

THE WESTERN PACIFIC RAILROAD CO.



WESTERN DIVISION



TIME 32 TABLE

In Effect 12:01 A. M. Pacific Standard Time

SUNDAY, JULY 1, 1945

This Time Table is for the exclusive use and guidance of the employes concerned. The Company reserves the right to vary from it at pleasure.

Always have the Book of Rules of the Transportation Department at hand for reference.

E. W. MASON,
Vice President and General Manager.

J. P. QUIGLEY,
Superintendent of Transportation.

G. W. CURTIS,
Superintendent.

Fuel, Water, Pone, Table, Scale, Wye, Bulletin, Register Station, Standard Clock, Interlocking Plant.	SECOND CLASS			FIRST CLASS		Distance from San Francisco	Time Table No. 32 July 1, 1945		Distance from Stockton	FIRST CLASS		SECOND CLASS			Car Capacity of Sidings
	54 Fast Freight	78 Fast Freight	62 Fast Freight	40 Exposition Flyer	12 Feather River Express		STATIONS Telegraph Offices and Calls			39 Exposition Flyer	11 Feather River Express	61 Fast Freight	77 Fast Freight	53 Fast Freight	
	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily		Arrive Daily	Arrive Daily		Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		
W. F. O.				4.00 PM	10.00 AM	0.0	DN SAN FRANCISCO	Go	98.8	9.50 AM	4.50 PM				
B. R. P. K.				4.20 4.40 PM	10.20 10.40 AM	3.5	DN OAKLAND PIER (S.P.)	Ow	90.3	9.30 9.05 AM	4.30 4.15 PM				
F. W. T. O. P. B. R. K.	9.30 PM		5.30 AM	Via S. P.	Via S. P.	4.7	DN OAKLAND YARD (W.P.)	Mc	89.1	Via S. P.	Via S. P.	10.00 AM	7.00 PM	2.00 AM	Yard
L.						5.8	S. P. Crossing		88.0						
I.				4.48 PM	10.48 AM	5.85	CHESTNUT JUNCTION		87.95	8.55 AM	4.03 PM				
R.	9.40		5.40	4.55	10.55	6.6	OAKLAND	Ak	87.2	8.50	4.00	9.50	6.49	1.50	
I.				4.59	10.58	7.2	S. P. Crossing		86.6						
I.	9.52		5.51	5.08	11.05	7.8	CLINTON		86.0	8.39	3.51				
						8.6	FRUITVALE		84.2	8.31	3.44	9.39	6.37	1.38	
L.						10.3	S. P. Crossing		83.5						
						10.6	MELROSE		83.2						
P.	10.00		5.58	5.13	11.11	11.3	KOHLER		82.5	8.26	3.38	9.32	6.29	1.30	60
P.	10.08		6.04	5.18	11.16	13.5	ELMHURST		80.8	8.22	3.33	9.26	6.21	1.22	
P.	10.11		6.08	5.21	11.23	14.8	SAN LEANDRO	Dr	79.0	8.19	3.30	9.22	6.17	1.18	
P.	10.23		6.20	5.29	11.35	20.5	HAYWARD	Hy	73.8	8.10	3.12	9.10	6.06	1.04	84
P.				5.35	11.45	24.9	ALVARADO JUNCTION		68.9	8.00	2.59				39
W. P.	10.55		6.50	5.43	11.59 AM	29.7	NILES	Cn	64.1	7.53	2.52	8.50	5.43	12.44	83
I.						30.3	S. P. Crossing		63.5						
P. Y.						30.5	NILES JUNCTION		63.8						
P.	11.13		7.10	5.54	12.12 PM	36.0	SUNOL		57.8	7.42	2.37	8.21	5.05	12.17	77
P.	11.28		7.33	6.02	12.21	41.5	PLEASANTON	Tn	52.3	7.33	2.29	8.07	4.50	12.02 AM	76
I.						42.7	S. P. Crossing		51.1						
I.						43.0	S. P. Crossing		50.8						
W. P.	11.44 PM		7.50	6.18	12.40	47.6	LIVERMORE	Vn	46.2	7.21	2.11	7.50	4.32	11.44 PM	76
P. Y.	12.11 AM		8.15	6.42	1.01	56.2	ALTAMONT	N	37.6	7.04	1.54	7.25	4.10	11.16	95
P.	12.28		8.30	6.53	1.13	63.2	MIDWAY		30.6	6.47	1.42	6.47	3.45	10.41	51
W. Y. P.	12.46		8.47	7.05	1.27	71.8	CARBONA	Cb	22.0	6.30	1.27	6.07	3.10	10.08	115
P.	12.49		8.51	7.08	1.32	73.4	LYOTH	Ky	20.4	6.27	1.23	6.02	3.06	10.04	117
I.						74.0	S. P. Crossing		19.8						
P.	12.55		8.57	7.13	1.37	76.8	FITZ		17.0	6.22	1.18	5.56	3.00	9.58	89
P.	1.10		9.12	7.23	1.47	83.8	QUIGLEY		10.0	6.14	1.09	5.43	2.45	9.44	95
I.						84.45	S. P. Crossing		9.35						
P.	1.14		9.16	7.27	1.51	85.2	LATHROP	Ro	8.6	6.10	1.05	5.40	2.41	9.40	108
P.				7.32	1.56	90.3	ORTEGA		3.5						52
F. W. T. O. P. B. R. K.	1.30 AM 3.30 AM	5.00 PM	9.35 AM 10.30 AM	7.40	2.05	92.0	STOCKTON YARD	Sn	1.8	6.04	12.58	5.30 AM 2.35 AM	2.30 PM 11.50 AM	9.30 PM 7.30 PM	Yard
I.						93.2	A. T. & S. F. Crossing		0.6						
P. R. K.	3.40 AM	5.10 PM	10.40 AM	7.45 PM	2.10 PM	93.8	STOCKTON	Fc	0.0	5.55 AM	12.50 PM	2.25 AM	11.40 AM	7.20 PM	
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily					Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	
	4.00	.10	4.05	3.05	3.30		Time over Subdivision			3.10	3.25	4.30	4.30	4.30	
	21.8	10.8	21.4	29.3	25.8		Average Speed an Hour			28.5	26.4	19.4	19.4	19.4	

