300	4550
AC-4, 5	4100 to 4125.....	17300	13500	18500	5600	5950
AC-6 to 12	3800 to 3811, 4126 to 4294.....	18300	14300	18500	5900	6200
Mt-1, 3, 4, 5	4300 to 4376.....	9000	7450	10550	2800	3000
Mt-2	4385 to 4390.....	9750	7600	11500	3050	3250
GS-1, 2	4400 to 4415.....	9600	7800	11250	3000	3150
GS-3, 4, 5, 6	4416 to 4469.....	10200	8000	12000	3100	3300
SP-1, 2, 3	5000 to 5048.....	12950	10150	15350	4150	4400
Allowance for Empty and Underloaded Cars	Less than 45 Ms.....	6	6	6	3	3
	45 Ms to 55 Ms.....	3	3	3	3	3
	More than 55 Ms.....	0	0	0	0	0

ENGINES FOR WHICH NO RATING IS SHOWN IN THE RATING OF ENGINES TABLE WILL NOT BE PERMITTED TO OPERATE IN THAT TERRITORY UNLESS AUTHORIZED BY SUPERINTENDENT.

DIVISION MILEAGE

MAIN LINES

First Main Track:

Oakland Pier to Washington.....	(C. P. Ry.....	1.01	
	(S. P. R. R.....	86.20	87.21
Davis to end of division.....	S. P. R. R.....		1.45
Martinez to Tracy.....	S. P. R. R.....		47.62
Oakland Pier to Tracy via Niles.....	C. P. Ry.....		66.97
Tracy to Polk.....	C. P. Ry.....		60.74
Tracy to Fresno via Kerman.....	S. P. R. R.....		124.18
Lathrop to Biola Jet.....	C. P. Ry.....		106.45
Elmhurst to Santa Clara.....	S. P. Co.....		30.26
Redwood Jet. to Niles Tower.....	C. P. Ry.....		15.51
Niles to San Jose.....	C. P. Ry.....		15.41
Kerman to Biola Jet.....	S. P. R. R.....		14.52
Total First Main Track.....			570.32

Second Main Track:

Oakland Pier to Washington.....	(C. P. Ry.....	1.01	
	(S. P. R. R.....	86.33	87.34
Martinez to Mococo.....	S. P. R. R.....		.96
Oakland Pier to Elmhurst.....	C. P. Ry.....		9.17
Tracy to Akers.....	C. P. Ry.....		23.85
Total Second Main Track.....			121.32

Total Main Lines..... 691.64

BRANCH LINES

Richmond spur. San Pablo to Richmond Transfer.....	S. P. R. R.....		2.06
Napa..... Suisun-Fairfield to Calistoga.....	S. P. R. R.....		47.34
Vallejo..... Napa Jet. to Vallejo.....	S. P. R. R.....		7.13
Schellville..... Napa Jet. to Schellville.....	S. P. R. R.....		11.30
Union..... Union to West Napa.....	S. P. R. R.....		2.01
Winters..... Elmira to Esparto.....	S. P. R. R.....		30.74
San Ramon..... Avon to Radum.....	S. P. R. R.....		29.85
Oakdale..... Stockton to Montpellier.....	S. P. R. R.....		49.33
Lodi..... Lodi to Woodbridge.....	S. P. R. R.....	2.59	
	(S. P. R. R.....	26.67	
Lodi..... Lodi to Kentucky House.....	(S. P. Co.....	12.65	41.91
Ione..... Galt to Ione.....	S. P. R. R.....		26.91
Riverdale..... Ingle to end of division.....	S. P. R. R.....		.25
Chowchilla..... Chowchilla to Dairyland.....	S. P. Co.....		10.23
Berenda..... Berenda to Daulton.....	S. P. R. R.....		11.90
Madera spur..... Madera to end of spur.....	S. P. R. R.....		3.89
Elmhurst..... Elmhurst to Stonehurst.....	S. P. R. R.....		.75

Total Branches..... 275.60

Total Western Division..... 967.24

SPEED TABLE

TIME PER MILE	MILES PER HOUR
36"	100
37"	97.3
38"	94.7
39"	92.3
40"	90
41"	87.8
42"	85.7
43"	83.7
44"	81.8
45"	80
46"	78.3
47"	76.6
48"	75
49"	73.5
50"	72
51"	70.6
52"	69.2
53"	67.9
54"	66.6
55"	65.4
56"	64.2
57"	63.1
58"	62
59"	61
1'00"	60
1'01"	59
1'02"	58
1'03"	57.1
1'04"	56.2
1'05"	55.3
1'06"	54.5
1'07"	53.7
1'08"	52.9
1'09"	52.1
1'10"	51.4
1'11"	50.7
1'12"	50
1'13"	49.3
1'14"	48.6
1'15"	48
1'16"	47.3
1'17"	46.7
1'18"	46
1'19"	45.5
1'20"	45
1'25"	42.3
1'30"	40
1'35"	37.9
1'40"	36
1'45"	34.3
1'50"	32.7
1'55"	31.3
2'00"	30
2'15"	26.6
2'30"	24
2'45"	21.8
3'00"	20
3'30"	17.1
4'00"	15
5'00"	12
6'00"	10
7'00"	8.6
7'30"	8
8'00"	7.5
10'00"	6