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Through rules knowledge
Injury free conditions
Control unsafe practices
Keep alert

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 H. L. JOHNSON.....Tracy
 R. J. BRANDI.....Fresno
 L. E. TIBBS.....Fresno
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 W. S. KELLY.....Mojave

ASSISTANT TRAINMASTERS

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 L. C. LARSON.....Bakersfield
 W. O. ROSS.....Exeter
 H. C. HAUGHT.....Palmdale
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R. K. COOL.....Tracy
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 D. L. GREEN.....Palmdale

ASSISTANT ROAD FOREMAN OF ENGINES

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F. M. BANNISTER.....Bakersfield

GENERAL YARDMASTER

W. D. STALLINGS.....Fresno

SOUTHERN PACIFIC TRANSPORTATION COMPANY



SAN JOAQUIN DIVISION TIMETABLE AND SPECIAL INSTRUCTIONS

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EFFECTIVE SUNDAY, SEPTEMBER 15, 1974
 AT 12:01 A. M.
 PACIFIC STANDARD TIME

FOR THE GOVERNMENT AND INFORMATION
 OF EMPLOYEES ONLY

R. L. KING,
General Manager.

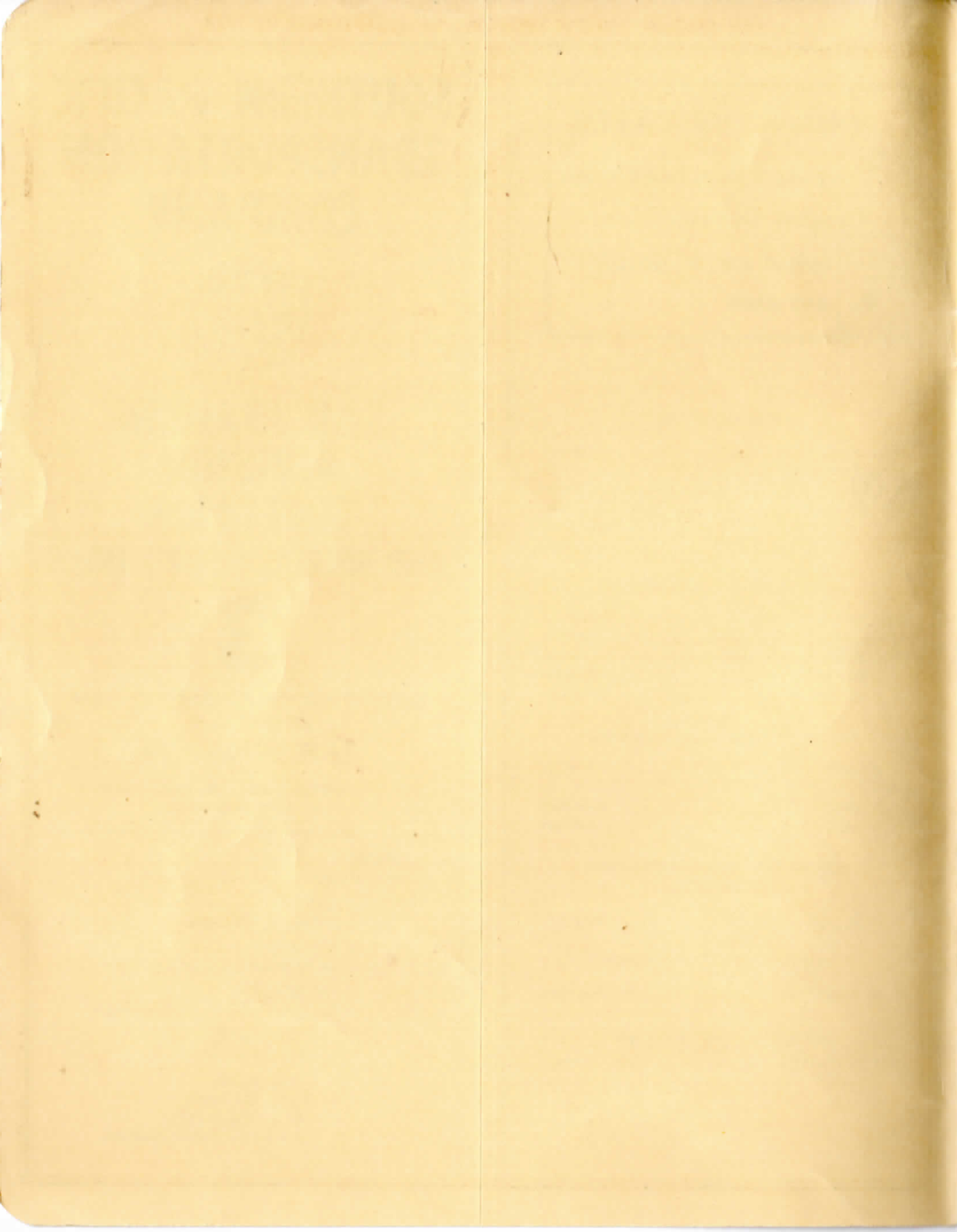
W. J. LACY,
Assistant General Manager.

J. J. WILLIS,
General Superintendent of Transportation.

J. W. BREEN,
Superintendent of Transportation.

W. C. MORRIS,
Superintendent.

J. E. NEAL,
 K. W. DIXON,
 W. J. KRAMER,
Assistant Superintendents.



STOCKTON SUBDIVISION

EASTWARD		Mile Post Location	STATIONS		Station Number	WESTWARD	
FIRST CLASS			SIDING CAPACITIES AND FACILITIES			Distance from Polk	
375	365						
LABRT	LABRF						
Leave Daily	Leave Daily						
		71.5	Yd. Lmts. TO-R	TRACY	BKIYPQ	25300	60.5
AM 10.25	AM 7.45	81.5	W-3870	LATHROP	YP	26620	50.5
		90.9	Yd. Lmts. R	STOCKTON	BKIYPQ	26420	41.1
		92.7	No. 2 Track	EL PINAL	P	26417	39.3
		93.9		AKERS	P	26415	38.1
		103.3	6070	LODI	BKYPQ	26220	28.7
		106.2	8350	ACAMPO	P	26211	25.8
		111.7	R	GALT	P	26038	20.3
		115.5	8350	NEED	P	26032	16.5
		122.9	8350	ELK GROVE	P	26022	9.1
		129.0		FLORIN	P	26014	3.0
11.50 AM	9.05 AM	132.0	Yd. Lmts.	POLK	IP	26000	0.0
Arrive Daily	Arrive Daily			(60.5)			
375	365						

EASTWARD	Mile Post Location	STATIONS	Station Number	WESTWARD
		SIDING CAPACITIES AND FACILITIES		Distance from End
Oakdale Branch				
	90.9	Yd. Lmts. R	STOCKTON	BKIYPQ
		2450		P
	122.4		OAKDALE	
		2950		
	139.8		MONTPELLIER	
		(48.9)		
Kentucky House Branch				
	103.5	Yd. Lmts. R	LODI	BKYPQ
	107.1	Yd. Lmts. R	VICTOR	
	142.6		KENTUCKY HOUSE	
		(39.1)		
Woodbridge Branch				
	103.4	Yd. Lmts. R	LODI	BKYPQ
	105.8	Yd. Lmts. R	WOODBIDGE	
		(2.4)		
Ione Branch				
	111.7	R	GALT	P
	138.8	1370	IONE	
		(27.1)		

ADDITIONAL STATIONS				
Capacity and Direction of entry into Spurs	Mile Post	NAME	Station Number	
1710	P	French Camp.....	26610	
980W	..	Castle..... (Spur)	26411	
290E	P	Tomspur..... (Spur)	26408	
1510E	P	Urgon..... (Spur)	26213	
Oakdale Branch				
..	..	98.3 Walthall.....	26513	
..	..	103.8 Peters.....	26521	
880W	..	120.6 Adela..... (Spur)	26542	
1250	..	126.3 Claribel.....	26580	
2450	..	132.4 Waterford.....	26587	
Kentucky House Branch				
..	..	105.2 Brandywine.....	26305	
880	..	110.7 Lockeford.....	26314	
..	..	114.7 Clements.....	26321	
840	..	130.2 Valley Spring.....	26339	
530	..	134.7 Toyon.....	26345	
Ione Branch				
930	..	122.0 Clay.....	26112	
4800E	..	124.2 Rancho Seco.. (Spur)	26114	
1860	..	132.3 Carbondale.....	26124	
1070	..	134.4 Indian Hill.....	26127	
1370W	..	134.8 Edwin..... (Spur)	26129	
680W	..	137.7 Dagon..... (Spur)	26137	

SAN JOAQUIN DIVISION TIMETABLE No. 3, SEPTEMBER 15, 1974

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STOCKTON SUBDIVISION

EAST- WARD	Mile Post Location	STATIONS SIDING CAPACITIES AND FACILITIES	Station Number	Distance from Fresno Yard	WESTWARD	
					FIRST CLASS	
					365 LABRF Advance Starpacer	375 LABBT Starpacer
	81.5 92.9	LATHROP YP	26620	108.9	Arrive Daily AM 7.45	Arrive Daily AM 10.25
	99.4	8350 CALLA YP	26723	102.4		
	108.0	8350 COVELL P	26739	93.8		
	113.1	MODESTO BKPQ	26750	88.7		
	117.4	8350 CERES P	26775	84.4		
	126.2	TURLOCK PQ	26790	75.6		
	129.6	8350 ALCANT P	26805	72.2		
	139.8	8350 ARENA P	26822	62.0		
	147.4	8350 FERGUS P	26834	54.4		
	150.5	MERCED BPQ	26840	51.3		
	156.6	8350 LINGARD P	26867	45.2		
	168.2	8300 CHOWCHILLA P	27005	33.6		
	179.2	8410 NOTARB P	27019	22.6		
	183.9	MADERA PQ	27025	17.9		
	190.2	8350 IRRIGOSA P	27033	11.6		
	199.2	10090 R BIOLA JCT. P	27300	2.6		
	201.8	TO-R FRESNO YARD BKYPQ (108.9)	27325	0.0	5.40 AM Leave Daily	8.20 AM Leave Daily
					365	375

EAST- WARD	Mile Post Location	Biola Branch STATIONS SIDING CAPACITIES AND FACILITIES	Station Number	Distance from Biola Jct.	WEST- WARD
	200.5	BIOLA	27315	8.1	
	208.6	Yd. Lmts. BIOLA JCT. P R	27300	0.0	
		(8.1)			

ADDITIONAL STATIONS			
Capacity and Direction of entry into Spurs	Mile Post	NAME	Station Number
8250	P	Manteca.....	26720
3250	P	Ripon.....	26729
..	..	Salida.....	26734
12100	P	West Modesto.....	26745
290W	..	Keyes..... (Spur)	26779
980W	..	Delhi..... (Spur)	26810
5800E	P	Livingston..... (Spur)	26815
3800	P	Atwater.....	26829
..	..	Creegan.....	26861
..	P	Athlone.....	26872
2450	P	Berenda.....	27015
1220W	P	Borden..... (Spur)	27039
Biola Branch			
190W	..	Raco..... (Spur)	27312
190E	..	Rayland..... (Spur)	27306

STOCKTON SUBDIVISION

EAST-WARD	Mile Post Location	STATIONS	Station Number	WEST-WARD
SECOND CLASS		SIDING CAPACITIES AND FACILITIES		Distance from Fresno Yard
430				
Freight				
Leave Daily				
AM 8.00	71.5 82.9	TO-R TRACY BKIYPQ	25300	126.4
	84.9	LYOTH IP	25310	124.4
8.28	100.4	5040 Yd. Lmts. WESTLEY P	25343	108.9
8.36	107.4	2540 Yd. Lmts. TO PATTERSON PQ	25352	101.9
8.50	119.5	2690 Yd. Lmts. TO NEWMAN PQ	25368	89.8
8.55	123.5	2450 Yd. Lmts. GUSTINE P	25373	85.8
9.15	140.4	4500 Yd. Lmts. TO-R LOS BANOS BKPKQ	25395	68.9
9.31	153.0	2100 Yd. Lmts. DOS PALOS P	25410	56.3
9.46	166.2	5040 Yd. Lmts. TO FIREBAUGH PQ	25426	43.1
9.57	174.5	4360 Yd. Lmts. TO MENDOTA YPQ	25440	34.8
10.06	181.9	1910 Yd. Lmts. R INGLE P	27100	27.4
10.20	193.0	5390 Yd. Lmts. KERMAN P	27220	16.3
10.35	202.5	PRATTON P	27236	6.8
10.50 AM	209.3 201.8	Yd. Lmts. TO-R FRESNO YARD BKYPQ	27325	0.0
Arrive Daily		(126.4)		
430				

EAST-WARD	Mile Post Location	STATIONS	Station Number	WEST-WARD
Distance from Riverdale		SIDING CAPACITIES AND FACILITIES		Distance from Riverdale
181.9		1910 R INGLE P	27100	32.7
199.0		2730 HELM	27122	15.6
214.6		730 RIVERDALE	27145	0.0
		(32.7)		

ADDITIONAL STATIONS			
Capacity and Direction of entry into Spurs	Mile Post	NAME	Station Number
450E ..	92.6	Vernalis.....	25336
490E .. P	94.9	Solyo.....	25338
2450 Yd. Lmts. P	113.2	Crows Landing.....	25359
980 .. P	129.3	Ingomar.....	25379
490E Yd. Lmts. ..	135.6	Volta.....	25387
290E .. P	159.8	Oxalis.....	25419
390W .. P	169.0	Benito.....	25431
1960 Yd. Lmts. P	170.8	Cromir.....	25435
830 .. P	205.3	Crayold.....	27240
Riverdale Branch			
580 ..	187.2	Tranquility.....	27107
1560 ..	191.7	San Joaquin.....	27114
.. ..	206.2	Burrell.....	27131

BAKERSFIELD SUBDIVISION

EAST-WARD	Mile Post Location	Coalinga Branch	Station Number	WEST-WARD
Distance from End		SIDING CAPACITIES AND FACILITIES		Distance from End
239.1	239.7	Yd. Lmts. R GOSHEN JCT. YP	27739	55.3
252.5	255.9	3230 Yd. Lmts. ATSF Ry. Xing TO-R HANFORD KPI	27809	42.5
256.3		Yd. Lmts. ARMONA P	27813	39.1
260.8		2840 Yd. Lmts. LEMOORE P	27819	34.6
263.5		R ROSSI P	27825	31.9
273.1		2400 Yd. Lmts. WESTHAVEN P	27852	22.3
279.7		2000 Yd. Lmts. HURON P	27860	15.7
287.0		TURK P	27868	8.4
295.4		Yd. Lmts. TO-R COALINGA KYP	27880	0.0
		(55.3)		
STRATFORD BRANCH				
263.5		R ROSSI P	27825	7.6
271.1		STRATFORD	27840	0.0
		(7.6)		

CLOVIS BRANCH			
Distance from End		SIDING CAPACITIES AND FACILITIES	Distance from End
205.5		Yd. Lmts. FRESNO YP	27330
207.0		ATSF RY. JCT. (Stop)	20.0
Via ATSF RY. and FI RY.			
213.0		FI RY. JUNCTION (Stop)	12.7
214.9		TARPEY	27363
217.4		1910 CLOVIS	27367
225.7		620 ROCKFIELD	27378
		(21.5)	

ADDITIONAL STATIONS			
Capacity and Direction of entry into Spurs	Mile Post	NAME	Station Number
Coalinga Branch			
780W ..	262.4	Cimarron..... (Spur)	27821
.. ..	268.5	Vanguard.....	27850
Clovis Branch			
830 ..	212.9	Las Palmas.... (On Spur from Cameo, FI Ry.)	27358
.. ..	214.2	Hammer Field. (via F. I. Ry.)	27361
320E ..	216.3	Melvin.....	27365
490W ..	218.5	Glorietta..... (Spur)	27369
.. ..	220.9	Pinedale.....	27372
360E ..	223.0	Copper Ave.....	27375

BAKERSFIELD SUBDIVISION

Mile Post Location	STATIONS SIDING CAPACITIES AND FACILITIES		Station Number	Distance from End
	EXETER BRANCH			
205.5	Yd. Lmts. {	FRESNO YP	27330	104.3
207.0		AT&SFRy Crossing IP		
213.0		LOCANS YP	27413	96.8
215.9		CLOTHO P	27416	93.9
219.8	4360 Yd. Lmts. TO-R	SANGER PQ	27420	90.0
227.9		LACJAC P	27428	81.9
228.0		AT&SFRy Crossing (Stop)		81.8
229.9	4110 Yd. Lmts.	REEDLEY P	27430	79.9
235.0	2490 Yd. Lmts. TO-R	DINUBA P	27435	74.8
243.6		AT&SFRy Crossing (Stop)		66.2
257.4	3570 Yd. Lmts. TO-R	EXETER KYP	27460	52.4
264.3	5090 Yd. Lmts. TO-R	LINDSAY P	27615	45.5
268.6	1760 Yd. Lmts.	STRATHMORE P	27625	41.2
274.8	1440 TO-R	PORTERVILLE BKP	28010	35.0
282.6		TERRA BELLA P	28047	27.2
287.1	Automatic Block Signal System {	3380 R DUCOR P	28051	22.7
294.9		3330 R RICHGROVE YP		
299.0		JASMIN P		
309.8		FAMOSO P	28200	0.0

(104.3)

RICHGROVE BRANCH

Mile Post Location	STATIONS SIDING CAPACITIES AND FACILITIES	Station Number	Distance from End
294.9	RICHGROVE YPQ	28059	4.1
297.6	TROCHA	28065	1.4
299.0	JOVISTA	28069	0.0

(4.1)

VISALIA BRANCH

Mile Post Location	STATIONS SIDING CAPACITIES AND FACILITIES	Station Number	Distance from End	
239.1	Yd. Lmts. {	GOSHEN JCT. YP	27739	17.9
245.3		AT&SFRy Xing (Stop) P		
253.1		VISALIA KYP	27520	10.1
263.2	TO-R	EXETER	27460	0.0
257.4				

(17.9)

Mile Post Location	STATIONS SIDING CAPACITIES AND FACILITIES		Station Number	Distance from End
	Buttonwillow Branch			
313.6	Yard Limits {	TO-R KERN JCT. KIP	28280	32.7
316.7		STRADER		
318.8		WIBLE ORCHARD	28325	27.5
322.6		R GOSFORD	28335	23.7
328.4		STEVENS	28340	17.9
346.3		BUTTONWILLOW	28370	0.0

(32.7)

Arvin Branch				
316.6	Yd. Lmts. {	MAGUNDEN P	28505	16.5
324.6		LAMONT		
326.8		RIBIER Y	28529	6.3
328.8		DI GIORGIO	28532	4.3
333.1		ARVIN	28536	0.0

(16.5)

OIL CITY BRANCH				
308.6	Yd. Lmts. {	OIL JCT. YP	28222	3.9
311.6		MALTHA		

(3.9)

ADDITIONAL STATIONS

Capacity and Direction of entry into spurs	Mile Post	NAME	Station Number
90W ..	209.9	Exeter Branch	
.. P	214.5	Goldleaf.....(Spur)	27410
390W ..	227.1	Ivesta.....(Spur)	27415
539W ..	232.3	Uva.....(Spur)	27427
560 P	249.4	Ivanhoe..Yd. Lmts.....	27449
90W ..	262.8	Vance.....(Spur)	27610
780W ..	265.8	Stout.....(Spur)	27620
780E ..	272.2	Lisko.....(Spur)	28005
360E ..	278.0	Lois.....	28042
1120 ..	280.1	Elmco.....	28044
.. ..	291.5	Vestal . Yd. Lmts.	28056
980 ..	295.9	Quality Yd. Lmts.....	28072
680 P	304.8	Hollis . Yd. Lmts.....	28081
1560 P	307.3	Calico . Yd. Lmts.....	28085
340W ..	257.3	Visalia Branch	
		Rector.....(Spur)	27358
1660E Yd. Lmts	315.3	Buttonwillow Branch	
2640E Yd. Lmts.	316.0	Bakersfield Corrals..(Spur)	28310
1420 ..	331.9	Kayandee.....(Spur)	28315
		Rogas.....	28347
580 Yd. Lmts.	316.9	Arvin Branch	
.. Yd. Lmts.	318.3	Algoso.....	28510
630 Yd. Lmts.	321.1	Lonsmith.....	28513
490E Yd. Lmts.	323.5	Harpertown.....	28517
390E Yd. Lmts.	325.9	West Lamont.....(Spur)	28521
		Patch.....(Spur)	28526
1400 ..	310.5	Oil City Branch	
		Seguro.....	28230

BAKERSFIELD SUBDIVISION

EASTWARD				Mile Post Location	STATIONS SIDING CAPACITIES AND FACILITIES				Station Number	Distance from Mojave	WESTWARD				
FIRST CLASS					Automatic Block Signal System						FIRST CLASS				
340 - BRLAT Leave Daily											365 LABRF Arrive Daily		375 LABRT Arrive Daily		
				201.8	TO-R	FRESNO YARD	BKYPQ YP	27325	178.7	AM 5.30	AM 8.00				
				205.5		FRESNO	YP	27330	175.0						
				209.1		CALWA TOWER	IP	27704	171.4						
				216.5	8350	GOBLE	P	27716	164.0						
				223.2	8350	SUN-MAID	P	27723	157.3						
				231.3	8300	TRAVER	P	27731	149.2						
				239.1	11170	GOSHEN JCT.	YP	27739	141.4						
				250.0	8200	TULARE	P	27915	130.5						
				260.4	8350	TIPTON	P	28100	120.1						
				272.4	8350	EARLIMART	P	28114	108.1						
				280.7		DELANO	KPQ	28126	99.8						
				283.1	8350	DELFAK	P	28131	97.4						
				292.6	8350	FAMOSO	P	28200	87.9						
				299.7	8330	CAWELO	P	28209	80.8						
				305.8	8350	SACO	P	28218	74.7						
		PM 11.20		312.9	TO-R	BAKERSFIELD	BKYPQ KIP	28250	67.6	2.59 2.51	5.10 5.01				
				313.6	TO-R	KERN JCT.	KIP	28280	66.9						
				316.6		MAGUNDEN	P	28505	63.9						
				320.1		EDISON	P	28605	60.4						
				325.0		SANDCUT	P	28611	55.5						
				327.9		BENA	P	28615	52.6						
				331.3		ILMON	P	28619	49.2						
				335.1	5160	CALIENTE	P	28624	45.4						
				335.2	13270	BEALVILLE	P	28631	41.1						
				339.5	5400	CLIFF	P	28633	38.3						
				342.3	8390	ROWEN	P	28638	35.1						
				345.5	6150	WOODFORD	P	28642	31.8						
				348.8	3670										
				351.8	5100	WALONG	P	28646	28.8						
				354.1	5500	MARCEL	P	28649	26.5						
				356.6	5500										
				356.7		CABLE	P	28655	24.0						
				360.6		TEHACHAPI	P	29000	20.1						
				362.4	E-5040	SUMMIT SWITCH	YP	29003	18.3						
				370.4		CAMERON	IP	29012	10.3						
				374.3		WARREN	P	29016	6.4						
		1.30 AM		380.7	Yd. Lmts TO-R	MOJAVE	BKIYPQ	29030	0.0	12.35 AM	2.45 AM				
		Arrive Daily								Leave Daily	Leave Daily				
		340								365	375				

ADDITIONAL STATIONS

Capacity and Direction of entry into Spurs	Mile Post	NAME	Station Number
..	208.3	Calwa	27700
..	210.4	Malaga	27707
4150 P	215.1	Fowler	27713
3550 P	220.7	Selma	27721
7000 P	225.6	Kingsburg	27726
3540 P	245.6	Tagus	27910
490E P	255.8	Oetol (Spur)	27925
4300 P	266.8	Pixley	28109

ADDITIONAL STATIONS

Capacity and Direction of entry into Spurs	Mile Post	NAME	Station Number
..	276.5	Radnor	28121
2010E P	284.5	Vinland (Spur)	28135
6960 P	287.0	McFarland	28138
6970 P	295.9	Slater	28204
5600 P	300.5	Lerdo	28211
2060E YP	308.6	Oil Jct.	28222
8870 P	365.0	Monolith Yd. Lmts.	29006

MOJAVE SUBDIVISION

EAST-WARD Mile Post Location	STATIONS SIDING CAPACITIES AND FACILITIES			Station Number	Distance from West Colton	WESTWARD				EASTWARD FIRST CLASS
						SECOND CLASS				
						515 Freight Arrive Daily	517 Freight Arrive Daily	519 Freight Arrive Daily	521 Freight Arrive Daily	
413.8	Yd. Lmts. No. 1-3570 - No. 2-7420 BIKPQ TO-R	PALMDALE		29345	80.4	AM 7.40	PM 1.40	PM 7.40	AM 1.40	AM 1.40
435.1	7560	WASH		29368	59.1	7.18	1.18	7.18	1.18	1.42
451.1		PHELAN		29384	43.1	6.57	12.57	6.57	12.57	1.51
463.0	7480 TO	HILAND	PQ	29396	31.2	6.43	12.43	6.43	12.43	2.01
470.0	7270	CANYON		29403	24.2	6.13	12.13 PM	6.13	12.13 AM	2.07
481.0	7950 TO	DIKE	PQ	29414	13.2	5.28	11.28 AM	5.28	11.28 PM	2.14
489.8	Yd. Lmt. A.B.S. 7420	BENCH	C.T.C. IP	29422	4.4					2.17
491.1		SLOVER		29424	3.1	5.00	11.00	5.00	11.00	2.21
494.2 535.7		WESTCOLTON		BKYIPQ	45500	0.0	4.50 AM	10.50 AM	4.50 PM	10.50 PM	2.31
		(80.4)				Leave Daily	Leave Daily	Leave Daily	Leave Daily	2.38
						515	517	519	521	2.47
										2.57

Mile Post Location	Lone Pine Branch STATIONS SIDING CAPACITIES AND FACILITIES			Station Number	Distance from End	WESTWARD		EASTWARD
						THIRD CLASS		
						701 Arrive Daily	703 Arrive Daily		340 Arrive Daily
380.7	Yd. Lmts. TO-R 2350	MOJAVE	BKYPQ	29030	139.3	AM 10.45	AM 3.30	3.15
380.8	1970	CHAFFEE		29205	138.0			3.20
402.5		CANTIL		29215	116.3			3.27
428.4	2690 Yd. Lmts. R	SEARLES	Y	29240	90.4	9.00 AM	2.00 AM	3.34
447.2	2470	INYOKERN		29250	71.6			3.45
461.5		LINNIE		29260	57.3			3.49
493.3	1230	OLANCHA		29280	25.5			3.52
518.8	1320 Yd. Lmts. TO	LONE PINE	BKY	29299	0.0			3.58
		(139.3)				Leave Daily	Leave Daily	4.09
						701	703	4.25 AM
								Arrive Daily
								340

OAK CREEK BRANCH			
380.7	Yd. Lmts. TO-R	MOJAVE	BKYPQ
			29030
			9.2
389.9		CREAL	
			29120
			0.0
		(9.2)	

Capacity and Direction of entry into Spurs	Mile Post	NAME	Station Number
6480W ..	460.0	Hivolt..... (Spur)	29393
680E ..	408.5	Lone Pine Branch	
..	471.5	Saltdale..... (Spur)	29225
..	475.6	Coso.....	29270
..	475.6	Sykes.....	29275
340 ..	509.2	Bartlett.....	29290

RULE 5. Time at Burbank Jct. applies at end of double track.

See Los Angeles Division current timetable for other train movements between Burbank Jct. and Los Angeles.

MOJAVE SUBDIVISION

Mile Post Location	STATIONS SIDING CAPACITIES AND FACILITIES	Station Number	Distance from Los Angeles	WESTWARD										
				FIRST CLASS		SECOND CLASS								
				365	375	801	515	803	517	805	519	807	521	
				LABRF	LABRT	Freight	Freight	Freight	Freight	Freight	Freight	Freight	Freight	
				Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily
380.7	Yd. Lmts. TO-R MOJAVE BKIYPQ	29030	101.8	AM 12.35	AM 2.45	AM 4.07	AM 8.27	AM 11.05	PM 2.27	PM 3.59	PM 8.27	PM 10.20	AM 2.27	
381.3	EAST MOJAVE	29302	101.2			4.06	8.24	11.03	2.24	3.55	8.24	10.19	2.24	
390.4	8340 TO ANSEL PQ	29312	92.1	12.25	2.35	3.57	8.15	10.54	2.15	3.46	8.15	10.10	2.15	
399.9	8350 OBAN P	29324	82.6	12.15	2.25	3.49	8.05	10.44	2.05	3.36	8.05	10.00	2.05	
405.5	5782 Yd. Lmts. LANCASTER P	29331	77.0	12.09	2.19	3.43	7.56	10.38	1.56	3.29	7.56	9.54	1.56	
409.8	8350 DENIS P	29338	72.7	12.04	2.14	3.26	7.50	10.32	1.50	3.18	7.50	9.48	1.50	
413.8	No. 1-3570—No. 2-7420 TO-R PALMDALE BKIPQ	29345	68.7	12.01 AM	2.10	3.21	7.45 AM	10.27	1.45 PM	3.13	7.45 PM	9.43	1.45 AM	
416.3	4600 HAROLD P	29510	66.2	11.58 PM	2.07	3.17		10.23		3.09		9.39		
420.5	6350 Yd. Lmts. VINCENT P	29516	62.0	11.50	1.59	3.08		10.14		3.00		9.30		
425.0	4160 PARIS P	29521	57.5	11.42	1.42	2.38		9.54		2.40		9.10		
429.0	6090 RAVENNA P	29527	53.5	11.35	1.35	2.15		9.44		2.30		9.00		
434.6	3960 RUSS P	29534	47.9	11.21	1.21	1.58		9.29		2.15		8.40		
438.6	4990 LANG P	29539	43.9	11.12	1.12	1.44		9.15		2.01		8.26		
443.0	4110 HUMPHREYS P	29544	39.7	11.04	1.04	1.34		9.05		1.51		8.16		
443.1	3870 HONBY P	29550	35.9	10.56	12.56	1.26		8.57		1.41		8.05		
446.9	E-5040 W-5480 Yd. Lmts. TO-R SAUGUS IYPQ	40000	32.2	10.49	12.49	1.18		8.47		1.31		7.54		
450.6	8470 NEWHALL IP	40010	29.8	10.45	12.45	1.12		8.30		1.25		7.48		
453.0	6050 SYLMAR P	40030	23.6	10.30	12.30	12.53		8.10		1.05		7.28		
459.2	4600 TO SAN FERNANDO P	40040	21.0	10.27	12.27	12.48		8.05		1.00		7.24		
461.8	3070 PACOIMA P	40050	19.4	10.25	12.25	12.45		8.00		12.55		7.20		
463.4	4260 SUN VALLEY P	40060	14.9	10.20	12.20	12.35		7.50		12.45		7.10		
467.9	TO-R BURBANK JCT. KIPQ	40300	11.2	10.15	12.15 AM	12.25		7.40		12.35		7.05		
471.6	YR BURBANK P	40310	10.7											
472.1	GLLENDALE P	40330	5.7											
477.1	TO-R LOS ANGELES YD. BKYPQ	40400	4.3			12.01 AM		7.20 AM		12.10 PM		6.40 PM		
478.5	DAYTON AVE. TOWER I	40410	2.1	9.15 PM	11.15 PM									
480.7	EAST BANK JCT. I	40420	0.9											
481.9	MISSION TOWER I	40430	0.6											
482.2	LOS ANGELES BKIYPQ	40440	0.0											
482.8	(101.8)			Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	
				365	375	801	515	803	517	805	519	807	521	

RULE 5. Time at Burbank Jct. applies at end of double track.

See Los Angeles Division current Timetable for other train movements between Burbank Junction and Los Angeles.

Time at Vincent will apply for Westward trains at end of double track MP 419.98. Time at Vincent will apply for Eastward trains at end of double track MP 421.33.

Time at Palmdale on Mojave Subdivision applies at Junction Switch at MP 414.42.

ADDITIONAL STATIONS			
Capacity and Direction of entry into Spurs	Mile Post	NAME	Station Number
2450 P	384.4	Fleta.....	29305
2250 P	394.0	Rosamond.....	29317

SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

RULE A. Employees must know they have in their possession copy of Rules and Regulations of the Transportation Department effective January 1, 1969.

RULE M. Fourth paragraph is revised to read as follows: Employees are prohibited from getting on roof of cars except when necessary to make repairs.
Fifth paragraph of Rule M is cancelled in its entirety.

DEFINITIONS

HOLIDAYS are revised to read:

New Year's Day, January 1,
Washington's Birthday, Third Monday in February,
Decoration Day, Last Monday in May,
Independence Day, July 4,
Labor Day, First Monday in September,
Thanksgiving Day, Fourth Thursday in November,
Christmas Day, December 25.

RESTRICTED SPEED is revised to read:

Restricted Speed. Proceed prepared to stop short of train, obstruction, stop signal or switch not properly lined and look out for broken rail, not exceeding twenty miles per hour.

RULE 3. First paragraph is revised to read:

Conductors, yard-engine foremen, engineers and outside hostlers must compare their watches with a standard clock before commencing each day's work. Conductors and yard-engine foremen must, when practicable, compare time with their engineers before starting each trip or each day's work. At first opportunity other members of the crew must compare time with the conductor, yard-engine foreman or engineer.

RULE 10-H. On all branches, except the Ione, Exeter, and Lone Pine Branches, when a yellow flag is required it will be displayed to the right of track in direction of approach one-half mile instead of two miles from structure or track over which speed of trains must be restricted.

RULES 10-G, 10-H and 10-I. When unattended red flags or red lights, yellow flags, red **CONDITIONAL STOP** signs and yellow **PROCEED PREPARED TO STOP** signs are displayed between siding switches, they must be duplicated to right of siding in direction of approach. If clearance between siding and main track does not permit display of these flags or signs to right of track in direction of approach, flags or signs may be displayed to the left of track in direction of approach. Display of these flags or signs to left of track direction of approach must be respected as though they were displayed in accordance with these rules.

RULES 10-H and 15. On all branches, except the Ione, Exeter, and Lone Pine Branches, yellow flags will be displayed one-half mile from point of restriction, and when a torpedo is exploded in the vicinity of a yellow flag displayed in accordance with Rule 10-H, train must proceed expecting to find an unattended red flag that may be displayed one-half mile beyond the torpedo and the yellow flag.

RULE 10-J. Speed signs prescribing an increase in speed will not be installed on branches. Speed Restrictions tables will indicate permissible speeds between mile post locations named.

Second and fourth paragraphs are revised to read:

Speed signs that prescribe reduction in speed will be located two miles from initial point of restriction, and where used to authorize increase in speed will be located at point where higher speed commences. Speed may be increased as soon as rear of train has passed speed sign. Where such signs are not used to authorize an increase in speed, limit of restriction will be shown in timetable.

Certain speed signs have the word "SIGNAL" above the figures. Such signs in advance of signal indicate the speed that must not be exceeded while engine is passing signal two miles beyond the speed sign, unless signal can plainly be seen to be displaying green aspect.

RULE 14(l). Where there are multiple public crossings not more than one-fourth mile apart, sign bearing letter "X" located one-fourth mile in advance of first crossing will display a figure which represents the number of crossings involved.

Whistle signal under provisions of Rule 14(l) must be sounded until engine has passed over last crossing.

RULE 21. First paragraph is revised to read:

Trains must be identified by engine number on lead unit when practicable. Only the number designated for identification will be continuously illuminated when engine is so equipped.

RULE 26. On diesel fueling tracks a blue light will not be attached to reflectorized blue "MEN AT WORK" signs when displayed at night.

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

RULE 83-A. At locations where movements of extra trains or engines are authorized by the use of train register, all lines of each page of train register must be used and filled in before turning and starting a new page.

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

RULE 101. When member of crew has reason to believe train has passed over defect in track or roadbed that may interfere with safe train movement, the following precautions must be taken:

- (1) Train stopped immediately and inspection made to insure train is safe to proceed.
- (2) Train Dispatcher and opposing or following trains must be immediately notified of condition encountered. Train Dispatcher must, if means available, afford protection for opposing and/or following trains until advised that reported defect has been inspected by Maintenance of Way forces.
- (3) To provide such protection, Train Dispatcher will arrange to stop train movements over the reported defect, except when crew that reports the defect indicates conditions allow, movement through the location may be authorized at restricted speed.
- (4) If Train Dispatcher cannot be contacted or if Train Dispatcher cannot afford appropriate protection, crew of train first encountering defect must afford protection.

RULE 102. ADD:

At any time a train in motion has emergency application of air brakes for any cause, before proceeding an inspection of train must be made on both sides to determine all wheels are on rail and no damage or defects in track exist which will interfere with safe movement of train.

RULE 103-A. On tracks other than main tracks where crossing is protected by Automatic Gates or other Automatic Crossing Protection and "STOP" signs are located approximately twenty-five ft. each side of crossing, movements must stop at "STOP" sign and allow gates to lower or other automatic protection to operate twenty seconds before entering crossing.

Trains moving under conditions that may require them to stop must, where possible, stop to clear public grade crossings. When not possible to stop clear of such crossings and train cannot proceed immediately crews on other than passenger trains must cut these crossings within ten minutes unless no vehicles are waiting at or closely approaching the crossing. Public crossings must be left open until it is known that trains are ready to depart. Crews required to pick up, set out or perform switching operations must, when track room exists, stop their trains back a sufficient distance to avoid blocking public crossings when coupling trains and while charging train lines. When recoupling at public crossings, trains shall be moved promptly consistent with safety.

Switching movements over public grade crossings should be avoided whenever possible. If not possible, such crossings must be cleared frequently to allow vehicles to pass and must not be occupied continuously for longer than ten minutes unless it can be seen that no vehicles are waiting at or closely approaching the crossing.

Cars or locomotives must not be left standing nor switches left open within the controlling circuits of automatic gate protection devices unless time-out features are provided to allow the gate arms to rise.

RULE 105. Capacity of sidings column indicates length of train in feet that can be accommodated between fouling points.

Sidings designated "E" in capacity of sidings column are assigned for use by eastward trains; those designated "W" are assigned for use by westward trains. Those designated "N" for North and "S" for South are assigned for use by trains as shown in special instructions for the subdivision on which located.

RULE 211 and Form "N" Train Order:

When operators advance a train at a station under Rule 211, Example (3), the following wording must be used:

"This is S.P. operator (station). I have a Form 'N' train order to advance (train) on main track until (time)."

RULE 221. Light will not be displayed in train-order signals on all branches, except when train-order operator is on duty.

RULE 285. First paragraph under Name and Aspect, is revised to read:

Trains exceeding medium speed must reduce to medium speed before engine reaches the signal if advance view of signal permits.

RULE 286. Where distant signals governing movements on controlled sidings display yellow aspect, train may proceed on siding at restricted speed expecting to find siding occupied by preceding train.

First paragraph under Name and Aspect, is revised to read:

Trains exceeding medium speed must reduce to medium speed before engine reaches the signal if advance view of signal permits.

RULE 290-A. Revised to read:

Indication: PROCEED WITHOUT STOPPING NOT EXCEEDING RESTRICTED SPEED PREPARED TO STOP SHORT OF NEXT HOME SIGNAL.

**RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM
PUSH BUTTONS**

Where signal protection is provided for movements from an adjacent track to main track, push buttons and lights are installed in box near each of the two signals, with time-release feature, to clear signals on one track when the control circuit on the other track is occupied.

Train on main track to let train on siding pass may clear signal on siding by pressing button bearing number of signal on siding. Train on siding to let train on main track pass should not pass Approach Circuit sign, but when necessary to do so, may clear signal on main track by pressing button bearing number of signal on main track. Further instructions posted inside push button box.

ELECTRIC OR MECHANICAL SWITCH LOCKS

Where electric or mechanical switch locks are installed, be governed by instructions posted in telephone booths, on doors or on housings of electrical or mechanical switch locks.

RULE 507. ADD:

On single track within yard limits, when an automatic block signal displays stop indication, engines, after stopping, may proceed at restricted speed under the following conditions:

- (1) When a preceding train is seen in the block, and intervening track is seen to be clear.

- (2) When view of track is clear to end of block.
- (3) After waiting five minutes and no train or engine is seen or heard approaching.

INTERLOCKING

RULE 663-B. Operator may authorize movements under provisions of this rule after it has been ascertained indication lights on control panel are illuminated indicating dual control switches are in proper position and locked for movement without requiring dual control switches to be placed in hand position as required by Rule 772.

When indication lights on control panel are not illuminated movements may be authorized under provisions of this rule; however, before making a facing point or trailing point movement over dual control switches, such switches must be placed in hand position in accordance with Rule 772 and locked until movement over switch has been completed. When movement has been completed, switch must be returned to normal position and selector lever restored to motor position and locked.

When member of crew examines switch to see that points are in proper position for movement, examination must be made on the ground.

RULE 705. HOT BOX DETECTORS

If means of communication is available, engineer must inform conductor and helper engineer, if any, when approaching hot box detector. Crews on helper engine and on rear end of train must acknowledge and advise engineer of indications displayed in addition to taking appropriate action in accordance with applicable rules and special instructions.

Except for emergency situations, train and engine crews must avoid using radio transmitter when within 500 feet from or beyond Hot Box Detector scanner site.

Hot box detector scanner sites have a white light continuously displayed on track side of instrument house, except when a hot bearing is detected, at which time light will start flashing. Crew members must keep a vigilant lookout for light and, when flashing, conductor and engineer must immediately orally compare observation when means of communication is available. Absence of white light must be promptly reported to train dispatcher.

Actuation of hot box detector requires train to be immediately stopped for inspection. To accomplish this without causing journal to seize from the brake application, dynamic brake must be used when practicable. When working power and hot box detector has been actuated, brakes should be applied with an initial reduction, reducing power and applying dynamic brake as soon as possible consistent with good train handling, adding to the reduction as may be necessary to complete the stop.

Instructions follow for operations of hot box detectors when stopped by illuminated letter, flashing white light, or rotating red beacon actuated by hot bearing.

TYPE A. Letter "H" Indicator with Digital Readout.

When letter "H" is illuminated or it is known hot bearing has been detected by crew member observing the flashing white light at scanner site, train must be stopped promptly and inspection made to determine that it is safe to proceed. Where possible, inspection must be made before passing over switches or structures. After inspection train must not exceed 15 MPH from point of inspection until stop is made at location of readout indicator and be governed by instructions posted inside case.

When letter "W" is illuminated train must stop and wait until indicator is extinguished or permission is obtained from train dispatcher to proceed. Telephone located near "W" indicator.

When hot box detector is activated, member of crew must make a physical count of axles from rear of train to axle indicated by digital readout and when hot bearing is not located then all bearings of car indicated by detector as well as five cars on either side of the car involved must be inspected.

When H indicator indicates a hot bearing on train and there is no count shown on hot bearing detector and/or red light below readout marked "Locator Out of Service" is illuminated or when digital readout indicator displays a false indication such as a duplication of numbers or the numbers displayed exceed the number of axles in train, then all bearings of train must be inspected.

SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

After inspection has been completed train dispatcher must be notified of condition found. When it is safe to proceed, member of crew must push button below indicator panel to cancel numbers on the indicator. Case door must be closed and secured with switch lock.

TYPE B. Light Indicator Array.

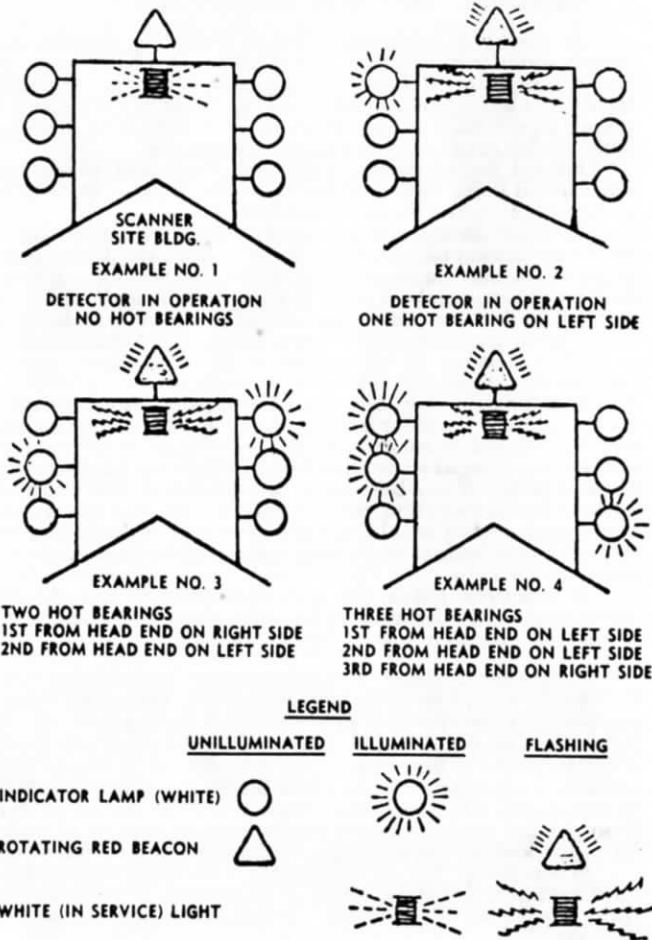
Detector instrument house is equipped with indicator array consisting of white lights and revolving red beacon as shown in diagram.

White light at top center of indicator array will be continuously displayed, except when a hot bearing has been detected, at which time light will start flashing. Absence of white light must be promptly reported to train dispatcher.

Revolving red beacon at top center of indicator array will be normally dark, except when a hot bearing has been detected, beacon will be actuated.

Three vertical white lights are located on each side of indicator array. Lights on right side will be displayed for hot bearings on right side of train, and lights on left side will indicate hot bearings on left side of train, in direction of movement. Top light indicates first hot bearing, second light indicates second hot bearing, and third light indicates third hot bearing. Lights will indicate a maximum of three hot bearings on each train.

HOT BOX BEARING DETECTOR INDICATOR ARRAY



Crew members must keep vigilant look-out when passing these locations, and if hot bearing is detected, train must be stopped promptly, and inspection made to locate car with hot bearing. In addition, truck of car with hot bearing will be sprayed with fluorescent dye marker for identification. All bearings on car marked, as well as car ahead, must be inspected.

When indicator array indicates hot bearing on train, and no dye marker is observed, all bearings of train must be inspected.

TYPE C. Monitor Display Board with Indicator Lights.

A Monitor Display Board and hot box indicator lights, as shown in diagram, are mounted on a signal mast at side of track. As the train passes the detector, the right or left hot box indicator light on top of the board starts to flash immediately upon detection of a hot bearing, indicating the side of the train having the overheated bearing. Two seconds after the train passes the detector, the display board will display numerals indicating the accumulated axle count from the hot bearing to the rear of the train.

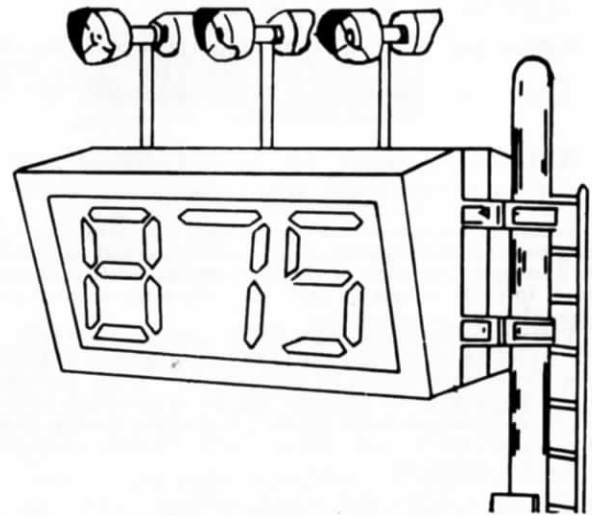
A flashing indicator light in the center indicates that another hot bearing (or bearings) was detected subsequent to the hot bearing which is numerically indicated on the display board. Flashing lights, both left and right but not in the center, indicate two hot bearings, same axle, numerals displayed indicating axle count from that axle to the rear of the train. Flashing center light, together with either the left or right light only, indicates the hot bearings detected were all on the same side of the train. All three indicator lights flashing signify the indicated hot bearing may be on either side and that one of the subsequent bearings was on the opposite side.

The display board is illuminated as train passes and will display zeros in the absence of a hot bearing. Absence of any numerical display after passage of a train must be promptly reported to Train Dispatcher.

Also upon detection of a hot bearing, white light which is continuously lit on equipment house adjacent to Monitor Display Board, will start to flash. Absence of white light must be promptly reported to train dispatcher.

When any indicator light displays flashing white aspect, train must be stopped promptly and inspected. If only one flashing aspect is indicated, the axle number from rear of train shall be inspected plus all bearings of car indicated by detector as well as each adjoining car. If center light displays flashing white aspect, all bearings from count indicated to rear of train shall be inspected on side or sides as indicated by left or right flashing white light. Lights and illuminated numerals will automatically cancel out ninety (90) seconds after entire train passes detector.

When hot box detector is actuated member of crew must make physical count of axles from rear of train to axle indicated by display board. When hot bearing is not located, then all bearings of car indicated by detector as well as five cars on either side of the car involved must be inspected.



TYPE D. Remote Readout by Recorder at Terminal.

Readout is by recorder located at nearby terminal as shown under Rule 705 on each subdivision of Special Instructions.

Hot box detector scanner sites have a white light continuously displayed on track side of instrument house, except when a hot bearing is detected, at which time light will start flashing. Absence of white light must be promptly reported to train dispatcher.

Crew members must keep a vigilant lookout for light and, when flashing, conductor and engineer must immediately orally compare observation when means of communication is available. Train must be stopped promptly, and when means of communications is available, crew member must contact employe at location of recorder to determine location of hot bearing. If location of hot bearing cannot be determined, inspection must be made of all bearings.

REPORTING OF HOT BOXES:

When hot box detectors are actuated, the following information is to be reported at next terminal in telegraph message form identified by symbol H.B. addressed jointly to Superintendent, Division Engineer, Signal Supervisor, and Chief Train Dispatcher, also General Manager—Amtrak, San Francisco, when an Amtrak passenger train is involved:

1. Date and time stopped, and M.P. location.
2. Train identification.
3. Car number and location in train.
4. Box location (1, 2, 3 or 4 from trailing end of car in direction of movement, right or left side).
5. Disposition of car: If set out, state where. If inspection shows that it was not necessary to set out even though bearing was warm enough to activate the detector, advise what corrective action was taken to permit movement of car. If roller bearing equipped, so state.
6. Report all cases where train passes over the detector without an indication having been displayed, but develops a hot bearing between detector and a point 20 miles beyond detector.

CENTRALIZED TRAFFIC CONTROL

RULE 765. First sentence is revised to read:

When necessary to perform switching moves requiring more than one reverse and one normal movement over any main track or controlled siding switch and track is unoccupied, member of crew must request, and train dispatcher will designate, work limits and clock time limit that must not be exceeded.

RULE 776(a). When member of crew examines switch to see that points are in proper position for movement, examination must be made on the ground.

RULE 781. White light which may appear on side of relay housing is maintainer's call light, but when train has been stopped by an absolute signal and white light is observed burning, members of crew will communicate with train dispatcher except when a train is closely approaching.

GENERAL REGULATIONS

RULE 804. ADD:

Employees are, unless authorized by an officer of the Company, forbidden to have in their possession while on the property firearms, concealed or otherwise, or any other weapon considered dangerous.

RULE 810. ADD: Continued failure by employes to protect their employment shall be sufficient cause for dismissal.

RULE 822. Trainmen shall not be inside caboose when caboose is involved in switching moves or when caboose is being coupled to or uncoupled from train.

Ninth paragraph is revised to read:

"When necessary to climb through cars, employes may, when practicable, cross only through those standing cars equipped with end platforms or over the body of an empty flat car. They must not place any part of their body between coupler horn and end sill regardless of whether car is equipped with standard draft gear arrangement, sliding sill arrangement or end-of-car cushioning device. Crossing through moving equipment is prohibited.

ADD: When train is starting, stopping, or moving slowly, employes on train must maintain a secure position to avoid personal injury from possible slack action.

RULE 824. SETTING OUT CARS EQUIPPED WITH AB OR ABD AIR BRAKE EQUIPMENT:

Any time an angle cock is closed in the train where the brake pipe pressure is lower than it is elsewhere, the resultant

equalization will raise the brake pipe pressure at that point sufficient to release the AB or ABD valve. Equalizing the air in the brake pipe will cause release of brakes throughout the cars. Therefore, it is imperative that when cars are set out, regardless of the air brake equipment, a sufficient number of hand brakes must be applied and brake pipe pressure completely depleted by opening angle cock and leaving the angle cock in open position.

RULE 825. A sufficient number of hand brakes must be set to hold cars, and where there are two or more cars, not less than two hand brakes must be set.

Rail skids are hung on posts at locations listed under subdivisions. When using rail skid it must be placed on rail and leading wheel of first car in descending direction run onto rail skid and hand brakes set if brakes are operative before engine is detached. Train crews picking up cars from these locations must remove rail skids, return to proper location and lock in place where locks are provided.

RULES 825 and 883. Cars with short wheel base, less than 30 feet inside length as stenciled on side of car, should not be left standing on main track in automatic block signal territory, interlocking limits, CTC limits nor on CTC sidings unless coupled to another car to prevent possibility of short wheel base car occupying dead section of track.

RULE 827. Engines running light on descending grade without dynamic brake in operation must stop a sufficient length of time to permit wheel heat radiation if there is indication of overheating.

Dragging equipment and/or derailed equipment detector equipment mounted on post adjacent to detector will display revolving red light when detector is actuated. Crew members must keep vigilant look-out when passing and if revolving red light observed, train must be stopped promptly and inspection made of train and track, notifying dispatcher of condition found.

If means of communication is available, engineer must inform conductor and helper engineer, if any, when approaching dragging equipment detector. Crews on helper engine and on rear end of train must acknowledge and advise engineer of indications displayed in addition to taking appropriate action in accordance with applicable rules and special instructions.

During inspection by trainmen, any roller bearing found with one cap screw loose or missing and hot box detector has not been activated and check with tempilstik reveals no overheated condition, train may proceed to the next terminal where car must be set out.

Under the same circumstances, when two or more roller bearing cap screws are found loose or missing, train may proceed with caution to the first available track where car must be set out.

RULE 830. At interlocked railroad crossings at grade, cars or engines must not be cut off nor left within the interlocking limits in such a way as to foul any part of the crossing frogs.

RULE 837. When making yard movements on any work lead or an adjoining track thereto, the movement will have the right to move on the track for which the switches are properly lined. If switch is lined against the movement, or for an adjacent connected track, the movement must not proceed until it is safe to do so. Position of the switches will govern the right of movement regardless whether or not they are spring, rigid, or variable.

RULE 872. Enginemen taking charge of engines at Tracy, Stockton, Fresno, Bakersfield and West Colton will consider engines as having been amply supplied with water, fuel, sand, and other supplies.

RULE 883. Enginemen before leaving locomotive must apply hand brakes on all units, place generator field switch in "off" position, isolate diesel engines on all units except when relieved of this responsibility by an engineman. Blocking chains are required at all locations except within the confines of Fresno and Bakersfield diesel facilities.

When light engines are left on descending grade without an employe in charge at any point on San Joaquin Division, engine must be placed on a track affording derailed protection or on a track that will be protected by an inside switch to prevent movement to main track. In the event the above protection cannot be afforded, engine must not be left unattended.

The first sentence in first paragraph of Rule 883 is revised to read:

When an engine is left without an employe in charge, it must, when practicable, be placed on track affording protection against entry to main track; hand brakes must be fully applied, wheel secured with blocking chain or if not available other suitable blocking material, reverse lever removed from control stand, generator field switch OFF, engine isolated and cab doors locked.

RADIO OPERATING RULES

RULE 958 is revised to read:

Employes shall identify the radio station from which they are calling by prefacing their call with the railroad name, for example: "SP Caboose Train Second 802 calling SP Engine Second 802, over," and to answer a call, announce, for example: "This is SP Caboose Train Second 802, over."

Radio station must be identified at the end of each transmission which exceeds three minutes, except that, in event of continued exchange of communications, identification shall be made at the end of each 15-minute period if the exchange continues without substantial interruption.

RULE 962. First sentence is revised to read:

Radio communication system may be used in lieu of hand, flag or lamp signals prescribed by Rule 12.

RULE 963(d) is revised to read:

Train dispatcher communicating direct with engineer or conductor, after assured train is stopped, may authorize train to pass an absolute signal displaying stop indication within CTC limits as prescribed by Rule 776.

AIR BRAKE RULES

RULE 2. Enginemen taking charge of road engines at Tracy, Stockton, Fresno, Bakersfield and West Colton will consider that condensation has been drained from reservoirs and from moisture and dirt collectors; that sanders are operating properly and that there are no flat spots on wheels.

Dead engines and live engines not equipped with control cables for multiple operation must not be picked up by light engines. If necessary to pick up such engines, they will be picked up only by freight trains or locals.

RULE 2-A. When continuous wheel slip and/or ground relay action is experienced on a unit, the unit should not be isolated and allowed to remain in the engine consist unless inspection definitely reveals that all wheels are rotating freely.

When using engine brake, it must, according to conditions, be operated in such manner as to avoid overheating of brake shoes and wheels.

On departure from maintenance facility, engineers must determine by making running air brake test that the independent and automatic brakes are operating effectively.

RULE 2-B. First sentence in second paragraph is revised to read:

When going from power to dynamic braking proceed as follows:

1. Assure that throttle is in idle position.
2. Move selector lever to 'off' position.
3. Pause 10 seconds.
4. Move selector lever to 'B' or braking position.
5. Use throttle or dynamic brake handle to control strength of dynamic braking as needed.

Dynamic brake on head end of freight trains must not exceed 24 axles.

If the maximum 24-axle limit cannot be adhered to due to units in the consist not having dynamic brake cutout switches, then such units must be isolated prior to using dynamic brake.

When dynamic brake and automatic air brake are used together, the independent brake valve handle must be depressed and held in release position a sufficient time to ensure engine brakes are released.

RULE 3. A full independent brake application on road engine classes EP636, GF628, GF630, GF633, EF623, EF630, EF636 and EF642, results in a brake cylinder pressure of 72 psi. This brake cylinder pressure must be maintained to provide required braking power at very low speeds or when stopped. Under no circumstances must self-lapping portion of independent brake valve be changed except to obtain brake cylinder pressure of 72 psi from a full independent brake application.

RULE 11. Cars equipped with brake cylinder release valve may have one or two operating release rods. Operating rods connected to brake cylinder release valve may be identified by stencil reading "Br.Cyl.Rel.", or by a diamond shaped stencil or by noting that ends of release rod form a small closed circle. Air brakes can be released on cars equipped with brake cylinder release valve by a hard momentary pull on release rod after brake pipe pressure has been depleted.

RULE 12. SETTING OUT CARS EQUIPPED WITH AB OR ABD AIR BRAKE EQUIPMENT:

Rules require that when cars are set out and a sufficient number of hand brakes are applied brake pipe pressure must be depleted by opening angle cock. This method of securing cars is applicable to cars equipped with AB air brake equipment or cars equipped with the latest type of air brake equipment, the ABD valve.

RULE 13. Second paragraph is revised to read:

In case the trouble cannot be corrected or complete air failure occurs from any cause, train must not be moved. Train dispatcher must be promptly notified.

Sixth paragraph is revised to read:

Should the compressor or main reservoir on the lead engine fail the train must be stopped, automatic brakes left applied, dead-engine feature cut in and control of the brakes transferred to the second engine. The train must not be moved beyond the next point where an engine with suitable air equipment can be placed in the lead.

Seventh paragraph is canceled in its entirety.

RULE 14. Engine controlling train must have brake pipe cut off valve in cut in position. Engine(s) not controlling train must have brake pipe cutoff valve in cut out position. 26C Automatic Brake Valve handle must be placed in "Handle Off" position. Handle must be left in this position to be available for emergency application if necessary. Independent Brake Valve must be in and handle in place.

RULE 17. If at any time in engineer's judgment use of retaining valves is required, stop will be made and retaining valves turned up in accordance with his request.

RULE 22. When two or more trains or engines are working at locations where Mechanical Department forces are not on duty, employes must not couple air hoses or go on, under or between cars for the purpose of making repairs until a member of the crew has notified employes on other trains or engines in the immediate vicinity and yardmaster, where assigned, that work is about to be performed and complete understanding had to prevent movement on the affected track.

First paragraph is revised to read:

All trains, except for run-through and unit run-through trains covered in Rule 22-B, must be given inspection and test as specified in this rule at points: (1) Where a train is originally made up (Initial Terminal); (2) Where train consist is changed other than by adding or removing a solid block of cars and train brake system remains charged; and (3) Where train is received in interchange.

ADD: RULE 22-B. Air Brake Tests on Run-Through and Unit Run-Through trains.

Each run through train must be given inspection and test as prescribed by Rule 22 at points: (1) Where train is originally made up (Initial Terminal); (2) Where train consist is changed other than by adding or removing a solid block of cars and train brake system remains charged.

Each unit run-through train must be given inspection and test as prescribed by Rule 22 at points (1) Where train is originally made up and where it is reassembled after being broken up; (2) and once during each round-trip cycle at designated points.

At these designated points inspection and tests must be made to determine the piston travel of a body-mounted 10-inch brake cylinder does not exceed 10 inches; and piston travel on all other brakes must not exceed the nominal travel specified

by more than 2 inches or exceed the maximum travel specified by the badge plate or stencil on the car.

At a point where a block of one or more cars is added to a run-through train or a unit run-through train after the train is originally made up, cars must be inspected and tested as prescribed by Rule 22. At a point other than a terminal where a block is added inspection and tests must be made as prescribed by Rule 24-C.

Inspection and tests made under Rule 22 must be recorded at the time they are performed by completing FRA Form F-6180-48 in duplicate. This form must be signed by employe responsible for the inspection and tests. One copy of the form shall be kept in the cab of the engine until the train arrives at its final terminal. In the event of change of head-end power between terminals, engineer must insure that this form accompanies train.

At locations where the crew of one carrier takes over control and operation of a run-through train or unit run-through train from the crew of another carrier, the receiving carrier shall inspect and test the train to determine that:

- (1) The cab of the engine contains a completed FRA Form F-6180-48.
- (2) Brake pipe leakage does not exceed 5 pounds per minute.
- (3) Brakes apply and release on the rear car from a 20-pound service brake pipe pressure reduction.

If the cab of the engine does not contain a completed Form F-6180-48, the train must be inspected and tested as prescribed by Rule 22 before it proceeds.

RULE 23. The following series of cars are equipped with ABEL brake system which has automatic changeover feature to provide proper brake function when car is loaded and when empty:

SSW 75700-75799	Gondolas
SSW 78500-78599	Hoppers (open top)
SP 333500-334399	Gondolas
SP 337500-337599	Gondolas
SP 345000-345669	Gondolas
SP 354000-354749	Gondolas
SP 463500-464899	Hoppers (open top)
SP 467500-467549	Hoppers (open top)
SP 480000-480193	Hoppers (open top)
SP 491000-491059	Hoppers (covered)
SP 492000-492039	Hoppers (covered)
SP 500604	Flat cars
SP 590000-590099	Flat cars

The following series of cars are equipped with ABDEL brake system, which has automatic change-over feature to provide proper brake function when car is loaded and when empty. This feature is fully automatic on these series and requires no action on part of engineer:

SP 595500-595624	Coil Flats
SP 337600-337699	Gondolas
SP 354750-355099	Gondolas

RULE 33. Loaded cars with empty-load brakes (ABEL or ABDEL) are to be considered the equivalent of one and one-half (1½) cars in determining tons per operative brake.

RULE 60. On descending grades train air brakes must be used in conjunction with dynamic brakes unless air brake application would cause train to either stop or retard speed excessively below that which is authorized.

MISCELLANEOUS

1. Nominal classifications are descriptive of the engines as follows:

- 1st letter Builder: A—Alco; B—BLH; E—EMD; F—Fairbanks-Morse; G—G.E.
- 2nd letter Type of service: F—Freight; P—Passenger; S—Switcher.
- 1st number Number of axles.
- 2nd and 3rd numbers Horsepower (100).
- Last letter Style of unit: A—Car body type with control cab. B—No control cab.
C—SSW.
E—S.P. Equipment Co.
No letter indicates road switcher type.

2. HELPER SERVICE

The following covers engine tractive effort in pounds:

Engine Model	Classification	Tractive Effort Pounds
C415	AS415	62,750
C628	AS628-2	97,750
C630	AS630-1	101,000
DD35	EF850B-1	131,750
GP9	EF418-1 to 9; EF418C-1-2	64,200
GP20	EF420-1, 2; EF420C-1, 2	65,100
GP30	EF423-1; EF423C-1	66,100
GP35	EF425-1, 3, 4, 4; EF425C-1, 2, 3	66,000
GP40	EF430C-1	67,560
RS11	AS418-1-2-3-4-5-6	65,000
RS32	AF420	63,750
RSD15	AS624-1	92,500
SD7	ES615-1-2-3-4	82,500
SD9	EF618-1 to 5; EF618E-1, 2	89,700
SD35	EF625-1	95,540
SD38	ES620-1	104,000
SD39	EF623-1, 2	104,150
SD40	EF630-1, 2	102,750
SD45	EF636-1 to 6; EF636C-1 to 5	103,470
SD45-2	EF636-7-8-9; EF636C-6-7-8	102,600
SD45X	EF642-1, 2	103,240
SDP45	EF636-1	102,500
SW1200	ES412	62,250
SW1500	ES415-1-2-3-4-5-6	65,000
U25B	GF425-1, 2, 3	67,800
U28B	GF428-1	67,890
U28C	GF628-1 z	103,120
U30C	GF630-1, 2	104,850
U33C	GF633-1 to 5	104,710
U50	GF850	139,250

For classification of engines see item 1.

(a) Rule for entraining when only one helper engine:

(1) On trains of less than 100 cars, helper engine consisting of not more than two six-axle operating units totaling 179,400 pounds tractive effort nor more than two four-axle operating units totaling 135,600 pounds tractive effort or a combination of one four-axle and one six-axle operating unit totaling 157,600 pounds tractive effort may be placed behind caboose.

(2) Helper engine consisting of only one unit on trains of 100 or more cars may be placed behind caboose.

(3) Helper engine that does not qualify under (1) or (2) be entrained as near as practicable to shove 1/3 and pull 2/3 of tonnage handled by helper engine.

(b) Trains having more than one helper engine must have each engine entrained as near as practicable so that it will shove 1/3 and pull 2/3 of tonnage handled.

(c) Trains powered with two helper engines, one of which qualifies to be placed behind caboose, must entrain the non-qualifying helper as near as practicable to shove 1/3 and pull 2/3 of tonnage handled by the non-qualifying helper.

(d) Not more than 3500 tons may be placed behind rear helper engine.

SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

- (e) When helper is used on train handling empty coil cars in series SP 595500 to SP 595624, helper engine must be entrained ahead of these cars.
- (f) AS415, AF420, ES412 and ES415 class units must not be cut into train in helper service. No more than two of these units may be placed behind caboose.
- (g) To place helper engine on head end of train, authority must be obtained from dispatcher.
- (h) Air must be cut in on all helper engines and engine must not be coupled nor uncoupled while train is in motion.
- (i) Road engineer and helper engineer must communicate any change affecting the operation of their train when means of communication are available. When communication is not available, and speed is being held above 8 MPH on ascending grade, helper engineer must regulate amperage during speed reductions or speed increases to maintain the amperage indicated before speed change; if speed of train drops below 8 MPH or when coming to a stop on ascending grade, helper engineer must regulate amperage during speed reduction to maintain the amperage indicated before speed change, then close throttle just before train stops.

- (j) When speed of trains powered with 12000 or more horsepower on the head end and with helper engine entrained drops below 16 MPH, road engineer must reduce throttle to Run 6.
Loss of helper unit or units resulting in train speed dropping below 16 MPH and head end power being reduced to Run 6 may result in helper power working in short time rating. The short time rating must not be exceeded. If it appears that short time rating will be exceeded, assistance must be requested from train dispatcher. If assistance cannot be obtained, grade must be doubled.

- (k) In locating helper engine in train, the following example of calculating tonnage for road engine and helper engine will be used.
Example:

Train: 42 loads, 87 empties, 5756 tons
 Four unit road engine (2U30C, 1SD39, 1SD35)
 Three unit helper engine (2SD39, 1SD40)

Total road horsepower	10800
Total helper horsepower	7600
Total horsepower	18400

(1) Divide total horsepower by tonnage =

$$\frac{18400}{5756} = 3.196 \text{ HP/T}$$

(2) Divide road horsepower by HP/T factor =

$$\frac{10800}{3.196} = 3379 \text{ tons}$$
 Road engine will handle 3379 tons

(3) Divide helper horsepower by HP/T factor =

$$\frac{7600}{3.196} = 2377 \text{ tons}$$

(4) To determine 1/3 of helper tonnage divide

$$\frac{2377}{3} = 792 \text{ tons}$$
 Helper engine will shove 792 tons.

(5) To determine 2/3 of helper tonnage multiply

$$792 \times 2 = 1584 \text{ tons}$$
 Helper engine will pull 1584 tons.

3. PLACEMENT OF RESTRICTED CARS IN TRAIN WITH OR WITHOUT HELPER

- (a) Between Illmon and Tehachapi, Russ and Paris, Mojave and Creal, and Helisma and Toyon, empty 70-foot-long or longer equipment must be entrained

ten or more cars behind road engine and ten or more cars ahead of helper engine. A flat with one van or one container, whether loaded or empty, must be considered as an empty.

These instructions will not apply to LABRF, LABRT, or BRLAT.

- (b) When average weight of cars in trains other than locals or switchers, is more than 60 tons per car, do not handle any cars which weigh less than 50 tons within five cars of road engine.
- (c) Flat cars USAX and DODX series 38016-38665 and USAX and DODX series 39095-39199 have been placed in TOPS Pool #0642 and are restricted to movement on rear of train and behind any helper.

4. SPEED RESTRICTIONS FOR ENGINES: Maximum speed shown below is subject to further restriction applicable to certain territories as shown in Speed Restrictions for Trains:

MAXIMUM SPEED AND LENGTH OF ENGINES

CLASSIFICATION	ENGINE NUMBERS	MAXIMUM SPEED EXCEPT#	LENGTH (FEET)
AS600	1000-1002	70	70
ES406	1004	45	44
AS407	1025	60	44
ES408	1100-1128	65	44
ES408B	1150-1153	65	44
ES409	1170-1179	65	44
AS409	1200-1281	60	45
ES410E	1300-1337	65	44
ES615	1400-1442	70	61
AS410	1778-1845	60	45
ES410	1904	60	44
BS412	2101-2157	60	46
FS412C	2250-2261, 2289-2293	65	44
ES412	2218-2223, 2262-2288	65	44
ES412E	2294-2307	65	44
FS412	2350-2394	60	46
AS415	2400-2409	65	54
ES415	2450-2480, 2493-2510, 2523-2578, 2591-2689	65	45
ES415C	2481-2492, 2511-2522, 2579-2590	65	45
AS418	2900-2936	70	57
AS618	2950-2970	70	58
ES620	2971-2976	70	69
EF418	3000-3010	79	56
FP624	3020-3035	70	66
AS624	3100-3102	25*	67
AS618	3110-3120	25*	69
AS630	3140-3153	25*	69
EP636	3200-3209	70	71
EF418E	3300-3398, 3720-3758	70	56
EF418	3413-3640, 3653-3727	70	56
EF418C	3611-3652	70	56
EF618	3816-3964	70	61
AF420	4000-4009	70	57
EF420C	4030-4049	70	56
EF420	4050-4087	70	56
EF618E	4300-4376	70	61
EF618E	4400	70	61
EF423C	5000-5009	70	56
EF423	5010-5017	70	56
GS407	5100-5120	55	37
EF623	5300-5325	70	66
EF425C	6500-6519, 6680-6681	70	56
EF425	6520-6679	70	56
GF425	6700-6767	70	60
EF525	6900-6928	70	61
GF428	7025-7028	70	60
AF628	7100-7128	70	69
GF628	7150-7159	70	67
EF430C	7600-7607	70	59
GF630	7900-7929	70	67
EF630	8300-8306, 8350-8356	70	66
EF630	8400-8488	70	66
GF633	8600-8785	70	67
EF636	8800-8963, 8982-9051, 9069-9151, 9166-9260, 9302-9343	70	66

SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

CLASSIFICATION	ENGINE NUMBERS	MAXIMUM SPEED EXCEPT#	LENGTH (FEET)
EF636C	8964-8981, 9052-9068, 9152-9165, 9261-9301	70	66
EF642	9500-9505	70	71
EF850B	9900-9902	70	88
GF850	9950-9952	70	81
Amtrak Locomotives:			
EP415A	SP Model F7	79	51
EP415B	SP Model F7	79	50
	UP Model E8, 9A	70	51
	UP Model E8, 9B	70	70
	Any locomotive not listed	35	....

D&RGW & UP diesel units, when used, will be permitted maximum freight train speeds but will not exceed maximum speed stenciled in cab of each unit.

#When operated in multiple unit control, on head end of train or running light and engineer is in other than the leading control cab in direction of movement, speed must not exceed 30 MPH. 'A' type units (indicated by letter 'A' following classification numerals) operating in reverse as lead unit in direction of movement must not exceed 30 MPH.

*May be handled isolated in multiple, dead in multiple, or dead in train at maximum speed of 70 MPH.

Nominal Classification	Maximum Speed	Maximum Speed Running Backward with Train or Light
AT&SF Ry: 11 to 90, 300 to 314, 325 to 344	79	45
AT&SF Ry: 100 to 289, 401 to 430, 700 to 751, 2650 to 2893	65	45
AT&SF Ry: 2310 to 2399	45	30

Engines handled dead must not exceed speed shown in table.

5. OTHER INSTRUCTIONS

(a) Light engines are authorized to operate at Column 1 speeds not exceeding 65 MPH except on descending grade without dynamic brake in operation must not exceed Column 2 speeds.

(b) Dead diesel locomotives weighing 100,000 pounds or more will be placed first behind locomotive handling train; locomotive weighing less than 100,000 pounds must be placed near rear of train.

(c) Dead or disabled engines, and equipment listed in timetable which requires movement at reduced speed must first be reported as ready to move to the chief train dispatcher, who will designate the train in which the engine or equipment is to be moved. Any such engine must not be handled in train until train-order designating maximum speed is issued.

(d) Engines operated with engineer in other than lead unit in direction of movement, must not exceed 20 MPH when approaching highway or street crossing at grade, subject to further restrictions imposed by local conditions.

(e) Movement of foreign line engines, in service or dead in train, must not be authorized until provisions of current Line Clearance Circular have been complied with.

(f) When a unit or units in locomotive consist emit excessive smoke through exhaust stacks other than from a cold start, prompt report must be made to train dispatcher who will arrange to notify roundhouse foreman or locomotive maintenance forces on duty at first maintenance facility where train is scheduled to stop. Unit number, time and location where excessive smoking of unit was first observed should be reported.

(g) When a yard engine is observed emitting excessive smoke report must be made to roundhouse foreman or locomotive maintenance forces on duty.

(h) In addition to (f) and (g) above, engineer should make appropriate entry on work report, Form CS 2326.

(i) AS415, AF420, ES412 and ES415 class engines must not be moved dead in train. These units must be MU'ed in engine consist.

(j) When only AS415, AF420, ES412 and ES415 units are used in engine consist, not more than two units may be on the line when making a reverse movement with cars or train and must be located adjacent to the train.

(k) When operating with mixed engine consist, where dynamic brake is required, not more than two AS415, AF420 and ES415 units will be used.

(1) If one unit is used, it will be placed as the second unit.

(2) If two units are used, units must be placed as the second and third units in consist.

(3) A road unit must be coupled against the train.

(4) If necessary to make a reverse move with cars or train, lead unit must be isolated.

(l) ES412 class units 2212-2257 will not be used in mixed consist account not equipped with #24 MU wire.

(m) If necessary to operate with more than two AS415, AF420, ES412 and ES415 class units in consist (including pick up units from outlying points), these units must be placed in the lead. Under these conditions, if reverse move is made with cars or train, all units ahead of the two rear units in these classes will be isolated.

(n) Extreme caution must be used during dynamic braking or when making reverse moves to prevent jackknifing and track damage.

(o) Not more than ten diesel units in operation may be used on head end of any freight train.

(p) MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT	MPH MAIN TRACKS OTHER THAN BRANCHES	MPH MAIN TRACKS ON BRANCHES
Double or triple loads	....	25
Scale test cars, except:	40	30
SPMW 2024, WO-3	65	49
NBS-1	60**	....
Relief outfits with steam derrick, except:	45	25*
Nos. 7007 and 7034	35*	25*
Between Fresno and Famoso via Porterville	25	....
Relief outfits weighing in excess of 120 tons must not be operated on any branch except Lone Pine and Oak Creek Branches.		
Nos. 7000 and 7010 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.		
K&J, Pedestal or center-hinged air-dump cars (except SPMW 5100 to 5289 loaded or empty)	35*	....
Locomotive cranes:		
(SPMW 4027, 4080, 4088, 4091, 4542, 4543, 5479, 5595, 5849, 6601 and 6602)		
With Boom disconnected and counterweight forward, except:	45	25*
SPMW 5595	40	25*
With Boom disconnected and light end forward	20*	15
With Boom in place, either end forward	25*	15
Steam Pile Drivers:		
(SPMW 3402)		
With leads removed and secured	45	25*
(SPMW 4052 and 4053)	35	25*

* These speeds must not be exceeded, and on curves where authorized speed is more than 15 MPH speed must be reduced to 5 MPH less than shown in timetable and on speed signs.

**To be handled in trains not more than 20 cars ahead of cabooses.

SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

(q) OTHER MAXIMUM SPEEDS	MPH PASSENGER TRAINS	MPH FREIGHT TRAINS
Trains of deadhead equipment, with caboose.....	65	....
Passenger trains, with caboose.....	65	....
Engine and caboose only, except..... must not exceed speed for same engine running forward light.	....	65
SP595500-595624 (coil steel flat cars).....	....	45

(r) When moving against current of traffic, or when movement is not protected by block signals, speed of passenger trains and light engines must not exceed 59 MPH, and speed of freight trains must not exceed 49 MPH, nor may speed exceed that applying to normal operation.

(s) Unless otherwise authorized, trains handling passenger cars with flat spots on wheels in excess of $3\frac{1}{4}$ inches in length must not exceed 10 MPH. When flat spots are not in excess of $3\frac{1}{4}$ inches long such cars may be operated at maximum authorized speeds.

(t) Flat cars loaded with copper anodes must not be handled in trains unless cars are equipped with side cleats.

(u) Cars SPMW 6400-6439 (100-ton Air Dump) have gross weight of 263,000 pounds (car and contents). These cars are not to be operated on lines shown in each Subdivision where allowable gross weight is exceeded. These cars are not to be dumped on curves of 25 degrees or more, or operated through curves of 35 degrees or more.

(v) Forward brakeman on freight trains will ride the lead unit when a seat is available.

(w) Except when handling cabooses on or near the head end in local or road switcher service and when handling only a few cars, cabooses are not to be moved other than at rear of train.

(x) Flat cars SP-595500 to SP-595624, inclusive, loaded or empty are restricted to 45 MPH.

(y) Penn Central gondolas PC-598500 to PC-598999, inclusive, loaded or empty are restricted to 45 MPH.

RULE 7-A. Fresno Yard: Trains entering or leaving yard tracks must receive proceed signal from switchman, green flag by day, green light by night, except within limits of diverging route signals, or engineer is orally authorized.

RULES 10-G, 10-H and 10-I. When unattended red flags or red lights, yellow signals, red **CONDITIONAL STOP** signs and yellow **PROCEED PREPARED TO STOP** signs are displayed between El Pinal and Akers on Track No. 1 for eastward movement, or on Track No. 2 for westward movement, they will be displayed to left of track in direction of movement.

RULE 10-J. Speed signs to left of track.

Eastward	Reading
MP-72.25	70-60
MP-110.60	65-60
MP-147.70	45
Westward	Reading
MP-199.28	70-60

RULE 82-A. Trains to San Joaquin Division at Polk, originating at Sacramento or Roseville, must obtain two clearances, one endorsed Sacramento Division, the other endorsed San Joaquin Division. Train orders addressed to such trains at Sacramento or Roseville will apply the same as if addressed to them at Polk.

Trains originating on San Joaquin Division may be issued train orders over the initials of San Joaquin Division Chief Dispatcher which will apply on Sacramento Division between Polk and Roseville.

RULES 82-A, 83 and 83-A. Extra trains operating on designated Branch Lines and originating as follows will display numbers as extra trains on entire trips as indicated by number of lead unit leaving originating point, and are authorized to operate as extra trains on those Branch Lines without obtaining clearances:

Branch Line	Originating Point
Oakdale	Stockton
Kentucky House	Lodi
Ione	Lodi
Biola	Fresno Yard

Extra trains operating on designated Branch Lines, in addition to information required by Train Register at specified locations, must register destination of trip (turning point) and date of departure in column captioned "Signals Displayed." When trip has been completed, date of arrival at register location must also be entered in column captioned "Signals Displayed." Extra trains enroute into these territories must not leave train register locations until it has been ascertained from Train Register that all preceding extra trains via the route to be used have completed their trips and registered their times and dates of arrival at train register locations. Flag protection is not required for trains operating on these Branch Lines beyond the train register locations.

Branch Line	Train Register Location	For Trains Operating Beyond
Oakdale	Stockton	MP 94.40
Kentucky House	Victor	MP 107.50
Ione	Galt	MP 112.10
Biola	Biola Jct.	MP 208.44

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

Sacramento	Trains originating or terminating.
Victor	Trains beyond Victor via Kentucky House Branch.
Galt	Trains via Ione Branch originating or terminating.
Biola Jct.	Trains via Biola Branch originating or terminating.
Ingle	Trains required by train order.

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

Stockton.....All trains except trains via Oakdale Branch.

At Stockton trainmen and enginemen should be on the lookout for messages to be picked up if light is showing in Train-Order stand.

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

West MP		East MP
78.50	Tracy (Martinez-Westside Line)	85.64
66.50	Tracy (Niles-Polk Line)	74.37
99.10	Westley	101.10
105.85	Patterson	108.62
112.00	Crows Landing	114.50
117.95	Newman	121.05
122.50	Gustine	124.60
134.20	Los Banos	142.01
152.20	Dos Palos	155.00
164.94	Firebaugh-Mendota	178.50
181.10	Ingle	182.50
	Ingle (Riverdale Branch)	End of track
192.46	Kerman	194.53
203.00	Fresno (Westside Line)	
199.34	Fresno (Valley Line)	209.00
208.44	Fresno (Biola Branch)	
85.09	Stockton	92.17
	Stockton (Oakdale Branch)	94.40
103.53	Lodi (Kentucky House Branch)	107.50
103.51	Lodi (Woodbridge Branch)	End of track
131.60	Sacramento (Polk Line)	

Tracy: Flashing white light installed at MP-74.4 between Tracy and Lathrop controlled by switchmen from control panel located at the base of yardmaster's tower and on east side of Signal 735. All westward freight trains will not proceed by MP 74.4 unless flashing light displayed. After receiving flashing light, will then be governed by aspect displayed on Signal 735 to enter yard. Movement into yard tracks must not exceed 8 MPH so as to allow verification of train passing Signal 735.

Fresno Yard: Trains entering or leaving yard tracks must receive proceed signal from switchman (green flag by day, green light by night), except within limits of diverging route signals, or engineer is orally authorized.

Oakdale: Trains and engines must move with caution between F and G Streets expecting to find main track occupied by Sierra Ry. trains or engines.

RULE 97. Westward extra trains originating Fresno Yard to operate via Valley Line need not obtain train order authority but must obtain a clearance.

RULE D-97. Applies on both main tracks between Lathrop (MP 81.30) and El Pinal (MP 92.32).

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,

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

Brandywine...CCTCo., crossing of Kentucky House Branch.

Oakdale.....AT&SFRy, crossing of Oakdale Branch. MP 116.7 on

Ione Branch. CCTCo., crossing of Ione Branch.

RULE 99. Rule 99 will not apply in following areas:
 Oakdale Branch...Between MP-94.40 and end of branch.
 Kentucky House Branch.....Between MP-107.50 and end of branch.
 Ione Branch.....Between MP-112.10 and end of branch.
 Biola Branch.....Between MP-208.44 and end of branch.

SPECIAL INSTRUCTIONS—STOCKTON SUBDIVISION

RULE 103-A. Automatic crossing gates:

Automatic protection (controlled by single track circuit with "Stop" signs at control limits) exists at following crossings:

Location	Crossing No.	Track	Protection
Manteca	B-96.9	Yard	Gates
Calla	*B-98.52-C	Spreckels	Gates
Salida	B-106.4	Spur	Gates
Modesto	*B-112.3	Stor.; #2 Siding	Gates
Livingston	B-136.5	Drill track	Gates
Madera	#B-183.9-C	Spur	Fl. Lights
Firebaugh	BA-166.2	Siding	Gates
Firebaugh	BA-168.6-C	Britton	Fl. Lights
Cromir	BA-170.2	Drill	Gates
Kerman	BA-193.5	Siding	Gates
Tomspur	#D-98.1	Spur	Gates
Oakdale	DC-122.3	House	Gates
Rancho Seco	DG-124.3-C	SMUD Spur	Gates
Stockton (Port)	DK-92.41-C	Spur	Gates

*Westward movements only.
#PUC Order.

Members of crews should assure themselves that crossing protection is operating (and gates are down where they exist) before entering crossing or crossing is protected by member of crew.

Los Banos: Crossing gates installed on crossings Mercy Springs Road, MP-141.2, and State Highway MP-141.3. Trains or engines switching in this area must not enter crossing until revolving yellow beacon, located on mast on north side of track between the two crossings, is actuated.

Turlock: Switching must not be done over Main and Olive Street crossings between hours of 12 Noon and 1:00 PM. No switching to be performed over Marshall Street except for spotting or removing of cars to or from industries served by these tracks.

Fresno: Eastward freight trains changing crews at Fresno, must stop to clear insulated joints located just west of Tulare Street unless otherwise instructed by yardmaster or his representative.

At the following locations, trains moving under the provisions of Rules 771 and 776 must not enter the crossing until protection for vehicular traffic has been afforded by a member of the crew, or it is known that automatic warning devices are operating:

Station	Location	MP
Lathrop	Lathrop Road	82.1
Modesto	Butchertown Spur	114.7
Turlock	Fulkerth Road	124.9
Arena	West Siding Switch (Arena Way)	139.0
Merced	"D" Street	151.3
Chowchilla	West Siding Switch (King St.)	168.0
Chowchilla	West Siding Switch (Robertson Blvd.)	168.1
Biola Jct.	Biola Branch (Old Highway 99)	208.5
Lodi	Woodbridge Rd.	105.1
Lodi	Lodi Ave.	102.1

Public Utilities Commission orders prohibit operation of train, engine, motor or car over the following crossings unless first brought to a stop and traffic on the highway protected by a member of the crew:

- Lodi..... Crossing Oak St., D-103.25, and Pine St., D-103.3 on yard tracks,
- Woodbridge. Crossing Woodbridge Road on General Mills spur, DE-105.3-C,
- Carbondale.. Crossing County road when on industry track, DG-132.1,
- Modesto... Tully Ave., on Grange Co. spur, B-112.25-C,
- Modesto... B St. on Shoemaker spur, B-113-55-C,
- Vernalis... Crossing on Spur No. 6890, BA-93.0,
- Los Banos... Crossing 2nd and 4th Sts., on drill crossovers and storage tracks, BA-140.1, BA-140.2,
- Firebaugh... Crossing 12th St., on drill and spur tracks, BA-166.2,
- Helm..... County road crossing on Spreckels Sugar Co. track, BAO-199.1.

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

- Ingle..... Riverdale Branch, for Branch.
- Fresno Yard. End double track, for westward track.
- Fresno..... Westside Line, for eastward main track.
- Fresno..... Stem of Wye for West Leg Wye.
- Lodi..... Woodbridge Branch, for Lathrop line.
- Lodi..... Yard track, for Kentucky House Branch.

Derails on main track.

Location	MP
Kentucky House	142.2

Madera. (Winery spur). MP-187.06.

Derail installed 100 ft. ahead of gates at Madera Glass Company plant to protect LPG tank car unloading. Do not close derail nor enter plant to do switching until it has been determined that no tank car is connected for unloading.

RULE 104-A. Tracy: Westward freight trains approaching east end Tracy Yard must run expecting to find main track switch lined for movement into yard tracks.

Yellow switch targets and keepers have been installed on main tracks switches at the ends of the following branch lines:

- Kentucky House Branch... MP-142.6, Kentucky House
- Biola Branch..... MP-200.5, Biola
- Riverdale Branch..... MP-214.6, Riverdale

RULE 104-F. Between El Pinal and Polk at locations where entrance to main track is governed by automatic block signals, Rule 778 will apply.

RULE 105. Manteca-Calla:

Manteca Track No. 1 extends from MP 96.73 to MP 97.72. Calla siding extends from MP 97.74 to MP 99.44, is CTC controlled siding, capacity 8350 ft. Crossover at west end Calla siding is equipped with dual control switch machines. Westward absolute siding signal at west end Calla siding is three-unit signal.

Top unit governs movements to Manteca Track No. 1. Center unit governs movement to main track. Lower unit, when displaying lunar aspect, governs movements to Manteca Track No. 1 per Rule 289.

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

RULE D-251. Will apply:

- On eastward track: Lathrop to MP 92.2.
- On westward track: MP 92.2 to MP 81.24.
- On both tracks between Fresno Yard and Calwa Tower.

RULE 291. Lathrop: Flashing yellow aspect governs movements to east or west leg of wye at Fresno end of wye. Flashing yellow aspect on eastward signal at west junction switch and westward signals at west junction switch on Valley Line and Westward Main.

RULE 306. The following block signals equipped with triangular plate bearing the letter "P" have included in their control limits some special protective device. Absolute and interlocking signals are listed as "P-A," "P-SA" or "P-I."

Eastward Signal	Protection	Westward Signal
TRACY-FRESNO (WESTSIDE LINE)		
P-710	Spring switch, junction to Westside Line, Tracy	
	Spring switch to yard, Tracy	P-829
P-1164	Flood detector at MP-116.60, Newman	P-1179
P-1372	Flood detector, MP-137.80, Volta	P-1387
P-2046	Barricade detector, MP-204.60, Fresno	P-2051
TRACY-POLK LINE		
	Spring switch to Freight Lead, MP-75.9 (Polk Line)	P-SA
	Spring switch, Stockton wye	P-I
LATHROP-FRESNO (VALLEY LINE)		
P-1972	Spring switch, Crossover Biola Jct.	P-A
P-2042	Barricade detector, MP 204.6	

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

Tracy: Trains moving on main track in either direction will move between junction switch MP-70.62 and P-SA Signal MP-75.9, beginning CTC, by block signals whose indications will supersede the superiority of trains.

Top unit of Signal P-710 governs movements toward Lathrop. Bottom unit governs movement toward Los Banos. Signals 713, 825 and 827 are approach clearing. Signal 713 will revert to stop position when 600-ft. track circuit in front of station building is occupied for approximately four minutes. A second approach circuit is located at MP 71.39, 185 feet east of MacArthur Blvd., to clear Signal 713 for movements to be continued.

Approach circuit to Signal 825 on Track No. 1 begins 185 feet east of MacArthur Blvd.

Approach circuit sign is north of main track 185 feet east of MacArthur Blvd.

Top unit of Signal P-829 governs movements on main track. Bottom unit governs movements to yard.

Signals 716 and 723 on Track No. 1 at crossover near MP 72 govern movements over crossovers to enter main track only. These signals will not be lighted when crossovers are lined normal. Time circuits are provided to cut out west control of Signal 716, 2 minutes and 40 seconds after crossover is lined; east control of Signal 723, 6 minutes and 10 seconds after crossover is lined; and west control of Signal 736, 5 minutes and 20 seconds after crossover is lined. If signals fail to clear at expiration of time interval, Rule 507 will govern.

Top unit of Signal 735 governs movements on main track. Bottom unit governs movements into yard over crossover.

Top unit of Signal 736 on Track No. 1 governs movements to the freight lead. The center unit governs movements to the main track. The bottom unit, when displaying a lunar light governs movements to the Freight Lead per Rule 289.

Eastward trains moving on main track must not pass Signal 734 and eastward trains entering main track through crossover MP 73.5 must not pass Signal 736 until signal governing movement displays proceed indication or permission obtained from Train Dispatcher. When Signal 734 displays proceed indications, eastward trains on main track may proceed to Centralized Traffic Control limits MP 75.81, and when Signal 736 displays proceed indication, eastward trains entering main track through crossover are authorized to enter main track and proceed to Centralized Traffic Control limits MP 75.81.

When westward P-SA Signal at MP 75.9 displays proceed indication, westward trains are authorized to proceed on main track to Signal 735, Tracy Yard.

When Signal 816, approach signal to West End Tracy displays stop indication, eastward trains may proceed after receiving oral authority from Operator at Tracy but must comply with Rule 507.

RULE 505. PUSH BUTTONS

Tracy: Push buttons are located on Signal 827 on West side line, and instrument case east of MacArthur Blvd. on Lathrop line to clear signals over junction switch.

Push buttons are located on instrument case opposite Signals 828 and 826, Westside line, west of spring switch to yard.

RULE 538. SPRING SWITCHES

Spring switches equipped with facing point locks are located as follows:

Location	Normal Position
Tracy Junction switch MP-71.16 to Westside Line	Lathrop Line
Tracy MP-75.9 Freight Lead to Main Track	Main Track

Spring switches not equipped with facing point locks are located as follows:

Location	Normal Position
Biola Jct. East Switch of Crossover	Freight Lead
Tracy MP-82.98 Westside Line to yard	Yard Track
*Stockton West Leg of Wye	West Leg of Wye

*Has ground throw switch stand below plate at switch. Not equipped with target bearing letters "SS."

Switch point indicator located at:

Fresno Yard Spring switch leading from Freight Lead to Track No. 31 west of Ashlan Avenue.

RULE 605. INTERLOCKING

Tracy: Limits extend from westward SA Signal at MP 70.68 to eastward SA Signal at MP 70.62 on the Niles line and to eastward SA Signal at MP 82.18 on the Martinez line.

Position of the junction switch between Niles Subdivision MP 70.66 and Martinez Subdivision MP 82.16 controlled by switchman from control panel located at the base of the Yardmaster's tower.

The junction switch between Niles Line MP 70.66 and Martinez Line MP 82.16 is equipped with a dual control machine. When necessary to hand throw this switch, permission must be secured from the Yardmaster and Rules 771 and 772 govern.

Interlocking portion of the SA signal controlled by Tracy Telegraph Operator.

The telegraph operator shall determine that switch has been lined for proper route before clearing a signal.

Stockton: AT&SF Crossing Sacramento and Taylor Streets:

Limits of Stockton Tower include that portion of main track, siding and crossovers on the AT&SF Ry. to Stockton Public Belt Railroad, at AT&SF MP-1122.97. Signal indications supersede the superiority of trains in both directions on both tracks. At Lincoln Street, MP-1121.75 signals and power switch to Port Lead are controlled from Stockton Tower. Tower telephone located near Lincoln Street signal. West end of Fibreboard support tracks diverge from Port Lead at MP-1121.90 and converge with Port Lead at MP-1122.14. Fibreboard spur track diverges from Port Lead at MP-1122.17. The Washington Street Yard Lead diverges from the Port Lead at MP-1122.20. Crossover also exists between AT&SF Ry. main track and Port Lead at MP-1122.28. Signals and power switches at crossover are controlled from Stockton Tower. Tower telephone located near east switch of crossover. West end of setout track diverges from Washington Street Yard Lead at MP-1122.21, east end of set-out track converges with Port Lead track at MP-1122.54.

The movement of trains and engines in this territory is under the control of Stockton Tower, who may issue instructions as required and must be advised in advance of any movement of trains and engines to the AT&SF main track and also advised of any known condition that will delay the train or engine or prevent it from making usual speed.

Crews will not leave the Port of Stockton yard (in area of yard office) without securing authority of Stockton Tower Interlocking Operator. This authority may be obtained orally, or through Yardmaster at Port of Stockton.

Speed limit between Stockton Tower and Stockton Public Belt Railroad is 20 MPH; through turnouts and crossovers—12 MPH.

Following fixed signals and indications are effective in above specified territory, and between Stockton Tower and AT&SF Ry. Mormon Yard:

- RED Stop and communicate with Stockton Tower for instructions.
- FLASHING RED Proceed prepared to stop short of train, obstruction or switch not properly lined, but not exceeding 20 MPH.
- RED OVER YELLOW . . Same as flashing red.

S.P. movements entering AT&SF interlocking limits at Commerce Street may disregard the letter A on signal governing entrance thereto as it applies to WP movements only.

SPECIAL INSTRUCTIONS—STOCKTON SUBDIVISION

Following whistle signal will be observed at Stockton Tower:

To and from SP and AT&SF yards	0 0 0 -
From SP to AT&SF enroute Commerce Street ..	0 - 0.
For Middle Track	0 - -
For Old Siding	- 0 0.
For Westward Main Track	0 0 - -
For Eastward Main Track	- 0 - -
From SP to AT&SF enroute Lincoln Street ..	0 - 0 -

Enginemen of eastward trains that are to make through movement without stopping at Stockton Yard will sound whistle signal --- 0 --- while approaching Signal 876 east of W.P. Railroad crossing French Camp.

Stockton: WPRR crossing Weber Avenue and Union St.: Signals governing movements over WPRR track at MP 91.00 are under control of WPRR train dispatcher. When signals governing movement over crossing display stop indication after approach circuit is occupied or if signal governing movements out of Building Materials Distributors spur does not display proceed indication after switch and derail have been lined, a member of crew must contact WPRR train dispatcher for permission and instructions to operate push button time release.

Eastward trains via Oakdale Branch must not leave yard until authorized by yardmaster or his representative.

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

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

Dual control switches within interlocking limits are under the control of signal operator. When necessary to hand-throw these switches, permission must be obtained from signal operator and be governed by Rules 771 and 772.

At all interlockings, when route lined is not to be used, following engine whistle signal will be sounded: o o - o o.

RULE 660. AUTOMATIC INTERLOCKING

French Camp, WPRR Crossing MP 87.85. Interlocking limits: Interlocking signals 500 feet west of and 430 feet east of WP crossing on eastward main track. Interlocking signals 430 feet east of and 380 feet west of WP crossing on westward main track. Interlocking signals 240 feet west of and 210 feet east of WP crossing on the drill track.

Lyoth: WPRR crossing, MP 85.16. Limits extend from eastward SA Signal 825 feet west of crossing to westward SA Signal 590 feet east of crossing.

Signals are approach clearing, if movement over crossing is not completed within 8 minutes after train enters approach circuit, signals will revert to STOP position. Approach circuits to re-clear SA signals are located 1,050 feet in advance of eastward signals and 500 feet in advance of westward signals.

Cars or engines are not to be left standing on these circuits. Push button time release in box marked "SP" and block indicator marked "WP" are installed near crossing.

Instructions for operating time release are posted in box. If signal indicates STOP for train desiring to make movement over crossing, a member of crew will proceed to crossing to operate time release. If block indicator marked "WP" indicates block clear, press push button until yellow light appears, then release. Approximately 8 minutes later a red light should appear under the button and signal indicate proceed.

If signal displays flashing red indication per Rule 290-A, train may proceed through interlocking limits.

If home signal indicates STOP per Rule 290, Figure E, and red indicator light cannot be actuated, train may proceed over crossing as provided for in Rule 663(c).

RULE 705. LETTER TYPE INDICATORS

Indicators located:

Illum. Letter	On Signal Approaching	Authorizes and Requires Movement as Follows:
S	Post at east switch Covell.. West Modesto	Take siding at West Modesto
S	Absolute Signal MP 114.9.. Modesto	Take siding at West Modesto

RULE 705. HOT BOX DETECTORS

Refer to Rule 705 All Subdivisions.

SCANNER SITE

MP	Type	Direction	Location
97.6	C	East and West	Akers-Lodi
119.5	A	East and West	Elk Grove-Need
102.3	A	East and West	Calla-Covell
121.1	A	East and West	Ceres-Turlock
144.7	B	East and West	Arena-Fergus
161.2	A	East and West	Lingard-Chowchilla
193.6	D	East	*Irrigosa-Biola Jct.
103.6	A	East and West	Westley-Patterson

*Recorder at Fresno Yard, Car Foreman's office.

TYPE "A" HOT BOX DETECTOR LETTER TYPE INDICATOR AND READOUT LOCATIONS

Illum. Letter	On Signal	Approaching	Location of Readout
H	1177	Need	MP 114.5 Need
W	1178	Elk Grove	
W	1197	Need	
H	Eastward Absolute.	Elk Grove	MP 122.9 Elk Grove
	Signal W.E.		
W	1006	Ripon	
H	1007	Calla	Westward Absolute Signal W.E. Calla
W	1031	Calla	
H	1058	Salida	Eastward Absolute Signal E.E. Covell
H	Westward Absolute.	Ceres	Westward Absolute Signal W.E. Ceres
	Signal E.E. Ceres		
W	1206	Turlock	
W	1227	Ceres	
H	1228	Turlock	MP 125.0 Turlock
H	1595	Lingard	Westward Absolute Signal WE Lingard
W	1596	Athlone	
W	1617	Athlone	
H	1640	Chowchilla.	Eastward Absolute Signal E.E. Chowchilla
H	1019	Westley	MP 99.5 Westley
W	1020	Patterson	
W	1041	Westley	
H	1056	Patterson	MP 106.8 Patterson

RULE 760. CENTRALIZED TRAFFIC CONTROL

CTC is under control of Train Dispatcher at Bakersfield.

Lathrop-Biola Jct.: Limits extend from eastward absolute signals at MP 75.81 on Tracy line and westward absolute signal at MP 82.15 on Polk Line at Lathrop, to westward absolute signal at MP 199.32 at Biola Junction on Valley Line.

Lathrop: Eastward 3 unit signal MP 81.30 (west junction switch) governs movements as follows:

- Top unit eastward main track
- Center unit Valley line
- Bottom unit westward main track
- Flashing yellow,
Rule 291 westward main track or Valley Line.

Westward 3 unit signal MP 82.15 governs movements as follows:

- Top unit westward main track
- Center unit Valley Line
- Bottom unit eastward main track

Movements across WPRR MP 93.72 under control of SP train dispatcher.

When absolute signals governing movements over crossing display "STOP" indication, member of the train crew must contact train dispatcher by telephone for instructions.

If signal cannot be cleared and there is no train approaching from either direction of WPRR, train dispatcher may authorize member of crew to operate push button time release in box marked "SP" located near the crossing as follows:

Press button until amber light is illuminated, then release. After interval of 5¼ minutes, red light should be illuminated, indicating time release has functioned and WPRR crossing is clear of conflicting trains.

If absolute signal does not then indicate proceed, train may proceed over WPRR crossing under provisions of Rule 776 without providing flag protection on WPRR.

If absolute signal does not display proceed indication and red light is not illuminated in push button box after time release actuated, train may proceed only as provided by Rules 663(c) and 776.

Instructions for operating emergency push buttons are posted in box marked "SP" at the crossing.

Modesto: Movements across TS Ry., MP 114.70, on main track and MP 114.92 on Butchertown spur under control of SP Train Dispatcher.

When absolute signals governing movements over crossing display stop indication, member of train crew must contact Train Dispatcher by telephone for instructions.

Absolute signals on Butchertown spur will not display proceed indication unless main track switch is lined for movement to Butchertown spur.

If signal cannot be cleared for main track or Butchertown movements and there is no train approaching from either direction on TS Ry., Train Dispatcher may authorize member of crew to operate push button time release in box marked "SP" located near the crossing as follows:

Push button time release for movements on main track is in box marked SP located near the crossing.

Pushbutton time release for movements on Butchertown Spur is in box adjacent to switch.

Movements on Main Track

Press push button until amber light is illuminated, then release. After interval of 3 minutes, red light should be illuminated, indicating time release has functioned and TS Ry. crossing is clear of conflicting trains.

If absolute signal does not then indicate proceed, train may proceed over TS Ry. crossing under provisions of Rule 776 without providing flag protection on TS Ry.

If absolute signal does not display proceed indication and red light is not illuminated in push button box after time release actuated, train may proceed only as provided by Rules 663(c) and 776.

Movement to Butchertown Spur

1. Press push button until amber light appears above push button.
2. SP red light will be displayed immediately and electric lock released.
3. After 3 minutes, TS Ry. red light should be displayed indicating time release has functioned.
4. Reverse switch.

5. If absolute signal does not then indicate proceed on diverging route and red lights for TS Ry. and SP are displayed in push button box, train may proceed over crossing under provisions of Rule 776 without providing flag protection on TS Ry.

6. If absolute signal does not indicate proceed on diverging route and red lights for TS Ry. and SP are not illuminated in push button box after time interval, train may proceed only as provided by Rules 663(c) and 776.

Movement to Main Track

1. Press push button until amber light appears above push button.
2. After 3 minutes, TS Ry. red light should be displayed indicating time release has functioned.
3. SP red light should be displayed immediately or after an interval of 6 minutes indicating SP time release has functioned and electric lock released.
4. Reverse switch.
5. If absolute signal does not then indicate proceed, and red lights for TS Ry. and SP are displayed in push button box, train may proceed over crossing under provisions of Rule 776 without providing flag protection on TS Ry. and SP track.
6. If absolute signal does not indicate proceed and red lights for TS Ry. and SP are not illuminated in push button box after time interval, train may proceed only as provided by Rules 663(c) and 776.

Instructions for operating emergency push buttons are posted in box adjacent to switch.

Biola Jct.: Westward absolute signal located on lead track governs movements:

- Top unit freight lead extension
- Center unit through crossover to main track
- Bottom unit Biola Branch

When lunar aspect is displayed in lower unit, trains may proceed on freight lead extension without stopping at restricted speed, expecting to find freight lead extension occupied by a preceding train.

El Pinal-Polk: Limits extend from signal at MP 92.30, 650 feet west of WP RR crossing at El Pinal, to westward signals at MP 131.81 at west end of Polk.

El Pinal: Movements across WP RR MP 92.30 under control of SP train dispatcher at Bakersfield.

When absolute signals governing movements over crossing display "STOP" indication, member of the train crew must contact train dispatcher by telephone for instructions.

If signal cannot be cleared and there is no train approaching from either direction of WP RR, train dispatcher may authorize member of crew to operate push button time release in box marked "SP" located near the crossing as follows:

1. Press button until amber light is illuminated, then release.
2. After interval of 5¼ minutes, red light should be illuminated, indicating time release has functioned and WP RR crossing is clear of conflicting trains.
3. If absolute signal does not then indicate proceed, train may proceed over WP RR crossing under provisions of Rule 776 without providing flag protection on WP RR.
4. If absolute signal does not display proceed indication and red light is not illuminated in push button box after time release actuated, train may proceed only as provided by Rules 663(c) and 776.

Instructions for operating emergency push buttons are posted in box marked "SP" at the crossing.

Crossover switches are dual control switches and when necessary to hand throw these switches, Rules 771 and 772 will apply.

SPECIAL INSTRUCTIONS—STOCKTON SUBDIVISION

El Pinal-Akers: On tracks Nos. 1 and 2 between MP-92.36 and MP-95.02, train movements may be made in either direction on either track being governed by absolute and automatic signals. Rule 507 applicable to single track will apply on both tracks.

GENERAL REGULATIONS

RULE 825. Tracy: All freight trains entering Tracy Yard will tie no less than three hand brakes on the east end unless instructed otherwise by Yardmaster.

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

RULE 827. Dragging and/or derailed equipment detector and indicator installed at the following locations:

MP	Location
84.0	Between Lathrop and French Camp on Eastward Main Track
84.0	Between Lathrop and French Camp on Westward Main Track
95.5	Between Lathrop and Manteca
100.0	Between Tomspur and Lodi
109.1	Between Acampo and Galt
109.3	Between Covell and Modesto
116.0	Between Modesto and Ceres
124.5	Between Ceres and Turlock
125.6	Between Elk Grove and Florin
132.5	Between Delhi and Livingston
142.5	Between Arena and Atwater
152.5	Between Merced and Lingard
165.9	Between Lingard and Chowchilla
187.0	Between Borden and Irrigosa

Refer to Rule 827 All Subdivisions.

Tracy: Eastward freight trains passing Tracy Yard Office and trains to or from Westside Line operating on either leg of wye must not exceed 8 MPH to allow visual verification of consist.

Turlock: City ordinance requires that in event of fire alarm being sounded, any train blocking Main St., MP-126.1, must clear crossing immediately.

Madera: Eastward through freight trains when stopping to set out, leave train clear of Central Avenue crossing, MP-183.3, and westward through freight trains clear of Olive Avenue crossing, MP-184.5.

AIR BRAKE RULES

RULE 17. Retaining valves must be used on freight and mixed trains on descending grades:

Toyon to MP-125.5.

Without Dynamic Brake in Operation: One retaining valve for each 80 tons in train. If gross tonnage exceeds 80 tons per operative brake, retaining valves must be used on all cars, and speed must not exceed 15 MPH.

With Dynamic Brake in Operation:

Permissible Tons Per Unit Without Retaining Valves*

Basic Dynamic Brake		Extended Range Dynamic Brake		
4-Axle	6-Axle	4-Axle	6-Axle	8-Axle
525	625	550	950	1250
1500	1800	1600	2700	3600

With dynamic brake in operation **without** pressure maintaining system of braking... 525 625 550 950 1250

With dynamic brake in operation **with** pressure maintaining system of braking... 1500 1800 1600 2700 3600

If permissible tonnage is exceeded, one retaining valve must be used for each 150 tons of excess tonnage.

*If any unit having basic dynamic brake is operated with units having extended range dynamic brake, all units in consist must use tonnage authorized for units having basic dynamic brake.

Locomotive classes AF628, AF630, EF425, EF623, EF625, EF630, EF636, GF425 (except units 6700-6727), GF628, GF630, GF633, EF850-B, and GF850 are equipped with extended range dynamic brake.

FREIGHT TRAINS

RULE 24-B. Tracy and Fresno Yard: Incoming engineer after completing stop, must make a full service brake application leaving brakes applied. When outgoing crew takes charge of train on arrival or otherwise is assured, upon request, that continuity of brake pipe has not been disturbed, engineer will release brakes and proceed.

RULE 24-C. Ione: Before making any switch movement at Owens-Illinois or Interpace on the Owens-Illinois Lead at Ione, it must be known that air brake system on each car being handled is fully charged, air hoses coupled between engine and cars and angle cocks properly positioned.

After fully charging air brake system and upon receipt of request or signal, brakes must be applied with not less than 20 pound brake pipe reduction, after which conductor will see that a member of crew observes each car to see that brakes are properly working, then release and recharge brakes before switch move commences.

RULE 25. Will apply at Toyon.

RULE 33. Toyon to MP-125.5.

Maximum tonnage per operative brake... 80 tons, except with dynamic brake and pressure maintaining system of braking in operation with speed not exceeding 20 MPH... 80 to 100 tons

Should dynamic brake failure occur while handling in excess of 80 tons per operative brake, train may proceed at speed not exceeding 15 MPH if in judgment of conductor and engineer it is safe to do so, and provided retaining valves are used as prescribed by Air Brake Rule 17.

Restrictive grades are as follows:

KENTUCKY HOUSE BRANCH

Westward

(Station) MP	to	(Station) MP	Speed
(End) 142.84		(Kentucky House) 142.53	20 MPH
(Valley Spring) 129.1		(Clements) 124.77	20 MPH

MISCELLANEOUS

1. Load limit (car and contents):

*Tracy-Polk	263,000 pounds
#Tracy-Polk	315,000 pounds
Stockton-Montpellier	240,000 pounds
Woodbridge-Kentucky House	240,000 pounds
Galt-Ione	240,000 pounds
*Lathrop-Fresno	263,000 pounds
#Lathrop-Fresno	315,000 pounds
*Tracy-Fresno via Westside	263,000 pounds
#Tracy-Fresno via Westside	315,000 pounds
*Ingle-Helm	263,000 pounds
&#Ingle-Helm	315,000 pounds
*Helm-Riverdale	251,000 pounds
#Biola Jct.-Biola	315,000 pounds

*Applies to uniformly loaded four-axle cars having trucks spaced 23 ft. 0 in. or more center to center and minimum axle spacing of 5 ft. 6 in.

#Applies to uniformly loaded four-axle cars with minimum axle spacing of 6 ft. 0 in. and minimum distance 37 ft. 0 in. center to center of trucks; also, wheels 38 in. or more in diameter.

&Trains handling loads weighing in excess of 280,000 pounds must not exceed 20 MPH on the Riverdale Branch between Ingle MP-181.9 and Helm MP-199.00.

Unless authorized by Superintendent, heavier loads must not be handled.

2. Lathrop: MP-81.50. Libby Owens Ford Glass Co. Hinged platform has been placed on platform inside building near the end of Track No. 1. Protective signals have been placed on each side of door where track enters building. Trainmen and enginemen must not pass these signals if red indication or no indication is shown. Green indication must be shown before proceeding beyond signals.

3. Stockton: Coupled in motion track scale located on lead track, Stockton Yard, MP-89.2. Speed of train when weighing must not exceed 4 MPH. Bidirectional indicator lights located at scale, MP 88.5 and MP 89.8. Continuous white aspect indicates speed is under 4 MPH, flashing white aspect, speed is in excess of 4 MPH. Speed of train when weighing should be at continuous speed without slack action or stopping.

4. Madera. (Winery Spur): MP-187.0. Access to United Vintner's Winery is controlled by gates across track No. 5330 (old main track) and track No. 5360 in advance of tank car loading area, and another gate across track No. 5361 in advance of shipping area. A member of train crew must gain access by calling Security Guard on the intra-plant Telephone.

At United Vintners MP-187.25, the 535 ft. end portion of each of two tracks is inside warehouse and entry is controlled by signals on each side of doorway. Enter only when green light visible. Red light or absence of light indicates "STOP."

5. Woodbridge: MP-104.8. General Mills Co. Signals have been placed over all tracks at doorways entering buildings. Trainmen and enginemen must not pass these signals if red indication or no indication is shown. Green indication must be shown before proceeding beyond signals.

6. Ione: MP-138.8. Interpace Corp. Track. Signal has been placed at retractable loading ramp with red aspect indicating ramp in position. Trainmen and enginemen must not pass signal displaying red indication. Green aspect must be showing before proceeding beyond retractable loading ramp

7. Modesto: Westward trains set out at West Modesto—pick up on storage track. Eastward trains set out at West Modesto—pick up on cleaning track.

Under no circumstances are cars to be kicked or dropped into tracks serving Food Machinery Corporation Plant at Modesto.

SPECIAL INSTRUCTIONS—STOCKTON SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in **SPEED RESTRICTIONS FOR ENGINES** appearing on page 16 and **MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT** appearing on page 17 and **OTHER MAXIMUM SPEEDS** appearing on page 18 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and **INSURE SAFETY, REGARDLESS OF TIME.**

TERRITORY			1	2	TERRITORY			1	2
MP	MP	Column:			MP	MP	Column:		
EASTWARD, TRACY TO POLK:					WESTWARD, POLK TO TRACY:				
71.16 to 72.25			35	35	132.00 to 103.65		70	55	
72.25 to 81.30			70	55	103.65 to 102.80		30	30	
81.30 to 81.50 (switches)			20	20	102.80 to 95.02		70	55	
81.50 to 90.40			70	55	95.02 to 95.00 (thru turnout)		60	55	
90.40 to 91.40 (Stockton)			20	20	95.00 to 92.39 (via No. 1 Track)		70	55	
91.40 to 92.32			70	55	95.00 to 92.43 (via No. 2 Track)		70	55	
92.32 to 95.00 (via No. 2 Track)			70	55	92.43 to 92.39 (via No. 2 Track, crossover)		15	15	
92.32 to 92.36 (via No. 1 Track, crossover)			15	15	92.39 to 91.40		70	55	
92.36 to 95.00 (via No. 1 Track)			70	55	91.40 to 90.40 (Stockton)		20	20	
95.00 to 95.02 (thru turnout)			60	55	90.40 to 81.37		70	55	
95.02 to 102.80			70	55	Thru diverging route crossover and switches, Lathrop		25	25	
102.80 to 103.65			30	30	81.37 to 72.25		70	55	
103.65 to 132.00			70	55	72.25 to 71.16		35	35	
EASTWARD, STOCKTON TO MONTELLIER:					WESTWARD, MONTELLIER TO STOCKTON:				
90.95 to 93.10 (Stockton)				12	140.29 to 122.30			25	
93.10 to 140.29				25	122.30 to 122.20			10	
EASTWARD, LODI TO KENTUCKY HOUSE:					WESTWARD, KENTUCKY HOUSE TO LODI:				
103.51 to 121.40				30	142.84 to 139.70			25	
121.40 to 127.92				25	139.70 to 132.30			15	
127.92 to 127.95				15	132.30 to 127.95			25	
127.95 to 132.30				25	127.95 to 127.92			15	
132.30 to 139.70				15	127.92 to 121.40			25	
139.70 to 142.84				25	121.40 to 103.51			30	
EASTWARD, LODI TO WOODBRIDGE:					WESTWARD, WOODBRIDGE TO LODI:				
				25				25	
EASTWARD, GALT TO IONE:					WESTWARD, IONE TO GALT:				
112.12 to 112.50				20	138.99 to 132.43			40	
112.50 to 124.95				40	132.43 to 124.95			30	
124.95 to 132.43				30	124.95 to 112.50			40	
132.43 to 138.99				40	112.50 to 112.20			20	
EASTWARD, LATHROP TO FRESNO:					WESTWARD, FRESNO TO LATHROP:				
On East leg of wye, Lathrop			25	25	205.50 to 199.28		65	55	
92.80 to 93.07 (switches)			20	20	199.28 to 184.50		70	55	
93.07 to 94.00			30	30	184.50 to 182.60 (Madera)		45	45	
94.00 to 112.60			70	55	182.60 to 151.60		70	55	
112.60 to 114.00 (Modesto)			65	55	151.60 to 149.70		45	45	
114.00 to 126.00			70	55	149.70 to 126.30		70	55	
126.00 to 126.30 (Turlock)			65	55	126.30 to 126.00 (Turlock)		65	55	
126.30 to 149.70			70	55	126.00 to 114.00		70	55	
149.70 to 151.60			45	45	114.00 to 112.60 (Modesto)		65	55	
151.60 to 182.60			70	55	112.60 to 94.00		70	55	
182.60 to 184.50 (Madera)			45	45	94.00 to 93.07		30	30	
184.50 to 199.28			70	55	93.07 to 92.80 (switches)		20	20	
199.28 to 201.89			65	55	East leg of wye, Lathrop		25	25	
201.89 to 201.93 (thru turnout)			25	25					
201.93 to 203.90			50	50					
203.90 to 204.00			35	35					
204.00 to 205.50			65	55					
EASTWARD, BIOLA TO BIOLA JCT.:					WESTWARD, BIOLA JCT. TO BIOLA:				
199.93 to 208.62			40	40	208.62 to 199.93		40	40	

SPECIAL INSTRUCTIONS—STOCKTON SUBDIVISION

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TERRITORY			1	2	TERRITORY			1	2
MP	MP	Column:			MP	MP	Column:		
EASTWARD, TRACY TO FRESNO:					WESTWARD, FRESNO TO TRACY:				
82.58 to 83.00 (Jct. Switch).....			15	15	208.40 to 207.36.....			20	20
83.00 to 140.10.....			40	40	207.36 to 206.87 (Jct. Switch).....			15	15
140.10 to 141.30.....			35	35	206.87 to 141.30.....			40	40
141.30 to 206.87.....			40	40	141.30 to 140.10.....			35	35
206.87 to 207.36 (Jct. Switch).....			15	15	140.10 to 83.00.....			40	40
207.36 to 208.40.....			20	20	83.00 to 82.58 (Jct. Niles Lines).....			15	15
EASTWARD, INGLE TO RIVERDALE:					WESTWARD, RIVERDALE TO INGLE:				
181.97 to 191.74.....				25	215.00 to 192.17.....				25
191.74 to 192.17.....				15	192.17 to 191.74.....				15
192.17 to 215.00.....				25	191.74 to 181.97.....				25

All freight and mixed trains are restricted to Column 2 speeds except LABRF, LABRT, BRLAT, FRRVP, Light Engines and Cab Hops may be authorized by train order to operate at Column 1 speeds not exceeding 60 MPH between Tracy and Stockton; 65 MPH between Stockton and Polk, and between Lathrop and Fresno, provided trains contain no restricted cars and do not exceed requirements of tons per operative brake:

Number of Cars	Tons Per Operative Brake	Number of Cars	Tons Per Operative Brake
70.....	70	110.....	62
75.....	69	115.....	61
80.....	68	120.....	60
85.....	67	125.....	58
90.....	66	130.....	56
95.....	65	135.....	54
100.....	64	140.....	52
105.....	63	145.....	50

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS

With Caution
Not Exceeding
MPH

Through sidings, yard and other tracks, wyes, crossovers and turnouts.....	10
Except:	
Through controlled sidings and turnouts in CTC.....	25
Freight Lead, Tracy, from Banta Rd., MP-73.6, to MP-75.9, except:.....	30
Through spring switch at east end.....	25
Winery Spur, Madera.....	25
Freight Lead, Biola Jct.....	30

SPECIAL INSTRUCTIONS—BAKERSFIELD SUBDIVISION

RULE 7-A. Fresno Yard: Trains entering or leaving yard tracks must receive proceed signal from switchman, green flag by day, green light by night, except within limits of diverging route signals, or engineer is orally authorized.

Bakersfield: Trains entering or leaving yard tracks must receive proceed signal from switchman, green flag by day, green light by night, except within limits of diverging route signals, or engineer is orally authorized.

RULES 10-G, 10-H, and 10-I. When unattended red flags or red lights, yellow signals, or CONDITIONAL STOP signs and yellow PROCEED PREPARED TO STOP signs are displayed between Mojave and Cameron on eastward main track for westward movement, they will be displayed to left of track in direction of movement.

RULE 10-J. Speed signs to left of track:

Westward	Reading	Eastward	Reading
MP-223.30	City Ordinance	MP-327.76	55-No. 1 Track
MP-283.45	40	MP-359.50	25-No. 1 Track

Following speed signs to left of track for westward movement on eastward track, Mojave to Cameron:

Westward	Reading
MP-379.90	45
MP-378.41	35
MP-373.40	45
MP-372.41	25

RULE 82-A. Fresno: Trains originating Fresno en route Fresno Interurban Railway must first obtain AT&SF clearance at Fresno Yard.

Bakersfield: Westward and Eastward Southern Pacific extra trains originating will obtain clearance OK's by Chief Train Dispatcher which will be issued at Bakersfield and delivered by tube to Bakersfield Yard Office. Red container is for westward extra trains and blue container is for eastward extra trains.

Mojave: Regular trains authorized on Mojave Subdivision are authorized to carry same identity through to Bakersfield and will receive clearance accordingly at Mojave.

Coalinga Branch: Trains operating on Coalinga Branch east of MP-243.00 will move only by train order authority except:

- Hanford, between MP-251.88 and MP-253.28
- Between Lemoore MP-260.30 and Rossi MP-264.00
- Between Westhaven MP-272.00 and Huron MP-282.00
- Coalinga, between MP-294.50 and end of branch.

Visalia Branch: Trains operating on Visalia Branch will move only by train order authority except:
Goshen Jct., between MP-245.30 and MP-247.50,
Exeter, between MP-263.20 and MP-260.00.

Stratford Branch: Extra trains operating on Stratford Branch in addition to information required by train register located at Rossi must register destination of trip (turning point) and date of departure in the Column captioned "Signals." When trip has been completed, date of arrival at Rossi must also be entered in Column captioned "Signals." Extra trains en route into this territory must not leave Rossi until it has been ascertained from the train register that all preceding extra trains via the route to be used have completed their trip and registered time and date of arrival at Rossi accordingly.

Trains operating on Stratford Branch will operate as an extra train on entire trip as indicated by the engine number leaving Rossi and are authorized to operate as extra trains.

Buttonwillow Branch: Extra trains operating beyond Gosford on Buttonwillow Branch in addition to information required by train register located at Gosford, must register destination of trip (turning point) and date of departure in the

Column captioned "Signals." When trip has been completed, date of arrival at Gosford must also be entered in Column captioned "Signals." Extra trains en route into this territory must not leave Gosford until it has been ascertained from the train register that all preceding extra trains via the route to be used have completed their trip and registered time and date of arrival at Gosford accordingly.

Trains originating at Bakersfield and operating beyond Gosford on Buttonwillow Branch will operate as an extra train on entire trip as indicated by the engine number leaving Gosford and are authorized to operate as extra trains beyond Gosford on Buttonwillow Branch.

RULE 83. Where train orders are received prior to departure CTC limits, identification may be made against approaching trains to be applied at end of CTC. Rule 14(k) applies.

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

- Fresno Yard.....Trains originating or terminating.
- Goshen Jct.....Trains required by train order.
- Bakersfield.....First class trains, eastward and westward freight trains terminating.
- Kern Jct.....AT&SFRy trains.

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

- Bakersfield.....All trains.
- Kern Jct.....AT&SFRy trains.
- Mojave.....All trains.

Conductors of eastward and westward freight trains terminating at Bakersfield will leave train register ticket at yard office which will arrange for delivery to operator at Bakersfield who will enter registration.

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

West MP		East MP
199.34	Fresno (Valley Line)	209.00
203.00	Fresno (Westside Line)	
208.44	Fresno (Biola Branch)	
	Fresno (Clovis Branch)	206.99
	Fresno (Exeter Branch)	208.15
310.87	Bakersfield	321.09
	Bakersfield (Buttonwillow Branch)	315.67
	Bakersfield (Arvin Branch)	317.10
360.65	Tehachapi	362.62
364.00	Monolith	366.00
378.87	Mojave	386.00
219.01	Sanger	221.50
228.73	Reedley	230.98
234.31	Dinuba	235.72
248.90	Ivanhoe	249.90
256.33	Exeter	257.96
260.00	Exeter (Visalia Branch)	
263.40	Lindsay	265.00
267.90	Strathmore	269.00
272.00	Porterville	275.72
286.00	Richgrove	308.66
	Richgrove (Richgrove Branch)	End of Track
239.86	Goshen Jct. (Coalinga Branch)	243.00
251.88	Hanford	253.28
255.43	Armona	256.83
260.30	Lemoore	264.00
	Lemoore (Stratford Branch)	263.48
272.00	Huron	282.00
294.82	Coalinga	End of Track
246.01	Visalia Branch	256.00
308.74	Oil City Branch	End of Track
315.67	Buttonwillow Branch	322.80
317.10	Arvin Branch	End of Track

Fresno: Trains from Fresno Yard to operate via Westside line may pass Signal 2036 displaying stop indication without stopping at restricted speed to enter west leg of wye if wye switch is properly set and proceed signal received from switchman or oral authorization is given.

Bakersfield: Eastward trains may pass Signal 3132 displaying stop indication without stopping to enter yard tracks if flashing white light is displayed. If flashing white light not displayed, trains must receive proceed signal from switchman, green flag by day, green light by night, or engineer is orally authorized.

Westward SP freight trains entering Bakersfield Yard tracks through crossover west of signal bridge 3151 may pass signal 3151 displaying stop indication without stopping to enter yard tracks if flashing white light is displayed. If flashing white light not displayed, trains must receive proceed signal from switchmen, green flag by day, green light by night, or engineer is orally authorized, and will sound whistle signal 14(j) approaching Bakersfield.

RULE 97. Westward extra trains originating Bakersfield and eastward extra trains originating Fresno Yard to operate via Valley line need not obtain train order authority but must obtain a clearance.

RULE D-97. Applies on both main tracks between Fresno Yard (MP 201.93) and Calwa Tower (MP 209.09). Applies on both main tracks, Bakersfield, between MP 310.86 and MP 312.90. Applies on both main tracks between Kern Jct. and Sandcut; and between Tehachapi and Mojave.

RULE 98. Railroad crossings at grade not interlocked: AT&SFRy, MP 228.04 east of Lacjac. STOP. AT&SFRy, MP 243.61 west of Ivanhoe. STOP. AT&SFRy, Visalia. STOP and send flagman ahead who must ascertain that no movement is approaching on intersecting line before giving signal to proceed. AT&SFRy, Porterville. STOP. FIRy. Junctions with FIRy at MP-213.01 and MP-213.03 east of Las Palmas. STOP. Yellow reflectorized One Mile signs and red reflectorized Stop signs approaching above crossings do not require application of Rules 10-G or 10-H.

RULE 99. Buttonwillow Branch: Rule 99 will not apply between Gosford and Buttonwillow.

Stratford Branch: Rule 99 will not apply between Rossi and Stratford.

RULE 99-A. Bakersfield: Trains and engines, moving with current of traffic, are not required to provide flag protection to the rear between MP 314.7 and MP 312.9. All trains and engines moving on main track between MP 314.7 and MP 312.9 proceed expecting to find main track occupied by other trains or engines without protection of flagman.

RULE 103-A. Trains and engines must stop and member of crew must protect traffic while moving over following streets and highways:

- Fresno.....Clovis Branch, crossing on Cherry Ave., while switching.
- Calwa.....North Ave., on drill track leading into Producers Compress, while switching.
- Porterville...Olive St., BC-274.7, on side tracks.

Calwa: Flood lights over Railroad Ave. at David & Sons spur. Crossing B-208-5-C, are operated from switches located in box on power pole on main track side of highway. When these crossings are to be used trainmen must close floodlight switch before cars foul the highway, and open the switch after completing use of the track.

Fresno: Freight trains changing crews at Fresno Depot must stop to clear insulated joints located just west of Tulare Street unless otherwise instructed by yardmaster or his representative.

Crossing gates at Tulare Street, MP-205.5, and Kern Street, MP-205.6, may be operated by operating key release on relay shelter near pole line. Insert key and turn to operate gates.

Automatic protection (controlled by single track circuit, with "Stop" signs at control limits) exists at following crossings:

Location	Crossing No.	Track	Protection
Fresno	B-205.0-C	McClatchy	Fl. Lights
Calwa	B-210.55-C	P.P. Glass	Fl. Lights
Calwa	B-210.80-C	P.P. Glass	Fl. Lights
Kingsburg	B-225.7	Drill	Gates
Delano	*B-281.2	House & 2 Yd.	Gates
Oil Jct.	B-308.9	Minkler Con.	Gates
Edison	B-319.9	Drill	Fl. Lights & Gates
Goshen Jct.			
(Visalia Br.)	BAC-247.3-C	Prestolite	Fl. Lights
Goshen Jct.	BAC-247.28-C	Gifford-Hill	Fl. Lights
Goshen Jct.	BAC-248.7-C	Bostitch	Fl. Lights
Fresno			
(Exeter Br.)	BC-208.38-C	Ward's Drill	Fl. Lights
Sanger	BC-219.9	Siding & Yard	Gates
Reedley	BC-229.8	Siding & Yard	Gates
Fresno			
(Clovis Br.)	BS-210.15-C	Bartonette	Fl. Lights
Clovis	BS-217.5	Drill	Gates
Bakersfield			
Corrals	BT-315.2	Corral	Gates
Wible Orchard	BT-318.9	Siding	Gates

*Stop signs located on No. 2 yard track also apply to yard track No. 1.

Members of crews should assure themselves that crossing protection is operating (and gates are down where installed) before entering crossing or crossing is protected by member of crew.

Delano: Westward trains stopped in the vicinity of the Delano Depot must proceed slowly to permit gates to lower on 11th Avenue before crossing is entered.

Bakersfield: Automatic crossing gates in service at following street crossing:

Baker Street.....MP-312.9

Gates will operate for movement in either direction on main track and Track No. 1.

Westward trains making stop at Bakersfield station must stop to clear insulated joints located just east of Baker Street unless otherwise instructed by Yardmaster or his representative. Sound detector microphone is located adjacent to point where engines will stop and enginemen must sound whistle to actuate the gates and crossing must not be entered until gates are known to be down.

Crossing gates at 24th Street, MP 312.2, and Union Avenue, MP 312.3, may be operated by operating key release on relay shelters. Insert key and turn to operate gates.

"STOP" signs located 30 feet each side of crossing, B-312.0-C, 24th Street. Crossing gates may be actuated with key release on "STOP" sign posts by inserting key and turning.

Summit Switch: Flood lights on east and west legs of wye crossing, B-362.4, with highway are track circuit controlled with "Stop" signs installed at control limits. Crews should assure themselves that flood lights are illuminated before fouling crossing.

Monolith: Eastward trains stopping to set out or pick up cars must not exceed 10 MPH approaching County Highway, Crossing No. B-365.2, until crossing gates are down.

SPECIAL INSTRUCTIONS—BAKERSFIELD SUBDIVISION

Mojave: Automatic crossing gates, Oak Creek Road, MP 380.2.

Gates will also operate for against-the-current-of-traffic movements on eastward and westward main tracks, but such movements must not exceed 20 MPH approaching the above street crossing.

Unit for the display of flashing white light installed on relay case on south side of eastward main track. This unit will display flashing white light which will indicate that gates are down protecting vehicular traffic.

Public Utilities Commission orders prohibit operation of train, engine, motor or car over the following crossings unless first brought to a stop and traffic on the highway protected by a member of the crew:

Selma W. Front St. on Turkey Growers Spur, Crossing No. B-221.05-C.

Kingsburg,
Sierra St. Roma Wine Company Spur, Crossing No. B-225-2, stop sign governing westward movement over this crossing is located to left of Spur and applies to this track only.

Armona Lake St., MP 256.5, while switching,

Bakersfield 30th St. on McCarthy Tank spur,

Bakersfield Golden State Ave. on freight station spur. Crossing must be cleared as quickly as possible. If flashing light signals are not operating, member of crew must push button marked "START" in box on mast of crossing signal north side highway for southward movement, or in box on instrument case on south side highway for northward movement. If movement over highway is not to be made after signals start operating, signals can be stopped by pushing button marked "STOP." If flashing light signals fail to operate, movement over crossing must be protected by member of crew.

Arvin Widmar Road, MP-332.60, while switching.

Public Utilities Commission orders also require the following protection for traffic:

Tulare If train, engine or cars stand on siding within 200 feet of county road crossing at Prosperity Ave., MP 248.7, member of crew must protect traffic against movements on main track.

At the following locations, trains or engines moving under the provisions of Rule 771 and 776 must not enter the crossing until protection for vehicular traffic has been afforded by a member of the crew, or it is known that automatic warning devices are operating:

Station	Location	Mile Post
Caliente	East siding switch,	
	Caliente-Bodfish Road	335.5

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

- Fresno Yard End double track, for westward track,
- Fresno Westside Line, for eastward track,
- Fresno Stem of Wye for West Leg Wye,
- Fresno Drill track, for Exeter Branch,
- Goshen Jct. Visalia Branch, for Valley line,
- Goshen Jct. Coalinga Branch, for CTC siding,
- Oil Jct. Oil City Branch, for spur track,
- Oil Jct. AT&SFRy, for tail track,
- Rossi Stratford Branch, for branch,
- Exeter VERy, for Exeter Branch,
- Ducor AT&SFRy, for siding,
- Richgrove Richgrove Branch, for siding,
- Gosford Buttonwillow Branch, for Sunset Ry.
- Magunden Arvin Branch, for eastward track,
- Mojave Lone Pine Branch, for westward track.

Derails in main track:

- Goshen Jct. On Visalia Branch, 250 feet east of junction switch.
- Coalinga MP 295.70.

Summit Switch: MP-362.0. At electric lock on east end main track crossover crews must push button and run 6 minutes time release to unlock unless train remains in clear on Summit siding and crew lines switch after departure of eastward trains moving by indication of Signal 3621.

Monolith: Trains entering east end of storage track located between main tracks, must line switches in the following order: Main track switch first; inside switch next; then derail. After train is in storage track, switches must be lined in the following order: Main track switch first; derail next; then inside switch.

Oil Jct. (Oil City Branch): Derail has been placed on both tracks at Mobil Chemical. Derail positioned to derail inward. Derails must be removed before performing switching at Industry.

RULE 104-A. Yellow switch targets and keepers have been installed on main track switches at the ends of the following branch lines:

- Clovis Branch MP-225.7, Rockfield
- Coalinga Branch MP-295.4, Coalinga
- Buttonwillow Branch MP-346.3, Buttonwillow

RULE 105. Traver: When length of train permits, westward trains taking siding after clearing main track will provide not less than 500 feet clearance to westward fouling point.

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

Exeter is train-order office for trains originating only.

Coalinga is train order office between the hours of 8:00 AM and 12:00 Noon and 1:00 PM and 5:00 PM, daily except Saturdays, Sundays and holidays.

RULE D-251. Will apply on both tracks between Fresno Yard and Calwa Tower.

Applies on both main tracks, Bakersfield, between MP 310.86 and MP 312.90; both main tracks between Kern Jct. and Sandcut, and between Tehachapi and Mojave.

RULE 306. The following block signals equipped with triangular plate displaying the letter "P" have included in their control limits some special protective device. Interlocking signals are listed as P-I; absolute signals as P.A.

Eastward Signal	Protection	Westward Signal
P-1972	Spring switch, Crossover Biola Jct.	P-A
P-2036	Spring switch, west leg of Westside Line wye, Fresno	
	Spring switch on crossover, Valley Line, Fresno	P-2041
P-2042	Barricade detector, MP 204.6 Valley Line, Fresno	P-2057
P-2046	Fresno	P-2059
	Spring switch, east end station track, Fresno	P-2937
	Spring switch, junction switch Exeter Branch, Famoso siding	P-A
	Spring switch, east end double track, Bakersfield	P-3129
P-A	Spring switch at west end of westward siding, Caliente	
	Spring switch at east end of eastward siding, Caliente	P-A
P-3438	Slide detector fence between Tunnels 7 and 8	P-3445
P-A	Spring switch at west end of westward siding, Marcel	
	Spring switch at east end of eastward siding, Marcel	P-A
P-3556	Slide detector fence between Tunnels 14 and 15	P-A
P-3632	Barricade detector MP-363.4	P-3639
P-3630		
P-I	Spring switch west crossover switch MP-370.40	
	Spring switch east crossover switch MP-370.40	P-SA

Famoso: When switch point indicators display green aspect westward trains may proceed without inspecting or throwing switch by hand.

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

Fresno: Trains or engines will operate between MP-199.32 and MP-201.80 on signal indication which indication will supersede the superiority of trains between these points.

Westward signal adjacent to Eastward main line MP-204.11 will display red aspect only per Rule 290, figure "I." Trains and engines will be governed by yardmasters instructions and Rules 507 and 513 before passing this signal.

Eastward trains and engines making reverse movement and Westward trains and engines passing Signal 2041 under Rule 507, moving over spring switch East end crossover on Eastward main line West of west leg of Westside Line wye, will be governed by Rule 513.

Westward Signal D-2399 located at MP 239.9 on Coalinga Branch will display aspect as per Rule 286, Figure "B."

Bakersfield: Trains or engines will operate between MP-312.82 and MP-313.54 on signal indication, which indication will supersede the superiority of trains between these points.

Eastward Signal P-3124 is a two-unit signal; top unit governs movement on eastward track, bottom unit governs eastward movement through crossovers to yard tracks. Westward Signal 3127 governs westward movements from yard Track 1 to westward Track.

Push buttons installed on instrument case opposite Signal 3127 and on Signals 3128 and 3129.

Eastward signal adjacent to Westward main track at MP-314.99 will display red aspect only per Rule 290, Figure "I." Trains and engines will be governed by Yardmaster's instructions and Rules 507 and 513 before passing this signal.

Summit Switch: Top unit of two-unit Signal 3621 at clear point of west siding switch may display indication per Rule 285, Figure "G," or Rule 290, Figure "I," and governs movement to eastward main track.

Lower unit may display indication per Rule 281, Figure "F," Rule 285, Figure "G"; or Rule 290, Figure "I" and governs movement through crossover to westward main track.

"M" indicator on top of two-unit Signal 3621, when illuminated, authorizes westward movement on eastward main track to beginning of CTC, Tehachapi. When "M" indicator not illuminated, member of crew will contact dispatcher by phone for instructions.

Rule 507 applicable to single track will apply on eastward main track between Tehachapi and Summit Switch.

RULE 538. SPRING SWITCHES

Spring switch equipped with facing point lock is located:

Location	Normal Position
Famoso	East end station track Main Track

Spring switches not equipped with facing point locks are located:

Location	Normal Position
Biola Jct.	East Switch of Crossover . . . Freight Lead
Fresno	West leg of wye, Westside Line Eastward Main Track
Fresno	East leg of wye, Westside Line Eastward Main Track
Fresno	West end Crossover on westward Main Track west of west leg of Westside Line wye Westward Main Track
Fresno	East end crossover on Eastward Main Track west of west leg of Westside Line wye Crossover
Fresno	Exeter Branch Westward Main Track
Fresno	Junction switch, Clovis Branch Exeter Branch
Fresno	Switch from Exeter Branch to west end Track *No. 4420 Exeter Branch

Location	Normal Position
Goshen Jct.	Stem of Wye West Leg of Wye
Famoso	Junction switch, Exeter Branch Famoso Siding
Bakersfield	East end double track Westward Track
Bakersfield	West end yard, Track 1 Westward Track
Caliente	West end westward siding Eastward siding
Caliente	East end eastward siding Westward siding
Marcel	West end westward siding Eastward siding
Marcel	East end eastward siding Westward siding
Summit Switch	East end siding Eastward track
Cameron	West end crossover Westward track
Cameron	East end crossover Crossover

Switch-point indicators located at:

Fresno Yard	Spring switch leading from No. 1 drill track to Track No. 31 west of Ashlan Ave.
Fresno	West leg of wye, Westside Line.
Fresno	East leg of wye, Westside Line.
Fresno	West end crossover west of west leg of Westside Line wye.
Fresno	East end crossover west of west leg of Westside Line wye.
Fresno	Spring switch, junction switch, Exeter Branch.
Fresno	Spring switch, junction switch, Clovis Branch.
Fresno	Spring switch to west end Track No. 4420 Exeter Branch.
Goshen Jct.	Spring switch leading from Coalinga main track to west leg of wye.
Famoso	Spring switch siding junction switch.
Famoso	Spring switch east end station track.
Summit Switch	Spring switch from east end siding to eastward main track.

Indicator does not indicate track occupancy. When indicator displays red aspect, or is not lighted, careful examination of switch must be made before passing over in facing point direction.

RULE 605. INTERLOCKING

AT&SFRy Crossing MP 207.0 (Exeter Br.): Interlocking is part of AT&SF Ry CTC system and operation over crossing is under control of AT&SF Ry train dispatcher. Telephones located in door of relay shelter at crossing and at interlocking signals. Trains stopped by signals at crossing must immediately contact AT&SF Ry train dispatcher and inform him of arrival and desired movement.

Hanford: AT&SF Ry crossing. Interlocking is part of AT&SF Ry CTC system and operation over crossing is under control of AT&SF Ry train dispatcher, Fresno. Telephone located in box at signals governing movement over crossing. Train stopped by signals at crossing must immediately contact AT&SF Ry train dispatcher and inform him of arrival and desired movement.

Kern Jct. Tower: Buttonwillow Branch junction switch is at MP-313.65 on eastward main track inside of interlocking limits.

Top unit of westward interlocking signal located at end of double track and top unit of eastward interlocking signal at west interlocking limit and top unit of westward interlocking signal on Buttonwillow Branch may display flashing red aspect per Rule 290-A.

Westward interlocking signal located at east interlocking limit at end of double track governs movement as follows:

Top unit governs westward movements to SP main track. Middle unit governs westward movements to AT&SFRy westward main track.

Lower unit will display lunar aspect only; when lunar aspect is displayed trains may proceed without stopping at restricted speed on SP No. 1 Track.

Eastward interlocking signal at west interlocking limit governs movements as follows:

Top unit governs movements to eastward main track. Bottom unit governs movements to Buttonwillow Branch or to westward SP main track.

Westward interlocking signal at east interlocking limit on Buttonwillow Branch governs movements as follows:

Top unit governs movements to SP main track. Bottom unit governs movements to AT&SFRy westward main track.

SPECIAL INSTRUCTIONS—BAKERSFIELD SUBDIVISION

Westward interlocking signal at east interlocking limit for westward movements on SP eastward main track governs movements as follows:

Top unit governs westward movements on SP eastward main track to SP single main track.

Bottom unit governs westward movements on SP eastward main track to AT&SFRy westward main track (and interchange tracks west of interlocking limit).

AT&SFRy junction switch, Buttonwillow Branch junction switch, and end of double track. Whistle signals:

- For main track, —,
- To or from Buttonwillow Branch, — o —,
- From SP to AT&SFRy main track, o — —,
- Between main track and transfer track, o — o,
- To or from No. 1 track, o o — o.

Cameron-Mojave: Limits extend, on eastward track, from eastward interlocking signal MP-370.37, to westward interlocking signal MP-380.15; and on westward track between eastward interlocking Signal MP-370.37 and westward SA signal MP-370.41, and are under control of operator Mojave. Telephone is located in box on pole adjacent to crossover switches Cameron.

Block signals are provided on eastward track within these limits for movement of trains in either direction being governed by indications of interlocking and automatic block signals.

RULE 705. LETTER TYPE INDICATORS

Indicators located:

Illum. Letter	On Signal	Approaching	Authorizes and requires movement as follows
S	P-2937	Famoso	Enter station track at east switch.
S	3612	Summit Switch	Enter siding and remain in siding until letter "M" is displayed.
M	3630	Summit Switch	Enter eastward track and proceed under provisions of Rule D-251.

Bakersfield: Letter type indicators under control of train dispatcher at MP 312.91 just east of Baker Street and when illuminated will display the word "WAIT." Indicator applicable to westward movement on main track located on separate mast to right of main track and indicator applicable to westward movement on Track 1 is dwarf type located to right of Track 1.

Westward trains or engines will approach these indicators prepared to stop short of indicator and not proceed until light is extinguished or verbal authority to proceed is received from the train dispatcher.

RULE 705. HOT BOX DETECTORS

Refer to Rule 705 All Subdivisions.

SCANNER SITE

MP	Type	Direction	Location
212.3	D	West	*Fowler-Malaga
235.1	A	East and West	Traver-Goshen Jct.
253.3	B	East & West	Tulare-Tipton
267.5	A	East & West	Pixley-Earlimart
294.5	C	East & West	Famoso-Slater
307.7	D	East	#Saco-Oil Jct.
318.8	D	West	#Edison-Magunden @
328.6	C	East & West	Bena-Ilmon
363.8	C	East	Summit Switch-Monolith (Eastward Main Track)
363.8	C	West	Monolith-Summit Switch (Westward Main Track)

*Recorder at Fresno Yard, Car Foreman's office.
 #Recorder at Bakersfield, Car Foreman's office.
 @White light is located on mast on north side of track.

TYPE "A" HOT BOX DETECTOR LETTER TYPE INDICATOR AND READOUT LOCATIONS

Illum. Letter	On Signal	Approaching	Location of Readout
H*	MP 233.6	Traver	Westward Absolute Signal, W.E. Traver
W	2338	Goshen Jct.	
W	2361	Traver	
H*	MP 236.6	Goshen Jct	MP 238.6 Goshen Jct.
H	2645	Tipton	Westward Absolute Signal W.E. Tipton
W	2670	Earlimart	
W	Westward Absolute Signal MP 269.4	Pixley	
H	Eastward Absolute Signal MP 269.4	Earlimart	MP 271.7 Earlimart

*Displays flashing white light when "H" is illuminated. For westward trains at MP-233.6 and for eastward trains at MP-236.6, upper unit is H indicator, lower unit is flashing white light.

RULE 760. CENTRALIZED TRAFFIC CONTROL

CTC is under control of Train Dispatcher at Bakersfield.

Calwa Tower-Bakersfield: Limits extend from end of double track, Calwa Tower, MP 209.09, to beginning of double track, Bakersfield, MP 310.87.

Calwa Tower: Movements across AT&SF Railway track, MP-209.1, Calwa Tower, under control of Santa Fe train dispatcher. When eastward absolute signal or westward SA signal governing movements over AT&SF Railway track display stop indication, a member of crew must call Southern Pacific train dispatcher at Bakersfield who, after ascertaining that signals on AT&SF Railway track in both directions are displaying stop indication and no train approaching from either direction on AT&SF Railway track, may authorize movement over crossing.

Sound detector microphone is located 240 feet east of Signal 2058 and adjacent to eastward main track. Eastward trains destined beyond Malaga must sound whistle from Signal 2058 to sound detector microphone to notify Southern Pacific train dispatcher, which will be request for eastward absolute signal Calwa.

Goshen Junction: Westward absolute signals located on siding and on Coalinga Branch in advance of crossover Goshen Junction, MP 238.7, govern movements:

- Top unit governs westward movement on siding;
- Middle unit governs movement through crossover to main track;
- Lower unit will display lunar aspect only.

Eastward absolute signals located on siding in advance of crossover Goshen Junction, MP 238.6, govern movements:

- Top unit governs eastward movement on siding;
 - Middle unit governs movement to Coalinga Branch;
 - Lower unit will display lunar aspect only.
- When lunar aspect is displayed in these units, trains may proceed on siding without stopping, at restricted speed, expecting to find siding occupied by a preceding train.

Eastward absolute signals located on main track in advance of crossover Goshen Junction, MP 238.6, govern movements:

- Top unit governs eastward movement on main track;
- Middle unit governs movement to siding;
- Lower unit governs movement to Coalinga Branch.

Tulare: Movements across AT&SF Ry Track MP 249.70, Tulare, under control of SP train dispatcher. When absolute signals governing movement over crossing display stop indication member of crew must call train dispatcher and after ascertaining that derails on AT&SF Ry Track in both directions are set to derail and no train approaching from either direction on AT&SF Ry track, train dispatcher may authorize movement over the crossing.

Famoso: Eastward absolute signal located at east end of siding is a two-unit signal. Top unit governs movement to, but does not indicate track occupancy of station track. Lower unit governs movement through crossover to main track.

Eastward absolute signal located on Exeter Branch at fouling point of junction to Famoso siding, and on station track at fouling point east end.

Sandcut-Tehachapi: Limits extend from end of double track at Sandcut, MP 324.93, to beginning of double track at Tehachapi, MP-360.65.

Sandcut-Bena: On tracks Nos. 1 and 2 between Sandcut and Bena, train movements may be made in either direction on either track, being governed by absolute and automatic signals. Rule 507 applicable to single track will apply on both tracks. Westward absolute signal at end of two tracks Bena, MP-328.1, will authorize movement on either track.

Bealville: Westward two-unit absolute signal, located in advance of crossover on siding, Bealville, MP-339.6, governs movements on siding. Lower unit will display lunar aspect only.

Eastward three-unit absolute signal located in advance of crossover on siding, Bealville, MP-339.5, governs movements as follows:

- Top unit governs eastward movement on siding,
- Middle unit governs movement through crossover to main track,
- Lower unit will display lunar aspect only.

When lunar aspect is displayed in these units, trains may proceed on siding, without stopping, at restricted speed expecting to find siding occupied by a preceding train.

Cable-Tehachapi: On tracks Nos. 1 and 2 between Cable and Tehachapi train movements may be made in either direction on either track, being governed by absolute and automatic signals. Rule 507 applicable to single track will apply on both tracks.

Eastward absolute signal at west end of Cable, MP-356.4, has two units. Upper unit governs eastward movement on No. 2 track. Lower unit governs eastward movements on No. 1 track.

Two unit eastward absolute signal is on No. 1 Track west of crossover at MP-358.5. Upper unit governs eastward movements on No. 1 Track. Lower unit governs eastward movements through crossover to No. 2 Track.

Two unit westward absolute signal is on No. 2 Track east of crossover at MP-358.5. Upper unit governs westward movements on No. 2 Track. Lower unit governs westward movements through crossover to No. 1 Track.

Westward absolute signal on No. 1 Track east of crossover at MP-358.5 governs westward movements on No. 1 Track.

Eastward SA Signal at east end of No. 1 Track at MP-360.4 is two unit signal. Upper unit displays red aspect only. Lower unit governs movements through crossover from No. 1 Track to eastward main track.

Westward two unit absolute signal is on westward main track at easterly limits of CTC, MP-360.65. Upper unit governs westward movements to No. 1 Track. Lower unit governs westward movements through crossover to No. 2 track.

Westward signal on Eastward Main Track at easterly limits of CTC, MP-360.65, is two unit dwarf absolute signal. Upper unit governs westward movements on No. 2 track. Lower unit governs westward movement through crossover to No. 1 Track.

Signal line between MP 325.20 and MP 340.50 carries 2300 volts, and if blown or knocked down must not be touched, and train dispatcher must be notified immediately.

GENERAL REGULATIONS

RULE 825. INSTRUCTIONS FOR SETTING HAND BRAKES: Staff brakes must be set with the assistance of a brake club after train has stopped.

Portable rail skids are hung on posts at west end of sidings at:

Ilmon	Bealville Crossover	Woodford	Cable
Caliente	Cliff	Walong	Tehachapi
Bealville	Rowen	Marcel	Summit
			Switch

When necessary to leave cars on any of these sidings permission must first be obtained from chief train dispatcher, after which rail skid must be placed on rail and leading wheel of first car in descending direction run onto the rail skid, and hand brakes set if brakes are operative, before engine is detached. Trains picking up cars from these sidings must remove rail skid and return it to proper post.

Portable rail skid is hung on "Advan" sign Bakersfield team track east of old Highway 99.

Refer to Rule 825 All Subdivisions.

RULE 827. Dragging and/or derailed equipment detector and indicator installed at the following locations:

MP	Location
MP-340.75	Between Bealville and Cliff
MP-344.12	Between Cliff and Rowen
MP-355.21	Between Marcel and Cable.
	Refer to Rule 827 All Subdivisions.

AIR BRAKE RULES

RULE 14. Coupling of trains together for the purpose of moving in one unit between Mojave and Ilmon is forbidden, unless authorized by Chief Train Dispatcher.

RULE 17. Retaining valves must be used as follows: Retaining valves must be used on freight trains on descending grades as follows:
Cameron to Mojave and Tehachapi to Caliente.

Without Dynamic Brake in Operation: One retaining valve for each 80 tons in train. If gross tonnage exceeds 80 tons per operative brake, retaining valves must be used on all cars, and speed must not exceed 15 MPH.

With Dynamic Brake in Operation:

Permissible Tons Per Unit Without Retaining Valves*				
Basic Dynamic Brake		Extended Range Dynamic Brake		
4-Axle	6-Axle	4-Axle	6-Axle	8-Axle

With Dynamic brake in operation **without** pressure maintaining system of braking . . . 525 625 550 950 1250

With Dynamic brake in operation **with** pressure maintaining system of braking . . . 1500 1800 1600 2700 3600

If permissible tonnage is exceeded, one retaining valve must be used for each 150 tons of excess tonnage.

*If any unit having basic dynamic brake is operated with units having extended range dynamic brake, all units in consist must use tonnage authorized for units having basic dyanic brake.

Locomotive classes AF628, AF630, EF425, EF623, EF625, EF630, EF636, GF425 (except units 6700-6727), GF628, GF630, GF633, EF850-B, and GF850 are equipped with extended range dynamic brake.

Westward trains may turn up retaining valves at west end of Tehachapi if not required to stop before entering CTC. Retaining valves may be turned down at Ilmon or Bena instead of Caliente. If retaining valves not turned down before reaching Bena, speed must not exceed 25 MPH, Ilmon to Bena.

Conductor must advise train dispatcher when retaining valves are to be used.

SPECIAL INSTRUCTIONS—BAKERSFIELD SUBDIVISION

RULE 17-A. When necessary to use retaining valves as prescribed by Rule 17, freight trains using dynamic brakes need not stop, if in the judgment of conductor and engineer wheels are not overheating. When dynamic brakes are inoperative stops must be made as follows:

Freight trains may make continuous run Tehachapi to Woodford, where stop of 10 mins. must be made. If stop made at Cable, Marcel or Walong for 10 mins., succeeding run may be made to Cliff, where stop of 10 mins. must be made. After 10 min. stop at Woodford, Rowen or Cliff, succeeding run may be made to Bena.

RULE 24-B. Bakersfield and Fresno Yard: Incoming engineer, after completing stop, must make a full service brake application leaving brakes applied. When outgoing crew takes charge of train on arrival or otherwise is assured, upon request, that continuity of brake pipe has not been disturbed, engineer will release brakes and proceed.

RULE 24-E. Will apply at Bakersfield and Fresno Yard.

RULE 25. Will apply for trains stopping at Summit Switch.

Trains not stopping at Summit Switch will make running air test by applying train air brakes with sufficient force to insure that air brakes are operating properly and to give assurance by observation of air gauge on caboose that there has been a brake pipe reduction made. After receiving this assurance trainmen will inform engineer when brake pipe pressure is being restored.

RULE 33. Tehachapi to MP-332.62, and Cameron to Mojave:

Maximum tonnage per operative brake . . . 80 tons, except
With dynamic brake and pressure maintaining
system of braking in operation; with not more
than 100 cars and speed not exceeding 20 MPH. 100 tons
Beet trains consisting of not more than 110 cars
and speed not exceeding 20 MPH 100 tons

Should dynamic brake failure occur while handling in excess of 80 tons per operative brake, train may proceed at speed not exceeding 15 MPH if in judgment of conductor and engineer it is safe to do so, and provided retaining valves are used as prescribed by Air Brake Rule 17.

Restrictive grades are:

Eastward			Westward		
(Station) to MP	(Station) to MP	Speed	(Station) to MP	(Station) to MP	Speed
(Sandcut) 325.72	(Bena) 326.72	25 MPH	(Caliente) 334.10	(Ilmon) 332.51	20 MPH
(Monolith) 368.59	(Cameron) 369.27	20 MPH	(Sandcut) 325.04	(Edison) 322.18	25 MPH

MISCELLANEOUS

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

Class of Engine	Restricted Tracks
All, except: ES 406; AS 407; ES 408; ES 408B; ES 409; AS 409; AS 410; BS 410; ES 410; BS 412; ES 412; FS 412	Fresno-Bekins spur; Drill track serving Calif. Fig Growers; Sunmaid Raisin Plants; Stewart-Nuss spur; Pearl spur east of "M" St.

Class of Engine	Restricted Tracks
All, except: EF 618, ES 406; AS 407; ES 408; ES 408B; ES 409; AS 409; AS 410; BS 410; ES 410; BS 412; ES 412; FS 412	Fresno-Drill track serving Pacific Crate; Roma Wine and Container Corp.; Drill track serving Levi Iron & Metal; Fresno-Vendolator Co. tracks; Carskadon Distr. spur; Producers Cotton Oil tracks; Central Empire spur; PCA canal track.
All, except: ES 406, AS 407; ES 408; ES 408B; ES 409; AS 409; AS 410; BS 410; ES 410; BS 412; ES 412; FS 412	Fresno Yard-Wye track at Diesel Facilities.
All, except: AS 616; ES 406; AS 407; ES 408; ES 408B; ES 409; AS 409; AS 410; BS 410; ES 410; BS 412; ES 412; FS 412	Bakersfield-McCarthy Tank & Steel spur.
All, except: AS 616; EF 418; ES 406; AS 407; ES 408; ES 408B; ES 409; AS 409; AS 410; BS 410; ES 410; ES 410; BS 412; ES 412; FS 412	Bakersfield-Lead tracks to Freight House, Montgomery Ward Co.
All, except: AS 616; ES 406; AS 407; ES 408; ES 408B; ES 409; AS 409; AS 410; BS 410; ES 410; BS 412; ES 412; FS 412	Lindsay-Tracks serving Shell Oil Co.; Independent Growers; California Spray Chemical Co.
All, except: ES 406; AS 407; ES 408; ES 408B; ES 409; AS 409; AS 410; BS 410; ES 410; BS 412; ES 412; FS 412	Rector-Southern Calif. Edison Co. spur beyond fouling point.

2. LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCES ON MAIN TRACKS AND SIDINGS

MP	Location	Description
201.80	Fresno Yard	Diesel facility Overhead
253.50	West of Lort	Kaweah River bridge Side
315.05	Kern Jct.-Strader	Golden State Wrecking Co. Spur Side
332.60	East of Ilmon	Tunnel 1/2 Overhead & side
336.90	East of Caliente	Tunnel 1 Overhead & side
337.80	East of Caliente	Tunnel 2 Overhead & side
340.80	East of Bealville	Tunnel 3 Overhead & side
341.50	East of Bealville	Tunnel 5 Overhead & side
343.70	East of Cliff	Tunnel 7 Overhead & side
344.20	East of Cliff	Tunnel 8 Overhead & side
351.00	East of Woodford	Tunnel 9 Overhead & side
352.30	East of Walong	Tunnel 10 Overhead & side
355.14	East of Marcel	Tunnel 14 Overhead & side
355.80	East of Marcel	Tunnel 15 Overhead & side
355.90	East of Marcel	Tunnel 16 Overhead & side
356.00	East of Marcel	Tunnel 17 Overhead & side
359.20	East of Cable	Overhead highway crossing Overhead

3. Load limit (car and contents):

*Fresno-Mojave.....	263,000 pounds
#Fresno-Mojave.....	315,000 pounds
Fresno-Famoso via Porterville.....	251,000 pounds
Fresno-Rockfield.....	240,000 pounds
Richgrove-Jovista.....	240,000 pounds
Goshen Jct.-Exeter.....	240,000 pounds
Goshen Jct.-Coalinga.....	240,000 pounds
Rossi-Stratford.....	240,000 pounds
Oil Jct.-Oil City.....	240,000 pounds
Kern Jct.-Buttonwillow.....	240,000 pounds
@Magunden-Arvin.....	240,000 pounds

*Applies to uniformly loaded four-axle cars having trucks spaced 23 ft. 0 in. or more center to center and minimum axle spacing of 5 ft. 6 in.

#Applies to uniformly loaded four-axle cars with minimum axle spacing of 6 ft. 0 in. and minimum distance 37 ft. 0 in. center to center of trucks; also, wheels 38 ins. or more in diameter.

@ Cars 67 ft. in length with 4 axles with 5 ft. 10 in. axle centers, 53 ft. 0 in. truck centers and 36 in. diameter wheels may have gross weight of 315,000 pounds between Magunden and Harperton, MP-321.1, if speed does not exceed 10 MPH.

Unless authorized by Superintendent, heavier loads must not be handled.

4. Tulare: MP-248.37. Burglar alarm system has been installed on gate to Western Compress. Alarm must be shut off before opening gate to perform switching. Instructions are posted inside metal box attached to gate.

5. Locans: When two 60 ft. box cars on tracks 1 and 2 at Bonner Packing Co., will not clear man on side of car.

6. Clotho-Sanger: Irrigation ditch in the path area on north side of track between MP-217.47 and MP-218.53; crews are advised to detrain on south side only.

7. Rogas: MP-331.90, Arco LPG loading track is limited to tank cars only.

SPECIAL INSTRUCTIONS—BAKERSFIELD SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in **SPEED RESTRICTIONS FOR ENGINES** appearing on page 16 and **MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT** appearing on page 17 and **OTHER MAXIMUM SPEEDS** appearing on page 18 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and **INSURE SAFETY, REGARDLESS OF TIME.**

TERRITORY			1	2	TERRITORY			1	2
MP	MP	Column:			MP	MP	Column:		
EASTWARD, FRESNO YARD TO MOJAVE:					WESTWARD, MOJAVE TO FRESNO YARD:				
201.89 to 201.93 (through turnout)			25	25	380.70 to 376.40			45	45
201.93 to 203.90			50	50	376.40 to 373.40			35	35
203.90 to 204.00			35	35	373.40 to 369.50			50	50
204.00 to 209.00			65	55	369.50 to 368.74			40	40
209.00 to 209.14 (through turnout)			60	55	368.74 to 360.61			70	55
209.14 to 214.48			70	55	360.61 to 338.00			25	20
214.48 to 215.30 (Fowler)			45	45	338.00 to 332.10			25	25
215.30 to 220.04			70	55	332.10 to 329.76			55	55
220.04 to 221.30 (Selma, 5 AM to 11 PM)			45	45	329.76 to 325.93			60	55
220.04 to 221.30 (Selma, 11 PM to 5 AM)			70	55	325.93 to 325.60			50	50
221.30 to 225.17			70	55	325.60 to 313.64			70	55
225.17 to 225.98			60	55	313.64 to 313.58 (Kern Jct.) except:			25	25
225.98 to 249.21			70	55	AT&SF Ry. trains			20	20
249.21 to 250.73 (Tulare)			35	35	313.58 to 312.80			35	35
250.73 to 279.16			70	55	312.80 to 310.07			60	55
279.16 to 281.45 (Delano)			40	40	310.07 to 281.45			70	55
281.45 to 310.07			70	55	281.45 to 279.16 (Delano)			40	40
310.07 to 312.80			60	55	279.16 to 250.73			70	55
312.80 to 313.64 (Kern Jct.) except:			35	35	250.73 to 249.21 (Tulare)			35	35
AT&SF Ry. trains			30	30	249.21 to 225.98			70	55
313.64 to 325.60			70	55	225.98 to 225.17			60	55
325.60 to 325.93			50	50	225.17 to 221.30			70	55
325.93 to 329.76			60	55	221.30 to 220.04 (Selma, 5 AM to 11 PM)			45	45
329.76 to 332.10			55	55	221.30 to 220.04 (Selma, 11 PM to 5 AM)			70	55
332.10 to 335.97			30	30	220.04 to 215.30			70	55
335.97 to 359.50			25	25	215.30 to 214.48 (Fowler)			45	45
359.50 to 360.65 (via No. 2 track)			70	55	214.48 to 209.14			70	55
359.50 to 360.65 (via No. 1 Track)			25	25	209.14 to 209.00 (Through turnout)			60	55
360.65 to 366.44			70	55	209.00 to 201.89			65	55
366.44 to 368.74			70	55					
368.74 to 370.37			40	40	WESTWARD, ON EASTWARD MAIN TRACK:				
370.37 to 371.40 (spring switch)			35	35	380.18 to 376.40			45	45
371.40 to 374.00			30	30	376.40 to 373.40			35	35
374.00 to 380.70			25	25	373.40 to 370.42			45	45
					370.42 to 370.36 (Through crossover)			25	25

At Fowler, Selma, Tulare and Delano, speed may be resumed after engine has passed last crossing within city limits in direction train is moving.

All freight and mixed trains are restricted to Column 2 speeds except LABRF, LABRT, BRLAT, Light Engines, Cab Hops may be authorized by train order to operate at Column 1 speeds not exceeding 65 MPH between Fresno and Bakersfield via Tulare and between Bakersfield and MP-368.74 except through cities where speeds are regulated by City Ordinance provided trains contain no restricted cars and do not exceed requirements of tons per operative brake.

Freight and mixed trains containing no restricted cars are authorized to operate at Column 1 speeds between MP-360.61 to MP-338.00 provided trains do not exceed requirements of tons per operative brake:

Number of Cars	Tons Per Operative Brake	Number of Cars	Tons Per Operative Brake
70	.70	110	.62
75	.69	115	.61
80	.68	120	.60
85	.67	125	.58
90	.66	130	.56
95	.65	135	.54
100	.64	140	.52
105	.63	145	.50

SPECIAL INSTRUCTIONS—BAKERSFIELD SUBDIVISION

Signs reading "CITY ORDINANCE" are in place 2 miles in advance of the City Limits at the following cities having variable speed restrictions depending upon time of day:

City MAIN TRACK	City Limits		Sign Locations	
	West	East	Eastward	Westward
Fowler.....	MP-214.48.....	MP-215.65.....	MP-212.48.....	MP-217.65.....
Selma.....	MP-220.04.....	MP-221.30.....	MP-218.04.....	MP-223.30.....
 EXETER BRANCH				
Reedley.....	MP-229.16.....	MP-230.66.....	MP-227.16.....	MP-232.66.....
Exeter.....	MP-256.49.....	MP-257.89.....	MP-254.49.....	MP-259.89.....
Lindsay.....	MP-263.42.....	MP-264.84.....	MP-261.42.....	MP-266.84.....

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in **SPEED RESTRICTIONS FOR ENGINES** appearing on page 16 and **MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT** appearing on page 17 and **OTHER MAXIMUM SPEEDS** appearing on page 18 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and **INSURE SAFETY, REGARDLESS OF TIME.**

TERRITORY			TERRITORY		
MP	MP		MP	MP	
EASTWARD, FRESNO TO FAMOSO VIA PORTERVILLE:			WESTWARD, FAMOSO TO FRESNO VIA PORTERVILLE:		
206.11 to 207.50 (Fresno).....		20	310.06 to 308.67 (Famoso).....		20
207.50 to 218.49.....		40	308.67 to 295.50.....		40
218.49 to 220.30 (Sanger).....		35	295.50 to 264.84.....		35
220.30 to 228.00.....		40	264.84 to 263.42 (Lindsay, 5 AM to 11 PM).....		20
228.00 to 229.16.....		35	264.84 to 263.42 (Lindsay, 11 PM to 5 AM).....		35
229.16 to 230.66 (Reedley, 5 AM to 11 PM).....		20	263.42 to 257.89.....		40
229.16 to 230.66 (Reedley, 11 PM to 5 AM).....		35	257.89 to 256.49 (Exeter, 5 AM to 11 PM).....		20
230.66 to 247.00.....		35	257.89 to 256.49 (Exeter, 11 PM to 5 AM).....		40
247.00 to 256.49.....		40	256.49 to 247.00.....		40
256.49 to 257.89 (Exeter, 5 AM to 11 PM).....		20	247.00 to 230.66.....		35
256.49 to 257.89 (Exeter, 11 PM to 5 AM).....		40	230.66 to 229.16 (Reedley, 5 AM to 11 PM).....		20
257.89 to 263.42.....		40	230.66 to 229.16 (Reedley, 11 PM to 5 AM).....		35
263.42 to 264.84 (Lindsay, 5 AM to 11 PM).....		20	229.16 to 228.00.....		35
263.42 to 264.84 (Lindsay, 11 PM to 5 AM).....		35	228.00 to 220.30.....		40
264.84 to 275.00.....		35	220.30 to 218.49 (Sanger).....		35
275.00 to 275.05 (Orange Ave. Crossing).....		15	218.49 to 207.50.....		40
275.05 to 295.50.....		35	207.50 to 206.11 (Fresno).....		20
295.50 to 308.67.....		40			
308.67 to 310.06 (Famoso).....		20			
EASTWARD, RICHGROVE TO JOVISTA:		20	WESTWARD, JOVISTA TO RICHGROVE:		20
EASTWARD, GOSHEN JCT. TO EXETER:			WESTWARD, EXETER TO GOSHEN JCT.:		
245.96 to 251.87.....		30	262.72 to 253.92.....		30
251.87 to 253.92 (Visalia).....		15	253.92 to 251.87 (Visalia).....		15
253.92 to 262.72.....		30	251.87 to 245.96.....		30

At Reedley, Exeter and Lindsay, speed may be resumed after engine has passed last crossing within city limits in direction train is moving. At Sanger eastward trains may resume speed after engine has passed street crossing MP-220.24.

On Exeter Branch, MP-228.00 to MP-247.05, and MP-266.00 to MP-295.52, maximum speed of trains as shown below must not be exceeded when handled by following engines subject to further restrictions shown in Speed Restrictions for Trains table above:

EF-415B, EP-415B, AS-418..... 45 MPH

On Exeter Branch, between MP-287.10 and MP-295.52, maximum speed of trains shown below must not be exceeded when handled by following AT&SF Ry. engines subject to further restrictions shown in Speed Restrictions for Trains table above:

Diesels 99, 2650 to 2893..... 30 MPH

On Visalia Branch maximum speed of trains as shown below must not be exceeded when handled by following engines, subject to further restrictions shown in Speed Restrictions for Trains table above:

AS 410..... 20 MPH

EP 415B..... 15 MPH

SPECIAL INSTRUCTIONS—BAKERSFIELD SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in **SPEED RESTRICTIONS FOR ENGINES** appearing on page 16 and **MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT** appearing on page 17 and **OTHER MAXIMUM SPEEDS** appearing on page 18 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and **INSURE SAFETY, REGARDLESS OF TIME.**

TERRITORY			TERRITORY		
MP	MP		MP	MP	
EASTWARD, FRESNO TO ROCKFIELD:			WESTWARD, ROCKFIELD TO FRESNO:		
206.15 to 206.99		15	225.77 to 223.15		20
213.03 to 214.30		20	223.15 to 214.30		30
214.30 to 223.15		30	214.30 to 213.03		20
223.15 to 225.77		20	206.99 to 206.15		15
EASTWARD, GOSHEN JCT. TO COALINGA:			WESTWARD, COALINGA TO GOSHEN JCT.:		
239.53 to 240.13 (Wye)		15	296.49 to 256.49		30
240.13 to 256.48		30	256.49 to 256.48 (Lake St., Armona)		20
256.48 to 256.49 (Lake St., Armona)		20	256.48 to 240.13		30
256.49 to 296.39		30	240.13 to 239.53 (Wye)		15
EASTWARD, ROSSI TO STRATFORD:			WESTWARD, STRATFORD TO ROSSI:		
		20			20
EASTWARD, OIL JCT. TO MALTHA:			WESTWARD, MALTHA TO OIL JCT.:		
		20			20
EASTWARD, KERN JCT. TO BUTTONWILLOW:			WESTWARD, BUTTONWILLOW TO KERN JCT.:		
313.44 to 314.15 (street crossings)		15	347.00 to 316.65		30
314.15 to 316.65 (U.S. Highway 99)		25	316.65 to 314.15 (U.S. Highway 99)		25
316.65 to 347.00		30	314.15 to 313.44 (street crossings)		15
EASTWARD, MAGUNDEN TO ARVIN:			WESTWARD, ARVIN TO MAGUNDEN:		
316.66 to 317.06		10	333.54 to 329.95		25
317.06 to 329.76		25	329.95 to 329.76		10
329.76 to 329.95		10	329.76 to 317.06		25
329.95 to 333.54		25	317.06 to 316.66		10

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

Through sidings, yard and other tracks, wyes, crossovers and turnouts	10
Except:	
Through controlled sidings and turnouts at Goble, Sun-Maid, Traver, Goshen Jct., Tulare, Tipton, Earlimart, Delfar, Famoso, Cawelo and Saco	25
Through crossover Sandcut and through siding and turnouts Summit Switch	20
Through controlled sidings and turnouts between Ilmon and Tehachapi, inclusive: except:	25
Through turnout at east end of short siding Woodford, MP-349.06	20
On wye and packing house tracks at Locans	10
On Las Palmas spur	20
On spur leading from Pinedale	20

RULE 10-J. Speed signs to left of track.

Eastward	Reading
MP-458.94, Sylmar.....	60-35
Westward	Reading
MP-416.60, Palmdale No. 2.....	35

RULE 82-A. Los Angeles: Trains to San Joaquin Division originating at Los Angeles or Los Angeles Yard must obtain San Joaquin Division clearance, and need not obtain clearance at Burbank Jct., if cleared by train-order signal.

Oak Creek Branch: Extra trains originating at Mojave and operating between Mojave and Creal will display numbers as an extra train on entire trip as indicated by the engine number of the lead unit leaving Mojave and are authorized to operate as extra trains between Mojave and Creal without obtaining a clearance.

Searles: Crew arriving Searles from Lone Pine may assume schedule of No. 701 without obtaining clearance.

Crew arriving Searles on LATA may assume schedule of No. 703 without obtaining clearance.

RULES 82-A, 83 and 83-A. Oak Creek Branch: Extra trains operating between Mojave and Creal, in addition to information required by train register located at Mojave, must register destination of trip (turning point) and date of departure in the column captioned "Signals." When trip has been completed, date of arrival at Mojave must also be entered in column captioned "Signals." An extra train en route Creal must not leave Mojave until it has been ascertained from the train register that all preceding extra trains via the route to be used have completed their trip and registered time and date of arrival at Mojave accordingly. Flag protection is not required in this territory.

RULES 82-A, 83 and 83-A. Lone Pine Branch: Extra trains operating between Searles and Lone Pine, in addition to information required by train register located at Searles, must register destination of trip (turning point) and date of departure in the column captioned "Signals." When trip has been completed, date and time of arrival at Searles must also be entered in column captioned "Signals." An extra train enroute Lone Pine must not leave Searles until it has been ascertained from the train register that all preceding extra trains via the route to be used have completed the trip and registered time and date of arrival at Searles accordingly. Flag protection is not required in this territory.

Refer to Rule 83-A All Subdivisions.

RULE 83.

Vincent: Trains may be identified on double track at Vincent.

Burbank Junction: Identification may be made between Glendale and Burbank Junction to be applied at end of double track. Trains approaching each other between these stations must reduce speed sufficiently to permit identification and Rule 14(k) will apply.

Slover: Trains operating via Hiland may identify trains between West Colton and Slover and such identification will apply at Slover.

RULE 83-A. At the following stations, only the trains indicated will register:

- Palmdale Trains originating or terminating.
- Saugus Trains originating or terminating.

West Colton: Trains originating or terminating.

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

Mojave All trains except Oak Creek Branch trains.

When a regular train or section of schedule is checked on register at Los Angeles it will not be necessary to obtain check of the same train at Burbank Jct.

West Colton: Train order office is in building at Pepper Avenue, MP-537.17.

Trains from Palmdale-Colton Cutoff, westward freight trains from Colton Sub-Division, trains and helper engines originating or terminating may register by ticket under provisions of Rule 83-B.

Westward trains from West Colton yard via Palmdale-Colton Cutoff will receive train orders and clearance at train order office at Pepper Avenue, MP-537.17.

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

West MP		East MP
378.87	Mojave	386.00
	Mojave (Lone Pine Branch)	381.60
	Mojave (Oak Creek Branch)	380.96
393.00	Rosamond	396.50
404.12	Lancaster	407.53
408.20	Palmdale	421.52
	Palmdale (Colton Cut-Off)	419.07
449.37	Saugus	451.64
448.17	Saugus (Santa Paula Branch)	
459.30	San Fernando	468.50
471.20	Burbank Jct.	
491.80	Colton (Mojave Subdivision)	
531.00	Colton (Colton Subdivision)	540.05
427.68	Searles	430.03
517.50	Lone Pine	End of track

Mojave: Trains and engines from Lone Pine Branch must stop at stop sign located 500 feet east of highway crossing MP-380.34 and obtain instructions from operator as to whether or not they can cross over to main track to avoid blocking highway crossing.

RULE 99. Oak Creek Branch: Rule 99 will not apply between Mojave and Creal.

RULE 103-A.

Automatic protection (controlled by single track circuit, with "Stop" signs at control limits) exists at following crossings:

Location	Crossing No.	Track	Protection
Palmdale	B-412.53-C	P.I.D. Drill	Flash. Lights
Palmdale	B-412.78-C	P.I.D. Drill	Flash. Lights
Sylmar	B-457.83-C	2 spurs	Gates
Inyokern	BAM-447.1	Siding	Gates

Refer to Rule 103-A All Subdivisions.

Pacoima: Automatic crossing gates Van Nuys Boulevard crossing MP-463.34. Gates will remain lowered if engines or cars occupy tracks 50 feet either side of crossing.

Sun Valley: Cars or engines must not be left standing on main track or siding within 100 feet of either side of Sunland Blvd. crossing, MP 467.8. When switching over Sunland Blvd., engines or cars must stop within 50 feet of crossing and not enter crossing until traffic signals on both sides of crossing are synchronized with the automatic warning devices.

Sun Valley: MP-467.46-C. Tuxford Street Crossing. Consolidated Rock Company spur.

Stop signs installed. Crossing must not be entered until flashing lights are operating. Flashing lights are operated manually by inserting switch key in receptacle. Turn key 1/2 turn to right. Key may be removed but crossing must be occupied within 45 seconds or flashers will stop. Key start located in box 30 feet in advance of crossing in either direction and on all 3 tracks.

SPECIAL INSTRUCTIONS—MOJAVE SUBDIVISION

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

Mojave.....Lone Pine Branch, for westward track,
 Saugus.....Santa Paula Branch, for westward siding,
 Searles.....Trona Ry, for track No. 1.
 Vincent.....West end.....Eastward main track.
 Vincent.....East end.....Westward main track.

Mojave: MP-380.70. Derail located between No. 5 track switch and No. 6 track switch east end Mojave Yard is lined in derail position. Derail is facing point for eastward movements and may be trailed through on westward movements.

Fleta: MP-383.6. Tail track diverging westward from Purdy Company track is for exclusive use of industry. Tail track also substitutes for derail and has derail target. Switch must be locked in reversed (derailing) position except when Purdy Company spur being switched by Railroad.

Rosamond: MP-395.7. Track No. 0430. Great Lakes Carbon Corp. Derail located 200 ft. from end of spur to protect LPG tank cars spotted thereon.

Hivolt: Derail installed on Southern California Edison Co. spur, 325 feet east of main track switch.

Lone Pine. MP-517.9. Spring derail installed in main track.

RULE 104-A. Yellow switch targets and keepers have been installed on main track switches at the ends of the following branch lines:

Oak Creek Branch.....MP-389.9, Creal
 Lone Pine Branch.....MP-518.8, Lone Pine

RULE 105. Saugus: Westward siding is first track south of main track extending from MP-451.50 to MP-450.40. Eastward siding is first track north of main track extending from MP-449.40 to MP 450.50.

Trains or engines must not foul westward siding from east end of Bunnell storage track until permission is received from train-order operator.

San Fernando: Siding is for use only by light engines and local freight trains.

RULE 211.

Palmdale: To enable Train Dispatcher to advance a westward train beyond junction switch Palmdale-Colton Cut-Off, Operator after receiving verbal authority from Train Dispatcher will clear westward interlocking signal, Palmdale-Colton Cut-Off, for movement on main track which will be an indication to an approaching train that train orders have been issued authorizing movement to the next station at least, against and ahead of all superior trains, and will not require the issuance of Form N train order or the blinking of train order signal several times.

Saugus: Westward interlocking signal at east switch, westward siding, displaying proceed indication authorizes and requires westward trains to proceed on main track to train order office.

Burbank Jct.: To enable Train Dispatcher to advance a westward train beyond Burbank Junction where it is restricted for an opposing or a following train, Operator after receiving verbal authority from Train Dispatcher, will clear interlocking signal at west end of double track east of Burbank Junction for movement on main track on route desired which will be an indication to an approaching train that orders have been issued authorizing movement to the next station at least, against and ahead of all superior trains and will not require the issuance of Form N Train Order or the blinking of train order signal several times.

RULE 221. Burbank Jct. is train-order office only for westward trains.

West Colton is a train-order office for trains originating.
 Lone Pine is train-order office only between 6:30 AM and 3:30 PM, daily, except Saturdays, Sundays and Holidays.

Unit for display of flashing light installed at following location:

Station	Location	Direction
Palmdale.....	On train-order signal mast.....	Eastward

Display of flashing white light indicates that train-order signal is displaying proceed indication or that operator has train orders ready for delivery, that such train orders do not restrict train at that station, and that train, provided it is not restricted by timetable or train orders previously received, may pass fouling point of switch at which an opposing train may enter siding or place where time applies if there is no siding.

RULE D-251. Will apply: Both main tracks between west interlocking limits East Mojave and Mojave.

RULE 306. The following block signals equipped with triangular plate displaying the letter "P" have included in their control limits some special protective device:

Eastward Signal	Protection	Westward Signal
P-3826	Barricade detector, MP-384.63.....	P-3853
P-3894	Spring switch, west end siding, Ansel.....	
	Spring switch, east end siding, Ansel.....	P-3911
P-3992	Spring switch, west end siding, Oban.....	
	Spring switch, east end siding, Oban.....	P-4009
P-3992	Barricade detector, MP-400.00, Oban.....	P-4009
P-4008	Barricade detector, MP-402.00.....	P-4021
P-4010		
P-4046	Spring switch, west end siding, Lancaster.....	
	Spring switch, east end siding, Lancaster.....	P-4057
P-4092	Spring switch, west end siding, Denis.....	
	Spring switch, east end siding, Denis.....	P-4109
P-4156	Spring switch, west end siding, Harold.....	
	Spring switch, east end siding, Harold.....	P-4167
P-4200	Spring switch, west end Vincent.....	
	Spring switch, east end Vincent.....	P-4213
P-4248	Spring switch, west end siding, Paris.....	
	Spring switch, east end siding, Paris.....	P-4257
P-4284	Spring switch, west end siding, Ravenna.....	
	Spring switch, east end siding, Ravenna.....	P-4297
P-4338	Spring switch, west end siding, and slide detector fence middle of siding, Russ	
P-4346		
P-4348	Slide detector fence at MP 435	
	Spring switch, east end siding, and slide detector fence middle of siding, Russ.....	P-4347
	Slide detector fence at MP 435.....	P-4357
P-4382	Spring switch, west end siding, Lang.....	
	Spring switch, east end siding, Lang.....	P-4393
P-4426	Spring switch, west end siding, Humphreys.....	
	Spring switch, east end siding, Humphreys.....	P-4435
P-4466	Spring switch, west end siding, Honby.....	
	Spring switch, east end siding, Honby.....	P-4475
	Spring switch, east end eastward siding, Saugus.....	P-4505
P-4504	Spring switch, west end westward siding, Saugus	
Interlocking Signals	High Water Detector,	Interlocking Signals
MP-451.46	Saugus-Newhall MP-451.92.....	MP-452.67
	Spring switch, east end siding, Newhall.....	P-4541
P-4566	Barricade Detector MP 451.60.....	P-4581
		P-4583
P-4580	Spring switch, west end siding, Sylmar and Barricade Detector MP-458.80	
	Spring switch, east end siding, Sylmar, and Barricade Detector MP-458.80.....	P-4593
P-4610	Spring switch, west end siding, San Fernando.	
P-4622	Barricade Detector MP-462.60.....	P-4631
P-4630	Barricade Detector MP-463.30.....	P-4635
	Spring switch east end Palmdale Siding No. 2.....	P-4181
P-A	Spring switch, west end siding, Slover. (MP-489.68)	

RULE 516. Overlap post:
Pacoima Westward trains, MP 463.30.

RULE 538. SPRING SWITCHES. Spring switches equipped with facing point locks are located:

Location	Normal Position
Ansel West end siding	Main track
Ansel East end siding	Main track
Oban West end siding	Main track
Oban East end siding	Main track
Lancaster West end siding	Main track
Lancaster East end siding	Main track
Denis West end siding	Main track
Denis East end siding	Main track
Harold West end siding	Main track
Harold East end siding	Main track
Paris West end siding	Main track
Paris East end siding	Main track
Ravenna West end siding	Main track
Ravenna East end siding	Main track
Russ West end siding	Main track
Russ East end siding	Main track
Lang West end siding	Main track
Lang East end siding	Main track
Humphreys West end siding	Main track
Humphreys East end siding	Main track
Honby West end siding	Main track
Honby East end siding	Main track
Saugus East end eastward siding	Main track
Saugus West end westward siding	Main track
Sylmar East end siding	Main track
Sylmar West end siding	Main track
Newhall East end siding	Main track
San Fernando West end siding	Main track
Palmdale East end siding No. 2	Main track
Slover West end siding at MP-490.37	Main track

Spring switches not equipped with facing point locks are located:

Location	Normal Position
Vincent West end	Eastward main track
Vincent East end	Westward main track

Switch-point indicators located at:

Mojave Spring switches at east end tracks Nos. 2, 3 and 4.

Indicator does not indicate track occupancy. When indicator displays red aspect, or is not lighted, careful examination of switch must be made before passing over in westward direction.

RULE 605. INTERLOCKING

East Mojave: Limits extend from eastward interlocking signals on main track at MP 381.30 and eastward interlocking signal at clear point of east end yard lead to westward interlocking signal at MP 381.50 on SP main track and MP 816.50 on AT&SFRy main track and to westward signal on tail track and interlocking is under control of operator Mojave.

Eastward signal at MP 381.30 governs movements:

- Top unit to SP main track,
- Middle unit to AT&SF Ry main track,
- Bottom unit to tail track.

Eastward signal (for eastward movements against current of traffic) at MP 381.30 governs movements:

- Top unit to SP main track,
- Bottom unit to AT&SFRy main track.

Westward signals on SP and AT&SFRy main tracks at MP 381.50 and AT&SFRy MP 816.50 govern movements:

- Top units to westward SP main track.
- Bottom units to westward interlocking limits on eastward main track or to clear point of east end yard lead.

Signal at clear point on tail track governs movements to westward interlocking limits on eastward main track or to clear point of east end yard lead.

Telephones located on telephone pole at MP 381.30 and in booth at east interlocking limits.

Sound detector microphones are located adjacent to track near eastward interlocking signals MP-381.30 and MP-381.35 East Mojave.

Eastward trains occupying back track within 200 feet on 2 or 3 tracks within 500 feet in approach to these signals should blow whistle to notify Mojave operator when they are ready to leave East Mojave.

Operator will keep switches lined for tail track until train whistle has been sounded or otherwise notified when train is ready to depart Mojave Yard.

Palmdale: Limits extend from eastward interlocking Signal MP-414.42 to westward interlocking signals MP-414.50 Mojave-Saugus line and MP-416.62 on Palmdale-Colton Cut-Off.

Palmdale-Colton Cut-Off. Junction switch is dual control and instructions governing operations are posted in telephone box adjacent to the switch.

After train order Form N has been issued to operator at Palmdale, train operating eastward to Palmdale No. 2, Palmdale-Colton Cut-off, upon receipt of "calling on" signal from operator Palmdale, is authorized to proceed on main track from west switch Palmdale No. 1 to interlocking signal Junction switch Palmdale-Colton cut-off, MP-414.42.

Saugus-Newhall: Limits extend from 265 feet west of east switch of westward siding Saugus to 265 feet east of west switch of siding Newhall.

Burbank Jct.: Whistle signals:

- To Mojave Subdivision, or to Los Angeles, —,
- To siding, o o o o o.

West Colton: Limits extend:

- MP-532.43 (Sierra Avenue) to MP-538.70 (Colton Tower).
- MP-491.80 (Slover) to MP-537.45 (West Colton via West leg of Wye).
- MP-491.80 (Slover) to MP-492.39 (Via East leg of Wye).

RULE 705. LETTER TYPE INDICATORS

Indicators located as follows:

Illum. On Approach- Authorizes and requires
Letter Signal ing movement as follows:

M 4080	Denis	Proceed on main track to signal 4108 east end Denis siding, and be governed by that signal for movement to junction switch.
S 4080	Denis	Enter siding Denis and remain until letter "M" is displayed.
M 4119	Denis	Proceed on main track to west end of siding.
S 4119	Denis	Enter Denis siding.
M 4110	At east end Denis	Enter main track and proceed to junction switch.
M 4486	Saugus	Proceed on main track to east end eastward siding.

Denis: Illuminated "M" or "S" Signal at Denis requires movement be made as indicated and supersedes all other instructions and/or train orders that may be held restricting train at that point.

RULE 705. HOT BOX DETECTORS

Refer to Rule 705 All Subdivisions.

SCANNER SITE

MP	Type	Direction	Location
396.0 A	East & West	Ansel-Oban	
412.6 C	East & West	Denis-Palmdale	
431.1 B	East & West	Palmdale-Wash	
457.9 B	East & West	Phelan-Hivolt	
488.6 D	East	*Dike-Bench	

*Recorder at West Colton Yard, Crest Lead Carman at Administration Bldg.

SPECIAL INSTRUCTIONS—MOJAVE SUBDIVISION

TYPE "A" HOT BOX DETECTOR LETTER TYPE INDICATOR AND READOUT LOCATIONS.

Illum. Letter	On Signal	Approaching	Location of Readout
H.....	3945.....	Ansel.....	MP 389.5 Ansel
W.....	3946.....	Oban.....	
W.....	3979.....	Ansel.....	
H.....	3978.....	Oban.....	MP 400.8 Oban

RULE 760. CENTRALIZED TRAFFIC CONTROL

Limits on Colton Cut-Off extend from MP-489.68, Bench, to MP-491.80, Slover. CTC is controlled by train dispatcher in Los Angeles.

GENERAL REGULATIONS

RULE 825. Instructions for setting hand brakes:

Mojave: Through freight trains left standing without crew when consist is not to be disturbed will set hand brakes on cars in train as follows:

Ten brakes on east end and ten brakes on west end unless conductor has reached understanding that engineer will remain on engine at all times and control train by use of air brakes.

Other freight trains or cuts of cars left standing will have hand brakes set as follows:

- 25 cars or less 10 brakes on east end
- 26 to 50 cars 15 brakes on east end
- Over 50 cars 20 brakes on east end

Any employe releasing any of these brakes must set an equal number to replace them.

Staff brakes must be set with the assistance of a brake club after train has stopped.

West Colton: When trains or cars are left standing in West Colton Receiving Yard or Departure Yard, not less than four hand brakes will be set on descending end. When less than four cars, all brakes will be set.

Portable rail skids are hung on posts at lower end of sidings at:

Ansel	Paris (West End)
Oban	Paris (East End)
Denis	Ravenna
Harold	Russ
	Lang
	Newhall

When necessary to leave cars on these sidings they must be left clear of the Approach Circuit Board.

Portable rail skids are hung on posts at following locations:

- Slover (East End)
- Dike (East End)
- Canyon (East End)
- Hiland (East End)
- Wash (West End)
- Palmdale Siding No. 2 (West End)

Portable rail skids are hung on posts at:

- Vincent..... Team Track
- Vincent..... Setout Spur Track

When necessary to leave cars on any of these sidings permission must first be obtained from chief train dispatcher, after which rail skid must be placed on rail and leading wheel of first car in descending direction run onto the rail skid, and hand brakes set if brakes are operative, before engine is detached. Trains picking up cars from these sidings must remove rail skid and return it to proper post.

Refer to Rule 825 All Subdivisions.

RULE 827. ADD: Dragging and/or derailed equipment detector and indicator installed at the following locations:

MP	Location
MP-387.3.....	Between Fleta and Ansel
MP-431.72.....	Between Ravenna and Russ
MP-446.6.....	Between Wash and Phelan
MP-453.1.....	Newhall
MP-458.1.....	Between Newhall and Sylmar
MP-486.8.....	Between Dike and Bench.

Refer to Rule 827 All Subdivisions.

RULE 827. High-Wide Load Detector installed at Hot Box Detector at following location:

MP	Direction	Location	Location of Recorder Readout
488.6.....	East.....	Dike-Bench...	West Colton Yard Crest Lead Carman at Administration Bldg.

High-Wide Load Detector scanner sites have a dual purpose. High-Wide Load and Hot Box Detector white light is continuously displayed on track side of instrument house. When High-Wide Load or Hot Box is detected light will start to flash. Absence of white light must be promptly reported to train dispatcher.

Crew members must keep a vigilant look-out for white light, and when found flashing, conductor and engineer must immediately orally compare observations when means of communication is available. Train must be stopped and, when means of communication is available, crew member must contact employe at location of recorder to determine location of high-wide load or hot bearing. If means of communication is not available, inspection must be made of all journals and cars in train for hot bearing or load protruding beyond limits.

Switching movements must be made with air brakes cut in on all cars and cars must not be detached while in motion except when allowing caboose to roll against train on descending grade, at following locations:

MP-420, Palmdale, to MP-491.9, West Colton.

RULE 883. Light engines must not be left unattended between Hiland and West Colton unless protected by derail or inside switch.

AIR BRAKE RULES

RULE 17. Retaining valves must be used on freight and mixed trains on descending grades:

Vincent to Lang, Sylmar to Burbank Jct., Hiland to West Colton, Searles to MP-412 and Creal to Mojave.

Without Dynamic Brake in Operation:

One retaining valve for each 80 tons in train. If gross tonnage exceeds 80 tons per operative brake, retaining valves must be used on all cars and speed must not exceed 15 MPH.

With Dynamic Brake in Operation:

Permissible Tons Per Unit Without Retaining Valves*

	Basic Dynamic Brake		Extended Range Dynamic Brake		
	4-Axle	6-Axle	4-Axle	6-Axle	8-Axle

Vincent to Lang, Sylmar to Burbank Jct., Searles to MP-412 and Creal to Mojave:

With dynamic brake in operation **without** pressure maintaining system of braking... 525 625 550 950 1250

With dynamic brake in operation **with** pressure maintaining system of braking... 1500 1800 1600 2700 3600

Hiland to West Colton:
With dynamic brake in operation **without** pressure maintaining system of braking... 525 775 625 950 1250

With dynamic brake in operation **with** pressure maintaining system of braking... 1500 2250 1800 2700 3600

If permissible tonnage is exceeded, one retaining valve must be used for each 150 tons of excess tonnage.

*If any unit having basic dynamic brake is operated with units having extended range dynamic brake, all units in consist must use tonnage authorized for units having basic dynamic brake.

Locomotive classes AF628, AF630, EF425, EF623, EF625, EF630, EF636, GF425 (except units 6700-6727), GF628, GF630, GF633, EF850B and GF850 are equipped with extended range dynamic brake.

FREIGHT TRAINS

RULE 24-B. West Colton: Incoming engineer, after completing stop, must make a full service brake application leaving brakes applied. When outgoing crew takes charge of train on arrival or otherwise is assured, upon request, that continuity of brake pipe has not been disturbed, engineer will release brakes and proceed.

RULE 24-E.

Applies to trains arriving in West Colton receiving yard.

RULE 25. Will apply for eastward and westward trains stopping at Vincent and to westward trains stopping at Searles.

Eastward and westward trains not stopping at Vincent and westward trains not stopping at Searles, will make running air test by applying train air brakes with sufficient force to insure that air brakes are operating properly and to give assurance by observation of air gauge on caboose that there has been a brake pipe reduction made. After receiving this assurance, trainmen will inform engineer when brake pipe pressure is being restored.

Will apply at Hiland to eastward trains, except trains not using retaining valves are not required to stop. Eastward trains not required to stop must make running air brake test between MP 455.0 and Hiland:

Engineer while working power will make reduction of approximately 7 lbs., wait for slack to adjust, then make a 3 lb. reduction before releasing brakes. Trainmen will give proceed signal after noting reduction in brake pipe air pressure and knowing that the air pressure is being properly restored, as indicated by caboose gauge, and that brakes on caboose have been released.

RULE 33. Creal to Mojave, Searles to MP-412.00 and Vincent to Lang:

Maximum tonnage per operative brake... 80 tons, except
With dynamic brake and pressure maintaining
system of braking in operation with speed
not exceeding 20 MPH..... 80 to 100 tons

Without dynamic brake in operation, maximum tonnage per operative brake Vincent to Lang is 80 tons and speed must not exceed 15 MPH Vincent to Paris and 20 MPH Paris to Lang. Retaining valves must be used as prescribed by Air Brake Rule 17.

One hundred tons per operative brake may be handled with trains of 6,000 tons or less having dynamic brake in use running at reduced speed not to exceed 20 MPH Vincent to Paris.

Hiland to West Colton:

Maximum tonnage per operative brake..... 80 tons
Except with dynamic brake and pressure
maintaining system of braking in operation
with not more than 110 cars and speed
not exceeding 20 MPH 100 tons

If retaining valves not required as prescribed by Air Brake Rule 17, must not exceed 25 MPH.

Should dynamic brake failure occur while handling in excess of 80 tons per operative brake train may proceed at speed not exceeding 15 MPH if in judgment of conductor and engineer it is safe to do so and provided retaining valves are used as prescribed by Air Brake Rule 17.

Restrictive grades are:

Eastward			
(Station) MP	to	(Station) MP	Speed
(Ansel) 392.74		(Rosamond) 393.84	25 MPH
(Newhall) 456.25		(Sylmar) 457.69	20 MPH
(Sylmar) 458.97		(San Fernando) 461.17	25 MPH
(Pacoima) 463.97		(Sun Valley) 464.89	25 MPH
(Sun Valley) 468.22		(Burbank Jct.) 470.34	25 MPH
(Hiland) 463.9		(West Colton) 492.7	20 MPH

Westward			
(Station) MP	to	(Station) MP	Speed
(Sylmar) 454.94		(Newhall) 453.02	20 MPH

LONE PINE BRANCH

(Coso) 470.43		(Inyokern) 461.53	20 MPH
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RULE 60. TRAIN HANDLING

When operating over either leg of wye between east switch Slover and West Colton, dynamic braking force must not exceed one-half of maximum.

MISCELLANEOUS

1. Operation between MP 449.78 Saugus, and Burbank Jct., under the jurisdiction of Los Angeles Division. Train dispatching between Saugus and Burbank Jct. is under the jurisdiction of San Joaquin Division.

Operation via Colton Cut-Off between MP-462.00, Hiland, and MP-535.7, West Colton, is under the jurisdiction of Los Angeles Division. Train dispatching between Hiland and West Colton is under the jurisdiction of the San Joaquin Division.

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

Class of Engine	Restricted Tracks
All engines...	Inyokern—Must not go beyond 200 feet west of east interchange track, NWC.

3. Location of overhead and side structures not standard clearance on main track and sidings:

MP	Location	Description
435.80	East of Russ.....	Overhead highway crossing..... Overhead
436.80	East of Russ.....	Tunnel 18..... Overhead & side
437.30	East of Russ.....	Tunnel 19..... Overhead & side
459.40	West of Sylmar...	Tunnel 25..... Overhead & side
426.80	West of Searles...	Tunnel 29..... Overhead

4. Load limit (car and contents):

*Mojave-Burbank Jct.....	263,000 pounds
#Mojave-Burbank Jct.....	315,000 pounds
*Palmdale-West Colton via Hiland.....	263,000 pounds
#Palmdale-West Colton via Hiland.....	315,000 pounds
*Mojave-Searles.....	281,000 pounds
*Searles-Lone Pine.....	263,000 pounds
#Mojave-Creal.....	315,000 pounds

*Applies to uniformly loaded four-axle cars having trucks spaced 23 ft. 0 in. or more center to center and minimum axle spacing of 5 ft. 6 in.

#Applies to uniformly loaded four-axle cars with minimum axle spacing of 6 ft. 0 in. and minimum distance of 37 ft. 0 in. center to center of trucks; also, wheels 38 in. or more in diameter.

Unless authorized by Superintendent, heavier loads must not be handled.

5. Tunnel 25, Newhall: Boxes, secured with switch locks, at east portal of Tunnel 25, MP-459.40 contain two knuckles, two air hoses and a wrench for emergency use.

Switches controlling lights in Tunnel 25 are located at each portal. Lights must be extinguished when not in use.

6. Pacoima, MP-463.03: Spur track serving Price-Pfister International has beam across spur 100 feet from end, for operation of overhead crane, is at impaired clearance and is to be kept in raised position by industry during switching operations and when crane not in use. Look out for poor footing spur serving this industry.

7. Searles, MP-428.40: Look out for cars and equipment on both legs of wye.

8. Inyokern, MP-447.20: Look out for poor footing on team track account lumber loading.

9. Manual Block System established on Colton Cut-Off between MP-418.1, Palmdale #2, and MP-462.3, Hiland.

Unless otherwise provided, Manual Block System does not supersede superiority of trains nor dispense with use or observance of other signals and rules governing movements outside of block system limits whenever and wherever they may be required.

Train order will be used to authorize Manual Block System, and the following rules and instructions will govern when train order is in effect.

Definition: Manual Block System—A length of track over which train movements are governed by special rules as herein contained:

To place Manual Block System in effect, following form of train order must be issued:

“Effective (time) Manual Block System rules as described in Timetable and Special Instructions No. 2 are in effect between Hiland and Palmdale.”

When necessary to place a time limit on Manual Block System operation, following form of train order must be issued:

“Effective (time) Manual Block System rules as described in Timetable and Special Instructions No. 2 are in effect between Palmdale and Hiland. This order is annulled at (time) and Manual Block System rules are no longer in effect.”

To permit a train to enter block occupied by another train under rules requiring flag protection, following form of train order must be issued:

“Block is occupied by (Train No.). Your train (number) must be preceded by flagman.”

To permit a train to enter block occupied by another train under rules requiring movement at restricted speed, following form of train order must be issued:

“Block is occupied by (Train No.). Your train (number) must proceed prepared to stop short of train or obstruction but not to exceed fifteen (15) MPH.”

A train must not enter block when Manual Block System rules are in effect unless a clearance is received bearing OK time and initials of Chief Train Dispatcher. Wire failure clearance under provisions of third paragraph of Rule 221-A must not be issued at Palmdale or Hiland for trains on Colton Cut-Off.

A passenger train must not be admitted in the block when occupied by another train, except under flag protection.

No train will be admitted in the block when occupied by an opposing train or by a passenger train, except under flag protection.

A train, other than a passenger train, will not be permitted to follow a train, other than a passenger train, into the block except when authorized by train order, and when such movement is authorized, the following train must proceed prepared to stop short of a train or obstruction, but not to exceed 15 MPH.

The train dispatchers and operators are responsible for the proper operation of the Manual Block System and must maintain complete records in the block record book, including train numbers, time block authority granted and time trains enter and clear the block.

To admit a train in block, the block record must be examined by the individual in charge of block record at that station, and, if clear of trains, request permission for the block from the next block station in the following form: “Block for (train).” The individual receiving this request must check block record at his station and, if clear, will enter the train number in his station’s block record and respond: “I have blocked for (train).” Opposing trains must then be held at that station until train for which the block was given has arrived and cleared the block. When permission to use the block has been obtained, the train may be cleared.

Following speed restrictions must be adhered to:

EASTWARD, PALMDALE TO WEST COLTON:

460.00 to 463.80 40

WESTWARD, WEST COLTON TO PALMDALE:

463.80 to 460.00 40

Trains authorized by train order may operate at 65 MPH where speed signs authorize 49 MPH within Manual Block System limits, subject to Timetable and train order restrictions.

Employees in train and engine service, also train order operators at Palmdale and Hiland, must have copy of Timetable and Special Instructions No. 2 in their possession while on duty.

SPECIAL INSTRUCTIONS—MOJAVE SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in **SPEED RESTRICTIONS FOR ENGINES** appearing on page 16 and **MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT** appearing on page 17 and **OTHER MAXIMUM SPEEDS** appearing on page 18 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and **INSURE SAFETY, REGARDLESS OF TIME.**

TERRITORY			1	2	TERRITORY			1	2
MP	MP	Column:			MP	MP	Column:		
EASTWARD, MOJAVE TO BURBANK JCT.:					WESTWARD, BURBANK JCT. TO MOJAVE:				
380.70 to 381.30			45	25	471.49 to 461.90			60	55
381.30 to 381.40	(through turnouts)		25	25	461.90 to 461.80	(street crossings)		60	55
381.40 to 414.76			70	55	461.80 to 458.94	(Sylmar)		60	55
414.76 to 417.36			50	50	458.94 to 457.25			40	40
417.36 to 420.00			30	30	457.25 to 456.25			30	30
420.00 to 422.62			30	25	456.25 to 454.81			25	25
422.62 to 426.33			45	25	454.81 to 453.00			40	25
426.33 to 435.19			30	25	453.00 to 448.60			40	40
435.19 to 436.74			35	25	448.60 to 448.23			30	30
436.74 to 438.17			30	25	448.23 to 446.22			45	45
438.17 to 442.13			40	35	446.22 to 442.13			30	30
442.13 to 446.22			30	30	442.13 to 438.17			40	40
446.22 to 448.23			45	35	438.17 to 436.74			30	25
448.23 to 448.60			30	30	436.74 to 435.19			35	35
448.60 to 454.81			40	40	435.19 to 426.33			30	25
454.81 to 456.25			25	25	426.33 to 422.62			45	45
456.25 to 457.25			30	25	422.62 to 420.00			30	30
457.25 to 458.94			40	25	420.00 to 417.36			30	25
458.94 to 461.80	(Sylmar)		60	35	417.36 to 414.76			50	45
461.80 to 461.90	(street crossings)		60	35	414.76 to 381.40			70	55
461.90 to 471.49	(Burbank Jct.), except: thru crossover west of tower		60	45	381.40 to 380.70			50	45
			35	35					
EASTWARD, PALMDALE TO WEST COLTON:					WESTWARD, WEST COLTON TO PALMDALE:				
414.41 to 414.60				35	West leg of wye, West Colton				15
414.60 to 460.00				49	492.71 to 491.90	(East leg of wye)			15
460.00 to 463.80				40	491.90 to 487.40				40
463.80 to 487.40				30	487.40 to 463.80				30
487.40 to 491.90				40	463.80 to 460.00				40
491.90 to 492.71	(East leg of wye)			15	460.00 to 414.60				49
West leg of wye, West Colton				15	414.60 to 414.41				35
EASTWARD, MOJAVE TO LONE PINE:					WESTWARD, LONE PINE TO MOJAVE:				
380.09 to 380.47				15	518.00 to 428.80				30
380.47 to 422.00				40	428.80 to 428.20				15
422.00 to 428.20				30	428.20 to 412.90				30
428.20 to 428.80				15	412.90 to 380.47				40
428.80 to 518.00				30	380.47 to 380.09				15
EASTWARD, MOJAVE TO CREAL:					WESTWARD, CREAL TO MOJAVE:				
380.70 to 386.75				30					20
386.75 to 389.90				25					

All freight and mixed trains containing no restricted cars are authorized to operate at Column 1 speeds not exceeding 55 MPH except LABRF, LABRT, BRLAT, Light Engines, Cab Hops may be authorized by train order to operate at Column 1 speeds not exceeding 60 MPH provided requirements of tons per operative brake are not exceeded:

Number of Cars	Tons Per Operative Brake	Number of Cars	Tons per Operative Brake
70	70	110	62
75	69	115	61
80	68	120	60
85	67	125	58
90	66	130	56
95	65	135	54
100	64	140	52
105	63	145	50

except LABRF, LABRT, BRLAT, Light Engines, Cab Hops as follows:

EASTWARD	
MP-381.40 to MP-414.76	65 MPH
MP-420.50 to MP-426.33	25 MPH
WESTWARD	
MP-420.50 to MP-417.36	25 MPH
MP-417.36 to MP-414.76	45 MPH
MP-414.76 to MP-381.40	65 MPH

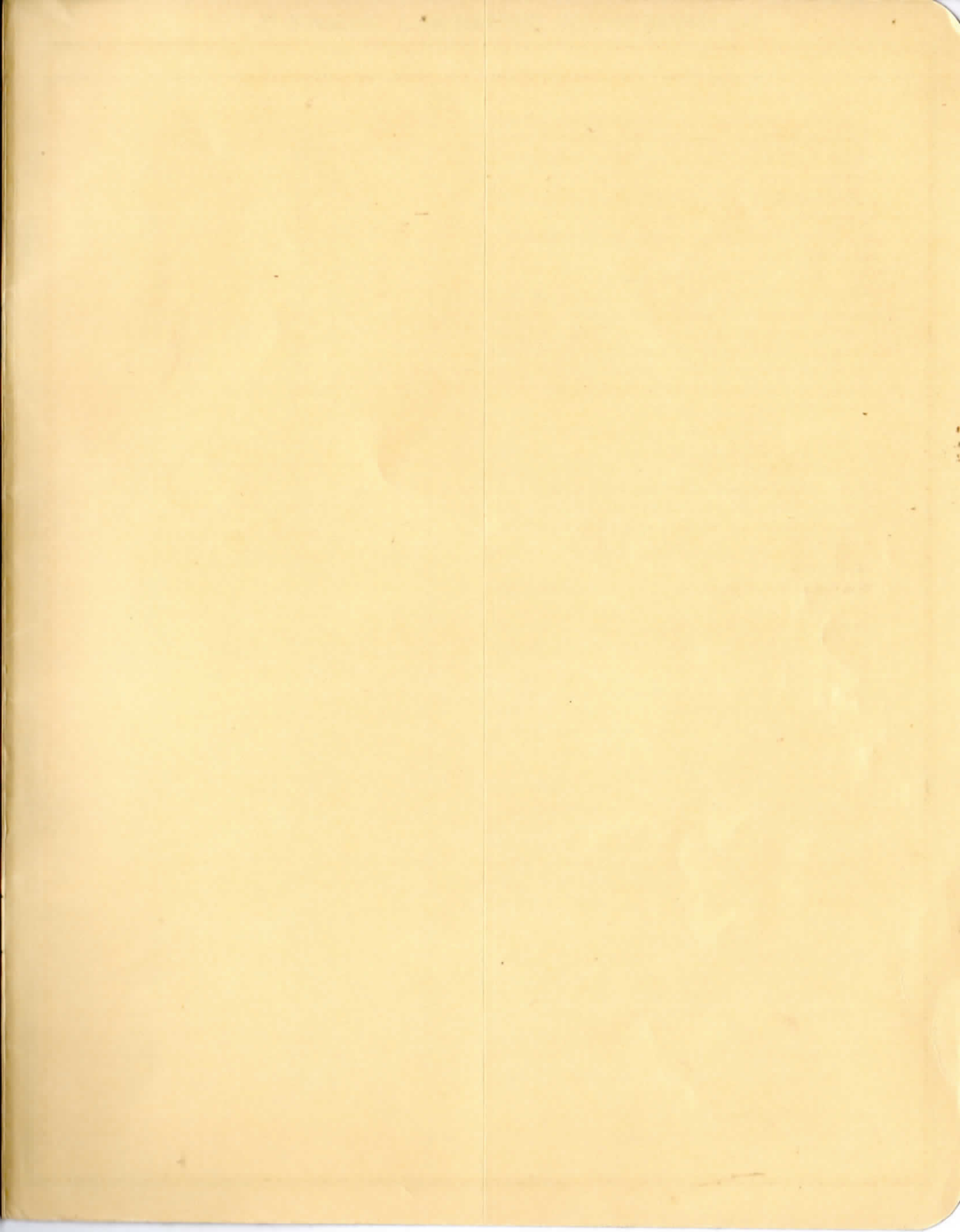
SPECIAL INSTRUCTIONS—MOJAVE SUBDIVISION

Eastward trains in excess of 300 tons per axle of dynamic brake in operation must not exceed 25 MPH between Hiland MP-464 and MP-487.

On Lone Pine Branch between MP-428.87 and MP-493.51, maximum speed of trains as shown below must not be exceeded when handled by following engines, subject to further restrictions shown in Speed Restrictions for Trains table above:

AS 409, 410	25 MPH
EP 415A, EF 418	20 MPH
ES 410, FS 412	20 MPH
EP 415B	15 MPH

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through yard and other tracks, wyes, balloon tracks, crossovers and turnouts	10
Except:	
Through sidings and their turnouts at Ansel and Oban, and between Palmdale and West Colton via Hiland	25
Through all other sidings and their turnouts.	20
Except:	
Through turnout at east end Ravenna, and through sidings and turnouts at Denis, Saugus, Newhall, San Fernando, Pacoima, and Sun Valley	15
West Colton Yard Tracks	15
Except:	
Track 100, MP-530.50 to MP-532.43, and By-Pass Track 951-952, MP-537.29 to MP-538.1	25



RULE 10-I

Oral authorization and acknowledgments between Foremen and Engineers for trains to pass "Red Conditional Stop" signs must be worded in the following forms:

"SP FOREMAN AT MP CALLING SP (Train No.)"

(After train answers giving his identification):
(i. e.) SP Train

Foreman's Response

"THIS IS SP FOREMAN . . . IN CHARGE OF THE WORK BETWEEN MP . . . AND MP SP TRAIN ORDER NO. . . . WE ARE IN THE CLEAR AND YOU MAY PROCEED PAST THE RED CONDITIONAL STOP SIGN AND THROUGH THE LIMITS OF ORDER AT MPH, REPEAT MPH"*

Engineer's Response

"THIS IS ENGINEER SP TRAIN I MAY PROCEED PAST THE RED CONDITIONAL STOP SIGN AND THROUGH THE LIMITS OF ORDER NO. . . . BETWEEN MP . . . AND MP . . . AT (Speed). REPEAT (Speed) MILES PER HOUR."

Foreman must acknowledge Engineer's response as follows:

"SP TRAIN ORDER NO. , BETWEEN MP AND MP MPH* OK."

*When no speed restriction account above Form "Y" Train Order, tell train engineer "At Maximum Authorized Speed."

Oral authorization and acknowledgments between Foremen and Engineers for trains to pass "Red Conditional Stop" signs in multiple main track territory must be worded in following forms:

Foreman's Response

"THIS IS SP FOREMAN IN CHARGE OF THE WORK BETWEEN MP AND MP SP TRAIN ORDER NO. . . . WE ARE IN THE CLEAR OF TRACK . . . AND YOU MAY PROCEED PAST THE RED CONDITIONAL STOP SIGN ON TRACK . . . AND THROUGH THE LIMITS OF ORDER AT MPH, REPEAT MPH."

Engineer's Response

"THIS IS ENGINEER SP TRAIN I MAY PROCEED PAST THE RED CONDITIONAL STOP SIGN AND THROUGH THE LIMITS OF ORDER NO. . . . ON TRACK BETWEEN MP AND MP AT (Speed). REPEAT (Speed) MILES PER HOUR."

Foreman must acknowledge Engineer's response as follows:

"SP TRAIN ORDER NO. ON TRACK , BETWEEN MP AND MP MPH OK."

SPEED TABLE

TIME PER MILE	MILES PER HOUR
36"	100
37"	97.3
38"	94.7
39"	92.3
40"	90
41"	87.8
42"	85.7
43"	83.7
44"	81.8
45"	80
46"	78.3
47"	76.6
48"	75
49"	73.5
50"	72
51"	70.6
52"	69.2
53"	67.9
54"	66.7
55"	65.5
56"	64.3
57"	63.2
58"	62.1
59"	61
1'00"	60
1'01"	59
1'02"	58.1
1'03"	57.1
1'04"	56.2
1'05"	55.4
1'06"	54.5
1'07"	53.7
1'08"	52.9
1'09"	52.2
1'10"	51.4
1'11"	50.7
1'12"	50
1'13"	49.3
1'14"	48.6
1'15"	48
1'16"	47.4
1'17"	46.8
1'18"	46.2
1'19"	45.6
1'20"	45
1'25"	42.4
1'30"	40
1'35"	37.9
1'40"	36
1'45"	34.3
1'50"	32.7
1'55"	31.3
2'00"	30
2'15"	28.7
2'30"	24
2'45"	21.8
3'00"	20
3'30"	17.1
4'00"	15
5'00"	12
6'00"	10
7'00"	8.6
7'30"	8
8'00"	7.5
10'00"	6