Between Chestnut Jct. and Oakland Pier, trains will be governed by S. P. Time Table and Rules and Regulations of the Transportation Department. Also see S. P. Air Brake Rule No. 39 on page 12.

Sections of first class trains originating or terminating at Chestnut Jct. and moving from or to Oakland Pier must display same signals between Oakland Pier and Chestnut Jct. and may do so without train order authority. (See S. P. Time Table.)

When crews of sections of first class trains terminating at Chestnut Junction tie up at Oakland Yard, registration will be made at that point and operators at Oakland Yard immediately will telephone such registration to telegraph operators at S. P. Oakland Pier.

Eastward W. P. trains originating at Oakland Pier must obtain W. P. clearance card at Oakland Pier and will not require clearance card at Chestnut Jct.

Chestnut Jct. is initial station for Nos. 40 and 12. Oakland is register station for first class trains only. Eastward first class trains must not leave Oakland without a clearance card. Other trains will not require a clearance card unless train orders are received.

Rule 83: No. 40 need not check departure of No. 12 at Chestnut Jct. When departure of sections of eastward first class trains has been checked at Oakland Pier following sections will not require additional check at Chestnut Jct. but must have check before leaving Oakland.

When trains meet at Clinton, the north track may be used between Clinton and Chestnut Jct. by train taking siding. See page 9 under Clinton for instructions covering electric lock at east switch to north track.

A westward first class train finding an eastward first class train at passenger station, Oakland, will not pass Franklin St. until eastward train leaves station. An eastward first class train finding a westward first class train at passenger station will not pass Clay St. until westward train leaves station.

Trains must approach Southern Pacific crossings at M.P. 7.2 (both main track and north track) and M. P. 10.3 under control and will not proceed over these crossings unless they are known to be clear.

Automatic Block Signals: See Page 9.

Switch Indicators: Two-way indicators located at east and west main track wye switches, Niles Jct., give warning of approach of trains either direction. See Rule 512.

Nos. 11 and 39 will register by ticket at Stockton Yard.

Nos. 40 and 12 will not register at Stockton Yard, except when crew changes on sections of Nos. 40 and 12 are made there conductor going off duty will register in and make notation in extreme left hand column of train register reading "Crew Change Sn Yd". Outgoing conductor will register departure with same notation.

Operator at Stockton will transmit registration of Nos. 40 and 12 to operator at Stockton Yard, who will enter on register with notation in extreme left hand column reading "Stockton Pgr Station" and immediately verify with dispatcher, for information of trains originating at Stockton Yard.

Stockton Yard is the terminal for second class and extra trains, First and Second Subdivisions. Second class and extra trains originating or terminating at Stockton Yard will not require clearance card at Stockton unless train orders are received.

Westward freight trains will enter Stockton Yard at lead switch immediately west of South Street and eastward freight trains at Ortega connection or at lead switch M.P. 91 as Yardmaster instructs. Track 15 will be used as run around track for movement of engines between round house and west end of yard.

When first class trains meet at Stockton Yard, 40-car siding on south side of main track between M.P. 92.09 and M.P. 92.54 will be used by train taking siding. Schedule and train order times of first class trains apply at this siding, but must be respected at lead switches M.P. 91 and South Street by first class trains or sections thereof leaving Stockton Yard from any inside track.

Stockton is register station for first class trains only. Nos. 39 and 40 register by ticket at Stockton.

No. 40 will stop on flag at Hayward, Pleasanton and Livermore to receive revenue passengers for Salt Lake City or east. No. 39 will stop at any station to discharge revenue passengers from Salt Lake City or east.

Nos. 39 and 40 will stop on flag at Livermore to receive or discharge revenue passengers.

Nos. 11 and 12 will stop on flag at any station where time is not shown to receive or discharge passengers, baggage, mail and express.

Fuel, Water, Fone, Trol., Scale, Nye, Boulder, Register Station, Standard Clock, Interlocking Plant.	SECOND CLASS					FIRST CLASS		Distance from San Francisco	Time Table No. 32 July 1, 1945		Distance from Portola	FIRST CLASS		SECOND CLASS					Car Capacity of Stalings
	78	62	54	94	96	40	12		11	39		53	93	95	61	77			
	Fast Freight	Fast Freight	Fast Freight	Local Freight	Local Freight	Exposition Flyer	Feather River Express		Feather River Express	Portola Flyer		Fast Freight	Local Freight	Local Freight	Fast Freight	Fast Freight			
	Leave Daily	Leave Daily	Leave Daily		Leave Mon., Wed., Fri.	Leave Daily	Leave Daily		STATIONS Telegraph Offices and Calls	Arrive Daily	Arrive Daily		Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily		
B.R.K.P.I.						11.05 PM	6.10 PM	205.1	DN OROVILLE Vi	116.8	s 9.15 AM	s 2.40 AM						51	
P.						11.13	f 6.19	209.8	QUARTZ 4.2	112.1	f 9.05	2.31						89	
P.						11.20	f 6.27	212.9	BIDWELL 3.6	108.5	f 8.58	2.24						94	
P.						11.29	f 6.36	217.6	BLOOMER 4.7	108.8	f 8.49	2.15						88	
W.P.						11.42	f 6.51	224.1	BERRY CREEK 6.5	97.3	f 8.36	2.02						95	
P.						11.56 PM	f 7.06	231.2	DAVID 7.1	90.2	f 8.22	1.48						98	
P.						12.04 AM	f 7.14	235.1	POE 3.9	86.8	f 8.14	1.39						80	
F.W.P.						12.12	s 7.25	239.2	2S PULGA Bg 4.3	82.2	s 8.04	1.28						85	
P.						12.20	f 7.36	243.5	ORESTA 4.1	77.9	f 7.53	1.17						86	
W.P.						12.28	f 7.47	247.6	MERLIN 5.5	78.8	f 7.44	1.03						78	
P.						12.39	f 8.01	253.1	TOBIN 3.3	68.8	f 7.32	12.50						58	
P.						12.44	f 8.06	255.8	CAMP RODGERS 4.5	66.1	f 7.26	12.44						89	
W.P.						12.54	s 8.19	260.1	2S BELDEN Bn 4.6	61.8	s 7.16	12.35						99	
P.						1.04	f 8.31	264.7	RICH BAR 5.5	56.7	f 7.04	12.26						78	
W.P.						1.23	f 8.47	270.2	VIRGILIA 3.6	51.2	f 6.51	12.15						80	
P.						1.31	f 8.56	273.8	TWAIN 3.5	47.3	f 6.43	12.09						90	
P.						1.38	f 9.04	277.3	PAXTON 3.8	44.1	f 6.35	12.02 AM						89	
F.W.P.R.K.Y.T.					Lv. Tues., Thurs., Sat.	1.46	s 9.20	280.9	DN KEDDIE Ds Rd 3.0	40.5	s 6.26	11.55 PM			Arrive Mon., Wed., Fri.	Leave Tues., Thurs., Sat.		Yard	
P.						1.54	f 9.29	284.5	SIERRA 3.4	36.9	f 6.15	11.47						89	
P.						2.00	s 9.45	287.9	2S QUINCY JUNCTION Rt 4.7	33.5	s 6.08	11.41						81	
P.						2.11	f 9.56	292.6	MASSACK 3.7	28.8	f 5.57	11.34						89	
W.P.						2.18	s 10.06	296.8	2S SPRING GARDEN Sg 5.3	26.1	s 5.50	11.28						98	
P.						2.28	s 10.16	301.6	D SLOAT 3.8	19.8	f 5.40	11.19						89	
P.						2.35	f 10.24	305.4	TWO RIVERS 5.0	16.0	f 5.32	11.13						89	
W.P.						2.44	s 10.40	310.4	2S BLAIRSDEN Ba 3.5	11.0	s 5.23	11.05						102	
P.						2.51	f 10.57	318.9	OLIO 4.3	7.5	f 5.13	10.57						94	
P.						3.00	f 11.05	318.7	MABIE 2.7	2.7	f 5.05	10.50						87	
F.W.T.O. P.Y.B.R.K.						s 3.05 AM	s 11.10 PM	321.4	DN PORTOLA Ki	0.0	5.00 AM	10.45 PM						Yard	
	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Tues., Thurs., Sat.		Arrive Daily	Arrive Daily			Leave Daily	Leave Daily		Leave Daily	Leave Mon., Wed., Fri.		Leave Daily	Leave Daily		
						4.00	5.00		Time over Subdivision	15	3.55								
						29.0	23.3		Average Speed an Hour	24.4	29.7								

Schedules shown for No. 40 and No. 12 do not confer any superiority whether or not C. T. C. is operative but must be respected by trains operating as sections of such schedules. (Also see C. T. C. S. Rule 780)

Schedules shown for No. 39 and No. 11 do not confer any superiority whether or not C. T. C. is operative but must be respected by trains operating as sections of such schedules. (Also see C. T. C. S. Rule 780)

Oroville Yard is the terminal for extra trains Third Subdivision. Extra trains originating or terminating at Oroville Yard will not require clearance card at Oroville unless train order signal is at STOP.

- Oroville is register station for first class trains only.
- Keddie is register station for extra trains originating and terminating at Keddie only.
- Nos. 93, 94, 95 and 96 carry passengers.
- When first class trains meet at Portola, pocket track in front of depot will be the siding.
- No. 39 will stop at any station to discharge revenue passengers from Salt Lake City or east.
- Nos. 11 and 12 will stop on flag at any station where time is not shown to receive or discharge passengers, baggage, mail and express.

The following will govern use of retainer valves on westward freight trains, Portola to Bloomer:

- When the gross weight of train does not exceed 33 tons per car, turn up retainer valves on first fifteen cars back of engine. When gross weight of train exceeds 33 tons and is less than 45 tons per car, turn up retainer valves on first twenty cars back of engine. When gross weight of train exceeds 45 tons per car, turn up retainer valves on first twenty-five cars back of engine.
- Retainers are to be used in low pressure position which is horizontal. Should wheels show tendency to heat, retainers will be alternated. If, in judgment of engineer, number of retainers unsatisfactory, engineer may instruct the brakeman to add or subtract as required to keep slack bunched and control train at safe speed while brake pipe pressure is being fully recharged.

Use of dynamic brake on freight trains being handled by Diesel freight engines does not modify requirements pertaining to use of retainers, with the following exception: When Diesel Freight Engines 904 to 912 inclusive are handling westward freight trains of 4200 tons or less with dynamic brake operative, retainers need not be used, unless requested by engineer.

- Slide Detector Fences: See section (H), C. T. C. instructions, page 10.
- Centralized Traffic Control: See page 10 for special instructions.
- Oroville: For movement between Oroville and Oroville Yard see page 11 for special instructions.
- Portola: For movement between Delleker and Portola passenger station see page 10 for special instructions.

Fuel, Water, Fone, Table, Scale, Wye, Bulletin, Register Station, Standard Clock	SECOND CLASS		FIRST CLASS		Distance from Keddie	Time Table No. 32		Distance from Bieber	FIRST CLASS		SECOND CLASS		Car Capacity of Sidings
						July 1, 1945							
	Western Pacific Fast Freight	Southern Pacific Local Freight	Western Pacific Fast Freight	Southern Pacific Local Freight		STATIONS	Telegraph Offices and Calls		Western Pacific Fast Freight	Southern Pacific Local Freight	Western Pacific Fast Freight	Southern Pacific Local Freight	
F. W. P. T. Y. B. R. K.	2.30 PM				0.0	DN	KEDDIE	Da Kd	111.8				Yard
P.	2.52				6.2		MOCCASIN		105.6				89
P.	2.58				8.6	D	ORESOENT MILLS	Cm	103.2				16
W. P.	3.15				14.7	DN	GREENVILLE	GI	97.1				89
P.	3.25				17.5		COHALA		94.3				89
W. P. Y.	3.53				25.4		ALMANOR		86.4				89
P.	4.13				32.4		LASSEN VIEW		79.4				89
P.	4.22				35.2		CLEAR CREEK JUNCTION		76.6				
F. W. P. Y. B. R. K.	4.55	6.15 AM			39.4	DN	WESTWOOD	Wd	72.4		5.30	5.50 AM	Yard
P. R.	5.10	6.30 AM			43.5	D	MASON	Md	68.3		5.20	5.35 AM	
P.	5.12				44.1		ROBBERS CREEK		67.7		5.18		89
P. Y.	5.42				52.5	N	NORVELL	Rv	59.8		4.58		89
P.	6.04				62.9		LODGEPOLE		48.9		4.36		89
W. P. Y.	6.40				76.4	DN	HALLS FLAT	Hf	36.4		4.08		89
P.	7.00				84.2		JELLYCO		27.6		3.24		89
P.	7.18				90.2		WILLOW SPRINGS		21.6		2.58		89
W. at M. P. 96.0 P.	7.33				94.8		LITTLE VALLEY		17.0		2.45		89
P.	8.03				100.9		DIXIE		10.9		2.25		89
P.	8.25				109.6		PIT RIVER		2.8		1.45		89
F. W. P. O. Y. B. R. K.	8.30 PM				111.8	DN	BIEBER	B	0.0		1.30 AM		Yard
	Arrive Daily	Leave Daily	Arrive Daily	Leave Daily							Leave Daily	Leave Daily	
	6.00		0.15								6.00	0.15	
	18.6		16.4								18.6	16.4	
							Time over Subdivision						
							Average Speed per Hour						

In Bieber Yard trains will be governed by Great Northern Time Table 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 Red River Lumber Co. trains will be governed by Western Pacific Time Table 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.

Automatic Block Signals: See page 9.

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

Westwood:
Nos. 153 and 154 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. 555 and 556 only. Nos. 555 and 556 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. 555.

No. 153 need not check register for Southern Pacific train No. 556.

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.

Nos. 153 and 154 carry passengers.

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 retainer valves 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 working.

All retainers will be turned up on westward freight trains between Almanor and Greenville.

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 valve on first car back of engine and on each fourth car throughout the train. If gross weight of train exceeds 33 tons and is less than 45 tons per car, turn up retainer valves on five head cars and on every third car throughout the train. If gross weight of train is 45 tons or more per car, turn up retainer valves on five head cars and on every second car throughout the train. When retainers are turned up handle will be placed in low pressure position, which is horizontal and should wheels show a tendency to heat, retainers must be alternated.

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 retainer valves necessary to control train and they must be used accordingly.

Use of dynamic brake on freight trains being handled by Diesel freight engines does not, in any way, modify requirements pertaining to use of retainers.

Eastward

FIRST SUBDIVISION "A"—SAN JOSE BRANCH.

Westward

Fuel, Water, Fone, Table, Scale, Wye, Bulletin, Register Station, Standard Clock, Interlocking Plant.	SECOND CLASS		Distance from Niles Junction	Time Table No. 32 July 1, 1945		Distance from Alameda St. Freight Station	SECOND CLASS		Car Capacity of Sidings
	254 Freight	Leave Daily		STATIONS Telegraph Offices and Calls	253 Freight		Arrive Daily		
W. P. R.	12.30 AM		DN	NILES 0.8	Cn		10.45 PM		83
Y. P.	12.40	0.0		NILES JUNCTION 3.3		23.0	10.25		
F.	1.00	3.3		IRVINGTON 3.5		19.7	10.10		29
	1.15	6.8		WARM SPRINGS 4.1		16.2	9.55		Spur 1W 6
P.	1.35	10.9		MILPITAS 3.2		12.1	9.40		31
	1.45	14.1		BERRYESSA 2.8		8.9	9.25		Spur 1E 10
	2.00	16.9		SAN JOSE East Santa Clara St. 0.6		6.1	9.10		
P. W. T. F. R. B. O. K.	2.10 AM	17.5	2S	SAN JOSE YARD 2.0	Sx	5.5	9.00 PM		Yard
		19.5		S. P. TRANSFER 0.1		3.5			
		19.6		VALBRIOK S. P. Crossing 0.6		3.4			
L		20.2		S. P. CROSSING 2.1		2.8			
L		22.3		S. P. CROSSING 0.7		0.7			
		28.0		SAN JOSE Alameda St. Freight Station		0.0			Yard
	Arrive Daily						Leave Daily		
	1.30			Time over Subdivision			1.25		
	11.6			Average Speed an Hour			12.4		

San Jose Branch trains have no Time Table superiority between Niles Junction and Niles. Their movement between these points will be governed by block signals and Rule 93. Time shown at Niles is for information only. SWITCH INDICATORS: Two-way indicators located at east and west main track wye switches, Niles Jct., give warning of approach of trains either direction. See Rule 512.

Eastward FIRST SUBDIVISION "B"—CARBONA BRANCH. Westward

Fuel, Water, Fone, Table, Scale, Wye, Bulletin, Register Station, Standard Clock.	Time Table No. 32 July 1, 1945		Distance from Carbona	Time Table No. 32 July 1, 1945		Distance from Moy	Car Capacity of Sidings
	STATIONS Telegraph Offices and Calls	STATIONS Telegraph Offices and Calls					
W. Y. P.	0.0	DN	CARBONA 1.7	CB	4.2		77
	1.7		KERLINGER 1.7		2.5		Spur 1W 8
O. P.	3.4		RIVER ROCK 0.8		0.8		Spur 1W 52
	4.2		MOY		0.0		No Siding

Derails on main track 138 feet east of east Bean Spur Switch, Carbona, M. P. 3.3 and 240 feet west and 885 feet east of Stock Yards Moy. Cars on main track east of River Rock not protected.

SECOND SUBDIVISION "A"—TERMINOUS BRANCH.

Eastward		Time Table No. 32 July 1, 1945		Westward	
Fuel, Water, Fone, Table, Scale, