



WORK SAFELY TODAY

EACH RULE VIOLATION IS A
POTENTIAL ACCIDENT

ASSISTANT SUPERINTENDENTS

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C. E. McDONALD.....Sacramento

TRAINMASTERS

J. J. McNALLY.....Stockton Yard
P. F. PRENTISS.....Oroville

TERMINAL TRAINMASTER

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

ROAD FOREMEN OF ENGINES

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

ASSISTANT TRAINMASTERS

M. J. McDONALD.....Oakland
LEROY FOSTER.....Sacramento
G. H. EVANS.....Keddie

CHIEF TRAIN DISPATCHER

E. J. HILLIER.....Sacramento

ASSISTANT CHIEF TRAIN DISPATCHER

G. L. HARLAN.....Sacramento

NIGHT CHIEF TRAIN DISPATCHERS

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



THE WESTERN PACIFIC RAILROAD CO.



WESTERN DIVISION TIMETABLE

39

EFFECTIVE SUNDAY, APRIL 29, 1951

AT 12:01 A. M.

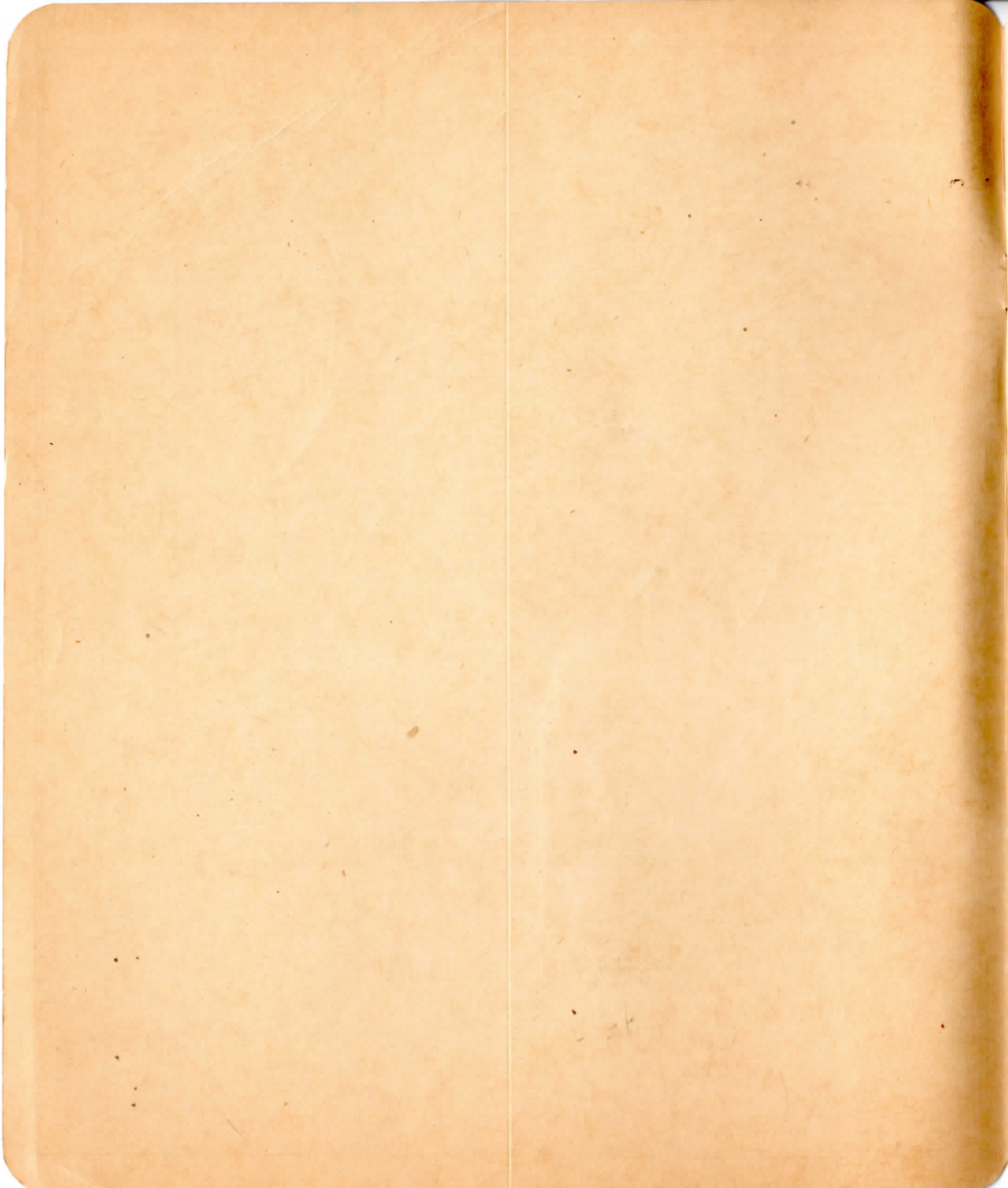
PACIFIC STANDARD TIME

FOR THE GOVERNMENT AND INFORMATION
OF EMPLOYEES ONLY

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

E. T. GALLAGHER,
Superintendent of Transportation.

G. W. CURTIS,
Superintendent.



RAILROAD SURGEONS

LOCATION	NAME	TITLE
San Francisco, Calif.	Dr. G. F. Cushman	Chief Surgeon
San Francisco, Calif.	Dr. C. E. Smith	Asst. Chief Surgeon
San Francisco, Calif.	Dr. Ruth Fleming	Local Surgeon
San Francisco, Calif.	Dr. J. L. Wilson	Local Surgeon
San Francisco, Calif.	Dr. S. J. Polk	Internist
San Francisco, Calif.	Dr. A. J. Brinkerhoff	Oculist
San Francisco, Calif.	Dr. F. D. Fellows	Aurist
San Francisco, Calif.	Dr. Frank Hand	Aurist
Oakland, Calif.	Dr. Robert R. Thomson	Local Surgeon
Oakland, Calif.	Dr. Fred D. Fisher	Local Surgeon
Oakland, Calif.	Dr. L. L. Coleman	Local Surgeon
Oakland, Calif.	Dr. J. P. Evans	Local Surgeon
Oakland, Calif.	Dr. R. F. Westerfield	Local Surgeon
Oakland, Calif.	Dr. H. W. Kohlmoos	Aurist
Berkeley, Calif.	Dr. W. B. McKnight	Local Surgeon
Berkeley, Calif.	Dr. Raymond Johanson	Oculist
Alameda, Calif.	Dr. D. D. Stafford	Local Surgeon
Alameda, Calif.	Dr. John Ohannesson	Local Surgeon
San Rafael, Calif.	Dr. W. M. Edwards	Local Surgeon
San Leandro, Calif.	Dr. D. M. Martin	Local Surgeon
Hayward, Calif.	Dr. H. C. Crockett	Local Surgeon
Niles, Calif.	Dr. E. C. Grau	Local Surgeon
Livermore, Calif.	Dr. Paul E. Dolan	Local Surgeon
San Jose, Calif.	Dr. H. G. Zanger	Local Surgeon
San Jose, Calif.	Dr. J. M. Geiger	Local Surgeon
Tracy, Calif.	Dr. Marion G. Weitz	Local Surgeon
Stockton, Calif.	Dr. E. G. Hermosillo	Local Surgeon
Stockton, Calif.	Dr. Henry F. Quinn	Local Surgeon
Stockton, Calif.	Dr. Dewey R. Powell	Oculist and Aurist
Stockton, Calif.	Dr. James R. Powell	Oculist and Aurist
Stockton, Calif.	Dr. James B. Pope	Internist
Lodi, Calif.	Dr. S. W. Leiske	Local Surgeon
Lodi, Calif.	Dr. W. G. Fessler	Local Surgeon
Sacramento, Calif.	Dr. J. V. Chambers	Local Surgeon
Sacramento, Calif.	Dr. D. O. Kilroy	Local Surgeon
Sacramento, Calif.	Dr. D. J. Engelberg	Local Surgeon
Sacramento, Calif.	Dr. John A. Berg	Oculist
Marysville, Calif.	Dr. P. B. Hoffman	Local Surgeon
Oroville, Calif.	Dr. J. E. Patrick	Local Surgeon
Oroville, Calif.	Dr. Chas. Benninger, Jr.	Local Surgeon
Oroville, Calif.	Dr. Concessa Craviotto	Local Surgeon
Oroville, Calif.	Dr. Robt. D. Bethel	Oculist
Quincy, Calif.	Dr. D. J. Bleiberg	Local Surgeon
Quincy, Calif.	Dr. Yale Rosenfeld	Local Surgeon
Greenville, Calif.	Dr. W. C. Batson	Local Surgeon
Westwood, Calif.	Dr. H. G. Levin	Local Surgeon
Portola, Calif.	Dr. J. D. Coulter	Division Surgeon
Portola, Calif.	Dr. J. F. Narkevitz	Asst. Division Surgeon

WATCH INSPECTORS

LOCATION	NAME	TITLE
San Francisco, Calif.	C. D. Fabrin	Manager of Time Service
San Francisco, Calif.	E. J. Land	Watch Inspector
Oakland, Calif.	E. W. Becker	Watch Inspector
Oakland, Calif.	Leroy D. Wertz	Watch Inspector
Oakland, Calif.	Don J. Allphin	Watch Inspector
San Jose, Calif.	Kochers	Watch Inspector
Livermore, Calif.	C. Harlie Power	Watch Inspector
Stockton, Calif.	Conrad Mantele	Watch Inspector
Sacramento, Calif.	H. T. Harger	Watch Inspector
Marysville, Calif.	John J. Fargo	Watch Inspector
Oroville, Calif.	Philip K. Schmidt	Watch Inspector
Quincy, Calif.	W. H. Powell	Watch Inspector
Portola, Calif.	Wm. B. and Allan H. Lindsey	Watch Inspector

SPEED TABLE

TIME PER MILE	MILES PER HOUR
36"	100
37"	97.3
38"	94.7
39"	92.3
40"	90
41"	87.8
42"	85.7
43"	83.7
44"	81.8
45"	80
46"	78.3
47"	76.6
48"	75
49"	73.5
50"	72
51"	70.6
52"	69.2
53"	67.9
54"	66.7
55"	65.5
56"	64.3
57"	63.2
58"	62.1
59"	61
1'00"	60
1'01"	59
1'02"	58.1
1'03"	57.1
1'04"	56.2
1'05"	55.4
1'06"	54.5
1'07"	53.7
1'08"	52.9
1'09"	52.2
1'10"	51.4
1'11"	50.7
1'12"	50
1'13"	49.3
1'14"	48.6
1'15"	48
1'16"	47.4
1'17"	46.8
1'18"	46.2
1'19"	45.6
1'20"	45
1'25"	42.4
1'30"	40
1'35"	37.9
1'40"	36
1'45"	34.3
1'50"	32.7
1'55"	31.3
2'00"	30
2'15"	26.7
2'30"	24
2'45"	21.8
3'00"	20
3'30"	17.1
4'00"	15
5'00"	12
6'00"	10
7'00"	8.6
7'30"	8
8'00"	7.5
10'00"	6

SECOND SUBDIVISION

EASTWARD

		SECOND CLASS			FIRST CLASS		Distance from San Francisco	Timetable No. 39 April 29, 1951		Distance from Stockton Yard				
		62 Fruit Block Leave Daily PM 7.30	56 S. W. G. Leave Daily PM 12.30	54 N. C. X. Leave Daily AM 4.30	2 Zephyrette Leave Sun., Wed., Fri. PM 10.23	18 California Zephyr Leave Daily AM 11.37		STATIONS						
Yard Limits	RBKW FTPO	Yard	Sn				92.0	TO	STOCKTON YARD	0.0				
	I			Schedules shown for first-class trains do not confer any superiority whether or not A.B.S. and C.T.C. are operative but must be respected by trains operating on such schedules or sections thereof. (Also see A.A.B.S. Rule 308 and C.T.C.S. Rule 780.)					1.2	AT&SF Crossing	1.2			
	KIP									93.2		0.6	STOCKTON (SP X'ing.)	1.8
	P	45										0.5	FLORA STREET	2.3
	I											0.8	SP Crossing	3.1
	P	84										3.0	HAMMER LANE	6.1
	P	73	Di							10.38		6.5	KINGDON	12.6
	YP	31										0.9	TERMINOUS JUNCTION	13.5
	WP	73	Nh							s 10.48	AM 11.58	8.4	THORNTON	21.9
	P	74										5.1	GLANNVALE	27.0
P	73								11.01	PM 12.09	5.4	FRANKLIN	32.4	
Yard Limits	P	100				11.11		8.0	POLLOCK	40.4				
	KWFP	Yard	Jy		PM 9.20	PM 2.30	AM 7.30		4.1	SOUTH SACRAMENTO	44.5			
	I							1.0	CCT and SN Crossing	45.5				
	I							0.5	SP Crossing	46.0				
	KYPO		Sr Ra Ds				s 11.27	s 12.33	0.6	SACRAMENTO	46.6			
	I							0.6	SN Crossing	47.2				
	I							1.6	SN Crossing	48.8				
	P	73					11.37	12.43	3.0	DEL PASO	51.8			
	I								8.7	SN Crossing	60.5			
	WP	72					11.51	12.56	3.9	PLEASANT GROVE	64.4			
Yard Limits	P	80				PM 11.57	1.02	5.1	TROWBRIDGE	69.5				
	P	73				AM 12.09	1.13	11.0	EAST ARBOGA	80.5				
	WP	107	Ms			s 12.19	s 1.23	6.3	MARYSVILLE	86.8				
	I							1.4	SP Crossing	88.2				
	P	73				12.29	1.32	5.8	TAMBO	94.0				
	P	73				12.37	1.39	7.0	CRAIG	101.0				
	RBKWF TYPO	Yard	Yd		11.59 PM	5.30 PM	11.30 AM		9.9	OROVILLE YARD	110.9			
	RBKP	50	Vi						2.2	OROVILLE	113.1			
					Arrive Daily	Arrive Daily	Arrive Daily	Arrive Mon., Thurs., Sat.						
					62	56	54	2	18					

Automatic Block System

C.T.C.

At Flora Street, Track 7, located on north side of main track, west switch at Park Street, east switch immediately west of Harding Way, will be used as siding.

Special Instructions on pages 4 and 5 will apply to both pages where applicable.

SECOND SUBDIVISION

Distance from San Francisco	Timetable No. 39 April 29, 1951		Distance from Oroville	WESTWARD							
				FIRST CLASS				SECOND CLASS			
				1	17	61	77	53	55		
				Zephyrette	California Zephyr	R. T.	C. F. S.	S. C. X.	G. W. S.		
STATIONS		Arrive Mon., Thurs., Sat.	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily				
92.0	TO STOCKTON YARD	113.1									
	1.2										
93.2	AT&SF Crossing	111.9									
	0.6										
93.8	STOCKTON (SP X'ing.)	111.3	AM	PM							
	0.5	s	4.32	s	1.52						
94.3	FLORA STREET	110.8									
	0.8										
95.1	SP Crossing	110.0									
	3.0										
98.1	HAMMER LANE	107.0		1.44							
	6.5										
104.6	KINGDON	100.5	4.16								
	0.9										
105.5	TERMINOUS JUNCTION	99.6									
	8.4										
113.9	THORNTON	91.2	s	4.06	1.29						
	5.1										
119.0	GLANVALE	86.1									
	5.4										
124.4	FRANKLIN	80.7	3.51	1.17							
	8.0										
132.4	POLLOCK	72.7	3.41								
	4.1										
136.5	SOUTH SACRAMENTO	68.6	3.35	1.02							
	1.0										
137.5	CCT and SN Crossing	67.6				4.00 AM	8.00 AM	11.30 AM	6.00 PM		
	0.5										
138.0	SP Crossing	67.1									
	0.6										
138.6	SACRAMENTO	66.5	s	3.28	s	12.55					
	0.6										
139.2	SN Crossing	65.9									
	1.6										
140.8	SN Crossing	64.3									
	3.0										
143.8	DEL PASO	61.3	3.13	12.43							
	8.7										
152.5	SN Crossing	52.6									
	3.9										
156.4	PLEASANT GROVE	48.7	2.59	12.27							
	5.1										
161.5	TROWBRIDGE	43.6	2.52	12.21							
	11.0										
172.5	EAST ARBOGA	32.6									
	6.3										
178.8	Joint Track { MARYSVILLE	26.3	s	2.30	s	12.01 PM					
	1.4										
180.2	SP Crossing	24.9									
	5.8										
186.0	TAMBO	19.1									
	7.0										
193.0	CRAIG	12.1	2.13	11.44							
	9.9										
202.9	TO OROVILLE YARD	2.2	2.00	11.33		12.30 AM	5.00 AM	7.30 AM	3.00 PM		
	2.2										
205.1	TO OROVILLE	0.0	1.55 AM	11.28 AM							
			Leave Mon., Thurs., Sat.	Leave Daily		Leave Daily	Leave Daily	Leave Daily	Leave Daily		
			1	17		61	77	53	55		

Schedules shown for first-class trains do not confer any superiority whether or not A.B.S. and C.T.C. are operative but must be respected by trains operating on such schedules or sections thereof.
(Also see A.A.B.S. Rule 308 and C. T. C. S. Rule 780).

Schedules shown for second-class trains do not confer any superiority whether or not A.B.S. is operative and trains must not be operated on these schedules. Times shown are for information only.

At South Sacramento and Sacramento, engine whistle should be used only when necessary and then kept as soft as possible consistent with the particular requirement.

RULES 83 (A) and 83 (B). First-class trains need not register at Stockton or Oroville Yard.

RULE 83 (D). Trains need not obtain clearance card at Sacramento.

Special Instructions on pages 4 and 5 will apply to both pages where applicable.

THIRD SUBDIVISION

EASTWARD

Yard Limits	Symbols, Rule 6 (A).	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS					FIRST CLASS			Distance from San Francisco	Timetable No. 39		Distance from Oroville Yard		
				56		54		94	96	62	2		18	April 29, 1951			
				S. W. G.	N. C. X.	Local Freight	Local Freight	Fruit Block	Zephyrette	California Zephyr	STATIONS						
				Leave Daily	Leave Daily	Leave Tues., Thurs., Sat.	Leave Mon., Wed., Fri.	Leave Daily	Leave Mon., Thurs., Sat.	Leave Daily							
				PM 7.00	PM 1.30		AM 7.30	AM 1.30			202.9	TO	OROVILLE YARD	0.0			
	RBKWF TYPO	Yard	Yd														
	RBKP	47	Vi						AM 1.00	PM 2.05	205.1	TO	OROVILLE	2.2			
	P	84							1.09		209.3		QUARTZ	6.4			
	P	88							1.15		212.9		BIDWELL	10.0			
	P	83							1.25	2.25	217.6		BLOOMER	14.7			
	WP	90		Schedules shown for first-class trains do not confer any superiority whether or not C.T.C. is operative but must be respected by trains operating on such schedules or sections thereof.						1.40		224.1		BERRY CREEK	21.2		
	P	93							1.55		231.2		DAVID	28.3			
	P	76							2.04	2.55	235.2		POE	32.3			
	WFP	81							2.14		239.3		PULGA	36.4			
	P	79							2.22		243.5		CRESTA	40.6			
	WP	73							2.30		247.6		MERLIN	44.7			
	P	55							2.43	3.28	253.1		TOBIN	50.2			
	P	83							2.48		255.3		CAMP RODGERS	52.4			
	P	94	Bn						s 2.59		260.1		BELDEN	57.2			
	P	73							3.08		264.6		RICH BAR	61.7			
	WP	75							3.19	3.59	270.2		VIRGILIA	67.3			
	P	85							3.27		273.7		TWAIN	70.8			
	P	84							3.34		277.3		PAXTON	74.4			
	RKW FTP	Yard	Kd	AM 12.01	PM 7.00	AM 8.30	12.30 PM	AM 5.30	s 3.46	4.20	281.5		KEDDIE	78.6			
	P	84							3.54		284.5		SIERRA	81.6			
	P	76	Rt						s 4.07		287.9		QUINCY JUNCTION	85.0			
	P	83							4.15		292.6		MASSACK	89.7			
	WP	92							4.22	4.44	296.4		SPRING GARDEN	93.5			
	P	85	So						4.32		301.6		SLOAT	98.7			
	P	85							4.40		305.4		TWO RIVERS	102.5			
	WP	98	Ba						s 4.50		310.4		BLAIRSDEN	107.5			
	P	90							4.59		313.8		CLIO	110.9			
	P	82							5.08		318.7		MABIE	115.8			
Yard Limits	RBKW FTYPO	Yard	Ki	3.00 AM	10.00 PM	11.30 AM		7.30 AM	s 5.15 AM	s 5.25 PM	321.4	TO	PORTOLA	118.5			
				Arrive Daily	Arrive Daily	Arrive Tues., Thurs., Sat.	Arrive Mon., Wed., Fri.	Arrive Daily	Arrive Mon., Thurs., Sat.	Arrive Daily							
				56	54	94	96	62	2	18							

Centralized Traffic Control

Oroville is register station for first-class trains only.
 Keddie is register station for extra trains originating and terminating only, and is a train-order office for trains originating at that station.
 Switch point derail located on NCE lead Keddie Yard between the two crossovers from NCE lead to west end of No. 1 track.
 Nos. 17 and 18 will stop on advance notice or flag at Keddie to discharge revenue passengers and to receive revenue passengers destined to points where scheduled to stop.
 Nos. 17 and 18 register by ticket at Portola.
 No. 1 and No. 2 will stop on flag at any station to receive or discharge revenue passengers or express.
 No. 1 and No. 2 will stop on flag at any station on Friday, Saturday or Sunday nights to receive or discharge WP employees.

Nos. 1 and 2 will handle closed pouch U. S. Mail between Oroville and Mayaro serving intermediate stations of Las Plumas and Isaiah. Exchange of mail at Las Plumas, Isaiah and Mayaro will be handled through station lockers.
 Nos. 93, 94, 95 and 96 may carry WP employees and/or their families traveling on WP trip or annual passes only.
 Special Instructions on pages 6 and 7 will apply to both pages where applicable.

FOURTH SUBDIVISION

EASTWARD

				SECOND CLASS			FIRST CLASS			Distance from San Francisco (Via NCE Conn.)	Timetable No. 39 April 29, 1951		Distance from Keddie	
				156	154	312					STATIONS			
				S. W. G.	N. C. X.	Southern Pacific Local Freight								
				Leave Daily	Leave Daily	Leave Daily Ex. Sunday								
				PM 10.30	PM 3.30					280.8	TO	KEDDIE	0.0	
				10.50	3.50					287.0		MOCCASIN	6.2	
				10.59	3.59					289.4	TO	CRESCENT MILLS	8.6	
				11.10	4.10					295.5	TO	GREENVILLE	14.7	
				11.19	4.19					298.3		COHALA	17.5	
				PM 11.45	4.45					306.2		ALMANOR	25.4	
				AM 12.05	5.05					313.2		LASSEN VIEW	32.4	
				12.15	5.15					316.0		CLEAR CREEK JCT. (ARR Conn.)	35.2	
				12.30	5.30	AM 9.15				320.2	Joint Track	TO	WESTWOOD	39.4
				12.40	5.40	9.30 AM				324.3		TO	MASON (SP Conn.)	43.5
				12.42	5.42					324.9		ROBBERS CREEK	44.1	
				1.01	6.01					333.3		NORVELL	52.5	
				1.22	6.22					343.7		LODGEPOLE	62.9	
				1.50	6.50					357.2	TO	HALLS FLAT	76.4	
				2.08	7.08					365.0		JELICO	84.2	
				2.23	7.23					371.0		WILLOW SPRINGS	90.2	
				2.35	7.35					375.6		LITTLE VALLEY	94.8	
				2.55	7.55					381.7		DIXIE	100.9	
				3.20	8.20					390.3		PIT RIVER	109.5	
				3.30 AM	8.30 PM					392.6	TO	BIEBER	111.8	
				Arrive Daily	Arrive Daily	Arrive Daily Ex. Sunday								
				156	154	312								

The Keddie-Westwood Local will handle all passengers to and from points between Keddie and Westwood daily except Sunday. On Sunday such passengers will be handled on No. 154 (N.C.X. Conn.) and on No. 153 (S.C.X. Conn.).

No. 154 and No. 153 will also handle passengers daily to and from points between Westwood and Bieber, except on days when there is not sufficient business to operate these trains, passengers will be handled on No. 156 (S.W.G. Conn.) and No. 155 (G.W.S. Conn.).

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

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

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

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

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

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

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

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

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

FOURTH SUBDIVISION

Distance from San Francisco (Via NCE Conn.)	Timetable No. 39		Distance from Bieber	WESTWARD							
	April 29, 1951			FIRST CLASS			SECOND CLASS				
	STATIONS			155	311	153					
				G. W. S.	Southern Pacific Local Freight	S. C. X.					
				Arrive Daily	Arrive Daily Ex. Sunday	Arrive Daily					
280.8	TO	KEDDIE 6.2	111.8	AM 5.40		PM 6.40					
287.0		MOCCASIN 2.4	105.6	5.18		6.18					
289.4	TO	CRESCENT MILLS 6.1	103.2	5.12		6.12					
295.5	TO	GREENVILLE 2.8	97.1	5.00		6.00					
298.3		COHALA 7.9	94.3	4.50		5.50					
306.2		ALMANOR 7.0	86.4	4.25		5.25					
313.2		LASSEN VIEW 2.8	79.4	4.07		5.05					
316.0		CLEAR CREEK JCT. (ARR Conn.) 4.2	76.6	4.00		4.55					
320.2	Joint Track TO	WESTWOOD 4.1	72.4	3.50	AM 8.50	4.45					
324.3	TO	MASON (SP Conn.) 0.6	68.3	3.38	8.35 AM	4.33					
324.9		ROBBERS CREEK 8.4	67.7	3.36		4.31					
333.3		NORVELL 10.4	59.3	3.20		4.15					
343.7		LODGEPOLE 13.5	48.9	3.00		3.55					
357.2	TO	HALLS FLAT 7.8	35.4	2.35		3.30					
365.0		JELICO 6.0	27.6	2.08		3.05					
371.0		WILLOW SPRINGS 4.6	21.6	1.43		2.43					
375.6		LITTLE VALLEY 6.1	17.0	1.25		2.25					
381.7		DIXIE 8.6	10.9	1.10		2.10					
390.3		PIT RIVER 2.3	2.3	12.45		1.45					
392.6	TO	BIEBER	0.0	12.40 AM		1.40 PM					
				Leave Daily	Leave Daily Ex. Sunday	Leave Daily					
				155	311	153					

In Bieber Yard trains will be governed by Great Northern timetable and transportation rules. Rule 93, Great Northern Transportation Rules, reads as follows: "Within yard limits the main track may be used, clearing first-class trains when due to leave the last station where time is shown, but not less than five minutes. In case of failure to clear the main track, protection must be given as prescribed by Rule 99. Within yard limits the main track may be used without protecting against second and inferior class, extra trains and engines. Second and inferior class, extra trains and engines must move within yard limits at restricted speed. When running against the current of traffic or on a portion of two or more tracks used as a single track, all trains and engines must move within yard limits at restricted speed."

Southern Pacific and Fruit Growers Supply Co. trains will be governed by Western Pacific timetable and rules and regulations of the Transportation Department.

Keddie. Normal position of switch leading from east leg of wye to Fourth Subdivision, lined for east leg of wye. Single switch indicator located at this switch.

Serviceable portion of west leg of wye ends 770 feet west of east wye switch (140 feet east of Bridge 280.61) and bumper in place at that location.

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

Clear Creek Junction. Normal position junction switch lined for Western Pacific main track.

Westwood. Nos. 153, 154, 155 and 156 register by ticket.

Track 4 will be used as siding, but must not be blocked between 6:01 AM and 7:30 AM.

Mason. Dispatchers may, when necessary, issue train orders to westward trains at Mason restricting them at Robbers Creek. Westward trains finding train order signal at Mason in STOP position will not pass fouling point west switch Robbers Creek until ascertain reason for signal being in stop position. See Rule 221.

Train order signal governs all trains except westward Southern Pacific trains. Westward Southern Pacific trains must obtain clearance card.

Register station for Nos. 311 and 312 only. Nos. 311 and 312 may register by ticket when there is an operator on duty.

Westward second-class and extra trains need not check register for Southern Pacific train No. 311.

Nos. 153 and 155 need not check register for Southern Pacific train No. 312.

Western Pacific trains will approach junction switch under control, being sure switch is right and that Southern Pacific trains are clear of junction switch before using. Normal position junction switch is lined for Western Pacific main track.

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

First Subdivision "A"—SAN JOSE BRANCH

EASTWARD				Distance from Niles Junction	Timetable No. 39 April 29, 1961	Distance from Alameda St. Freight Station	WESTWARD		
Symbols, Rule 6 (A).	Car Capacity of Sidings	Telegraph Office Calls	SECOND CLASS				FIRST CLASS	FIRST CLASS	SECOND CLASS
			254 Freight						253 Freight
			Leave Daily				Arrive Daily		
RWP	80	Cn	AM 12.30		TO		PM 10.45		
YP			12.40	0.0	0.8 NILES JUNCTION	23.0	10.25		
	Spur 1W 6		1.15	6.8	6.8 WARM SPRINGS	16.2	9.55		
	Spur 1E 4		1.22	8.0	1.2 CURTNER	15.0	9.50		
P	1E 1W 12		1.35	10.9	2.9 MILPITAS	12.1	9.40		
	Spur 1E 10		1.45	14.1	3.2 BERRYESSA	8.9	9.25		
			2.00	16.9	2.8 SAN JOSE (East Santa Clara St.)	6.1	9.10		
RBKW FTPO	Yard	Sx	2.10 AM	17.5	0.6 TO SAN JOSE YARD	5.5	9.00 PM		
				19.5	2.0 SP TRANSFER	3.5			
				19.6	0.1 VALBRICK (SP X'ing.)	3.4			
I				20.2	0.6 SP Crossing	2.3			
I				22.3	2.1 SP Crossing	0.7			
	Yard			23.0	0.7 SAN JOSE (Alameda St. Fr't. St'n.)	0.0			
			Arrive Daily				Leave Daily		
			254				253		

San Jose Branch trains have no timetable superiority between Niles Junction and Niles. Niles Junction is within station limits Niles and their movements between these points will be in accordance with A.A.B.S. signals and rules. Time shown at Niles is for information only.

Yard limit board located MP BR - 0.61 San Jose Branch. Rule 93 applies on Branch west of this point.

RULE S-72. WESTWARD TRAINS ARE SUPERIOR TO EASTWARD TRAINS OF THE SAME CLASS.

First Subdivision "B"—CARBONA BRANCH

EASTWARD				Distance from Carbona	↓	Timetable No. 39 April 29, 1951		Distance from End of Branch	WESTWARD	
Symbols, Rule 6 (A).	Car Capacity of Sidings	Telegraph Office Calls				STATIONS				
WYP	112	Cb		0.0		CARBONA	2.2			
PO	63			1.7		1.7 KERLINGER	0.5			
				2.2		0.5 END OF BRANCH	0.0			

RULE 201. Train order authority is not required on Carbona Branch and all movements on Branch must be made with caution.

Second Subdivision "A"—TERMINOUS BRANCH

EASTWARD				Distance from Terminus Jct.	↓	Timetable No. 39 April 29, 1951		Distance from Terminus	WESTWARD	
Symbols, Rule 6 (A).	Car Capacity of Sidings	Telegraph Office Calls				STATIONS				
YP	31			0.0		TERMINOUS JCT.	7.8			
	16			3.5		3.5 GARDEN	4.3			
Yard Limits	3			6.6		3.1 GRASS	1.2			
	WY	Yard	Us	7.8		1.2 TERMINOUS	0.0			

Terminus Branch main track ends opposite east end of packing shed No. 2 (geographical south end) and barricade has been erected across track at that point.

GENERAL

MEDIUM SPEED. A speed not exceeding 35 miles per hour.

RULE 6 (A). Symbol TO to left of station name indicates Train Order Office.

RULE 10 (J). Speed-control boards that prescribe reduction in speed will be located to the right of track in the direction of approach 4000 feet in advance of point of restriction.

Speed-control boards that authorize an increase in speed will be located at the point where higher speed is permissible and speed may be increased accordingly as soon as rear of train has passed such speed-control board.

The higher number on white oval speed-control board indicates the maximum permissible speed of passenger trains whose consist includes conventional passenger car equipment, and the lower number indicates the maximum permissible speed for freight trains. Where but one number is shown, it indicates the maximum permissible speed for both conventional passenger and freight trains.

Round yellow speed-control boards indicate the maximum permissible speed of diesel-powered California Zephyr trains as designated by special instructions in the timetable or by timetable bulletin. Round yellow speed-control boards will be displayed on the same post below the white oval speed-control board, or on separate posts.

Exception: Between Oroville and Portola, the speed of diesel-powered California Zephyr trains will be five miles per hour above the maximum permissible speed indicated on white oval speed-control boards for passenger trains.

RULE 11(A). Outside signal limits and on Third Subdivision fuses may be placed between rails of track when necessary to avoid danger of fire. If train overruns a lighted fusee it must be removed from under train at once. Within signal limits freight or mixed trains finding burning fusee between rails must stop and remove it before proceeding under first paragraph of Rule 11.

RULE 17. Oscillating white light on engines so equipped is to be operated in addition to headlight, when engine is moving at night, and in foggy or stormy weather by day. It must be extinguished approaching passenger stations.

Oscillating red light on engines so equipped shall be operated by day or night, only when a train has stopped, or is stopping, under circumstances that may cause an adjacent track to be fouled, and will not in any way relieve trainmen and enginemen from compliance with Rules 99 and 102. A train or engine on adjacent track must stop at once, and may proceed only after ascertaining that track is safe for passage of trains.

RULES 17, 17-C and S-17. Except as otherwise provided in Rules 17, 17-C and S-17 enginemen operating locomotives in passenger or freight service, or running light on main track, except when switching, will display headlights during daylight hours as well as night hours.

RULES S-17 and 99. Figures indicating "Car Capacity of Sidings" are number of cars, based on average allowance of 48 feet per car, that tracks will hold between clearance points, plus 150 feet for engine and caboose.

Outside of signal territory care must be taken to see that flag protection is furnished when taking siding to meet trains unless it is definitely known that train is clear of main track. After train comes to rest in the siding, the head end must receive a stop signal from the rear end indicating that train is clear of the main track. Until such signal has been received by head end, headlight will be displayed and flag protection provided. This does not in any way relieve the approaching train from complying with provisions of Rule S-90.

RULES S-17 and 19 (A). Do not apply within signal limits on First, Second and Third Subdivisions.

RULE 17 (D). In light engine movements between Oakland Roundhouse and Chestnut Junction in either direction in connection with moves to or from Southern Pacific Oakland Pier white light (lantern) may be displayed on rear of tender instead of red light.

RULES 20, 21 (A), 21 (B), 83 (A), 95 and 308. On First, Second and Third Subdivisions trains need not display classification signals. At meeting points on the San Jose and Terminus Branches trains must stop for purpose of identification.

Sections of first-class trains may be authorized on these subdivisions by clearance card addressed as instructed by the train dispatcher and conductor will register accordingly.

RULE 34. On diesel freight locomotives, the fireman must not leave the forward cab while train is in motion unless authorized by the engineer, who must give four short sounds of alarm gong to indicate that head brakeman must immediately come forward and

comply with Rule 34 before fireman leaves and until return of fireman. When third seat is available, head brakeman will ride in forward cab.

RULE 83. Does not apply on First, Second and Third Subdivisions.

RULES 83 (D) and 206 (A). First-class trains and sections thereof authorized on first or second subdivisions are authorized to assume corresponding schedules or sections of schedules on second or first subdivisions at Stockton without clearance card.

RULE 85. On the First, Second and Third Subdivisions, a section of a train may pass and run ahead of another section of the same schedule without exchanging train orders, signals or numbers.

RULE 93. Second-class trains, extra trains and engines moving within yard limits between Clinton and MP 13.78, at Stockton, Sacramento and between MP 201.44 and west train yard switch at Oroville by signal indication need not move with caution when signals indicate PROCEED. All other moves must be made with caution. Flag protection is not required against first-class trains in these territories when moving by signal indication or working under switching authority.

RULES 97 and 201. On First, Second and Third Subdivisions extra trains will be authorized at terminals by clearance card addressed as instructed by train dispatcher. Extra trains, except work extras, originating at intermediate points will be authorized verbally by the train dispatcher and will not require clearance except when their initial station is an open train-order office.

RULE 104 (C). Switches at various locations near road crossings are equipped with Safety Switch Locks. To use any switch so equipped unlock both standard switch stand and safety switch lock and step on treadle to release safety device. When use of switch is complete, both switch stand and safety switch lock must be locked.

RULE 104 (G). Dropping or kicking of cars must not be made with occupied passenger or outfit cars, or cars containing livestock, explosives, inflammables, or other commodities placarded "Dangerous," or open top cars on which load is likely to shift. Other cars must not be cut off and allowed to strike such cars.

RULE 204. Train orders may be issued to first-class and extra trains on first or second subdivisions which affect their movement on either or both subdivisions, provided same conductor and engineer operate the train through Stockton.

RULE 509. An automatic block signal with a triangular number plate bearing the letter "P" in addition to signal number or an absolute signal equipped with triangular letter plate bearing the letter "P," is also actuated by some special protective device.

Block signals or absolute signals so equipped include in their circuits protective devices known as "Slide Detector Fences" or "Bridge Fire Detectors."

When these signals indicate STOP such additional inspection as necessary to insure safety of proceeding must be made of slide detector fences and tracks in their vicinity or of bridges, including supporting members. When circumstances require train must be preceded by flagman.

RULE 834. STOP signal will be given by day or night to notify crews of passing trains of hot journals, brakes sticking, hot wheels, broken wheels, defective truck, dragging brake connection, lading shifted over side or end of car, swinging car doors, or other dangerous conditions. By day the STOP signal will be followed for:

Hot journals..... Nose held with one hand with the other hand pointing toward track.

Brakes sticking,
Sliding Wheels or

Hot Wheels..... Hands shoved in sliding motion out from body.

RULE 835. Caboose must not be kicked or dropped against other cars, nor other cars kicked or dropped against them.

When a caboose is kicked or dropped, a member of the crew must ride it. Hand brake must be tested before movement is started.

When coupling to a caboose, or coupling a caboose to other cars, movement must be stopped about ten feet from coupling and then moved slowly to a coupling.

If practicable, occupants of caboose must be warned in advance of impending couplings.

Persons occupying cabooses must brace themselves and remain seated while coupling is being made.

Switching at terminals with a caboose between engine and cars or with cars and caboose ahead of engine is prohibited except a cut of cars may be pulled with caboose to point where caboose is to be set over.

GENERAL (continued)

RULE 838. The use of helper engines behind cabooses is prohibited except in emergency when it may be impossible to handle otherwise.

RULE 882. No person will be permitted to ride on an engine without a written order from the Vice-President and General Manager, except employes in the discharge of their duties and those holding transportation endorsed to that effect.

RULES 927, 1025 and 1038—TRAIN INSPECTION.

First and Second Subdivisions: Freight trains need not stop for train inspection if train is operating normally.

Third Subdivision: Eastward freight trains need not stop for train inspection if train is operating normally.

Westward freight trains with diesel locomotives not using retainers need not stop for train inspection if train is operating normally.

Westward freight trains handled by steam locomotives or diesel locomotives requiring the use of retainers must stop for inspection at Rich Bar, Belden or Camp Rodgers, except when train has been inspected at Keddie, in which case, they may run from Keddie to Bloomer for inspection.

Fourth Subdivision: Eastward freight trains will be inspected at Almanor or before leaving Halls Flat.

Westward freight trains will be inspected at Halls Flat or before leaving Almanor.

All Subdivisions: Where stops are made for other reasons inspection of train must be made as often as practicable. When weather conditions restrict visibility, the conductor will designate additional stops for inspection that are necessary in his judgment.

AIR BRAKE RULES

RULES 24-B and 24-C. On California Zephyr trains, if motive power is changed at any intermediate station or terminal, or continuity of brake pipe is disturbed, air brake tests must be made.

On No. 18 at Oroville and on No. 17 at Portola and Oroville, except when motive power is to be detached, the incoming engineer, after making station stop, must make a full service electro-pneumatic brake application (approximately 75 pounds). Release will be made by outgoing engineer upon receiving the proper signal (hand or air whistle). If electro-pneumatic brake is inoperative, the above instructions will apply, using the automatic brake, except that a 20-pound brake pipe reduction will be made. Inspection card, Form 809-G, is not required at these points. When motive power is to be detached at Oroville automatic air will be used in making station stop.

On other passenger trains at points where terminal tests are made, when the continuity of the brake pipe is not disturbed, or motive power not changed, the incoming engineer, after making station stop, must apply the train brakes with a 15 pound brake pipe reduction immediately after stopping and without waiting for a signal.

The brake pipe leakage must be noted, then the reduction increased to a total of 20 pounds. The incoming engineer will notify the outgoing engineer the amount of brake pipe leakage.

Release of the train brakes will be made upon receiving the proper release signal.

RULE 32. Modified to the extent that at Oakland passenger equipment being switched in the making up or breaking up of trains or in the coach yard may be handled without air brakes cut in.

Such passenger equipment must not be kicked or dropped and any cars left standing must have hand brakes set or be coupled to car or cars with sufficient hand brakes set to prevent them from moving. Switch crews are cautioned that CZ type cars in particular, which have roller bearings, have a tendency to roll and every precaution must be taken to prevent accident.

RULES 43-A and 43-B. Freight trains originating or picking up and setting out cars at South Sacramento will make air test under these rules.

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

RULE 44. When making a running brake test trainmen will use one long blast of the communicating signal instead of signal provided for by Transportation Rule 16 (h).

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

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

Zephyrette trains will make a running brake test.

RULE 57. When changing ends on diesel locomotives equipped with 24-RL brake equipment proceed as follows:

Make a 20 pound brake pipe reduction with the automatic brake valve, after which move the brake valve handle to lap position, move the independent brake valve handle to release position and observe that the brakes are still applied. Close the double heading cock and place the Rotair valve in FRT lap or PASS lap position depending on service used. Move the automatic brake valve handle to running position and remove both handles.

To assume control at the other end, first insert the brake valve handles, place the Rotair in PASS or FRT position depending on the service used, move the independent brake valve handles to application position. Open the double heading cock and depress foot pedal, check gages to insure brake pipe and main reservoirs are fully charged, and if ready to move, release independent brake.

When opening doubleheading cock, move handle toward open position until latch engages the lug, then pull handle up to clear lug and complete handle movement. This procedure will prevent undesired brake application and operation of the P.C.S.

When changing ends on Zephyrette cars 375 and 376 proceed as follows:

Make a 20 pound brake pipe reduction with the automatic brake valve and then move brake valve handle to lap position. Release independent brake. Close brake valve cut-out cock and return automatic brake valve handle to running position. Remove both brake valve handles in running position and proceed to opposite end. In cutting in on opposite end, place brake valve handles on respective brake valves, apply independent brake fully.

Place foot on Safety Control Pedal and open the brake valve cut-out cock. Check the feed valve setting to insure required pressure in order to release brakes set up at opposite end. Release independent brake when ready to move.

TRAINS EQUIPPED WITH ELECTRO-PNEUMATIC BRAKE

Electro-pneumatic brake wire connectors and straight air hose must be connected between all cars and engine. Cutout cocks must be open except on the rear of last car and electro-pneumatic brake wire connectors securely fastened in their receptacles. Electro-pneumatic brake wire connectors must not be disconnected while train is in motion.

When a train leaves its originating terminal with automatic air brakes, or when operation of brakes is changed enroute from electro-pneumatic to automatic, the incoming engineer must inform the outgoing engineer that electro-pneumatic brake is inoperative. No attempt must be made to use the electro-pneumatic brake unless defects are corrected and a standing test is made as prescribed by Rules 24-B and 24-C.

AUTOMATIC BLOCK SIGNALS

Keddie. Fourth Subdivision:

Eastward: Two-position signal at west portal Tunnel 1.

Westward: Three-position signal 45 feet east of Tunnel 2.

Two-position signal 60 feet east of east wye switch.

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

SLIDE AND FIRE DETECTOR FENCES

Signals Actuated By:

Location	Eastward	Westward
Bridge 62.63	P-612	Abs. W. Midway
Bridge 64.43	Abs. E. Midway	P-649
East Portal Tunnel 7	P-2258	P-2295
West Portal Tunnel 7		
East Portal Tunnel 8		
MP 236.2 to MP 237.33	P-2362 P-2368	P-2371 P-2379
West Portal Tunnel 13	Abs. E. Cresta	P-2457
MP 261	Abs. E. Belden	P-2625
MP 265.0	Abs. E. Rich Bar	Abs. E. Rich Bar
MP 265.0	Abs. E. Rich Bar	P-2675
MP 265.51		
MP 266.25		
MP 266.31		
MP 266.74		
MP 266.77		
MP 266.89		
MP 267.18		

SPECIAL INSTRUCTIONS—FIRST SUBDIVISION

Oakland. Street Crossing at Third and Broadway must not be blocked.

A westward train finding an eastward passenger train at passenger station will not pass Franklin St. until eastward train leaves station.

Joint WP and SP drill track between Melrose and Elmhurst must not be used for meeting or passing trains. Crossover between drill track and west end of Elmhurst siding must not be used by road crews. Normal position at west end of crossover lined for drill track and at east end lined for crossover.

Kohler. Seminary Avenue crossing is protected by flashing light signals, but trains and yard engines using this siding must cut crossing when blocked more than five minutes.

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

Hayward. Freight trains doing switching will leave train outside of limits of bonded rails operating crossing bells at "A," "B" and "C" Streets and will use engine whistle and bell only when necessary to comply with the rules.

Trainmen must not ride cars beyond a point 548 feet from point of switch on Hayward Building Material Company spur. Sign has been placed at this point, reading: "STOP: Trainmen must not operate beyond this point."

Dispatcher's telephone installed in baggage room.

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

Dispatcher's telephone installed in baggage room.

Tunnel 1. Markers must be burning through Tunnel 1.

Sunol. Cars must not be left on house track spur within 75 feet of either side of Crossing No. 4-36.0.

Altamont. Under no circumstances may cars be left on either leg of wye.

Carbona. Normal position of all switches leading from siding is lined for the siding. Normal position of the east house track switch and of the two inside crossover switches east of depot is for east leg of wye and storage track. When not in use these switches must be left lined for the normal route. Track on north side of main track may be used as an auxiliary siding. (See paragraph (O) page 17).

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

Army Supply Depot. A tail track, capacity 54 cars, is connected with switching track at west end. Normal position of all switches in switching track or tail track is lined for switching track. Do not exceed 10 miles per hour on interchange trackage with Army Supply Depot. (See paragraph (Q) page 17.)

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

SPECIAL INSTRUCTIONS—SECOND SUBDIVISION

Stockton. Engines and cars must be brought to a stop at Country Club Highway crossing on North Channel Line and must be preceded by flagman over crossing.

Bridge over Smith Canal, North Channel Line, will not clear man on top of high car.

South Sacramento. The first street crossing west of South Sacramento, Sutterville Road, must not be blocked by freight trains taking water, oil, or doing work. Eastward freight trains will, when necessary to avoid blocking this crossing, leave train west of crossing while taking water or oil, or switching.

Sacramento. Trains or engines must not exceed eight miles per hour over street crossing at 5th and "R" Streets.

Normal position of switch at tail of wye "R Street line", is lined for west leg of wye.

Westward passenger engines and trains must not leave depot until engineer knows that wigwag on "K" Street is in motion and eastward passenger engines and trains must not leave depot until engineer knows that wigwag on "J" Street is in motion. If wigwag fails to operate a member of crew must precede engine or train over crossing.

Marysville. Spur track known as Cliff House Spur will not hold more than ten cars.

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

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

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

SPECIAL INSTRUCTIONS—THIRD SUBDIVISION

Markers must be burning through Tunnels 4, 5, 23, 33 and 35.

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

Two-unit diesels and smaller or C-43 class steam and smaller engines may use all tracks in entire yard at a moderate speed and may use east lead as far as deraill and sign reading "WPRR engines must not go beyond this point" located 125 feet east of extreme east switch of interchange yard with the Feather River Railway Co.

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

Camp Rodgers. West connected switch to tracks serving PG&E Co. located in siding 1472 feet east of west siding switch. Hayes deraill to prevent cars running out on siding is on lead track 200 feet east of connecting switch. Cars must not be left on grade on lead track between connecting switch and switch-back 550 feet from east end of lead track. Unless some portion of train is left on Camp Rodgers siding deraill must be set in derailling position while engine is on PG&E tracks and thereafter siding must not be entered without permission of train dispatcher (See Rule 772). See instructions in Sections (F) and (J), C.T.C. Special Instructions, page 22, covering deraill in siding.

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

Blairsdan. Mallet and Mikado engines may use house track at Blairsdan. Trains setting out or picking up on this track must have air cut through and operative.

Movement over Mill track between Blairsdan and Graeagle must be made with air cut through and operative.

A sign reading "TRAINMEN PROHIBITED FROM RIDING CARS BEYOND THIS POINT" erected over tracks at a point approximately 60 feet in advance of log rollway at plant of California Fruit Exchange, Graeagle. Sign to be illuminated at night. Trainmen must obey this sign in interest of SAFETY.

On Graeagle Spur do not exceed 8 MPH between main track switch and deraill at switch leading to box factory and 4 MPH beyond this deraill.

Crews spotting moulding mill at Graeagle must hold onto nine cars including cars to be spotted.

Markers must be burning through Tunnels 1, 2, 3, 6 and 8.

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

Box. Engines or cars must not be moved over highway crossing on Box Spur just east of Greenville without being brought to a stop and highway traffic protected in both directions by a member of crew.

Clear Creek Junction. The 33-car siding is the interchange track with Almanor Railroad Company and trackage between Western Pacific main track switch and yard limit board 2000 feet beyond end of the 33-car siding toward Chester is joint track for interchange purposes. Operation over this trackage is under transportation rules governing operations within yard limits. Switch point derail on Almanor RR main track 400 feet from junction switch.

Westwood. Following instructions govern movements over crossings at Veneer Plant and Third Street (east and west of passenger station):

Trains meeting at Westwood must not block these crossings. Trains or engines using main track over crossings will run prepared to stop before hitting anything on or about to use the crossings. Between the hours of

7:50 a.m. and 8:00 a.m.	12:50 p.m. and 1:00 p.m.
12:00 noon and 12:10 p.m.	5:00 p.m. and 5:10 p.m.

trains stopping at Westwood must not block crossings any part of the periods specified, waiting back of crossings if necessary. Any movements over crossings between these times must be preceded by flagman. Gate tender at Third Street crossing on duty continuously.

Any crossing must be cut immediately upon request of plant gate watchman for impending movement of ambulance or fire apparatus and kept clear until released by him.

Movements of trains or engines on any tracks other than main track over any crossings in yard must be preceded by flagman.

Deraill on west end F. G. S. Co. electric siding must be kept in derail position when cars are on siding. East switch of F. G. S. Co. electric siding must be left lined for siding. Switch leading from west end of house track to gravel bin spur must be left lined for gravel bin spur to serve as derail.

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

RULE S-72. WESTWARD TRAINS ARE SUPERIOR TO EASTWARD TRAINS OF THE SAME CLASS.

RULE 221. Telegraphers must not signal trains in connection with delivery of train orders. If there is no restriction at that station, telegrapher may hand up the orders without stopping train, but should not signal the train to come down the main track either by raising and lowering the train-order signal or by hand signals.

If no orders are held for trains from the same direction, or if orders held are for trains originating only, the telegrapher may clear the signal before train reaches such view point. Telegrapher must, after train passes, display signal in stop position before OS report is made to the train dispatcher.

Sixth paragraph is cancelled. When light is not displayed in a train-order signal at night, day indication will govern. Report of light out must be made promptly to the Chief Dispatcher.

RULE 840. When cars are set out at Cohala, Jellico, Willow Springs or Little Valley, in addition to provisions of Rule 840, lower car must be chained to rail and train dispatcher notified.

SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

INTERLOCKING PLANTS AND SIGNALS AND RAILROAD CROSSINGS NOT INTERLOCKED

MP 5.8—SP Crossing and MP 5.9—Chestnut Junction, Magnolia Tower. Interlocked.

Eastward: Two-arm home signal 700 feet west of crossing; upper arm governs movement to eastward main track; lower arm to westward main track. Dwarf signal 490 feet west of crossing governs movement from No. 1 track to either eastward or westward main track.

Westward: Three-unit home signal on westward main track 700 feet east of crossing; upper unit governs movement to SP; middle unit to WP yard; lower unit to Oliver Park Spur. Color-light dwarf signal 490 feet east of crossing governs movement from eastward main track to WP yard or SP.

Eastward whistle signals: Old yard to eastward main track—one long; to westward main track—one long, one short and one long. No. 1 track, old yard, to eastward main track—one short and one long; to westward main track—one short, one long and one short.

Telephone for communicating with towerman installed at eastbound home signal.

MP 7.2 SP Crossing, Both Main Tracks. Not interlocked. Protected by manually operated gates. When SP engines or cars are using SP track gates will be across both WP tracks and indicate STOP to movements on WP in either direction. Trains must approach under control and not proceed over this crossing unless it is known to be clear.

MP 7.7 Clinton, SP Crossing. Interlocked.

Spring switch located 60 feet west of crossing at end of double track normally lined for westward main track and may be trailed through eastbound on eastward main track. If movements trailing through switch are stopped, switch must be thrown by hand and secured before further movement is made.

Home signal east of crossing is a two-unit signal with "S" unit on mast. Upper unit governs movement over crossing to westward main track; lower unit to eastward main track after spring switch has been lined. The "S" unit must be illuminated before spring

switch is changed. Trains or engines moving from eastward main track to westward main track or vice versa must move beyond home signal and receive proper signal indication for reverse movement. If authorized to pass this signal in STOP position, in addition to observing Rule 663, spring switch must be examined and points found to fit properly for movement desired.

When spring switch is thrown by hand it must be returned by hand to normal position after movement is completed. Running switches must not be made over spring switch and sand must not be used between home signals governing movement over switch and crossing.

MP 10.6 and MP 10.7 Melrose Tower, SP Crossings. Interlocked.

MP 13.7 Elmhurst, SP Crossing. Automatic interlocked.

East switch to Elmhurst siding is within home signal limits and movement over this switch to the main track is governed by a dwarf semi-automatic home signal located at the clearance point.

For movement siding to main track stop train within 250 feet of dwarf signal. Call train dispatcher and when given permission by him in accordance with Rule 317 open door on electric lock and proceed according to instructions posted therein.

For movement from main track to siding, stop train between home signals and at least 50 feet east of switch points. Call train dispatcher and when given permission by him open door on electric lock and proceed according to instructions posted therein.

Electric lock is not equipped with an emergency release. If lock does not release west siding switch should be used.

If main track home signal indicates STOP upon the approach of a train, or if dwarf home signal indicates STOP with switch in the reverse position, send flagman to crossing to follow instructions posted in WP time release housing. If the time release is operated and the signal continues to indicate STOP, be governed by Rules 663 and 509.

Cars left on Elmhurst siding must be placed at least 300 feet west of dwarf home signal to avoid occupying approach lighting circuit.

INTERLOCKING PLANTS AND SIGNALS AND RAILROAD CROSSINGS NOT INTERLOCKED (Continued)

MP 30.3 Niles Tower, SP Crossing. Interlocked.

MP 42.7 and MP 42.95 Radum Tower, SP Crossings. Interlocked. Towerman on duty daily except Sundays and holidays. During hours towerman is off duty normal operation of signals on WP will be semi-automatic.

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

MP 74.05 Lyoth Tower, SP Crossing. Interlocked.

Home signal 600 feet east of crossing is a two-unit signal. Upper unit governs main track and lower unit governs movement over crossing and into east end Lyoth siding.

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

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

MP 80.28 San Joaquin River Drawbridge. Interlocked.

MP 84.45 SP Crossing. Interlocked.

When switching is done on main track at west Lathrop or crossover west end of Army Supply Depot track, signal operator in SP depot Lathrop must be notified by telephone length of time to be used so signal lineup may be changed if necessary and must also be notified when switching is completed. Telephones located at crossing and in A.A.B.S. booths west Lathrop and crossover west end Army Supply Depot track.

MP 90.5 Ortega Tower, SP Crossing. Interlocked with Hunter Street track.

Home signal 450 feet east of crossing is semi-automatic absolute block signal governing entrance to main track block on westward moves. Connecting switch to main track MP 90.42 must be thrown by hand. If this signal is in STOP position be governed by Rule 663 within interlocking limits and Rule 311 before passing this signal in STOP position. Telephones for communicating with train dispatcher located in tower and in booth adjacent to main track absolute block signals MP 90.4.

Towerman on duty 6:00 p.m. to 3:00 a.m. daily except Saturdays, Sundays and the seven National holidays.

MP 93.2 AT&SF Tower, AT&SF Crossing. Interlocked. Two-unit home signal 450 feet west of crossing. Upper unit governs movement on Western Pacific main track; lower unit governs movement over AT&SF main tracks to Hazelton Avenue line.

Whistle signals: Main track either direction, one long; to or from Hazelton Avenue line, three short and one long.

MP 93.8 Weber Avenue Tower, SP Crossing. Interlocked.

MP 95.1 El Pinal Tower, SP Crossing. Interlocked.

MP 137.5 "X" Street, CCT and SN Crossing. Automatic interlocked. Dwarf signals on Sacramento Valley Tractor Co. spur and west end of interchange track are semi-automatic absolute block signals. Derailed on each track pipe-connected to main track switches.

If main track home signals remain in STOP position upon approach of train, send flagman to crossing to follow instructions posted in WP time release housing. After time release is operated, if signal continues to indicate STOP be governed by Rules 663 and 311.

Switch indicators adjacent to Sacramento Valley Tractor Co. spur and west end interchange track. For movement out of spur or interchange track, first obtain permission from train dispatcher, then if switch indicator shows block clear line switch and signal should clear for movement. If signal does not clear operate time release. If signal still does not clear be governed by Rules 311 and 663. If switch indicator does not show block clear, dispatcher may authorize movement by A.A.B.S. clearance per Rule 311 except over crossing.

MP 138.0 "R" Street Tower, SP Crossing. Interlocked. Two-unit home signal 796 feet east of crossing. Upper unit governs main track; lower unit governs leg of wye. Two-unit home signal 700 feet west of crossing. Upper unit governs main track; lower unit governs leg of wye.

Two-unit signal on west leg of wye 800 feet from main track switch. Upper unit governs movement from "R" Street line over crossing to WP main track; lower unit governs movement over crossing to California Builders' Supply spur.

Spur serving Valley Wholesale Grocery Co. connected with west leg of wye with switch facing west. Indication on eastward home signal on main track is same for movements from main track to either "R" Street line or to spur. Crews desiring to enter spur must advise towerman. Switch cannot be changed while engine or cars are between home signals of plant.

Whistle signals: Main track to wye, either leg, one long, one short. Wye to main track, either leg, one short, one long.

MP 139.2 "C" Street, SN Crossing. Automatic interlocked. If home signals remain in STOP position upon approach of train send flagman to crossing to follow instructions posted in WP time release housing. After time release is operated, if signal continues to indicate STOP be governed by Rules 663 and 509.

MP 140.8 Globe, SN Crossing. Modified interlocked.

MP 152.5 Sankey, SN Crossing. Modified interlocked.

MP 180.2 Binney Junction Tower, SP Crossing. Interlocked.

San Jose Branch.

MP 19.6 SP Crossing. Not interlocked.

MP 20.2 Willow Glenn, SP Crossing. Interlocked. Home signals 225 feet east and west of crossing. No approach signals.

MP 22.3 West San Jose, SP Crossing. Interlocked. Home signals 250 feet east and west of crossing. No approach signals.

All trains must come to STOP at home signals, Willow Glenn and West San Jose crossings and a member of crew go to crossing and carefully follow instructions pasted inside of derail lock box at each crossing before proceeding over either crossing.

ABSOLUTE AUTOMATIC BLOCK SYSTEM—SPECIAL INSTRUCTIONS

(A) Trains will operate by timetable and train order authority over First Subdivision but within absolute automatic block system limits will be governed by signal indications which supersede the superiority of trains.

(B) Trains will maintain their authorized identity and first-class trains will respect their timetable schedules through A.A.B.S. limits.

(C) Signals at entrance to sidings are located 300 feet beyond switch. As "line switch indicator" thereon may require that trains enter siding, stop should be made back of switch when such signals display STOP indication.

(D) **RULE 105.** Main track only is included in signal circuits. Sidings and other tracks are not included and trains entering and using such tracks must proceed with caution.

(E) **RULE 302.** Work trains will be authorized by A.A.B.S. Clearance.

(F) **RULE 303.** Protection per Rule 99 is not required when a train is standing at a station between absolute signals at that station. On a passenger train flagman must take position on ground at rear of train prepared to provide protection, if protection becomes necessary.

(G) **RULES 311 and 291.** When a train is moving through a block under an A.A.B.S. clearance and finds an automatic block signal within the block in STOP position it will not be necessary to walk a flagman ahead but, after stopping, train may proceed at once with caution, not exceeding 12 miles per hour.

(H) **RULE 312.** Is modified to the extent that switches not protected by electric locks or signals located between absolute signals at a station may be used for switching without obtaining authority from the train dispatcher provided a part of the train is on the main track within the block at all times. The train dispatcher should be advised when such switching is to be done.

When a train is standing or switching between absolute signals at a station, train dispatcher may authorize another train to flag into the block to perform work. Crew of train so authorized must have an understanding with crew of train occupying the block before entering the block and must fully protect their movements against any movements by the train originally occupying the block.

(I) **RULES 311, 313 and 315.** When a train becomes disabled in a block between stations and is unable to proceed and train dispatcher is so informed by the conductor, or engineer if there is no conductor, he may authorize another engine or train to enter the block as follows:

Following movement: By means of an A.A.B.S. Clearance on which shall be shown the location of the disabled train. The engine or train so authorized must move with caution, not exceeding 12 MPH within the block.

Opposing movement: by means of an A.A.B.S. Clearance provided that the engine or train so authorized must send a flagman ahead into the block, wait at least five minutes after he has started, and then follow, keeping at least one-fourth mile behind him until the disabled train is reached.

(J) **RULE 313.** Conductor of a train, or engineer of a light engine, granted work authority by an A.A.B.S. Clearance under Rule 313, without train orders or clearance, must ascertain from train dispatcher what instructions are outstanding as to track conditions on that portion of the system over which movement is to be made.

(K) **RULE 317.** Instructions for operating electric locks are posted in telephone booths adjacent thereto.

In order to release electric locks for entrance to electrically-locked switches (except at Stockton Yard, Union Stockyards) a part of engine or cars must be standing ahead of switch within the release circuit. Release circuit extends from a point approximately 50 feet ahead of switch points to a point approximately 130 feet ahead of switch points, except at Niles Junction. (See special instructions under Section (N) for release circuit at Niles Junction.)

(L) **San Leandro.** Switching authority under Rule 312 may be granted by train dispatcher between home interlocking signal east of SP Crossing MP 13.7 and westward approach signal to absolute block signal at west end San Leandro.

(M) **Hayward.** Switching authority under Rule 312 may be granted by train dispatcher between eastward approach signal to west end new siding and westward approach signal to east end old siding.

(N) **Niles Junction.** Absolute block signals at east wye switch govern movement to and from east leg of wye.

West wye switch electrically-locked and pipe-connected to switch to outfit spur off west leg of wye, which will serve as a derail. Release circuit extends from 50 feet west of switch points to home interlocking signal 450 feet east of SP crossing MP 30.3.

(O) **Carbona.** The south siding is the designated track to be used for meeting or passing of trains. Permission from train dispatcher is required to enter north siding after entering main track block by signal indication at east or west, Carbona. Entrance from north siding to main track governed by signal indication. Train dispatcher cannot clear entrance signals from north siding to main track when main track block is occupied and Rules 312 or 314 will apply under these circumstances.

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

(Q) **Army Supply Depot.** No signals for movement from main track to Army Supply Depot tracks. Trains clearing main track on these tracks must notify train dispatcher when they have done so.

Entrance to main track through crossover at west end is governed by dwarf signal. At east end, signal located just west of switch points inside switch governs entrance to main track from either No. 1 track or lead. Signal is not affected by position of inside switch.

(R) **Hayward, Fitz, Army Supply Depot and Stockton Yard.** Inside switches of crossovers east end new siding Hayward, east Fitz, west end Army Supply Depot track and MP 90.4 and MP 91, Stockton Yard, normally lined for tail track or lead. Inside signals at these locations govern entrance to main track only. They are not illuminated unless one or both crossover switches are lined and do not affect movements on tail track or lead other than to main track.

The "S" unit on signal mast will be illuminated when train dispatcher authorizes switches to be lined and signal will light when switches are changed. Neither switch to crossover may be changed unless "S" unit is illuminated.

Trains leaving main track at these locations must line both switches of crossover when "S" unit is illuminated on main track signal and return both switches to normal position when movement is completed.

(S) **Stockton Yard.** When westward trains leaving Stockton Yard do not find the "S" illuminated on inside leaving signal at crossovers MP 90.4 or MP 91 member of crew must call train dispatcher. Telephones located north side of main track opposite these signals.

Absolute block signals located at Ortega connection, MP 90.4. Eastward trains, caboose hops or light engines will be governed by signal indications entering Stockton Yard. Eastward trains which head in at MP 91 call yardmaster on telephone located near switch for track instructions. Eastward caboose hops and light engines which head in at MP 90.4 will proceed via No. 2 lead through crossover west of Bridge 90.97-C to No. 3 lead and No. 15 track to yard office and roundhouse track. Eastward trains which head in at MP 90.4 by signal indication stop at train yard lead MP 91 and call yardmaster for track instructions.

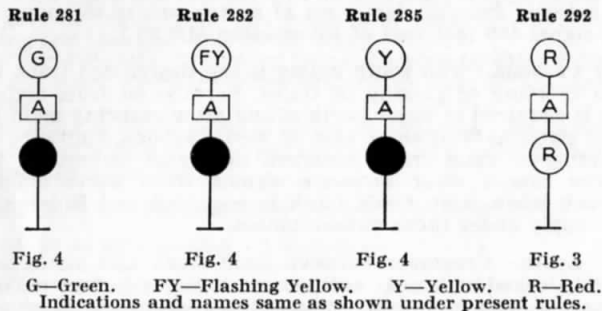
(T) **Ortega - Hunter Street Line.** See instructions on page 16 under Ortega Tower governing westward movement to main track. For movements main track to Hunter Street line indication first must be received on eastward absolute block signal MP 90.4 permitting entrance into block. Switch points are immediately east of signal and when switch is thrown signal will change to STOP. Under these conditions the absolute signal in STOP position may be passed without further authority.

**MODIFICATIONS OF ABSOLUTE AUTOMATIC BLOCK SYSTEM
RULES APPLYING WITHIN LIMITS OF AUTOMATIC
BLOCK SYSTEM—SECOND SUBDIVISION**

(A) Rules governing Absolute Automatic Block System, with the changes or additions listed below, will apply between west end Stockton Yard (MP 91) and west end Oroville Yard (MP 202.6).

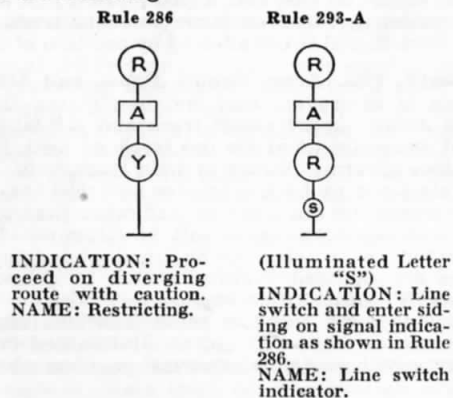
(B) Add to definitions: Dual-Control Switch—A power-operated switch which is also equipped for hand-throw operation.

(C) Add the following signal aspects:



(D) **RULE 293.** As entering signal is in advance of switch, this indication will not apply.

(E) Add the following:



(F) **RULE 302.** Work trains will be authorized by A.A.B.S. Clearance.

(G) **RULE 303.** Protection per Rule 99 is not required when a train is standing at a station between absolute signals at that station. On a passenger train flagman must take position on ground at rear of train prepared to provide protection, if protection becomes necessary.

(H) **RULE 305.** When the "S" is illuminated it is an indication that train dispatcher desires the switch to be lined. After switch is lined, the lamp in the "S" unit will be extinguished and signal will display aspect for movement over the route lined.

(I) **RULE 311.** When authorized by A.A.B.S. Clearance to move into the block:

1. Throw the selector lever on power switch to hand-throw position.
2. Operate hand-throw lever back and forth until switch points are seen to move with the movement of lever.
3. Operate switch by hand, the same as any other switch, with hand-throw lever.
4. After passing over switch it must be restored to motor position unless authorized by the train dispatcher to leave in hand-throw position, in which case it must be lined for main track and hand-throw lever locked.

If authorized to enter siding proceed with caution (after placing switch in hand-throw position).

(J) **RULES 311 and 291.** When a train is moving through a block under A.A.B.S. Clearance and finds an automatic block signal within the block in STOP position it will not be necessary to walk a flagman ahead but, after stopping, train may proceed at once with caution, not exceeding 12 miles per hour.

(K) **RULE 312.** When switching authority is granted over a dual-control switch it must be placed in hand-throw position as outlined in Section (I) herein and kept in hand-throw position during the work. When work is completed, switch must be restored to motor position before train dispatcher is notified that work is completed.

During switching operations, if necessary for all members of crew to leave immediate vicinity of switch, selector lever must be locked.

When the selector lever is in hand-throw position, the train dispatcher has no control over the switch and all absolute signals governing movement over the switch will indicate STOP. Under these conditions the train may pass these signals without stopping, including initial movement into the block, and make movements over the switch within the limits authorized.

Trainmen must notify engineer when the selector lever is in hand-throw position and also notify him when it is returned to motor position, so he may know when to be governed by the absolute signals governing movements over the switch.

(L) **RULE 312.** When a train is standing or switching between absolute signals at a station, train dispatcher may authorize another train to flag into the block to perform work. Crew of train so authorized must have an understanding with crew of train occupying the block before entering the block and must fully protect their movements against any movements by the train originally occupying the block.

(M) **RULES 311, 313 and 315.** When a train becomes disabled in a block between stations and is unable to proceed and train dispatcher is so informed by the conductor, or engineer if there is no conductor, he may authorize another engine or train to enter the block as follows:

Following movement: by means of an A.A.B.S. Clearance on which shall be shown the location of the disabled train. The engine or train so authorized must move with caution, not exceeding 12 miles per hour, within the block.

Oposing movement: by means of an A.A.B.S. Clearance provided that the engine or train so authorized must send a flagman ahead into the block, wait at least five minutes after he has started, and then follow, keeping at least one-fourth mile behind him until the disabled train is reached.

(N) The selector and hand-throw levers of a dual-control switch must not be forced. They will move easily when properly in mesh, although some manipulation of first one and then the other may be necessary to get them in proper mesh. If the switch was set for siding when use of dual-control was started, it must be again set for siding before selector lever is restored to motor position.

(O) Running switches must not be made, injectors or sanders used, or booster started over dual-control switches.

(P) Conductor of a train, or engineer of a light engine, granted work authority by an A.A.B.S. Clearance under Rule 313, without train orders or clearance, must ascertain from train dispatcher what instructions are outstanding as to track conditions on that portion of the system over which movement is to be made.

(Q) **RULE 325.** Before orders are issued discontinuing automatic block system, signal maintainer must cut power off each power-operated switch, throwing and locking the dual-control selector lever in the hand-throw position, operate switch once by hand, and leave it lined for main track. If the power-operated switch mechanism is not equipped with two levers, one for throwing control from "power" to "hand" and one for hand operation of switch points, then the points should be spiked for the main track movement by the signal maintainer at the time the power is cut off.

AUTOMATIC BLOCK SYSTEM—SPECIAL INSTRUCTIONS

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

(B) **RULE 105.** Main track only is included in signal circuits. Sidings and other tracks are not included and trains or engines entering and using such tracks must proceed with caution.

(C) All electrically-locked switches except crossover switches east and west ends SP Transfer and west switch Diner Siding Stockton Yard, North Channel Line Stockton and west switch Campbell Soup Co. track South Sacramento have pipe-connected derails. Instructions for operating electric locks posted in telephone booths adjacent thereto.

In order to release electric locks for entrance to electrically-locked switches from main track BETWEEN STATIONS a part of engine or cars must be standing ahead of switch within the release circuit. Release circuit extends from a point approximately 50 feet ahead of switch points to a point approximately 130 feet ahead of switch points. Release of electric locks between siding switches and in Stockton Yard is in accordance with instructions posted at locks.

(D) Stockton Yard.

(a) **S. P. Transfer:** Main track crossover switches from yard at east and west ends pipe connected to inside crossover switches. Main track switches at east and west end of SP Transfer Track have pipe-connected derails on transfer.

(b) **Diner Siding:** West switch governed by absolute block signals with "S" unit on entering and leaving signals. When "S" unit is illuminated electric lock is released and must be unlocked before switch is changed by hand operation. After moves are completed electric lock must be locked by member of crew.

(c) **Charter Way:** East switch of Diner Siding and connecting switch to "B" lead are dual-control switches. Main track switch to "B" lead is connected with inside switch off "B" lead to AT&SF transfer when in power position but these switches operate separately when either is in hand-throw position. Westward absolute block signal on lead to AT&SF transfer governs movement from lead over inside dual-control switch.

Eastward leaving signal from "B" lead is a two-unit absolute block signal. Upper unit governs entrance to main track and gives approach indication for AT&SF crossing. Lower unit governs movement to AT&SF transfer.

Westward signal at Charter Way is a two-unit signal and diverging route may be to either "B" lead or Diner Siding.

When any one of the three dual-control switches in this block (two at "B" lead and one at east end of Diner Siding) is placed in hand-throw position the other two switches are disconnected from power operation and it is not necessary to place them in hand-throw position when switching over them unless they are used.

(E) Stockton.

(a) **Flora Street:** Switches hand operated. Eastward signal at west end is a two-unit signal with "S" unit on mast which covers west switch to Track 7. Westward signal at east end is a two-unit signal with two "S" units on bracket, one on north side covering east switch to Track 7 and one on south side covering switch to tracks on that side.

(b) **North Channel Line:** Governed by absolute signals and electric lock. Eastward signal is a two-unit signal with "S" unit. When the "S" unit is illuminated electric lock is released and must be unlocked before switch is changed by hand operation. After movement through switch is completed electric lock must be locked by member of crew.

(F) **Terminus Junction:** Two derails at each end, on siding and leg of wye, pipe-connected in tandem with east and west siding switches. Switches from siding to each leg of wye, Terminus Branch, operate independently from derails.

(G) **Campbell Soup Co. track, South Sacramento:** West crossover switches both electrically-locked. After lock is released main track switch must be opened before inside switch can be opened and inside switch must be closed before main track switch can be closed. Electric lock will stay released as long as padlock is out.

(H) **South Sacramento.** Two dual-control switches at east end. Easterly switch connects with No. 1 track on north side and westerly switch connects with old siding. Power-operated switch point derail in No. 1 track connected with dual-control switch but operates separately when either switch or derail is in hand-throw position. When either dual-control switch or power derail is placed in hand-throw position the other switch and derail are disconnected from power operation and it is not necessary to place other switch in hand-throw position when switching over it unless it is used.

Westward absolute block signal at east end is a two-unit signal with two marker lights on bracket which, when signal indicates "Proceed on diverging route with caution (Rule 286)," will show whether switch to north or the south side is open.

(I) **RULE 311.** Train dispatcher may issue A.A.B.S. clearance covering blocks Globe to east end South Sacramento inclusive. Trains or engines moving on such clearance need not notify him until they reach either Globe or east end South Sacramento.

(J) **Sacramento.** Absolute block signals on main track at west end of sidings govern west switches to north and south sidings. Eastward absolute block signal is a two-unit signal with two "S" units on bracket which will indicate whether train dispatcher desires switch lined to north or to south siding.

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

Absolute block signals on main track just west of east switch to north siding do not control switches. No signal provided for westward trains to enter either siding. Train dispatcher may, when desired, instruct westward trains verbally to do so.

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

(L) **Marysville.** Main track and inside switches of crossover west of passenger station, east switch to No. 1 track and hand-throw tandem derails at east end of Tracks 1 and 2 are bolt-locked with one electric lock. They must be operated separately after electric lock is released and restored to normal position before electric lock is returned to the train dispatcher.

Pipe-connected derails at electrically-locked main track switches west end No. 1 track and SP interchange track.

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

A.A.B.S. and A.B.S.

SPECIAL INSTRUCTIONS GOVERNING YARD OPERATIONS BETWEEN CLINTON AND EAST YARD LIMIT, OAKLAND BETWEEN MP 91 AND EAST YARD LIMIT, STOCKTON BETWEEN WEST AND EAST YARD LIMITS, SACRAMENTO.

(A) **RULE 312.** First paragraph will apply within above limits, with switching authority limited to not more than three blocks at any one time. Engine foreman must obtain authority from train dispatcher whenever switching is to be done in a block or blocks and, when switching is completed, engine foreman personally must release block or blocks to the train dispatcher.

When initially entering a block at a switch where there is no signal or electric lock no signal indication is required but permission must be obtained from the train dispatcher and three minutes must elapse after switch is opened before engine or cars foul main track.

A yard engine may be granted switching authority including a block in which a train is standing (provided such train has not been granted block switching authority) for the purpose of switching such train. When such authority is granted signal indication is not required for entrance to the block nor must three minutes elapse after opening switch not protected by signal or electric lock to enter the block provided train to be switched can be seen stopped in the block. If it becomes necessary to switch such train from both ends, two yard engines may be granted authority to work in the same block from opposite ends of the train. Under such arrangements a portion of the train must be left at all times in the block originally occupied and after switching is completed the switching authority will be considered cancelled.

The granting of switching authority does not relieve trains or engines from complying with the indications of any interlocking signals within the switching limits. Any movement within interlocking limits must be made in accordance with interlocking rules. (See Rules 663 and 670).

(B) **RULE 310.** Certain switches within above limits are not electrically locked or signalled. Switch crews using such switches within a block under switching authority may leave and return to the main track without additional authority from the train dispatcher provided they have left car or cars on main track or main track switch open with a man in charge.

If main track has been cleared and switches restored to normal position new authorization must be obtained from the train dispatcher before returning to the main track.

When using dual-control switch in hand-throw position or electrically locked switch with lock released, it is not necessary to keep cars on main track or switch open to hold the block.

Flag protection is not required when entering or switching in a block by authority of the train dispatcher.

(C) Engine foreman must notify train dispatcher when leaving or intending to leave main track at an intermediate switch except when working under switching authority. A block must not be released to the train dispatcher in advance when switching authority has been granted but blocks must be released promptly when switching has been completed or specified time has expired in order to avoid delay to trains.

(D) **RULE 291.** When an engine is working in a block under switching authority and finds an automatic block signal within the block in STOP position it will not be necessary to walk a flagman ahead through the automatic block but, after stopping, engine may proceed with caution not exceeding 12 MPH.

OAKLAND

(a) Block limits are as follows:

Clinton, MP 7.7 to absolute block signal MP 8.8.
Absolute block signals MP 8.8 to MP 9.9
Absolute block signal MP 9.9 to west switch Kohler
West switch Kohler to east switch Kohler
East switch Kohler to absolute block signal MP 14.7.

(b) Train dispatcher must be notified when yard engines intend to enter A.A.B.S. on main track at Clinton and thereafter signal indications will govern.

(c) Telephones for communicating with train dispatcher are located adjacent to absolute block signals and at following points:

Fruitvale, east and west siding switches
Continental Can Co. Spur, MP 10.76
81st Ave. crossover to drill track
Harvey Spur
Gerber Spur, 98th Ave.
MP 13.7 Elmhurst crossing.

STOCKTON

(a) Block limits are as follows:

MP 91 to west switch Diner Siding
West switch Diner Siding to east switch Diner Siding
East switch Diner Siding to AT&SF Crossing
AT&SF Crossing to Weber Avenue Crossing
Weber Avenue Crossing to west switch Flora Street
West switch Flora Street to east switch Flora Street
East switch Flora Street to North Channel Line
North Channel Line to west switch Hammer Lane.

(b) Switching authority is not required for straight moves to or from SP Transfer or through other switches protected by electric locks.

(c) **Hazelton Ave. Line:** When yard engines desire to move to or from Hazelton Ave. Line train dispatcher must be advised when signal lineup for the move is requested and he will arrange for towerman at AT&SF Crossing to line the route. Home interlocking signal from Hazelton Ave. Line through interlocking plant to WP is a semi-automatic absolute block signal.

(d) **Charter Way:** Signals governing movement over inside dual-control switch on "B" lead are controlled by the train dispatcher. When these signals are lined for movement on the diverging route (Santa Fe Transfer) and indications are per Rule 286 or Rule 285, Fig. 3, movements may be made to or from Santa Fe Transfer or switch engines may drill over inside switch without further authority and without placing switch in hand-throw position. If signals are in STOP position and reason is not apparent or if call light is lit on telephone booth north of main track train dispatcher must be contacted promptly.

(e) Telephones for communicating with train dispatcher are located adjacent to absolute block signals and electric locks (except semi-automatic home interlocking signals east of AT&SF Crossing and east and west of Weber Avenue Crossing) and at following points:

AT&SF Crossing—in tower
West switch house track, Church Street
Weber Avenue Crossing—in box on side of tower and in tower
East switch house track, Lindsay Street.

A.A.B.S. and A.B.S.—Special Instructions Governing Yard Operations Between Clinton and East Yard Limit, Oakland Between MP 91 and East Yard Limit, Stockton Between West and East Yard Limits, Sacramento. (Continued)

SACRAMENTO

- (a) Block limits are as follows:
 East switch Pollock to west end train yard
 West end train yard to east end train yard
 East end train yard to eastward absolute signal "X" Street
 Eastward absolute signal "X" Street to west end depot siding
 West end depot siding to Globe.

(b) Flashing red aspect displayed by indicator on signal mast in front of yard office South Sacramento authorizes switching movements between absolute signals at east and west ends of train yard without contacting train dispatcher. All movements so authorized must be made with caution. It will not be necessary to wait three minutes before entering main track after opening non-locked switches in this block when flashing red aspect is displayed on the indicator.

When the flashing red aspect is extinguished it will terminate the authority and main track must be cleared as promptly as possible. If unable to clear the main track within five minutes, the train dispatcher must be contacted.

(c) Flashing red aspect displayed by indicator on instrument house in vicinity of east train yard is authority to place power switches at east end of train yard in hand-throw position and to make switching movements in block between eastward absolute signals east end train yard and eastward absolute signal "X" Street. All movements so authorized must be made with caution.

When flashing red aspect is extinguished it will terminate switching authority and main track must be cleared promptly and power switches returned to motor position. If unable to clear main track within five minutes, the train dispatcher must be contacted.

Switching movements over these power switches will be made in accordance with Paragraph "K", page 18. Power switch to be used must be placed in hand-throw position before passing absolute signals and must be restored to motor position immediately when switching movements are completed.

(d) If westward absolute block signal at east end of depot siding, Sacramento, is in STOP position it may be passed without A.A.B.S. clearance but provisions of Rules 509 (e) and 509 (G) will apply.

(e) Telephones for communicating with train dispatcher are located adjacent to absolute block signals and electric locks and at following points:

- Phone booth east of Sutterville Road
- Phone booth adjacent to flashing red signal mast, South Sacramento
- Instrument house "X" Street
- Phone booth south side "T" Street
- "R" Street—in tower
- Between legs of wye, 19th Street—in box
- East leg of wye—in box
- Haggin—phone booths adjacent to east and west switches.

SPECIAL INSTRUCTIONS—SECOND AND THIRD SUBDIVISIONS

**SPECIAL INSTRUCTIONS GOVERNING
SACRAMENTO NORTHERN CREWS—MARYSVILLE**

(A) All switches for entrance to W. P. main track are governed by absolute signals or electric locks. Movements of S. N. trains or switch engines will be made by signal indication or by permission of the W. P. train dispatcher. Western Pacific Absolute Automatic Block System rules, as modified for Second Subdivision, will apply.

(B) **RULE 312.** First paragraph governs switching operations. Block limits are:

- Junction switch MP 178.13 to west siding switch
- West siding switch to east siding switch
- East siding switch to Binney Junction

Engine foreman must obtain authority from train dispatcher whenever switching is to be done in a block or blocks and, when switching is completed, engine foreman personally must release block or blocks to the train dispatcher.

A yard engine may be granted switching authority including a block in which a train is standing (provided such train has not been granted block switching authority) for the purpose of switching such train. When such authority is granted signal indication is not required for entrance to the block.

Switching authority is not required for straight moves across W.P. main track through switches protected by electric locks.

(C) **RULES 311 and 291.** When an engine is working in a block under switching authority and finds an automatic block signal within the block in STOP position it will not be necessary to walk a flagman ahead but, after stopping, engine may proceed at once with caution not exceeding 12 MPH.

(D) **Junction Switch MP 178.13 (Oliver).** Protected by electric lock. Absolute signal on Sacramento Northern track with "S" unit on mast. When "S" unit is illuminated electric lock is released and must be unlocked before switch is changed by hand operation. After switch is changed signal will display aspect for movement over the route lined. After move is completed electric lock must be locked by member of crew and train dispatcher notified.

For movement leaving W.P. main track permission must be obtained from the W. P. train dispatcher before operating the electric lock.

(E) Instructions for operating electric locks are posted in telephone booths adjacent thereto.

Permission must be obtained from train dispatcher before electric locks can be released (except when entering W. P. main track at junction switch MP 178.13 by signal indication) and he must be notified after movement is completed and electric lock has been locked.

Telephones for communicating with train dispatcher are located adjacent to all electric locks and absolute signals.

**C. T. C. S.
SPECIAL INSTRUCTIONS GOVERNING YARD OPERATIONS
BETWEEN WEST TRAIN YARD SWITCH, OROVILLE
YARD, AND EAST YARD LIMIT.**

(A) **RULES 772 and 773.** Apply for switching moves within above limits.

(B) **RULES 772 and 766.** Train dispatcher may grant permission to different engines in different parts of the same block to operate a dual-control switch by hand or use the main track for switching and will not be required to protect work limits by absolute signals in each direction or apply red tags to the signal levels. However, he must not grant such permission if a train or engine is moving by signal indication in the block toward point where work is to be done or is closely approaching such block.

(C) Derails pipe-connected to main track switch are located at all electrically-locked switches except west siding switch, Oroville. Switch to house track, Oroville, operates derails on east end of house track and east end of team track simultaneously. Switch to Mt. Ida spur operates derails on Mt. Ida and Ehman spurs simultaneously.

(D) **Oroville Yard.** Main track and inside crossover switches at east end of train yard are dual-control switches. When either switch is placed in hand-throw position the other switch is disconnected from power operation and it is not necessary to place it in hand-throw position.

Signals governing movement over inside dual-control switch are controlled by the train dispatcher. When these signals are lined for movement on the drill track and indications are per Rule 754 or Rule 752, Fig. 5, movements may be made to or from drill track or switch engines may drill over inside switch without placing switch in hand-throw position. If signals are in STOP position and reason is not apparent or if call light is lit on telephone booth north of main track, train dispatcher must be contacted promptly.

(E) **Oroville.** West switch is governed by absolute signals with "S" unit. When "S" unit is illuminated, electric lock is released and must be unlocked before switch is changed by hand, after which signal will show indication for movement. After moves are completed electric lock must be locked by member of crew.

When switching is to be done at this location, after electric lock is released moves may be made with caution within the limits specified by the train dispatcher without regard to signal indications except that main track block east of west siding switch may not be entered without signal indication (or per Rule 776) unless working on train or cars occupying the block.

CENTRALIZED TRAFFIC CONTROL—SPECIAL INSTRUCTIONS

(A) Centralized Traffic Control extends from west train yard switch Oroville (MP 202.6) to Portola.

(B) After being authorized by clearance card eastward trains originating at Oroville Yard must not leave until given permission by train dispatcher after member of crew advises him they are ready to leave. Passenger trains may leave Oroville when ready, being governed by signal indications.

(C) **RULE 105.** Owing to the fact that certain switches leading into controlled sidings are not electrically locked, particular attention is directed to fact that this rule applies on controlled sidings as well as on other tracks. See Rule 772(d).

(D) **RULE 752.** Change "Indication" to read:
Indication: Proceed preparing to stop at next signal. Trains exceeding medium speed must immediately reduce to that speed.

(E) **Tobin.** Pipe-connected derail on pit track leading off east end of siding with normal position lined for siding.

(F) **Camp Rodgers.** Hand-operated switch point derail at west end of siding. Normal position closed. Train or cars may be left on siding while switching is being performed on PG&E tracks provided that, in addition to observing provisions of Transportation Rule 840, derail is opened to derailing position and locked. Derail must be closed and locked after switching is completed and before train departs. See instructions on page 14 about switching on PG&E tracks.

(G) **Paxton.** West connected crossover from main track to house track located 942 feet west of east end of 47-car house track spur. Both switches electrically locked. After lock is released main track switch must be opened before inside switch can be opened and inside switch must be closed before main track switch can be closed. Electric lock will stay released as long as door to electric lock is open.

(H) **Keddie Yard.** All switches leading in or out of siding (No. 1 track), except inside switch to Upper Crossover, must be left lined for the siding. Derailing switch at west end of siding is dual-control, power-operated and when in power position works simultaneously with west siding switch. When west siding switch is in hand-operated position, derailing switch must also be hand operated.

Eastward dwarf absolute signal just west of inside crossover switch, Upper Crossover, will govern movement of eastward trains or engines from siding to main track, and from siding to tail track.

Both switches of west crossover between No. 1 track and N.C.E. lead are included in circuits of eastward absolute entering signal west end Keddie siding. These switches must be left lined for No. 1 track and N.C.E. lead respectively when not in use.

Engines cannot take oil or water from east end of siding (No. 1 track) without fouling detector circuit which protects main track. Engines on siding requiring oil and water must not go beyond eastward dwarf absolute signal unless it shows indication per Rule 752, Fig. 6, or Rule 755, Fig. 6, with both switches of Upper Crossover lined for main track. If movement on main track prevents display of proceed signal to main track, engines may take oil and water by heading toward tail track. Trains or engines may be headed to tail track by making arrangements with train dispatcher to release electric lock on switch to tail track (first inside switch east of Upper Crossover) and lining switch by hand. After reversing tail track switch and inside switch to Upper Crossover, signal will display indication per Rule 754, Fig. 2, for movement to tail track.

(I) At Keddie, switch from tail track to roundhouse lead (first inside switch east of Upper Crossover) is electrically locked. Instructions and telephone are in instrument house across main track from lock. This switch is not protected by derail.

Hayes derail installed on tail track 75 feet east of inside switch to upper crossover and pipe connected to that switch.

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

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

(J) Sidings shown on pages 6 and 7 are controlled sidings except Oroville Yard, Oroville, and Portola.

Telephones for communicating with train dispatcher are located just inside doors of instrument houses adjacent to switches. At west end of Belden there is an additional telephone for communicating with train dispatcher in telephone booth opposite eastward absolute signal just west of Tunnel 22.

Cars must not be left on controlled sidings except in case of emergency and then only after notifying train dispatcher except at Camp Rodgers as provided in Section (F) of these instructions.

(K) All hand-operated switches in main track within C. T. C. limits are electrically locked. Instructions covering their operation and telephones for communicating with train dispatcher are in small telephone booths adjacent to electric locks except at Tobin, where they are in instrument houses.

(L) Each hand-operated electrically-locked main track switch is protected by derail except Middle and Lower Crossover switches, Keddie. These derails are pipe-connected to the main track switch stand and before lining switch care must be used to insure that all wheels have passed beyond derail.

East house track switch, Quincy Junction, operates derails on both east end house track and east end interchange track simultaneously.

C. T. C. S.

OPERATION OF TRAINS AND ENGINES BETWEEN EAST AND WEST TRAIN YARD SWITCHES PORTOLA YARD

(A) A flashing red aspect displayed by automatic signals between east train yard switch Portola, MP 322.13, and west train yard switch Portola, MP 320.25, authorizes yard switching or engine movements on the main track within these limits and is an indication the electrically-locked switches within these limits have been unlocked by the train dispatcher. Complete instructions for operation of electrically-locked switches are posted in telephone box located vicinity of switches.

(B) The absence of the flashing red aspect or the removal of the flashing red aspect is an indication that the train dispatcher desires the main track cleared for through train movements. Howlers controlled by the train dispatcher are located throughout the yard, and when operated the main track must be cleared immediately.

(C) In addition, train dispatchers will furnish information to operator, Portola, as to times passenger trains are expected to reach Portola. Employees in charge of switch engines, light engines, and similar moves must ascertain from operator whether these trains are due before occupying main track and not delay them.

(D) When main track is used on authority of flashing red aspect, all movements must be made with caution.

(E) East bound absolute signals at West Train Yard switch are under electrically-coordinated joint control of train dispatchers for the Third Subdivision, Western Division and First Subdivision, Eastern Division.

Permission to take switch or derail at West End Train Yard, Portola, in hand-throw must be obtained from Western Division train dispatcher. Western Division train dispatcher will in turn contact Eastern Division train dispatcher for his concurrence.

When West Train Yard switch is in hand-operated position, derailling switch, if used, must also be hand-operated.

(F) Train washer located on main track between west pocket track switch and east switch west siding.

Automatic signals 3210 and 3211 located adjacent to washer are equipped with marker lights indicating the position of washing arches.

All indications displayed by these signals are subject to the restrictions imposed by the marker lights and the following will govern:

LUNAR WHITE: Washer clear — Movement may be made through washer with caution, not exceeding 10 MPH.

PURPLE: Washing position—Restricted clearance. All trains and engines to be washed STOP and then proceed not exceeding 2 MPH.

Lunar white light must be displayed for all non-washing movements. If lunar white light not displayed for non-washing movements, trains and engines must STOP, check all washing arches, see they are locked in clear, then movement may be made through washer with caution not exceeding 10 MPH.

Employees are prohibited from riding on sides or tops of trains, cars or locomotives while passing through train washer in operating position.

(G) After being authorized by clearance card at Portola trains must not leave until given permission by train dispatcher after member of crew advises him that they are ready to leave, except Nos. 17 and 18 will leave when ready being governed by signal indications.

(H) Derail on west end of west siding Portola Yard pipe-connected to main track switch. Switch must not be lined for main track until engines or cars have passed over derail.

(I) Telephones are located as follows:

Relay house, west train yard switch:	West train dispatcher and west code phone.
Booth on south side west siding opposite west switch:	Portola terminal and east code phone.
Booth on south side opposite Signal 3208:	Portola terminal, west train dispatcher and west code.
On mast Signal 3210:	Portola terminal and east code phone.
East switch west siding:	Portola terminal and east code phone.
Yardmaster's Office:	East and west train dispatchers and east and west code phone.
West end freight house:	Portola terminal and east code phone.
Relay case south of ice track, opposite locks 6A and 6B:	Portola terminal, east train dispatcher and east code phone.
Relay house east train yard switch:	East train dispatcher and east code phone.

(J) Yard track indicators located opposite absolute signals governing movements of eastward or westward freight trains into Portola Yard will indicate to such trains the number of the track on which they are to yard their trains.

When indicator is dark yardmaster must be contacted at head-in switch to obtain track assignment.

(K) **Delleker.** Entrance to spur is through electrically-locked hand-operated switch. Derail is pipe-connected to main track switch. Switch must not be lined for main track until engines or cars have passed over derail.

Tracks on which engine movements restricted (continued)

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

****Necessary have hold of at least 4 cars to switch Standard Oil Spur. Where D-225 or heavier diesels are restricted, there is no restriction for 2 units or ½ of this class of power.

SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

SPEED RESTRICTIONS

Speed restrictions in miles per hour will apply as follows:

Between	Passenger				Freight	
	California Zephyr		Other Passenger Trains		All Freight Trains	
	Maximum	Restrictions	Maximum	Restrictions	Maximum	Restrictions
First Subdivision—Pages 2-3						
Chestnut Jet. and Oak St., Oakland..	15	..	15	..	15	..
Over Washington and Franklin Streets, Oakland.....	..	8	..	8	..	8
Oak St., Oakland and SP Crossing, MP 10.6.....	20	..	20	..	20	..
MP 7.2 over SP Crossing.....	..	10	..	10	..	10
*MP 7.7 over SP Crossing, Clinton ..	..	15	..	15	..	15
MP 9.5 just east 29th Ave. and MP 9.8 just east of Fruitvale Ave....	..	10	..	10	..	10
*SP Crossing MP 10.6 and East Oakland Yard Limit.....	35	..	35	..	25	..
*MP 13.7 over SP Crossing.....	..	30	..	30	..	..
Oakland Yard Limit and Niles.....	70	..	60	..	40	..
Bridge 14.55 just west of San Leandro depot and Williams St., 5 blocks east of depot.....	..	20	..	20	..	15
Over "A" and "B" Streets, Hayward ..	..	45	..	45	..	30
MP 23.93 and MP 24.31.....	..	45	..	45	..	30
MP 29.25 and MP 29.6 on curve.....	..	45	..	40	..	30
Niles and MP 39.....	55	..	50	..	30	..
*MP 30.3 over SP Crossing.....	..	30	..	25	..	20
MP 30.3 and MP 32.....	..	45	..	40	..	..
Thru Tunnels 1 and 2.....	..	45	..	40	..	20
MP 33.6 and MP 34.4 on curves.....	..	50	..	45	..	..
MP 36.4 and MP 37 on curves.....	..	50	..	45	..	..
MP 38.2 and MP 38.7 at SP underpass on curve.....	..	50	..	45	..	..
MP 39 and MP 52.....	70	..	60	..	40	..
MP 39.9 and MP 40.3 on curve.....	..	60	..	55	..	..
City Limits, Pleasanton.....	..	50	..	45	..	..
MP 42.7 and MP 42.95 SP Crossings ..	..	40	..	40	..	30
City Limits, Livermore.....	..	50	..	50	..	30
MP 49.6 and MP 50.1 over SP.....	..	60	..	55	..	..
MP 51.5 and MP 51.9.....	..	60	..	55	..	..
MP 52 and MP 60.5.....	50	..	45	..	30	..
MP 53 and MP 54 on curves.....	..	40	..	35	..	..
MP 58 and MP 58.2 on curve.....	..	45	..	40	..	..
MP 60.5 and MP 67.....	65	..	60	..	40	..
MP 61.8 and MP 62.1 on curve.....	..	60	..	55	..	..
MP 63.3 and MP 67 on curves.....	..	50	..	45	..	30
MP 67 and Stockton Depot.....	70	..	60	..	40	..
*MP 74.05 SP Crossing.....	..	50	..	40	..	30
MP 79.8 and MP 80.2 on curve.....	..	50	..	40	..	25
MP 80.2 and MP 80.4, San Joaquin River Drawbridge.....	..	30	..	20	..	15
*MP 84.45 SP Crossing.....	..	40	..	30	..	25
MP 89.75 and Charter Way on curves ..	..	50	..	45	..	30
Charter Way and Stockton Depot, Main Track.....	..	20	..	20	..	20
Other Tracks.....	..	8	..	8	..	8
Second Subdivision—Pages 4-5						
Stockton Depot and MP 122.....	70	..	60	..	40	..
Stockton Depot and MP 95—Main Track.....	..	20	..	20	..	20
Other Tracks.....	..	8	..	8	..	8
*MP 95.1 over SP Crossing.....	..	40	..	40	..	25
MP 116.07 Mokelumne River Bridge ..	..	45	..	35	..	35
Bradford Spur.....	..	..	..	..	..	10
MP 122 and MP 133.5.....	50	..	50	..	35	..
MP 133.5 and MP 155.....	60	..	60	..	40	..
Over and between Sutterville Road and "C" St., Sacramento.....	..	15	..	15	..	15
"C" St. and MP 140.1.....	..	20	..	20	..	20
*MP 140.8 SN Crossing.....	..	50	..	40	..	25
*MP 152.5 SN Crossing.....	..	50	..	40	..	25

SPEED RESTRICTIONS—Continued

Speed restrictions in miles per hour will apply as follows:

Between	Passenger				Freight	
	California Zephyr		Other Passenger Trains		All Freight Trains	
	Maximum	Restrictions	Maximum	Restrictions	Maximum	Restrictions
Second Subdivision—Continued						
MP 155 and MP 171.....	60	..	50	..	35	..
MP 171 and MP 185.....	60	..	60	..	40	..
MP 178 and MP 179.4.....	..	25	..	25	..	25
*MP 180.2 SP Crossing.....	..	50	..	40	..	25
MP 185 and MP 197.....	60	..	50	..	35	..
MP 197 and Oroville.....	60	..	60	..	40	..
MP 201.7 and MP 201.9 on curve....	..	45	..	40	..	25
MP 204.7 and MP 205.1 on curve....	..	50	..	45	..	30
Third Subdivision—Pages 6-7						
Oroville and Bidwell.....	55	..	50	..	35	..
Through Tunnel 4.....	..	35	..	30	..	25
MP 208.5 and MP 209.3 on curves....	..	45	..	40	..	30
MP 211.4 and MP 212.1 on curves....	..	50	..	45	..	30
MP 212.7 and MP 212.9 on curve....	..	45	..	40	..	30
Bidwell and Bloomer.....	50	..	45	..	30	..
MP 214 and MP 214.1 on curve.....	..	45	..	40	..	..
MP 214.8 and MP 215.7 on curves....	..	45	..	40	..	..
MP 216.15 and MP 216.75 on curves	40	..	35	..	25
Bloomer and Grays Flat Spur MP 272.57.....	40	..	35	..	25	..
MP 218.15 and MP 218.3 on curve....	..	35	..	30	..	..
MP 220.9 and MP 223.2 on curves....	..	35	..	30	..	..
MP 230.2 and MP 230.45 on curves....	..	35	..	30	..	..
MP 231.9 and MP 234.15 on curves....	..	35	..	30	..	..
MP 235.25 and MP 239 on curves.....	..	35	..	30	..	..
MP 241.4 and MP 241.5 on curve.....	..	35	..	30	..	..
MP 244.2 and MP 245 on curves.....	..	35	..	30	..	..
MP 248.4 and MP 252.6 on curves....	..	35	..	30	..	..
Over Bridge 252.6.....	..	30	..	25	..	20
MP 252.7 and MP 253.2 on curves....	..	35	..	30	..	..
MP 254 and MP 256.2 on curves.....	..	35	..	30	..	..
MP 257.8 and MP 259.2 on curves....	..	35	..	30	..	..
MP 260.9 and MP 271.5 on curves....	..	35	..	30	..	..
MP 272.57 and Quincy Junction.....	45	..	40	..	30	..
MP 273.3 and MP 273.5 on curves....	..	40	..	35	..	25
MP 275.2 and MP 283 on curves.....	..	35	..	30	..	25
MP 283 and MP 283.5 on curves.....	..	40	..	35	..	25
MP 286 and MP 287.1 on curves.....	..	35	..	30	..	25
Quincy Junction and Portola.....	50	..	45	..	30	..
MP 288.9 and MP 291.1 on curves....	..	45	..	40	..	..
MP 291.9 and MP 294 on curves.....	..	40	..	35	..	25
MP 294 and MP 295.1 on curves.....	..	35	..	30	..	25
MP 295.9 and MP 296.15 on curves....	..	45	..	40	..	..
Through Tunnel 35.....	20
MP 298.55 and MP 299.75 on curves	35	..	30	..	25
MP 300.85 and MP 301.05 on curves	40	..	35	..	25
MP 304.05 and MP 305.25 on curves	40	..	35	..	25
MP 306.15 and MP 307.45 on curves	45	..	40	..	..
MP 310.7 and MP 314.2 on curves....	..	45	..	40	..	..
MP 314.25 and MP 314.35 on curves	40	..	35	..	25
MP 314.8 and MP 316 on curves.....	..	45	..	40	..	..
MP 316 and MP 316.45 on curves....	..	35	..	30	..	25
MP 316.65 and MP 316.98 on curves	45	..	40	..	..
MP 318.1 and MP 318.3 on curves....	..	45	..	40	..	..

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

SPEED RESTRICTIONS—Continued

Speed restrictions in miles per hour will apply as follows:

Page No.	BETWEEN	Passenger		Freight	
		Maximum	Restriction	Maximum	Restriction
8-9	Fourth Subdivision				
	Keddie and Crescent Mills...	35	..	25	..
	Crescent Mills and Greenville..	40	..	40	..
	Greenville and Clear Creek Jct.	35	..	25	..
	Alamanor and Greenville Westward.....	..	..	..	20
	Clear Creek Jct. and Mason...	35	..	30	..
	Clear Creek Jct. and Westwood, on curves.....	..	25	..	25
	Mason, trains using turnout....	..	20	..	20
	Mason and Halls Flat.....	40	..	40	..
	Halls Flat and Pit River.....	35	..	25	..
	Halls Flat and Pit River, on curves.....	..	25	..	..
	On curve west mile board Willow Springs.....	..	20	..	20
	Pit River and Bieber.....	40	..	30	..
	First curve west of Bieber....	..	20	..	20
10	San Jose Branch.....	30	..	25	..
	Within city limits, San Jose...	..	12	..	12
11	Over all street and highway crossings within city limits, San Jose	..	5	..	5
	Carbona Branch.....	12	..	12	..
11	Terminus Branch				
	Terminus Jct. and Garden....	20	..	20	..
	Garden and Terminus.....	15	..	15	..

MAXIMUM SPEEDS:

On curved track Third Subdivision enginemen will reduce speed below the maximums provided where necessary to insure safety.

Engines backing, except diesel switchers—20 miles per hour on straight track. On curves and where track conditions are unfavorable speed must be reduced further to a rate consistent with safety.

Engines running light on main track or branches—speeds prescribed for freight trains.

M-80 Class engines, All Subdivisions—35 miles per hour.

GS-64-77 Class Engines (Nos. 481-486) must not exceed speeds indicated below over following bridges:

Bridge 18.80.....45 MPH	Bridge 39.40.....45 MPH
“ 20.87.....45 “	“ 49.88.....45 “
“ 22.11.....45 “	“ 53.40.....45 “
“ 35.09.....35 “	“ 116.28.....45 “
“ 37.12.....45 “	“ 204.82.....30 “
“ 37.36.....45 “	

M-137-151 Class engines:

Handling passenger trains..... speeds prescribed for freight trains

Over Bridge 317.43..... 25 miles per hour in trains or light

Second Subdivision.....30 “ “ “ “ “ “ “

Fourth Subdivision

Btw. Keddie and Greenville...25 “ “ “ “ “ “ “

“ Greenville and Alamanor...20 “ “ “ “ “ “ “

“ Alamanor and Bieber.....25 “ “ “ “ “ “ “

“ Halls Flat and Bieber, on

curves descending grade.20 “ “ “ “ “ “ “

While engine passing through

crossovers or turnouts..... 5 “ “ “ “ “ “ “

Passenger trains with cabooses on rear or when handled by

C-43 or MK-60 engine—50 miles per hour.

Trains handling Southern Pacific scale test car will not exceed

40 MPH.

Trains handling steam derrick 37 on tangent track 35 miles

per hour; on curves five miles per hour less than speed prescribed

for freight trains but not exceeding 30 miles per hour.

Trains handling steam derricks, other than derrick 37, steam

shovels, cranes, rotary plows or pile drivers, 25 miles per hour

First and Second Subdivision, 20 miles per hour Third and Fourth

Subdivisions.

Trains handling triple loads of poles, 20 miles per hour Third

and Fourth Subdivisions and between Carbona and Oakland.

Trains handling logs, 25 miles per hour. When two trains meet, either of which are handling logs, the standing train will remain standing until other train has cleared or come to a stop unless necessary to saw by. Maximum speed of train passing, 15 miles per hour.

All trains or engines through turnouts, crossovers, sidings and other inside tracks, 10 MPH.

MISCELLANEOUS

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

When steam derrick is handled with Mallet, D-239, or D-225 engine, there must be at least two cars between engine and derrick.

DOUBLEHEADING. When M-80, M-137-151, GS-64-77, MK-60, or MTP-44 engines are in a train with another engine of any class, either in service or dead, they must be spaced at least 10 cars apart, except on Third Subdivision and between Stockton Yard and Altamont MTP-44 engines may be doubleheaded with C-43 engines; and on Fourth Subdivision M-80 or MK-60 engines may be doubleheaded with C-43 engines; also two M-80 engines, a D-225 or D-239 and M-80 engine or an M-137-151 and M-80 engine may be doubleheaded between Bieber and Halls Flat.

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

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

C-43 engine being doubleheaded with C-43 engine, or running light coupled, will not exceed 35 miles per hour over Bridge 64.43.

MTP-44 engine being doubleheaded with C-43 engine, or running light coupled, will not exceed 35 miles per hour over Bridges 56.96, 64.43, 79.41 and 80.37.

MTP-44 engine may be doubleheaded with single unit D-176 engine on Third Subdivision.

MK-60 engine and M-80 engine being doubleheaded with C-43 engine on Fourth Subdivision will not exceed 25 miles per hour over Bridges 9.04, 9.29, 9.45 and 9.79.

GS-64-77 and M-80 engines may be doubleheaded between Greenville and Bieber but must not exceed 25 MPH over all steel bridges.

TRIPLEHEADING of locomotives of any class, running light or handling train, is prohibited.

DIESEL ENGINES. Diesel freight engines dead in train must have qualified messenger. In both cabs automatic brake valves must be cut out and brake valve handles locked in running position; independent brake valve handles locked in running position (locking pins are provided for this); dead engine features cut in; all isolation switches placed in “start” position; all switches at engineer’s control stand locked in “off” position and main battery switches pulled; reverses locked in neutral position in all units. Messenger should watch brake cylinder pressure in cab nearest to locomotive handling train. Distributing valve pops must be set to 25 pounds pressure. Maximum speed 60 miles per hour.

Diesel switch engines dead in train must have qualified messenger. Automatic brake valve must be cut out and handle placed in running position; distributing valve pop set to 15 pounds pressure; dead engine feature cut in; main battery switch pulled and reversers locked in neutral position. Maximum speed 45 miles per hour.

During freezing weather engine water cooling system must be drained on any type Diesel engine being towed.

SPURS AND COMMERCIAL TRACKS

MAIN LINE

STATIONS	Distance from San Francisco	How Connected	Car Capacity
HEMOCRAFT BAKING CO.....	14.3	1 W	6
HUDSON.....	15.9	1 E	20
GOLDEN GRAIN CO.....	16.04	1 W	14
WYLLIE.....	16.4	1 E	3
GENERAL FOODS CO.....	16.48	1 W	16
ESTUDILLO.....	16.5	1 E	13
ALVARADO JUNCTION (P)...	24.9	Both Ends	39
DECOTO.....	26.6	Both Ends	18
PABRICO.....	27.8	1 E	16
EBERLY.....	28.9	Both Ends	20
GOAD..... (P).....	32.1	1 E	25
RADUM..... (P).....	43.4	Both Ends	33
TREVARNO..... (P).....	49.0	1 W	24
REDMOND CUT (P).....	59.3	1 W	33
VALPICO..... (P).....	68.3	Both Ends	30
AYALA.....	70.9	1 E	6
RHODES.....	75.6	Both Ends	26
QUIGLEY..... (P).....	83.8	1 W	95
ARMY SUPPLY DEPOT (P)...	85.76	Both Ends	130
FRENCH CAMP.....	88.35	Both Ends	29
HARTE.....	100.5	1 W	24
VILLINGER.....	107.8	1 W	13
LAS VINAS.....	109.5	Both Ends	50
BRADFORD.....	119.0	1 W	9
ALBERT.....	127.2	1 W	9
BOMBAY.....	146.6	1 E	13
VISTA ROBLES.....	198.8	1 E	33
ADELAIDE.....	202.7	1 E	9
LAND..... (P).....	212.2	Both Ends	28
JARBO..... (P).....	236.1	1 E	17
GRIZZLY..... (P).....	246.1	1 E	11
ROCK CREEK..... (P).....	249.1	Both Ends	18
DALITE..... (P).....	256.8	1 W	12
GRAY'S FLAT..... (P).....	272.6	1 W	74
" " (PSGR STOP).....	273.0	.....	..
STODDARD..... (P).....	279.3	1 W	15

NORTHERN CALIFORNIA EXTENSION

STATIONS	Distance from Keddie	How Connected	Car Capacity
INDIAN CREEK (P).....	3.1	1 W	14
MACKEY.....	3.7	1 E	6
CHENEY LUMBER CO.....	13.9	1 E	16
BOX..... (P).....	15.5	1 W	34
ROLLO.....	21.6	1 W	11
INDIAN HEAD LBR. CO.. (P) ..	95.4	1 W	10

YARD LIMITS

West MP		East MP
WP Mole	Oakland	13.78
BR-14.4	San Jose	BR-23.0
89.34	Stockton	96.49
MJ-6.0	Terminous	End of Branch
133.4	Sacramento	140.69
201.44	Oroville	206.0
	Keddie, 4th Subdivision	K-0.48
319.94	Portola	323.09
K-38.25	Westwood	SP-409.45
	(2¼ miles west of Mason)	
K-75.17	Halls Flat	K-78.70
K-111.2	Bieber	GN-86.5
	(3.1 miles east of passenger station)	

ADDITIONAL STATION STOPS

NO TRACKS

STATIONS	Distance from San Francisco
COUNSMAN.....	150.6
PALERMO.....	199.3
LAS PLUMAS.....	221.4
CHINO CREEK.....	229.5
ISAIAH.....	230.5
INTAKE.....	232.1
MAYARO.....	240.9
STORRIE.....	250.6
SPANISH CREEK.....	285.4

NORTHERN CALIFORNIA EXTENSION

STATIONS	Distance from Keddie
WOLF CREEK.....	21.5

TONNAGE RATING

Engine Class	1st Sub-division	2nd Sub-division	3rd Sub-division	4th Subdivision		
				Keddie to Greenville	Greenville to Almanor	Almanor to Bieber
Eastward						
MTP-44.....	1650	4200	1250	900	617	900
C-43.....	1650	4200	1250	900	617	900
MK-60.....	2500	5500	1800	1250	858	1250
GS-64-77..	2800	6000	1900	1250	858	1250
M-80.....	3600	6500	2200	1690	1170	1690
M-137-151	5000	8500	4000	2800	1900	2800
D-176**	2800	6500	1900	1250	858	1250
D-225***	8000	11000	4750	3600	2500	3600
D-239***	10000	13500	6000	4700	3500	4700
Westward						
MTP-44.....	1400	4200	*	Bieber to Halls Flat	Halls Flat to Keddie	
C-43.....	1400	4200	*	756	1600	
MK-60.....	2350	5500	*	756	1600	
GS-64-77..	2500	6000	*	1051	2200	
M-80.....	2600	6500	*	1051	2450	
M-137-151	4000	8500	*	1051	2450	
D-176**	2500	6500	*	1427	3500	
D-225***	6000	12000	*	2200	5500	
D-239***	7500	15000	*	1051	2450	
				3250	6500	
				4500	8000	

*Descending grade, no tonnage limit.

**Reduce 33½% of tonnage rating for each; inoperative, or detached Diesel unit.

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

Add five tons friction for each car over 30 cars.

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

