

SOUTHERN PACIFIC COMPANY

(PACIFIC LINES)

TIME TABLE

FOR THE

SAN JOAQUIN DIVISION

159



To Take Effect Sunday, January 15, 1939, at 12:01 A. M.

PACIFIC STANDARD TIME (120th MERIDIAN)

For the government and information of employees only.

L. B. McDONALD,
General Manager.

W. B. KIRKLAND,
Superintendent of Transportation.

L. U. MORRIS,
Assistant General Manager.

J. D. BRENNAN,
Superintendent.

FRESNO SUBDIVISION

WESTWARD

EASTWARD

Capacity of Sidings in Car Lengths	SECOND CLASS		FIRST CLASS						Distance from San Francisco
	782	400	56	346	52	58	60	26	
	Freight	Freight	Tehachapl	Motor	San Joaquin	Sequoia	West Coast	Owl	
WOP Yard	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	
BKWOTYP Yard	1.55 PM	4.20 AM	8.00 PM		1.50 PM	6.50 AM	12.35 AM	12.05 AM	201.8
I P	2.05	4.30	8.10		2.00	7.00	12.45	12.15	203.2
No Siding P			f			s			205.5
118 P	2.15	4.40	f 8.20			s 7.08			209.1
125 Yard WP	2.25	4.50	s 8.30		f 2.14	s 7.20	12.57	f 12.28	210.4
108 Yard WP	2.35	5.00	s 8.40		f 2.21	s 7.30	1.02	12.34	215.1
106 P	2.44	5.09	f 8.48		2.28	7.37	1.08	12.41	220.7
60 P	2.56		8.51			7.40	1.11	12.44	225.6
94 WYP Yard	3.04	5.21	s 9.00		s 2.46	s 7.47 AM	1.17	12.50	231.3
59 P	3.14	5.31	f 9.13		2.53		1.24	12.58	233.7
									239.1
89 Yard P	3.21	5.40	s 9.20		s 3.02		1.30	s 1.05	245.6
59 P	3.30	5.58	9.40		3.09		1.39	1.16	249.7
83 WP	3.42	6.05	s 9.55		3.14		1.45	1.25	250.0
94 P	3.52	6.15	s 10.05		3.21		1.52	1.32	255.8
83 P		6.22	f 10.15		3.27		1.59	1.38	260.4
59 P	4.07	6.30	10.21		3.31		2.04	1.43	266.8
82 Yard WP	4.14	6.37	s 10.30		s 3.39		2.09	1.50	272.4
59 P	4.24	6.47	s 10.40		3.47		2.16	1.58	276.5
79 KWTP	4.35	7.00	f 10.49	10.32 PM	3.54		2.26	2.09	280.7
59 P	4.40	7.05	10.53	f 10.38	3.58		2.30	2.14	287.0
82 P	4.47	7.12	10.59	f 10.44	4.05		2.35	2.19	292.6
90 P	4.51	7.16	11.02	10.47	4.08		2.38	2.23	295.9
59 P	4.56	7.21	11.06	f 10.51	4.11		2.41	2.26	300.5
80 YP	5.01	7.26	11.10	10.55	4.15		2.45	2.30	303.0
No Siding P									305.8
Yard BKWOTYP	5.15 PM	7.40 AM	s 11.20 PM	s 11.05 PM	s 4.25 PM		s 2.55 AM	s 2.40 AM	308.6
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	311.1
	(3.20) 32.22	(3.20) 32.22	(3.20) 32.22	(0.33) 36.90	(2.35) 41.57	(0.57) 35.36	(2.20) 46.02	(2.35) 41.57	312.9

Time Table No. 159

January 15, 1939

STATIONS

FRESNO YARD	111.1
1.4	
F. T. Co. Crossing	109.7
2.3	
TO-R FRESNO	107.4
3.6	
TO CALWA TOWER	103.8
A. T. & S. F. Crossing	
1.3	
MALAGA	102.5
4.7	
TO FOWLER	97.8
5.6	
TO SELMA	92.2
4.9	
TO KINGSBURG	87.3
5.7	
TRAVER	81.6
2.4	
CROSS	79.2
5.4	
TO-R GOSHEN JCT.	73.8
6.5	
TAGUS	67.3
4.1	
TO TULARE TOWER	63.2
A. T. & S. F. Crossing	
0.3	
TULARE	62.9
5.8	
OCTOL	57.1
4.6	
TO TIPTON	52.5
6.4	
TO PIXLEY	46.1
5.6	
TO EARLIMART	40.5
4.1	
RADNOR	36.4
4.2	
TO DELANO	32.2
6.3	
TO Mc FARLAND	25.9
5.6	
TO-R FAMOSO	20.3
3.3	
SLATER	17.0
4.6	
LERDO	12.4
2.5	
PROSPERO	9.9
2.8	
SACO	7.1
2.8	
R OIL JCT.	4.3
2.5	
NOME	1.8
1.8	
TO-R BAKERSFIELD	0.0
(111.1)	

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

FIRST CLASS

25	59	55	345	51	57	783
Owl	West Coast	Tehachapi	Motor	San Joaquin	Sequoia	Freight
Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily
s 2.40 AM	s 4.00 AM	s 7.30 AM		s 3.45 PM	s 10.00 PM	1.20 PM
2.30	3.50	7.20		3.35	9.48	1.10
		f				
		s 7.08		3.26	f 9.39	12.57
f 2.14	3.34	s 6.58		f 3.17	s 9.31	12.47
2.05	3.27	s 6.48		f 3.07	s 9.22	12.37
1.58	3.21	f 6.38		2.59	9.13	12.28
1.55	3.18	6.35		2.56	9.10	
1.48	3.12	s 6.25		s 2.46	9.00 PM	12.16
1.40	3.05	6.02		2.38		12.06 PM
s 1.30	2.58	s 5.40		s 2.33		11.57 AM
1.16	2.51	5.22		2.25		11.47
1.11	2.46	s 5.12		2.20		11.40
1.04	2.39	s 5.02		2.13		11.22
12.57	2.33	s 4.52		2.07		
12.52	2.28	4.42		2.03		11.07
f 12.47	2.23	s 4.37		s 1.58		11.00
12.40	2.16	s 4.26		1.50		10.50
12.34	2.09	f 4.15	s 7.00 AM	1.44		10.40
12.30	2.05	4.10		1.40		10.35
12.25	2.00	4.05	f 6.51	1.35		10.28
12.22	1.57	4.02	6.48	1.32		10.24
		3.58	6.44	1.29		10.19
12.15	1.50	3.55	f 6.40	1.26		10.14
12.05 AM	1.40 AM	3.45 AM	6.30 AM	1.16 PM		10.00 AM
Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily
(2.35) 41.57	(2.20) 46.02	(3.45) 28.64	(0.30) 40.60	(2.29) 43.24	(1.00) 33.60	(3.20) 32.22

Schedule time and train orders for eastward trains at Calwa Tower apply at end of double track, 360 feet west of the tower. Rule S-72 Exception; No. 56 is superior to No. 57.
Schedule time and train orders for eastward trains at Famoso apply at junction switch of Porterville Line.
Schedule time and train orders for trains at Oil Jct. apply at crossover switch just west of Signal 3086.

ADDITIONAL STATIONS:

Muscotel	200.2
Calwa	208.3
Winedale (Spur)	222.8
Midvalley (Spur)	243.4
Alfac (Spur)	262.3
Quail (Spur)	263.7
Vinland (Spur)	284.5

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS

Train	At	Receive or Discharge	To (or beyond)	From (or beyond)	Frequency
60	Selma	Discharge		Stockton	Daily
60	Tulare	Discharge		Stockton	Daily
60	Delano	Discharge		Stockton	Daily
56	Any Station	Discharge		Delano	Daily
55	Any Station	Discharge		Los Angeles	Daily
52	Any Station	Discharge		Ogden	Daily
26	Delano	Receive & Discharge	Los Angeles	Tracy	Daily
59	Delano	Receive	Stockton		Daily
59	Tulare	Receive	Stockton		Daily

EASTWARD

FRESNO SUBDIVISION

WESTWARD

Capacity of Sidings in Car Lengths	FIRST CLASS		Distance from San Francisco	Time Table No. 159 January 15, 1939	Distance from Famoso	FIRST CLASS	
	346	58				345	57
	Motor	Sequoia				Motor	Sequoia
	Leave Daily	Leave Daily		STATIONS		Arrive Daily	Arrive Daily
BKWOTYP Yard	7.15 PM		205.5	TO-R FRESNO 1.5	104.3	s 10.20 AM	
I			207.0	TO SUNMAID TOWER A. T. & S. F. Crossing 1.5	102.8		
	7.26		208.5	BLOSSOMA 3.3	101.3	f 10.08	
19 P	7.30		211.8	BUTLER 1.2	98.0	f 10.03	
PY			213.0	LOCANS 1.5	96.8	f	
60 P	7.34		214.5	IVESTA 1.4	95.3	f 9.59	
77 P	f 7.36		215.9	CLOTHO 3.9	93.9	f 9.56	
90 Yard WP	s 7.44		219.8	TO SANGER 3.0	90.0	s 9.50	
14	f 7.48		222.8	TARN 2.5	87.0	f 9.42	
P	f 7.52		225.3	FARGO 2.6	84.5	f 9.38	
P	f 7.56		227.9	LACIAO 0.1	81.9	f 9.34	
			228.0	A. T. & S. F. Crossing (Stop) 1.9	81.8		
85 Yard P	s 8.02		229.9	TO REEDLEY 5.1	79.9	s 9.28	
63 Yard WP	s 8.11		235.0	TO DINUBA 2.2	74.8	s 9.18	
	f		237.2	SMYRNA 2.4	72.6	f	
23 P	f 8.18		239.6	MONSON 4.0	70.2	f 9.08	
			243.6	A. T. & S. F. Crossing (Stop) 2.8	66.2		
24 P	8.30		246.4	TAURUSA 3.0	63.4	f 8.56	
21	s 8.37		249.4	TO IVANHOE 2.8	60.4	s 8.51	
P	f 8.41		252.2	ROCHE 0.9	57.6	f 8.46	
24 P	8.43		253.1	CAPLIN 4.3	56.7	f 8.44	
74 KWYP Yard	s 8.55	8.35 AM	257.4	TO-R EXETER 3.1	52.4	s 8.35 s 7.50 PM	
13	f 9.00	8.45	260.5	BURR 3.8	49.3	8.25 7.44	
124 P Yard	s 9.08	s 8.53	264.3	TO LINDSAY 4.3	45.5	s 8.20 s 7.38	
38 P	s 9.15	s 9.00	268.6	TO STRATHMORE 2.3	41.2	s 8.10 f 7.28	
16	f		270.9	ZANTE 3.5	38.9		
20 P	s 9.30	s 9.10	274.4	PORTERVILLE 0.4	35.4	s 8.00 s 7.20	
42 BKWYP Yard	9.33	9.25 AM	274.8	TO-R PORTERVILLE-OLIVE ST. 1.7	35.0	7.57 7.10 PM	
19	9.36		276.5	PONCA 1.5	33.3	7.54	
25	f		278.0	LOIS 4.6	31.8	f	
23 P	s 9.46		282.6	TO TERRA BELLA 4.5	27.2	f 7.45	
69 KP	s 9.55		287.1	TO-R DUCOR 2.9	22.7	f 7.38	
23 P	f 10.00		290.0	ORRIS 1.5	19.8	f 7.32	
Spur	f		291.5	VESTAL 3.4	18.3	f	
67 YP	f 10.07		294.9	RIOH GROVE 4.1	14.9	f 7.25	
24 P	f 10.13		299.0	JASMIN 10.8	10.8	f 7.19	
KWTP	s 10.30 PM		309.8	TO-R FAMOSO (104.3)	0.0	7.03 AM	
	Arrive Daily	Arrive Daily				Leave Daily	Leave Daily

(3.15) 32.09 (0.50) 20.88

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

(3.17) 31.76 (0.40) 26.10

ADDITIONAL STATIONS:

Goldleaf..... 209.9	Efo (Spur)..... 227.6
Eshel (Spur)..... 210.6	Dorsey (Spur)..... 250.8
Reka..... 221.0	Lort (Spur)..... 254.0
Rusconi (Spur)..... 221.8	Vane..... 262.8
Uva (Spur)..... 227.1	Stout (Spur)..... 265.8
	Lisko (Spur)..... 272.2
	Quality..... 295.9

No. 57 head in at east end of siding at Exeter and use siding to junction of Visalia Branch.

FRESNO SUBDIVISION

Capacity of Sidings in Car Lengths	EASTWARD		Distance from San Francisco	Time Table No. 159 January 15, 1939	Distance from Claviole	WESTWARD	
	Success Branch					STATIONS	
	Yard 42 BKWYP						274.8
			275.6	A. T. & S. F. CROSSING (Stop) 3.0	12.5		
21			278.6	PERNU JOT. 1.4	9.5		
32			280.0	WORTH 2.4	8.1		
6			282.4	SUCCESS 5.7	5.7		
			288.1	CLAVIOLE	0.0		
				(13.3)			

FRESNO SUBDIVISION

Capacity of Sidings in Car Lengths	EASTWARD		Distance from San Francisco	Time Table No. 159 January 15, 1939	Distance from Pernu	WESTWARD	
	Pernu Branch					STATIONS	
	Spur						278.6
Spur			279.3	TANDY 0.6	0.6		
			279.9	PERNU	0.0		
				(1.3)			

FRESNO SUBDIVISION

Capacity of Sidings in Car Lengths	EASTWARD		Distance from San Francisco	Time Table No. 159 January 15, 1939	Distance from Jovista	WESTWARD	
	Richgrove Branch					STATIONS	
	67						294.9
50			297.6	TROCHA 1.4	1.4		
40			299.0	JOVISTA	0.0		
				(4.1)			

Time over District..... Average speed per hour.....

TEHACHAPI SUBDIVISION

EASTWARD											Distance from San Francisco	WESTWARD											
SECOND CLASS					FIRST CLASS							Time Table No. 159 January 15, 1939	Distance from Mojave	FIRST CLASS					THIRD CLASS				
Capacity of Siding in Car Lengths	816 Freight	814 Freight	812 Freight	810 Freight	56 Tehachapi	2 Santa Fe Passenger	52 San Joaquin	24 Santa Fe Passenger	60 West Coast	26 Owl				55 Tehachapi	9 Santa Fe Passenger	51 San Joaquin	23 Santa Fe Passenger	25 Owl	59 West Coast	811 Freight	813 Freight	815 Freight	
Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily				
BKWOTYP Yard					11.40 PM		4.33 PM		3.05 AM	2.50 AM	312.9	TO-R BAKERSFIELD 0.7	s 3.25 AM		s 1.08 PM		s 11.55 PM	s 1.30 AM					
KI P	6.30 PM	11.55 AM	6.05 AM	12.01 AM	11.42 PM	7.20 PM	4.35	8.25 AM	3.07	2.52	313.6	TO-R KERN JOT. 3.4	3.22	12.05 PM	1.06	9.50 PM	11.52	1.27	8.55 AM	6.00 PM	2.35 AM		
No Siding P											317.0	MAGUNDEN 3.1											
No Siding P					f						320.1	EDISON 7.8	f										
80 P	6.55	12.20 PM	6.30	12.26	12.05 AM	7.39	4.53	8.44	3.27	3.11	327.9	BENA 3.4	2.59	11.48 AM	12.49	9.32	11.30	1.05	8.22	5.30	2.10		
85 P	7.03	12.44	6.38	12.34	12.11	7.44	4.58	8.49	3.33	3.17	331.3	ILMON 3.9	2.53	11.43	12.44	9.27	11.24	12.59	8.12	5.21	2.00		
East 68 IWP West 68	7.18	12.54	6.50	12.49	s 12.21	7.53	f 5.07	8.58	3.42	3.25	335.2	TO CALIENTE 3.0	s 2.43	f 11.34	f 12.36	9.18	11.15	12.49	8.00	5.07	1.48		
82 I P											338.2	ALLARD 2.3	2.32	11.26	12.28	9.10	11.08	12.42	7.50	4.45	1.39		
West 71 IWP East 71					12.37						340.5	TO BEALVILLE 1.8					12.37						
71 IP	7.45	1.17	7.17	1.11	12.43	8.10	5.24	9.15	3.59	3.42	342.3	CLIFF 3.2											
East 73 West 73 P	7.55	1.27	7.27	1.21	12.50	8.17	5.31	9.22	4.06	3.49	345.5	ROWEN 3.3	2.16	11.10	12.12	8.55	10.52	12.26	7.27	4.27	1.21		
123 IWP No. 2 Siding 66	8.15	1.47	7.55	1.45	f 12.59	8.25	f 5.39	9.30	4.15	3.57	348.8	TO WOODFORD 3.0	s 2.08	11.03	f 12.05 PM	8.48	10.44	12.18	7.17	4.17	12.59		
99 P	8.24	1.57	8.10	1.58	1.07	8.32	5.46	9.37	4.22	4.03	351.8	WALONG 2.3	1.58	10.56	11.58 AM	8.42	10.37	12.11	7.07	4.07	12.47		
West 69 IWP East 69	8.37	2.05	8.21	2.10	1.14	8.37	5.52	9.43	4.28	4.08	354.1	TO MARCEL 2.6	1.53	10.51	11.53	8.37	10.31	12.05 AM	7.00	4.00	12.40		
81 P	8.55	2.15	8.32	2.20	1.22	8.46	5.59	9.51	4.35	4.14	356.7	CABLE 3.9	1.47	10.45	11.47	8.30	10.25	11.59 PM	6.52	3.52	12.32		
100 Yard	9.14	2.30	8.45	2.35	s 1.33	f 8.56	s 6.09	f 10.01	4.44	f 4.24	360.6	TO-R TEHACHAPI 1.8	s 1.38	s 10.36	s 11.38	f 8.21	f 10.15	11.50	6.40	3.40	12.20 AM		
100 Yard YP					1.37	9.00	6.13	10.05	4.48	4.28	362.4	SUMMIT SWITCH 2.6	1.32	10.33	11.35	8.18	10.11	11.47					
70 P					f 1.42	9.04	f 6.17	10.09	4.53	4.33	365.0	MONOLITH 3.0	s 1.27	10.29	f 11.31	8.14	10.07	11.43					
YP Yard											368.0	ERIO 1.9											
WP					1.49	9.10	6.23	10.15	4.59	4.39	369.9	CAMERON 4.4	f 1.17	10.21	11.23	8.06	9.59	11.35					
78 P					1.57	9.18	6.30	10.23	5.06	4.46	374.3	WARREN 6.4	1.07	10.13	11.15	7.58	9.50	11.26					
Yard BKWOYP	10.25 PM	3.45 PM	9.55 AM	3.55 AM	s 2.10 AM	s 9.32 PM	s 6.43 PM	10.37 AM	5.20 AM	s 5.00 AM	380.7	TO-R MOJAVE	12.50 AM	9.58 AM	11.00 AM	7.43 PM	9.35 PM	11.10 PM	5.40 AM	2.40 PM	11.20 PM		
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		(67.8)	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily		
	(3.55) 17.13	(3.50) 17.50	(3.50) 17.50	(3.54) 17.20	(2.30) 27.12	(2.12) 30.50	(2.10) 31.29	(2.12) 30.50	(2.15) 30.13	(2.10) 31.29	Time over District.....	(2.35) 26.24	(2.07) 31.70	(2.08) 31.78	(2.07) 31.70	(2.20) 29.05	(2.20) 29.05	(3.15) 20.64	(3.20) 20.13	(3.15) 20.64		

Schedule time and train orders at Tehachapi apply at end of double track.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS					
Train	At	Receive or Discharge	To (or beyond)	From (or beyond)	Frequency
59	Tehachapi	Receive	Stockton		Daily

MOJAVE SUBDIVISION

EASTWARD										Time Table No. 159	WESTWARD								
SECOND CLASS					FIRST CLASS					Distance from San Francisco	January 15, 1939	Distance from Burbank Jct.	FIRST CLASS				THIRD CLASS		
Capacity of Sidings in Car Lengths	816 Freight	814 Freight	810 Freight	52 San Joaquin	60 West Coast	26 Owl	56 Tehachapi				51 San Joaquin	25 Owl	59 West Coast	55 Tehachapi	811 Freight	813 Freight	815 Freight		
	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily				Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		
BKWOYP Yard	11.25 PM	4.50 PM	4.40 AM	6.48 PM	5.25 AM	5.05 AM	2.30 AM	380.7	TO-R MOJAVE 4.1	90.9	s 10.57 AM	s 9.25 PM	s 11.06 PM	s 12.33 AM	5.05 AM	1.40 PM	10.30 PM		
84 P	11.35	5.00	4.50	6.54	5.31	5.11	2.36	384.8	FLETA 2.5	86.8	10.51	9.19	11.00	12.27	4.50	1.25	10.16		
85 P	11.40	5.05	5.00	6.57	5.35	5.15	2.40	387.3	GLOSTER 3.1	84.3	10.48	9.15	10.56	12.23	4.46	1.15	10.11		
81 P	11.46	5.11	5.06	7.01	5.40	5.20	2.45	390.4	ANSEL 3.9	81.2	10.44	9.10	10.51	12.18	4.41	1.06	10.03		
80 P	11.53 PM	5.18	5.13	7.06	5.46	5.26	f 2.52	394.3	ROSMOND 5.6	77.3	10.39	9.04	10.45	f 12.12	4.35	12.58	9.56		
50 P	12.02 AM	5.28	5.23	7.12	5.54	5.34	3.00	399.9	OBAN 5.6	71.7	10.32	8.56	10.37	12.02 AM	4.26	12.48	9.46		
BKWOP 74 Yard	12.30	5.45	5.42	s 7.20	6.02	5.42	s 3.11	405.5	TO-R LANCASTER 4.3	66.1	s 10.25	f 8.48	10.28	s 11.52 PM	4.17	12.38	9.36		
50 P	12.43	6.00	6.08	7.25	6.08	5.48	3.18	409.8	DENIS 4.0	61.8	10.19	8.40	10.18	11.38	4.10	12.29	9.28		
68 WY P	12.51	6.08	6.28	f 7.30	6.13	5.53	s 3.27	413.8	TO PALMDALE 2.6	57.8	f 10.14	8.35	10.13	s 11.33	4.04	12.21	9.20		
90 P	12.58	6.15	6.35	7.33	6.17	5.57	3.32	416.3	HAROLD 4.2	55.3	10.10	8.31	10.09	11.26	3.57	12.14 PM	9.13		
East 75 Yard West 81 YP	1.20	6.45	7.00	7.43	6.29	6.09	3.45	420.5	TO VINCENT 4.5	51.1	10.01	8.22	10.00	11.17	3.45	11.59 AM	9.00		
84 P	1.34	6.59	7.19	7.53	6.39	6.19	3.56	425.0	PARIS 1.1	46.6	9.51	8.11	9.49	11.07	3.22	11.32	8.35		
13 P							f 4.00	426.1	ACTON 2.9	45.5				f 11.04					
95 WP	1.50	7.21	7.41	8.02	6.48	6.28	f 4.09	429.0	RAVENNA 5.6	42.6	9.42	8.02	9.40	f 10.56	3.09	11.19	8.02		
82 P	2.15	7.36 7.47	7.58	8.14	7.00	6.40	4.22	434.6	RUSS 4.2	37.0	9.30	7.47	9.26	10.44	2.52	11.02	7.36		
101 WP	2.39	8.05	8.11	8.23	7.09	6.49	f 4.33	438.7 438.8	TO LANG 4.3	32.8	9.22	7.38	9.17	f 10.35	2.39	10.49	7.19		
85 P	2.53	8.18	8.24	8.32	7.18	6.58	4.44	443.1	HUMPHREYS 3.8	28.5	9.13	7.28	9.08	f 10.26	2.27	10.37	7.07		
81 P	3.05	8.30	8.36	8.41	7.27	7.07	4.54	446.9	HONBY 3.7	24.7	9.05	7.19	8.59	10.17	2.16	10.26	6.56		
W 78 Yard E 71 BKWOYP	3.20	8.50	8.57	s 8.50	7.35	f 7.15	s 5.05	450.6	TO-R SAUGUS 2.4	21.0	f 8.57	s 7.10	8.50	s 10.08	2.05	10.15	6.45		
63 P							f	453.0	NEWHALL 0.7	18.6				f					
80				8.58	7.40	7.20	5.10	453.7	ELAYON 0.7	17.9	8.51	7.04	8.44	9.56					
								454.4	WALTZ JOT. 2.2	17.2									
58 P	3.48	9.18	9.30	9.05	7.49	7.31	5.21	456.6	TUNNEL 2.6	15.0	8.42	6.57	8.38	9.50	1.37	9.49	6.20		
83 P	3.58	9.27	9.40	9.09	7.53	7.35	5.26	459.2	SYLMAR 2.6	12.4	8.37	6.52	8.34	9.45	1.27	9.40	6.12		
Yard 105 WP	4.10	9.40	9.55	s 9.14	7.58	7.41	s 5.33	461.8	TO SAN FERNANDO 1.6	9.8	s 8.33	6.48	8.30	s 9.40	1.14	9.30	6.05		
85 P	4.15	9.54	10.01	9.17	8.01	7.45	f 5.38	463.4	PACOIMA 2.2	8.2	8.30	6.45	8.27	9.34	12.59	9.20	5.50		
39 P								465.6	WAHOO 2.3	6.0									
96 P	4.26	10.05	10.16	9.25	8.07	7.52	f 5.46	467.9	ROSCOE 3.7	3.7	8.24	6.39	8.21	9.25	12.47	9.10	5.40		
52 PI	4.38 AM	10.17 PM	10.30 AM	9.31 PM	8.13 AM	7.59 AM	5.54 AM	471.6	TO BURBANK JOT.	0.0	8.18 AM	6.33 PM	8.16 PM	9.15 PM	12.35 AM	9.00 AM	5.25 PM		
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		90.9		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily		
	(5.13) 17.42	(5.27) 16.67	(5.50) 15.58	(2.43) 33.46	(2.48) 32.46	(2.54) 31.34	(3.24) 26.73		Time over District.....		(2.39) 34.30	(2.52) 31.70	(2.50) 32.08	(3.18) 27.54	(4.30) 20.20	(4.40) 19.46	(5.05) 17.88		

Schedule time and train orders for first class trains at Saugus apply at initial switch Middle Siding at which opposing trains enter Siding. See special rule 105.
 Schedule time and train orders at Burbank Jct. apply at End of double track.
 Intermediate Spur: Consolidated Rock Co. M.P. 465.1. Capacity 10 cars.

ADDITIONAL FLAG STOPS TO RECEIVE OR DISCHARGE REVENUE PASSENGERS					
Train	At	Receive or Discharge	To (or beyond)	From (or beyond)	Frequency
26	Lancaster	Receive	Glendale		Daily
26	Palmdale	Receive	Glendale		Daily
59	Lancaster	Receive	Stockton		Daily
60	Lancaster	Discharge		Stockton	Daily
25	San Fernando	Receive	Mojave		Daily
59	San Fernando	Receive	Stockton		Daily
59	Saugus	Receive	Stockton		Daily
26	San Fernando	Receive & Discharge	Colton	Fresno	Daily
60	Saugus	Discharge		Stockton	Daily
60	San Fernando	Discharge		Stockton	Daily

Frequency
Daily

STWARD

TWARD

FRESNO SUBDIVISION

Table with columns for EASTWARD and WESTWARD, including Time Table No. 159, January 15, 1939, Clovis Branch, and STATIONS. Lists stations from Fresno to Friant with distances.

Time over District.....
Average speed per hour.....

FRESNO SUBDIVISION

Table with columns for EASTWARD and WESTWARD, including Time Table No. 159, January 15, 1939, McKittrick Branch, and STATIONS. Lists stations from Kern Jot to Olig with distances.

Time over District.....
Average speed per hour.....

SUNSET RAILWAY COMPANY

Table with columns for EASTWARD and WESTWARD, including Time Table No. 159, January 15, 1939, and STATIONS. Lists stations from Gosford to Maricopa with distances.

Time over District.....
Average speed per hour.....

SPECIAL INSTRUCTIONS

Southern Pacific Company Rules and Regulations of the Transportation Department, Air Brake Rules and Special Instructions in San Joaquin Division Time Table govern on Sunset Ry.

Train will not exceed the speed in miles per hour shown below:

Table with columns for BETWEEN, Pass., Freight, and Backing. Lists speed limits for various segments like Gosford and Pentland.

Exercise caution in going over sags in track between M. P. 26 and Maricopa and between Pentland and Kerto and do not exceed 6 miles per hour over sag in track 500 feet east of opening 11A, east of Taft.

At Pentland, normal position of junction switch will be for Taft line. There is a spring derailer on main track 900 feet west of west switch at Taft.

RULE 93: Yard limits are established at:

Pentland Taft Maricopa.

Dr. A. R. Moodie, District Physician and Surgeon, Taft, California.

MOJAVE SUBDIVISION

MOJAVE SUBDIVISION

EASTWARD				WESTWARD				
Capacity of Sidings in Car Lengths	SECOND CLASS	FIRST CLASS	Distance from San Francisco	Time Table No. 159		Distance from Owenyo	SECOND CLASS	THIRD CLASS
	802	788		January 15, 1939			789	803
	Freight	Mixed		Owenyo Branch			Mixed	Freight
	Leave Daily	Leave Daily Ex. Sunday		STATIONS		Arrive Daily Ex. Monday	Arrive Daily	
BKWOYP Yard	4.00 PM	1.25 AM	380.7	TO-R MOJAVE 1.3	143.5	s 12.30 AM	11.05 PM	
45	4.04	1.29	380.8	OHAFFEE 3.2	142.2	12.20	10.55	
48	4.11	1.36	384.0	CAMBIO 8.9	139.0	12.05 AM	10.40	
48	4.30	1.55	392.9	NEURALIA 4.4	130.1	11.45 PM	10.20	
48	4.40	2.04	397.3	CINGO 5.2	125.7	11.30	10.05	
East 48 W West 48	5.00	s 2.19	402.5	CANTIL 2.8	120.5	s 11.15	9.50	
Spur		f	405.3	GYPSITE 2.2	117.7	f		
35	5.15	f 2.30	407.5	OENEDA 1.0	115.5	f 10.50	9.20	
13	5.18	f 2.32	408.5	SALTDAL 3.7	114.5	f 10.45	9.15	
48	5.30	2.40	412.2	GARLOOK 4.2	110.8	10.35	9.00	
48	5.40	2.49	416.4	GOLER 4.1	106.6	10.25	8.45	
48	5.55	f 3.00	420.5	RAND 7.9	102.5	f 10.15	8.30	
48 Y Yard	6.15 PM	s 3.45	428.4	TO-R SEARLES 4.4	94.6	s 9.55	8.00 PM	
48		f 3.55	432.8	RADEMAOCHER 5.5	90.2	f 9.10		
52		4.06	438.3	CODE 8.9	84.7	8.55		
48		s 4.28	447.2	INYOKERN 4.5	75.8	s 8.35		
Spur W		4.38	451.7	LELITER 4.6	71.3	8.20		
48		s 4.48	456.3	BROWN 4.4	66.7	s 8.10		
48		4.57	460.7	LINNIE 4.6	62.3	7.53		
47		s 5.15	468.3	LITTLE LAKE 3.2	64.7	s 7.35		
48		f 5.25	471.5	COSO 4.1	61.5	f 7.25		
48		f 5.35	475.6	SYKES 8.5	47.4	f 7.15		
47 W		f 5.57	484.1	HAIWEE 4.4	38.9	f 6.55		
52		6.06	488.5	LOCO 4.8	34.5	6.45		
48		f 6.16	493.3	OLANCHA 4.4	29.7	f 6.35		
52		f 6.27	497.7	CARTAGO 4.6	25.3	f 6.25		
52		6.37	502.3	MONACHEE 4.0	20.7	6.01		
52		f 6.46	506.3	BRIER 2.9	16.7	f 5.54		
		f	509.2	BARTLETT 5.1	13.8	f		
52 W		7.04	514.3	DIAZ 4.5	8.7	5.40		
East 28 West 52		s 7.40	518.8	LONE PINE 4.2	4.2	s 5.30		
37 BKROY Yard		s 7.55 AM	523.0	TO-R OWENYO	0.0	5.15 PM		
	Arrive Daily	Arrive Daily Ex. Sunday		(143.5)		Leave Daily Ex. Sunday	Leave Daily	

(2.15) (6.30)Time over District..... (7.15) (3.05)
 21.73 22.07Average Speed per Hour..... 19.79 15.85

EASTWARD				WESTWARD							
(Narrow Gauge)				Time Table No. 159							
January 15, 1939				Keeler Branch							
Capacity of Sidings in Car Lengths	Distance from San Francisco	Distance from Keeler	STATIONS		Distance from San Francisco	Distance from Keeler	Arrive Daily				
			24 P					476.0	BENTON 11.0	101.2	
			13 YPW					487.0	HAMMIL 2.4	90.2	
12		489.4	DEHY 1.9	87.8							
8		491.3	SHEALY 7.8	85.9							
		499.1	CHALFANT 7.7	78.1							
Yard POTWK		506.8	TO-R LAWS 4.9	70.4							
20		511.7	BIGELOW 4.4	65.5							
10		516.1	BLACK CANYON 6.6	61.1							
14 P		522.7	ZURICH 2.8	54.5							
40		525.5	MONOLA 1.3	51.7							
10 Y		526.8	BENEME 4.1	50.4							
8		530.9	ELNA 6.0	46.3							
20 PW		536.9	ABERDEEN 13.9	40.3							
14 PW		550.1	KEARSARGE 5.1	26.4							
8		555.2	MANZANAR 4.6	21.3							
Yard OTPK		559.8	TO-R OWENYO 3.9	16.7							
14		563.7	MT. WHITNEY 5.0	12.8							
Spur		568.7	ALICO 1.5	7.8							
Spur		570.2	DOLOMITE 1.2	6.3							
Spur		571.4	MOCK 0.8	5.1							
6		572.2	TRAMWAY 4.3	4.3							
Yard WYBK		576.5	TO-R KEELER	0.0							
			(101.2)								

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

RULE 2. Designated watch inspectors:
 S. A. Pope, Manager of Time Service, 65 Market St., San Francisco.
 Fresno... Bert Fuller, 1335 Fulton St. Visalia... A. G. Hooper,
 Fresno... A. L. Colvin, 1211 Fulton St. 111 W. Main St.
 Porterville... Frank Haener Exeter... W. B. Adams
 Hanford... Hanford Jewelry Co. Bakersfield. J. N. Cheney,
 Lancaster... C. E. Miller 1425 19th St.—901 Baker St.
 San Fernando... F. G. Marshall Mojave... A. Ogulnick
 (Wm. B. Baehr, 103 Pacific Electric Bldg.
 Geo. D. Davidson Co., 445 S. Spring St.
 Los Angeles... O. H. Patzer, 2708 North Broadway
 Ralph Laraway, 1222 San Fernando Rd.

RULE 3. Conductors on eastward Santa Fe trains originating at Bakersfield will show on reverse side of Kern Jet. register ticket watch comparison made at Santa Fe station Bakersfield, also comparison with enginemen.

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

- Famoso.....Trains on Porterville main track.
- Ducor.....Trains on Minkler-Southern Branch.
- Exeter.....Trains on Visalia Branch.
- Goshen Jct.....Trains on Riverdale Branch.

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

- Fresno.....Trains on Porterville main track and Clovis Branch.
- Porterville.....Trains on Success Branch.
- Rossi.....Trains on Stratford Branch.
- Goshen Junction...Trains on Visalia Branch.
- Ingle.....Trains on Riverdale Branch.
- Richgrove.....Trains on Richgrove Branch.
- Magunden.....Trains on Arvin Branch.
- Mojave.....Trains on Owenyo Branch.

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

RULE 21 (C). In Bakersfield and Fresno indicators on engines must be displayed to relief track.

RULE D-71. Trains and engines may move between Calwa Tower and Clinton Ave., Fresno with current of traffic irrespective of time table superiority but must avoid delaying first-class trains.

Inferior trains and engines may run ahead of first-class trains Bakersfield to Bena and Bena to Bakersfield, but will take necessary precautions to avoid delay to passenger trains.

RULE S-72. Westward trains are superior to trains of the same class in the opposite direction, except as noted on page 2.

RULE 83. Train registers are not maintained at Calwa Tower or Bena. When an observation check be made between Fresno and Calwa Tower, and between Bakersfield and Bena, it will apply at end of double track.

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

When first class trains on opposite track between Mojave and Tehachapi are identified, it will not be necessary to obtain check of such trains before making movements in the same direction between Summit Switch and Mojave.

Rule 14-k must be applied when approaching trains on opposite track.

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

- Oil Jct.....} Trains originating and terminating.
- Lancaster.....}
- Saugus.....}
- Famoso.....Trains to and from Porterville main track.
- Tehachapi.....First and second class trains, and trains originating and terminating.
- Goshen Jct.....No. 55, No. 56, No. 57, No. 58 and trains to and from Visalia and Riverdale Branches, and extras originating and terminating.

When directed to register at an intermediate station, an extra train must show in column captioned "signals," the number and date of train order authorizing its movement; also the restricting order if such an order is in effect.

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

- Kern Jct.....Santa Fe trains, S. P. first class trains and Westward light engines.
- Tehachapi.....First and second class trains.
- Porterville Olive St. First class trains.
- Famoso.....Trains to and from Porterville main track.

Operator Kern Jet. will report arrival and departure Santa Fe first-class trains to Operator Bakersfield, who will enter same on register.

Operator Kern Jet. will report arrival and departure of all scheduled trains to operator Santa Fe station Bakersfield, who will enter same on Southern Pacific register located at Santa Fe station Bakersfield.

RULE 83 (D). Westward Santa Fe trains via Southern Pacific will obtain clearance and train orders from operator Santa Fe station Bakersfield authorizing movement from Oil Junction westward.

Eastward Clovis Branch trains destined to Fresno Interurban obtain train orders or clearance from operator at Fresno Tower, authorizing movement over Fresno Interurban.

Trains to and from Riverdale Branch and Western Division must obtain separate Western and San Joaquin Division clearances.

Trains via Visalia and Riverdale branches must obtain clearance before leaving Goshen Jct. when operator on duty. Trains to and from Santa Paula Branch must obtain a clearance before leaving Saugus.

San Joaquin Division routed trains must obtain San Joaquin Division clearance authorizing movement west of Burbank Jct., in addition to Los Angeles Division clearance, at initial station on Los Angeles Division. Each clearance must be properly designated.

Eastward trains from San Joaquin Division are authorized to assume corresponding schedule on Los Angeles Division from Burbank Jct. to terminal station of schedule. Trains to and from San Joaquin Division are not required to obtain clearance at Burbank Jct. provided train is properly cleared by train-order signal.

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

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

RULE 93. Yard limits are established at:

Fresno	Lancaster	Visalia
Selma	Vincent	Hanford
Kingsburg	Saugus	Armona
Goshen Jct.	San Fernando	Hardwick
Tulare	Sanger	Coalinga
Delano	Reedley	Friant
Bakersfield	Dinuba	Searles
Tehachapi	Exeter	Owenyo
Summit Switch	Lindsay	Keeler
Eric	Porterville	Olive St. Laws
Mojave		

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

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

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

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

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

Mojave: First class trains may pass through Mojave without hand signals, providing switches are properly lined for such movement, and will move with caution irrespective of timetable superiority between Signals 3802 and 3811. Inferior trains entering or leaving Mojave must receive green signal unless yardmaster or his subordinate notifies train that they may enter or leave without green signal.

Trains leaving east end of yard may proceed without signal from herder provided they are notified switches are properly lined.

Trains from Owenyo Branch stop before fouling main track or blocking highway crossing regardless of position of derailer or signals received.

Unless yardmaster or his subordinate instruct otherwise, crossover movement from Owenyo Branch to Mojave will be made as follows: First throw derailer on Owenyo Branch, second throw trailing point switch on eastward main track, third crossover switch on westward main track, fourth Owenyo Branch switch—then wait three minutes before proceeding.

Be governed by Rule 93.

Following code of signals will govern eastward trains entering yard: Southern Pacific:

- Passenger trains..... One long.
- Freight trains..... One short, one long, one short.

Santa Fe:

- Passenger trains..... One long, one short.
- Freight trains..... One long, one short, one long.

RULE 95. Eastward trains from San Joaquin Division holding train order authority to display signals for following section to Burbank Jct. are authorized to display signals to terminal station of schedule on Los Angeles Division.

RULE D-97 (A). Will apply between Tehachapi and Summit Switch. Eastward extra trains with running orders terminating at Burbank Junction may proceed beyond that station without a clearance, being governed by train order signal.

RULE 98. RAILROAD CROSSINGS AT GRADE NOT INTERLOCKED

- A. T. & S. F. Railway, 744 feet east of Lacjac, STOP.
- A. T. & S. F. Railway, 14718 feet west of Taurusa, STOP.
- A. T. & S. F. Railway, 602 feet east of Visalia, STOP, and not pass over crossing without receiving proceed signal from flagman, who must precede train.
- Laton & Western Railway, 1.8 miles east of Hub, STOP.
- A. T. & S. F. Railway (on Success Branch), 4515 feet east of Porterville, STOP.

Fresno Interurban Railway, 1771 feet east of Las Palmas.

Fresno—Trains from Clovis Branch and Porterville main track stop at "stop" board at junction of these lines.

Goshen Jct.—Trains from Visalia Branch stop at "stop" board east end of yard.

End of the Visalia Branch will be at first switch east of the station where it enters Bakersfield-Fresno main track.

RULE 103 (A). At Selma no switching movements will be made over West Front Street while switching industrial tracks east of station and opposite Libby, McNeill and Libby Plant unless crossing is protected by member of crew.

No train, engine, car or motor shall be stored within 100 feet of either property line of County Road Crossing or Western Dairy Products track at Tipton, unless crossing is protected by flagman.

At Armona no switching movements will be made over Lake Street crossing unless protected by member of crew.

Trains switching Knudsen Laboratories, Inc. (Creamery) Spur, Visalia, must stop before making reverse movement across Goshen Avenue crossing.

When using spur track leading to freight station, Bakersfield, member of crew will see that highway traffic on U. S. Highway 99 is protected. After having entered upon crossing, it should be cleared as quickly as practicable.

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

RULE 104. The normal position of switches at junctions will be for main tracks.

Exceptions:

Fresno Yard, Clinton Avenue (end of double track) for eastward track. This is an oil buffer spring switch.

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

Bena (end of double track) for westward track. This is an oil buffer spring switch.

Tehachapi (end of double track) for eastward track.

Mojave (end of double track) for westward track.

Saugus (Santa Paula Branch switch in middle siding)..... for Siding

Armona..... for Coalinga Branch

Rossi..... for Coalinga Branch

Pernu Jct..... for Success Branch

Gosford..... for Sunset Railway

Switch at stem of wye McKittrick must be set for direct movement along the east leg of wye to serve as deraill for cars spotted on stem of wye.

Deraillers in main track.

McKittrick. East wye switch is spring switch and serves as deraill.

Porterville. 310 feet east of junction switch on Success Branch.

Mojave. 230 feet east of junction switch on Owenyo Branch.

Famoso. 168 feet west of junction switch, on Porterville main track.

RULE 104 (D). Use of heavier than C class engines in making running switches is prohibited unless engine is routed over other than diverging track.

SPECIAL INSTRUCTIONS

RULE 105. Track next to and north of main track at Ducor will be used as siding No. 1. Second track north of main track, will be used as Minkler Southern Ry. main or No. 2 track. Trains will use extreme east switch to enter or leave Southern Pacific main track. Inside switches will be left lined for Siding No. 2.

At Caliente, Bealville and Marcel the siding next to main track will be used as eastward siding, adjoining track will be used as westward siding. Inside siding switches are oil spring switches and normal position is for train entering siding. Trains entering siding passing an inoperative signal must assure themselves this switch is properly lined.

At Rowen the siding east of the crossovers will be used as the westward siding, the one west of the crossovers as the eastward siding.

Track (No. 1) next to main track west of station at Tehachapi will be used as westward siding.

At Vincent siding next to main track will be used as eastward siding, adjoining track will be used as westward siding.

Trains using other than the designated siding, unless authorized by the dispatcher, must be preceded by a flagman.

In the territory between Caliente and Tehachapi trains using sidings designated for trains in the opposite direction must do so with caution expecting to find sidings occupied.

At Saugus the siding east of the station is the westward siding and the siding west of the station is the eastward siding. Track opposite station extending from westerly connection 863 feet east of station to connection with main track 722 feet west of station shall be known as middle siding. First-class trains meeting at Saugus use middle siding unless otherwise instructed.

RULE 221. Light will not be displayed in train order signals on Clovis, Riverdale, Coalinga, Stratford, Visalia, McKittrick, Keeler branches and Sunset Ry., except when train orders are to be delivered.

Trains will not be required to obtain clearance at Kern Jct. and Bakersfield except when such trains originate or receive orders at these stations.

RULE 824. Instructions for setting brakes.

MOJAVE

PASSENGER TRAINS—When road engine is detached, two brakes on east end and two brakes on west end on trains of 16 cars or less will be set. When train is set out to tie up, at least half of the brakes on the train will be set but in case train consists of 2 or 3 cars, 2 brakes will be set.

FREIGHT TRAINS—Ten brakes on east end, 5 in middle and 5 on west end on trains of 72 cars or less; 73 to 102 cars, 15 brakes on east end, 10 in middle and 5 on west end.

WOODFORD (When taking water)

FREIGHT TRAINS (Eastward)—First helper will spot for water, 5 brakes will be set ahead of this helper, 5 behind road engine and 5 ahead of second helper. First helper will keep engine brake applied until ready to proceed.

RAVENNA (When taking water)

FREIGHT TRAINS (Westward)—Road engine will spot for water, engine brake will be left applied on road engine and 8 brakes set ahead of helper that cuts off and takes water.

CALIENTE (When taking water)

FREIGHT TRAINS (Eastward)—Road engine will spot for water, and 8 hand brakes will be set just ahead of first helper that cuts off and takes water.

In complying with the above hand brakes on freight trains must be set with assistance of brake club after train has stopped. When for any reason hand brakes are released under these conditions, the same number must be set to replace them. Where the use of hand brake is required, air brakes must not be relied upon as a substitute.

In event it should happen that the road engine and first helper are spotted at same time to take water at Woodford, Ravenna and Caliente, automatic brakes will be released and it will not be necessary to apply hand brakes as long as road engine remains on the train.

When going to eat, or at any time that either train or engine crew leave train, sufficient hand brakes will be applied to hold the train.

In the application of Rule 825 in non-grade territory, conductors will take into consideration conditions such as heavy winds which arise from time to time on the Division.

RULE 825. Outfit cars must not be left in front of warehouses, storehouses, lumber yards, or other buildings.

When necessary to cut crossing and a distance of 100 feet on each side cannot be provided, a human flagman must protect. Cars must not be left in any position that would obstruct the view of an autoist or pedestrian of an approaching train, unless crossing is protected as stated above.

In cutting crossing Roscoe or Sheldon Ave., Wahoo, openings must be made so that cars or engines will not be left within 100 feet of either property line unless crossing is protected by a member of train crew or other competent employe acting as flagman.

RULE 833. Whenever practicable locomotive cranes, or cranes of similar type must be handled in trains with heavy end forward.

Except those of Southern Pacific ownership, cranes or machines of similar type, with rotating body, loaded on open cars, must not be moved until inspected and released by mechanical department. Conductors must not move Jordan Spreaders, except when in use, unless wings are protected against spreading by chain or tie bar extending from wing to wing and wing arm to wing arm.

RULE 834. Open-top cars loaded with rail, pipe, structural steel, lumber, poles or mounted wheels, when such lading projects above sides and end walls of car, must not be placed in train next to cab of mallet engines.

RULE 836. Cars moved from one station to another ahead of engine on descending grade must be chained to the engine. Switching movement on descending grades must be protected by a derail. When practicable engine must be kept on down hill end of cars.

When necessary to move cars ahead of engine do not exceed 20 miles per hour.

RULE 843. When a train is split at two sidings for the purpose of meeting or passing trains, conductor must accompany both portions of the train.

RULE 869. Trainmen will ride on top of trains through yards, entering and leaving terminals, through interlocking plants, also Vincent to Saugus, Vincent to Palmdale, Summit Switch to Mojave, Summit Switch to Ilmon, Tunnel to Burbank excepting rear brakeman, Searles to Cantil, McKittrick to Lokern and at other places as instructed by Conductor. Additional swing men must ride near the middle portion of train assigned to them. Trainmen must not ride on top of their train while passing through Tunnel 25.

RULE 883. Engines under steam must not be stored or left unattended on tracks that are not protected by derails against entry to main track.

AUTOMATIC BLOCK SYSTEM

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

Eastward freight trains having more cars than can be placed between San Fernando Road and home interlocking signal at Burbank Junction; if automatic home signal 4706 indicates stop, must stop west of crossing and communicate with signal operator by telephone located on post opposite signal 4706.

RULE 509 (e). That portion reading: "And the intervening track is seen to be clear," is interpreted as referring to the track being clear of engines and/or cars.

That section of track in Fresno between Tuolumne Street and Ventura Avenue is not protected by block signals. Be governed by third paragraph Rule 93.

Dwarf light signals governing movements to main track located as follows: Signals 2020 and 2022 Clinton Ave., Fresno, Signals 2565 and 2625 at Exeter, Signal 2870 Ducor, Signal 3627 Summit Switch, and Signal 3679 Eric. The first switch or derail lined, dwarf signal will indicate red. When all switches and derail are lined dwarf signal will indicate proceed. If signal indicates stop after proper line up has been made, a train will not move to main track except as provided by Rules 509 and 99.

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

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

Exeter.—Signal 2628 at junction Visalia Branch and Porterville main track normally indicates stop until crossover lined for movement to main track.

Bena.—Eastward trains leaving siding will be governed by dwarf light signal 3282 which will indicate proceed after siding switch has been thrown to reverse position for two minutes.

Tehachapi.—Trains on No. 1 track at Tehachapi ready to leave, finding dwarf light signal 3595 at stop, will push button located in box on post two feet east of signal 3593. After pushing this button signal will clear in two minutes if no trains in block.

Warren.—When dwarf light signals located at either end of siding indicate stop, trains entering will be preceded by a flagman.

Searles.—Automatic block signals 4277 and 4268, located at east and west end of Tunnel 29 at Searles.

Knife switches have been installed in relay boxes located at these signals for use of operators of motor cars passing through tunnel.

Motor cars should stop and if signal indicates proceed, switch in box should be thrown to reverse position which will place signals at stop before entering tunnel. After passing through tunnel, stop must be made at signal and knife switch thrown to reverse position, which will clear signals.

The following block signals, equipped with a triangular number plate, have included in their control limits some special protective device. When indicating "STOP" careful inspection must be made of the track and structure as indicated below and it must be known that it is safe for passage of trains before proceeding.

Signals	Location
2016	Clinton Ave., Fresno. Spring switch, end of double track.
3281	Bena. Spring switch, end of double track.
3308	Ilmon. Spring switch, west end.
3450	Rowen. Spring switch, west end.
3512	Walong. Spring switch, west end.
3564	Cable. Spring switch, west end.
3592	Tehachapi. Spring switch, west end.
4574	Culvert 457 D.
4579	Culvert 457 D.

Block signals 4500 to 4513 Saugus govern movement of trains entering yard. If signals indicate stop, after stopping, train may proceed with caution, not exceeding 12 miles per hour.

OIL BUFFER SPRING SWITCHES

When a block signal in advance of a facing point oil buffer spring switch indicates "STOP", careful examination of switch must be made before passing over it.

When making trailing point movement and train is stopped on switch, a reverse movement must not be made, nor the slack taken until the switch has been thrown by hand. When movement has been completed through switch, reverse movement must not be made until point closes.

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

Oil buffer spring switches are located as follows, and speed indicated must not be exceeded when passing over such switches.

	M.P.H.
Fresno, Clinton Ave., end double track.....	Trailing westward 35
	Facing eastward 20
Fresno, junction Los Banos line.....	Trailing eastward 15
	Facing westward 10
Bena, end double track.....	Trailing eastward 35
	Facing westward 20
Bena, west end siding.....	Trailing westward 50
Ilmon, west end.....	Trailing westward 30
	Facing eastward 30
Caliente, west jct., eastward and westward sidings.....	Trailing westward 10
	Facing eastward 10
Caliente, east jct. eastward and westward sidings.....	Trailing eastward 10
	Facing westward 10
Allard, west end.....	Trailing westward 30
	Facing eastward 30
Bealville, west jct. eastward and westward sidings.....	Trailing westward 10
	Facing eastward 10
Bealville, east jct. eastward and westward sidings.....	Trailing eastward 10
	Facing westward 10
Rowen, west end.....	Trailing westward 30
	Facing eastward 30
Walong, west end.....	Trailing westward 30
	Facing eastward 30
Marcel, west jct. eastward and westward sidings.....	Trailing westward 10
	Facing eastward 10
Marcel, east jct. eastward and westward sidings.....	Trailing eastward 10
	Facing westward 10
Cable, west end.....	Trailing westward 30
	Facing eastward 30
Tehachapi, west end.....	Trailing westward 30
	Facing eastward 30
Summit Switch, east end.....	Trailing eastward 50

RULE 511. Within block system limits after switches of a crossover are thrown, wait three minutes before crossing over, unless block signals protecting the movement can be seen to be in stop position not less than one-half mile distant.

RULE 516. Overlap post is located at: Newhall—Eastward trains—2000 feet east of west switch.

INTERLOCKING

At all interlocking plants, when route lined is not to be used following signal will be sounded by Engineers, two short, one long and two short (oo—oo).

FRESNO TOWER—A. T. & S. F. Crossing 1.6 miles east of Fresno on Clovis Branch

For main track, one long whistle (—)

To or from spur track, one short and two long whistles (o—)

SUN MAID TOWER—A. T. & S. F. Crossing 1.5 miles east of Fresno on Porterville main track

One long whistle (—)

CALWA TOWER—A. T. & S. F. Crossing and double track 3.6 miles east of Fresno

Eastward trains approaching end of double track will call for switch and derailer by one long, one short and one long whistle (—o—)

Westward trains, one long whistle for crossing and for double track (—)

HANFORD TOWER—A. T. & S. F. Crossing 0.3 miles west of Hanford

One long whistle (—)

TULARE TOWER—A. T. & S. F. Crossing 0.3 miles west of Tulare

One long whistle (—)

KERN JCT. TOWER—A. T. & S. F. Crossing, double track and McKittrick Branch 0.7 mile east of Bakersfield

For main track, one long whistle (—)

For movement over crossing on siding, one long, one short and one long whistle (—o—)

From S. P. to A. T. & S. F. main track, one short and two long whistles (o—)

Between main track and transfer track, one short, one long and one short whistle (o—o)

No. 1 track, two short, one long and one short whistles (o o—o)

Dwarf light signals opposite end of double track governing westward movement are as follows:

Green.....Westward track to S. P. single track.

Yellow.....To Santa Fe westward double track or S. P. No. 1 track.

Dwarf light signal for eastward movement is located at west limits of interlocking plant. Light signals as follows:

Green.....Eastward main track.

Yellow.....Against current of traffic.

Transfer tracks have pipe connected derrails to main track (transfer switch).

At Kern Jct. only, Rule 628 is modified to permit movement, without stopping, of helper cuts only, past interlocking signals in stop position, provided yellow signal is received from the towerman in tower or on ground, and helper engineer sees that track is properly lined for movement to be made.

TEHACHAPI

Main track movements (to or from double track) one long whistle (—)

No. 1 siding, one short, one long and one short whistle (o—o)

Trains or engines entering interlocking limits, except where fixed signals govern movements must receive authority from signal operator when may proceed with caution, not exceeding twelve miles per hour to next signal.

CALIENTE, ALLARD, BEALVILLE, CLIFF, WOODFORD, MARCEL

The east and west switches of sidings at Caliente, Bealville, Cliff, Woodford, Marcel and the east switch of siding at Allard are interlocked and controlled from Telegraph office. All other switches are hand throw. The switches and signals at Allard and Cliff are controlled by the plant at Bealville.

Interlocking limits extend on main track from the eastward signal, located fifty (50) feet west of the west switch, to the westward signal, located fifty (50) feet east of the east switch at Caliente, Woodford and Marcel, and on both main track and siding at Woodford, and at Bealville from the eastward signal, located fifty (50) feet west of the west switch Allard to westward signal, located fifty (50) feet east of the east switch Cliff. All signals within these limits are interlocking, except Signals 3412 and 3417, which are automatic.

When the eastward interlocking signals east end Bealville or the westward interlocking signals west end Cliff are inoperative, trains must be preceded by flagman to the next signal.

Trains stopped by signals must communicate with signal operator by telephone located in telephone booths at east and west switches and be governed by his instructions. Additional telephones are provided at derail west end No. 2 siding at Woodford, and at derail of house track extension at Caliente. If instructed by signal operator to throw interlocked switch by hand, follow instructions posted in telephone booth.

The member of crew cranking switch over, after receiving permission from signal operator, must notify rear member of his crew in order that switch will be returned to normal position, or remain at switch and return it to normal position, unless instructed by signal operator to leave switch open.

When for any reason, proceed indication of an interlocking signal cannot be acted upon at once signal operator must immediately be notified.

When pulling out of sidings at Caliente, Bealville and Marcel, where both sidings are occupied with trains moving in same direction, both trains will stop at clearance point and enginemen will have an understanding as to which train will move out of siding first, unless otherwise directed by the dispatcher.

Trains or engines entering main track, except where fixed signals govern movement, must receive authority from signal operator, then may proceed with caution, not exceeding 12 miles per hour to next signal.

At Cliff, Spur switch west end siding will be hand operated and trains must not enter or leave spur except on telephone authority from signal operator at Bealville.

At Woodford "Take Siding Indicator" mounted on mast of westward interlocking signal will govern westward trains that are to use No. 2 siding.

When westward third class and extra trains are given main track Allard, and unable to proceed farther ahead of superior trains in same direction, they will immediately advise the signal operator at Bealville.

Trains entering sidings at Caliente, Bealville and Marcel will stop clear of adjacent siding unless a proceed signal is indicated in light signal governing the movement to main track.

FRESNO OLIVE AVE. CROSSING, AUTOMATIC INTERLOCKER

Interlocking limits extend from eastward light type signal SA-2032, located 750 feet west of Fresno Traction Company crossing to westward light type signal SA-2033 located 750 feet east of this crossing.

When these signals display stop, trains will be governed by interlocking rules within the interlocking limits and Rule 509 within the automatic portion of the block beyond the interlocking limits and will be preceded to crossing by flagman.

Dwarf light type signals installed between main tracks and located 80 feet east and west of this crossing govern moving against current of traffic. These signals indicate stop only and trains must be preceded by flagman who will give proceed signal from center of crossing.

LOS ANGELES YARD - BURBANK JUNCTION TOWER

To Roscoe or Los Angeles, one long (—). To siding, five short (o o o o o).

To Hewitt, one long, four short (—o o o o).

To industrial lead, one short, one long, one short (o—o).

TRAIN AND AIR INSPECTION

At the following stations freight trains descending grade between Caliente and Lang will stop 10 minutes to allow heat to equalize in wheels and make inspection:

Ravenna.

Marcel Rowen.—Or in making other stops, inspection may be made provided initial run is not to exceed 8 miles, succeeding runs not to exceed 10 miles.

A continuous run of 10 miles will not be made where the run from the last inspection point was less than 7 miles.

Warren.

Owenyo Branch.—Rand.

Keeler Branch.—Hammil.

McKittrick Branch.—M. P. 353.

Freight trains must not run more than 40 miles without a stop for inspection: Except run may be made by westward freight trains, Saugus to Lancaster, Ravenna to Mojave, Bakersfield to Tipton, Tipton to Fresno or vice versa and Cantil to Leliter without stopping for train inspection when in the judgment of the conductor it is safe to do so. Inspection will be made at any intermediate stops.

AIR BRAKE RULE 11.

Air brake inspection at points where no car inspectors are on duty, and motive power and/or engine crew or train crew is changed on a freight train, shall be made as follows:

After the train is made up and the engine attached the engineer will apply the brakes with a 20 pound service reduction and leave them applied. The trainmen will then pass along the train to determine that the brake is applied on each car. The numbers of any cars found with inoperative air brakes must be reported on Form 2809 and such cars assembled and switched to the rear of the train next ahead of the caboose before leaving that station. After this inspection has been made, brakes have been released and trainmen have noted that normal brake pipe pressure has been restored as indicated on caboose gauge and have given signal to engineer, the latter must comply with last part of Rule 11 to avoid brakes sticking from an overcharge of the brake system etc.

If it is necessary to switch any cars to the rear account brakes being inoperative Rule 17 must be complied with before departure.

Rule 34 must be observed to determine by rolling inspection that each brake releases properly.

Attention is directed to the Safety Appliance Act which requires that whenever any train is operated with power or train brakes not less than 85 per cent of the cars of such train shall have their brakes used and operated by the engineer of the locomotive drawing such train. All power-brake cars in every such train which are associated together with the 85 per cent shall have their brakes so used and operated.

AIR BRAKE RULE 13.

At lay-over points for passenger equipment, where there are no car inspectors, crews must make air brake test before starting on initial trip as follows: Brake pipe must be fully charged, engineer then apply air brake; trainmen must examine each car to see whether all brakes are applied. If all brakes apply, trainmen must give signal 16-e from rear car, examine each car in train to see that all brakes release, and report condition to the engineer.

AIR BRAKE RULE 16.

Passenger Trains: Make running air brake test at Summit Switch and between initial and crossover switch at Vincent. Not necessary to make running test on passenger trains leaving Mojave that have not had the continuity of the brake pipe broken. Eastward Santa Fe passenger trains leaving Kern Jct. will not make running test. Within yard limits of Fresno, running air brake test will be made on eastward trains only when leaving Fresno.

When running air brake test is made trainmen will use communicating Signal 16-h instead of hand or lantern signals.

On westward passenger trains leaving Bakersfield, running test shall not be made until rear car has cleared Baker Street.

Freight Trains: Freight trains not stopping at Summit Switch will make running air brake test between wye switches as follows: While waiting for slack to adjust itself and then add about 3 pounds, making total reduction of 10 pounds before releasing.

Conductor will note reduction on caboose gauge and following build up in pressure when brakes are released, then give proceed signal which will be relayed by other trainmen from their portion of the train, providing they note retainers releasing in their vicinity.

If conductor is on the head end, the rear brakeman is held responsible for such observance of the gauge as will insure against danger from closed angle cock or low pressure.

When such observance indicates danger, take every needed precaution as the circumstances warrant.

If releasing of brakes cannot be made at a greater speed than 15 miles per hour, stop and make rear end test.

Whenever rear end tests or running tests, whichever are required under the rules, have been made on eastward trains at Tehachapi, it will not be necessary to make running tests on such trains not stopping at Summit Switch.

Westward freight trains that do not have helpers to cut out at Vincent and do not stop there for other operating reasons, will turn up the retaining valves on the first ten cars behind the engine at the east distant signal approaching Vincent, and will make air brake running test between siding switches as follows:

While working steam and not allowing driver brakes to apply, follow the same procedure as outlined in instructions relative to making the freight train running test at Summit Switch, with the exception that a release may be made at a speed not slower than 8 miles per hour. If train has to stop for any reason, or if speed of at least 8 miles per hour cannot be made at time release is desired, standing air brake test as per Rule 17 of the air brake rules will be made.

On Eastward freight trains not having helpers to cut out or required to stop at Vincent for operating reasons, they will follow the same procedure as outlined in next paragraph above, except that one retaining valve for each 115 M's contained in train will be used. These retaining valves must be turned up at or near west distant signal, the retaining valves on head portion of train to be turned up first.

AIR BRAKE RULE 17.

Rear end test will be made in accordance with Rules 17 and 17-A of the Air Brake Rules, and this test will also be made at the following places under the conditions hereinafter stated:

Vincent.....Freight trains stopping.

Summit Switch.....All trains stopping.

Mojave.....Freight trains not originating.

Leading engineer will not signal for rear end test on trains having helpers until such helpers indicate by one blast of the whistle that the train is ready for the test.

Before a train which has stopped on grade is signalled to proceed, air gauge in caboose must be observed. If gauge indicates brake pipe unobstructed and registers a pressure of not less than 65 pounds, proceed signal may be given.

AIR BRAKE RULE 54.

Emergency hose must be used on all freight trains between Los Angeles and Bakersfield.

Trains of 50 cars or less 2 emergency plugs will be used located approximately 20th and 40th cars from engine.

Trains of 50 to 71 cars 3 plugs located approximately between 20th, 40th and 60th cars from engine.

Trains of 71 to 100 cars 4 plugs located approximately on the 20th, 40th, 60th and 80th cars from engine.

Trains of 100 to 124 cars 4 plugs located on the 20th, 40th, 60th and 100th cars from engine.

On westward freight trains plugs will be fastened on east end of car and on eastward freight trains on west end of car.

Emergency hose will be handled by carmen at Los Angeles and Bakersfield, but must be applied and removed when necessary by trainmen at intermediate stations and placed in caboose.

In applying these hose efforts should be made to apply them between through loads so as to avoid having to change them enroute where emergency is encountered.

Handle of emergency hose must be sealed by carmen and full report made by trainmen when seal broken.

SPECIAL INSTRUCTIONS

SPEED RESTRICTIONS
 Maximum speed of any passenger train must not exceed 60 miles an hour except as otherwise provided for:
 Maximum speed of any freight or mixed train must not exceed 35 miles an hour except as otherwise provided for:
 Speed Restrictions in Miles Per Hour, Will Apply as Follows:

Page No.	TERRITORY	PASSENGER					FREIGHT	Engines Backing With or Without Cars	Yard Engines S-SE Type	LIGHT ENGINES RUNNING FORWARD			
		Maximum	With T-26, 32, 37, 40 P A Motors	With T 1, 2, 8, 9, 23, 28, 31, 36, 57, 58 MK 5, 6, 7, 8, 9	With Mt. GS Sta. Fe Mt. type	With C 2 to 10 Incl. C 18 to 29 Incl. F AC 4, 5, 6, MM, AM SP				Freight and Mixed Maximum	E T 26, 32, 37, 40 P A Mt. 1, 2, 3, 4, 5 Santa Fe Mt. type	M T 1, 2, 8, 9, 23, 28, 31, 36, 57, 58 C 2 to 10 Incl. C 18 to 29 Incl. MK 5, 6, 7, 8, 9	F SP GS Santa Fe 3800 type
2	Biola Jct.-Calwa Tower, except	50	50	50	50	45	40	30	20	40	35	35	30
2	F. T. Co., Crossing, Olive Ave., Fresno	20	20	20	20	20	20	20	20	20	20	20	20
2, 3, 7	In City Fresno along or across street crossings	20	20	20	20	20	20	12	12	12	12	12	12
2	Calwa Tower—East switch Oil Jct. except	60	60	50	60	40	40	30	20	40	35	35	30
2	A. T. & S. F. Ry., crossing at Tulare Tower	40	40	40	40	40	40	30	20	40	35	35	30
2, 4	East switch Oil Jct.—One mile east Kern Jct., except over street crossings in Bakersfield	35	35	35	35	35	20	20	20	20	20	20	20
3	Fresno—Famoso, except	45	45	45			30	20	20	20	20	20	20
3	On curves at Mile Post 218.54 and 218.74	35	35	35				20	20	30	30	30	30
3	On curve west of Orris	35	35	35				20	20	20	20	20	20
4	One mile east Kern Jct. - one mile west Ilmon	50	50	50	50	45	40	30	20	40	35	35	30
4	One mile west Ilmon - West Switch Tehachapi	30	30	28	30	28	20	15	20	25	25	20	20
4	West Switch Tehachapi - One Mile east of Cameron	50	50	50	50	45	35	30	20	35	35	35	30
4	One mile east of Cameron—Mojave, except	45	45	45	45	45	20	20	20	25	25	25	25
4, 5	Westward freight trains Mojave to one mile east of Cameron						35						
4, 5	Mojave Yard, between Standard Oil switch and extreme east switch	15	15	15	15	15	10	10	15	15	15	15	15
5	Mojave - Palmdale	55	55	50	55	45	40	30	20	40	35	35	30
5	Palmdale - Mile Post 417, except	50	50	50	50	45	40	30	20	40	35	35	30
5	Westward freight trains M. P. 417 to Palmdale						22						
5	Mile Post 417-Lang	30	30	28	30	28	20	15	15	25	25	20	20
5	Lang-Saugus	30	30	28	30	28	22	15	15	25	25	22	22
5	Saugus - Burbank Jct., except	50	50	50	50	45	35	30	20	35	35	35	30
5	East switch Saugus and West Portal tunnel 25	40	40	40	40	40	25	25	20	25	25	25	25
5	West Portal tunnel 25 and M.P. 458.14	30	30	30	30	30	20	20	20	20	20	20	20
5	M.P. 458.80 - 458.94	40	40	40	40	40	25	25	20	25	25	25	25
5	M.P. 458.14 - 471.60 (eastward frt. trains only)						25						
5	Burbank Jct. (Crossover west of tower)	30	30	30	30	30	20	20	30	30	30	30	30
6	(Crossover east of tower)	35	35	35	35	35	20	20	20	20	20	20	20
6	Armona-Crump, except	25					25	15	20	25	25		
6	Over trestle at M.P. 267.3	15					15	15	15	15	15		
6	Hardwick-Goshen Jct.	25					25	15	20	25	25		
6	Goshen Jct.-Exeter, except	40					30	15	20	30	30		
6	On curve at Goshen Jct. and curve at Ambler	30					20	15	20	20	20		
6	Ingle - Hardwick, except	20					20	15	20	20	20		
6	Mile Post 219 - Kings River Bridge	20					20	15	20	20	20		
6	Rossi-M.P. 239.4	25					20	15	15	15	15		
7	Mile Post 239.4 - Stratford	12					12	12	12	12	12		
7	Fresno-Gordon, except	25					25	15	20	25	25		
7	On curves at Barton and Maltermoro	20					20	15	15	20	20		
7	Over Fresno Interurban tracks, Las Palmas	15					15	15	15	15	15		
7	Gordon-Friant	20					20	15	15	15	15		
3	Porterville-Clavicle-Permu, except	15					15	15	15	15	15		
3	On curves, Success and Permu branches	12					12	12	12	12	12		
3	Richgrove-Jovista, except	25					25	15	20	25	25		
3	On curves, Richgrove branch	15					15	15	15	15	15		
7	Kern Jct.-M.P. 354 1/2	25					25	15	20	25	25		
7	Mile Post 354 1/2-Olig, except	20					20	15	15	20	20		
7	Mile Post 354-Olig, with large loaded oil cars						15	15	15	15	15		
8	Mojave-Owenyo, except	30					30	20	20	30	30		
8	F-4&F-5 engines-Mojave-Searles						25	20	20	20	25		
8	Over west siding switch, Owenyo	10					10	10	10	10	10		
8	Benton - Laws	20					20	15	10	10	10		
8	Laws - Keeler	30					30	15	10	10	10		

Narrow gauge engines running forward must not exceed twenty miles per hour.

Speed of 60 miles per hour is permitted gas-electric motor car trains on main track between Fresno and Goshen Jct.

SPEED OF TRAINS REGULATED BY ORDINANCE THROUGH CITY LIMITS

Page	STATION	Passenger	Freight	Running Backward	Page	STATION	Passenger	Freight	Running Backward
2-3-7	Fresno, along or across street crossings	20	20	12	3	Exeter, between 5 A. M. and 11 P. M.	20	20	20
2	Fowler, between 6 A. M. and 9 P. M.	30	30	30	3	Lindsay, between 5 A. M. and 11 P. M.	20	20	20
2	Selma, between 5 A. M. and 11 P. M.	30	30	30	5	San Fernando over street crossings east and west of station	25	25	25
2	Kingsburg, between 6 A. M. and 9 P. M.	30	30	30	6	Armona, Lake Street Crossing	20	20	20
2	Tulare, between 5 A. M. and 11 P. M.	20	20	20	6	Visalia	15	15	15
3	Reedley, between 5 A. M. and 11 P. M.	20	20	20					

At Fowler, Selma and Kingsburg it is lawful to increase speed to 40 M.P.H. after locomotive has passed last crossing within city limits in direction train is moving.

SPEED RESTRICTIONS

Speed restrictions for engines are shown in speed table; however, attention is called to the following maximum speeds at which tenders may be operated subject to restrictions imposed locally:

Tenders having water capacity, 7,000 gallons or less, except classes 70-R-1 and 70-SC-1, maximum speed 50 miles an hour.

Engines operated coupled tender to tender must not exceed speed permitted for light engines of that class running backwards.

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

- When pilot removed..... 20 M.P.H.
- When main rod only removed..... 30 M.P.H.
- When side rod only removed..... 30 M.P.H.
- When both main and side rods removed..... 20 M.P.H.
- When hauled in train and all rods are on..... 30 M.P.H.
- GS engines..... 15 M.P.H.
- SP 1, 2 and when inside main rod removed..... 30 M.P.H.
- S and SE engines and all other classes of engines when not equipped with engine trucks..... 20 M.P.H.
- When all weight has been removed from any one pair of drivers on an engine, speed must not exceed..... 20 M.P.H.
- When all weight has been removed from one wheel of any pair drivers on an engine, speed must not exceed..... 30 M.P.H.

F, SP, Santa Fe 3800 and AC class engines must not exceed 8 M.P.H. over switch turnouts, crossovers and slip switches.

When engines 3681, 3727, 4111, 4114, 4115, 4116, 4117, 4123, and 4124 are used in passenger service they are permitted maximum passenger speed between Bakersfield and Burbank Jct.

When Santa Fe 3800 class engines are used in passenger service they are permitted maximum speed of 45 miles per hour between one mile east of Kern Jct. and one mile west of Ilmon; also between west switch Tehachapi and one mile east of Cameron.

When used in passenger service, AC 4 and 5 engines and Santa Fe 3700 and 3800 class engines are permitted maximum speed of 30 miles per hour between one mile west of Ilmon and west switch Tehachapi, also between Mile Post 417 and Saugus.

Engines not shown in speed table must not exceed freight speed except MC engines must not exceed 20 miles per hour between Lang and Saugus.

When interlocking signals at Caliente, Allard, Bealville, Woodford and Marcel indicate proceed trains may run at speed and through other interlocking plants with caution.

Trains must not exceed 30 miles per hour through limits of interlocking plant at Calwa Tower.

Trains must not exceed 6 M.P.H. over wye and packing house tracks at Locans, 10 M.P.H. through main track switch Hardwick, 10 M.P.H. Pinedale to Mill site formerly Minerals and Western, 10 M.P.H. on pocket track Saugus extending west from Westward siding and 8 M.P.H. on spur leading to quarry from wye at Beneme.

Trains must not exceed 10 M.P.H. through sidings, over crossovers and turnouts, except oil buffer spring switches. See list of such switches on page 10.

Trains handling relief outfit must not exceed 25 miles per hour between Fresno and Bakersfield, Fresno and Famoso via Sanger, Armona and Exeter, Bakersfield and one mile west of Ilmon, one mile west of Tehachapi and one mile east of Cameron, Mojave and Mile Post 417, Saugus and Burbank Jct., and 20 miles per hour between one mile east of Cameron and Mojave, and must not exceed 15 miles per hour over other track. Where freight speed is less be governed thereby.

When locomotive Cranes, of the type SPMW 3636, are placed in trains, they must be handled with the heavy end forward, except where it is impossible to turn them, in which case they must be turned at the first available point. When handled with light end forward extreme care must be exercised and speed of 25 M.P.H. not exceeded.

All cars moved in passenger trains must be equipped with steel-tired or all-steel wheels. When cars not so equipped are offered for movement, they will be handled in freight trains—passengers, if any, to move on passenger train.

Trains consisting of engine and caboose only should be considered freight trains and speed restricted accordingly.

Trains carrying cabooses equipped with cast iron wheels must not exceed 40 miles per hour.

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

Speed of trains handling such cars must be restricted as follows: When consist includes not more than three wooden passenger-carrying cars, maximum speed must not exceed 50 miles per hour.

When consist includes more than three wooden passenger-carrying cars, maximum speed must not exceed 40 miles per hour.

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

SPECIAL INSTRUCTIONS

SPEED TABLE

Speed per Hour	1 Mile in Min. Sec.	Speed per Hour	1 Mile in Min. Sec.	Speed per Hour	1 Mile in Min. Sec.	Speed per Hour	1 Mile in Min. Sec.
6	10.00	25	2.24	39	1.33	53	1.08
8	7.30	26	2.18	40	1.30	54	1.06
10	6.00	27	2.13	41	1.27	55	1.05
12	5.00	28	2.08	42	1.25	56	1.04
15	4.00	29	2.04	43	1.23	57	1.03
16	3.45	30	2.00	44	1.21	58	1.02
17	3.31	31	1.96	45	1.20	59	1.01
18	3.20	32	1.92	46	1.18	60	1.00
19	3.09	33	1.89	47	1.16	61	0.99
20	3.00	34	1.86	48	1.15	62	0.98
21	2.91	35	1.83	49	1.13	63	0.97
22	2.83	36	1.81	50	1.12	64	0.96
23	2.76	37	1.79	51	1.10	65	0.95
24	2.70	38	1.77	52	1.09		

STRUCTURES LESS THAN STANDARD CLEARANCE

Mile Post	Location	Description
Fresno-Saugus—Main Track		
205.5	Fresno Shop Yard	Water tank spout.....Side
205.5	Fresno	Pullman shed.....Side
220.7	Selma	Libby-McNeill & Libby.....Side
313.2	Bakersfield, east end Round House lead	Water column.....Side
313.2	Bakersfield, roundhouse turnout tracks	Sandhouse.....Side and Overhead
313.2	Bakersfield	P. F. E. ice dock.....Side
313.2	Bakersfield	Pullman shed.....Side
313.2	Bakersfield	Coal house at store.....Side
313.2	Bakersfield	Air pump house.....Side
313.2	Bakersfield	Gravel Bunkers, Gravel Pit.....Side and Overhead
434.8	East of Russ	Tunnel 17 1/2.....Overhead
439.5	East of Lang	Tunnel 20.....Overhead
440.1	East of Lang	Tunnel 21.....Overhead
441.5	East of Lang	Tunnel 22.....Overhead
445.3	East of Humphreys	Tunnel 23.....Overhead
449.7	East of Honby	Tunnel 24.....Overhead
Fresno-Famoso via Porterville		
205.5	Fresno	S. J. L. & P. Corp. plant.....Side and Overhead
225.3	Fargo	Southern Pacific Freight Shed.....Side
257.4	Exeter	Water tank spout.....Side
Goshen Jct.-Coalinga-Engle		
229.1	Armons	Water tank spout.....Side
268.4	Coalinga	Water tank spout.....Side
Fresno-Friant		
205.5	Fresno	Alley Drill Track, Fulton.....Side
217.4	Clovis	Water tank spout.....Side
Bakersfield-Olig		
345.4	Kilowatt	Power House.....Overhead and Side
Mojave-Owenyo		
402.5	Cantil	Water tank spout.....Side
426.8	West of Searles	Tunnel 29.....Overhead
484.1	Haiwee	Water tank spout.....Side
523.0	Owenyo	Highline trestle on Calif. Alkali Co. Spur.....Overhead and Side
Saugus-Burbank Junction		
453.7	Elayon	Standard Oil Co. filling racks.....Side
465.6	Wahoo	Consolidated Rock Co. rock crusher.....Side and Overhead
465.6	Wahoo	Consolidated Rock Co. piles of rock.....Side
467.9	Roscoe	Consolidated Rock Co. bunkers.....Both Sides
467.9	Roscoe	Consolidated Rock Co. sand piles and switch stands.....Side

Employees are warned that it is dangerous to ride on top or sides of cars at above-mentioned points. Employees must guard against coming in contact with overhead wires or their connections.

AVERAGE TARE WEIGHTS OF PASSENGER TRAIN CARS

CLASS	NOT AIR-CONDITIONED		AIR-CONDITIONED	
	All-Steel	Steel Under-frame	All-Steel Cooling Season	All-Steel Heating Season
Baggage—60 ft.....	93,070			
“ —66 ft.....	127,610			
“ —70 ft.....	122,020			
“ —70 ft. (With Auto. End Door).....	125,800			
“ —(Dynamo).....	98,730			
“ —Passenger.....		87,120		
Baggage & Mail—60 ft.....	103,620			
“ —66 ft.....	124,760			
“ —70 ft.....	129,140			
“ —Passenger.....	103,675	103,590		
Express Refr.—N. P. Ry.....	74,000	112,640		
“ —A. R. E. No. 40-154.....	78,000	78,000		
“ —“ —“ —“ 153-224.....	89,000			
“ —“ —“ —“ 500-506.....	110,000			
“ —“ —“ —“ 1101-1175.....	85,000			
“ —P. F. E. “ 500-799.....	83,000			
Express, Horse.....	133,050			
Postal.....	112,120			
Postal Storage—40 ft.....	74,530			
“ —60 ft.....	105,120			
Assembly (ACW).....		188,950	168,950	
Club.....(ACI).....	146,210	122,300	172,200	164,700
Official.....(NAC).....	170,700	155,370		
“ —Cars 107-128(ACW).....			182,800	182,800
“ —Cars 140-141(ACW).....			185,040	195,040
Chair—60 ft.....(ACI).....	100,620		138,000	132,000
“ —72 ft.....(ACI).....			185,000	157,800
“ —72 ft.....(ACW).....			158,700	158,700
“ —Streamline—Single.....(ACS).....			120,900	104,500
“ —“ —Art.....(ACS).....			205,400	172,600
“ —74 ft.....(ACI).....			180,915	173,125
“ —74 ft.....(ACS).....			197,944	181,600
Coaches—60 ft.....(ACI).....	98,130	136,100	136,100	130,100
“ —70 ft.....(ACI).....	137,640	157,800	157,800	151,000
“ —70 ft.....(ACW).....	137,640	151,000	151,000	151,000
“ —72 ft.....(ACI).....		164,500	157,400	
“ —72 ft.....(ACW).....		153,500	153,500	
“ —73 ft. 6 in.....(ACW).....		163,000	163,000	
“ —73 ft. 6 in.....(ACI).....		168,500	161,200	
“ —72 ft. (Interurban).....	120,000			
All-Day Lunch—Chair.....	105,970			
“ —Coach.....	103,875			
Cafe-Coach.....(ACI).....		138,600	155,700	149,000
Cafe-Lounge.....(ACI).....	148,950	161,200	173,500	166,000
“ —(ACW).....			156,000	156,000
Daylight—(12-car train).....(ACS).....			1,344,080	1,47,250
“ —Comb. Baggage & Coach (ACS).....			203,640	170,840
“ —Art. Chair.....(ACS).....			130,850	114,450
“ —Tavern.....(ACS).....			129,860	113,460
“ —Diner.....(ACS).....			115,880	99,480
“ —Parlor.....(ACS).....			118,690	102,290
“ —Parlor-Observation.....(ACS).....				
Diner—70 ft.....	155,330	135,930		
“ —72 ft.....(ACI).....	156,000	146,930	170,100	162,700
“ —77 ft. (Arch Roof).....(ACW).....			162,950	162,950
“ —77 ft. (Clere Story Roof).....(ACW).....			169,450	169,450
“ —77 ft. (Arch Roof).....(ACM).....			189,581	173,826
“ —79 ft.....(NAC).....	169,100			
“ —80 ft. (Clere Story Roof).....(ACM).....			201,323	184,700
Lounge.....(ACI).....			189,800	181,630
“ —(Arch Roof).....(ACI).....			167,500	160,300
“ —(Arch Roof).....(ACW).....			164,980	157,780
Observation—75 ft.....(ACI).....	154,400		169,185	161,900
“ —77 ft.....(ACI).....			194,543	186,166
Pullman—Observation.....(ACI).....	160,800	141,870	177,314	169,200
“ —“ —“.....(ACM).....	160,800	153,000	192,300	176,300
“ —“ —“.....(ACM).....	171,200		194,900	178,900
“ —“ —“.....(ACM).....	171,200		187,682	179,600
“ —Bedroom.....(ACI).....	167,600		183,920	176,000
“ —“ —“.....(ACM).....	167,600		195,800	179,800
“ —Sleeper.....(ACI).....	163,100		191,100	175,100
“ —“ —“.....(ACM).....	163,100		180,075	171,500
“ —Tourist.....(ACI).....	153,000		185,200	169,200
“ —“ —“.....(ACM).....	153,000		168,663	161,400
Rail, Gas-Electric—400 H.P.....	158,400			
“ —600 H.P.....	167,200			

*Steel underframe.
CODE:—NAC—Non-Air Conditioned.
—ACI—Air-Conditioned—Ice System.
—ACM—Air-Conditioned—Mechanical System.
—ACW—Air-Conditioned—Waukesha System.
—ACS—Air-Conditioned—Steam Ejector System.

LIST OF SURGEONS

NAME	TITLE	LOCATION
Dr. C. A. Walker	Chief Surgeon and Manager	San Francisco, Cal.
Dr. J. D. Morgan	District Surgeon	Fresno, Cal.
Dr. Chas. A. James	District Surgeon	Fresno, Cal.
Dr. D. H. Trowbridge, Jr.	Oculist	Fresno, Cal.
Dr. Wayne Hunt	Aurist	Fresno, Cal.
Dr. O. B. Doyle	Asst. District Surgeon	Fresno, Cal.
Dr. J. D. Wagner	District Surgeon	Selma, Cal.
Dr. W. H. Nielson	District Surgeon	Fowler, Cal.
Dr. E. C. Halley	District Surgeon	Sanger, Cal.
Dr. G. A. Hawkins	District Surgeon	Reedley, Cal.
Dr. R. E. Cronmiller	District Surgeon	Exeter, Cal.
Dr. Edgar Brigham	District Surgeon	Dinuba, Cal.
Dr. O. A. Olson	District Surgeon	Kingsburg, Cal.
Dr. M. S. McMurtry	Emergency Surgeon	Clovis, Cal.
Dr. R. N. Fuller	District Surgeon	Tulare, Cal.
Dr. J. Seiberth	District Surgeon	Pixley, Cal.
Dr. Henry A. Rivin	District Surgeon	Delano, Cal.
Dr. W. B. Smith	District Surgeon	Delano, Cal.
Dr. F. R. Guido	District Surgeon	Visalia, Cal.
Dr. C. T. Rosson	District Surgeon	Hanford, Cal.
Dr. C. T. Rosson, Jr.	Asso. Dist. Physician & Surgeon	Hanford, Cal.
Dr. J. C. Drake	District Surgeon	Kerman, Cal.
Dr. Geo. A. Meracle	Emergency Surgeon	Caruthers, Cal.
Dr. Wm. P. Byron	District Surgeon	Lemoore, Cal.
Dr. Bryson E. Cox	District Surgeon	Coalinga, Cal.
Dr. P. S. Barber	District Surgeon	Porterville, Cal.
Dr. W. W. Tourtillott	District Surgeon	Porterville, Cal.
Dr. J. R. Fillmore	Emergency Surgeon	Strathmore, Cal.
Dr. H. D. R. Shoemaker	District Surgeon	Lindsay, Cal.
Dr. H. W. Bell	Division Surgeon	Bakersfield, Cal.
Dr. C. L. Moore	District Surgeon	Bakersfield, Cal.
Dr. J. M. Kirby	Consulting Physician & Surgeon	Bakersfield, Cal.
Dr. R. M. Jones	Oculist and Aurist	Bakersfield, Cal.
Dr. Harold L. Schlotthauer	District Surgeon	Tehachapi, Cal.
Dr. Phil J. Vogel	District Surgeon	Mojave, Cal.
Dr. M. A. Williamson	District Surgeon	Lone Pine, Cal.
Dr. Howard W. Dueker	Acting Dist. Phys. & Surgeon	Lone Pine, Cal.
*Dr. George D. Shultz	District Surgeon	Lone Pine, Cal.
Dr. Harvey Crook	District Surgeon	Bishop, Cal.
Dr. Thomas A. Drummond	Emergency Surgeon	Randsburg, Cal.
Dr. W. R. Senseman	District Surgeon	Lancaster, Cal.
Dr. N. H. Snook	District Surgeon	Palmdale, Cal.
Dr. E. C. Innis	District Surgeon	Saugus-Newhall, Cal.
Dr. R. W. Johnson	District Surgeon	San Fernando, Cal.

*Subject to call to Independence, Cal., at all times.
Note.—Emergency Surgeons should be summoned only for temporary treatment when prompt attention is required and when patients cannot be sent to or await arrival of Division or District Surgeon.

LOCATION OF HOSPITAL STRETCHERS

FRESNO	BAGGAGE ROOM	MOJAVE	BAGGAGE ROOM
	STORE ROOM		CAR SHOPS
	RELIEF TRAIN		
GOSHEN JUNCTION		SAUGUS	
BAKERSFIELD	BAGGAGE ROOM	EXETER	
	EMERGENCY HOSPITAL	PORTERVILLE	
	RELIEF TRAIN	COALINGA	
	CAR SHOPS	HANFORD	
	MACHINE SHOPS	OWENYO	
TEHACHAPI		LAWS	

LOCATION OF HOSPITALS

GENERAL HOSPITAL	SAN FRANCISCO
EMERGENCY HOSPITAL	BAKERSFIELD
WHITE MEMORIAL HOSPITAL	LOS ANGELES

Nominal Class

M-4
M-4
M-8
M-6
M-9
M-11
M-11

T-23
T-23
T-23, 31
T-32

P-1, 3, 5
P-4
P-6
P-10
P-10

C-9, 10
C-9, 10
C-8
C-5
C-5

A-6
A-3
A-3

Mk-5, 6
Mk-5, 6
Mk-7, 8, 9
F-4, 5
F-5

AC-1, 2, 3
AC-4
AC-5

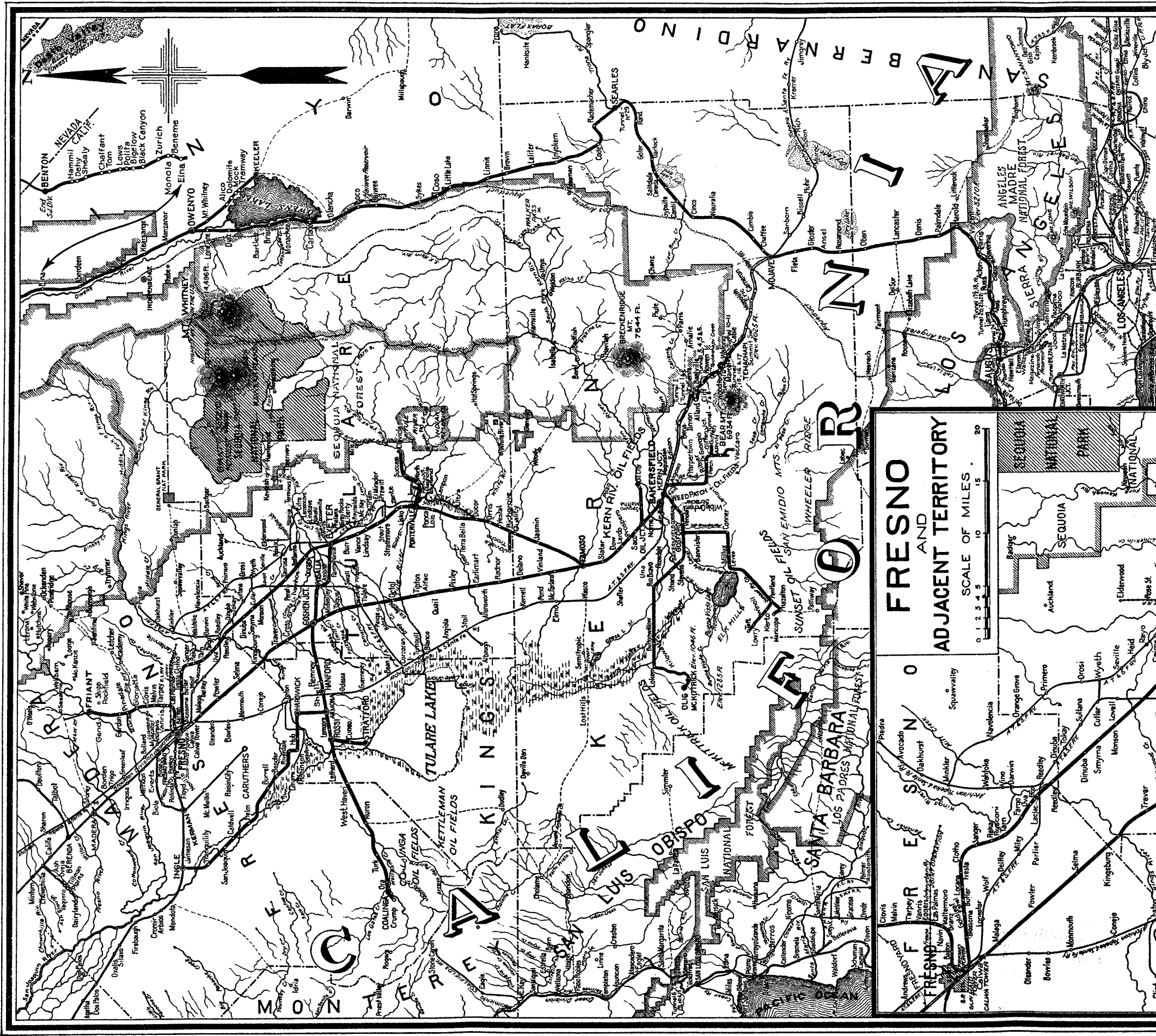
Mt-1,3,4,5

GS-1
GS-2
GS-3

SP-1
SP-2, 3

Allowance

These and tend direction



MAP OF THE SAN JOAQUIN DIVISION

SOUTHERN PACIFIC COMPANY

JUNE, 1918.
J. F. M.

Revised to Jan. 1, 1939

SCALE OF MILES
0 5 10 20 30 40

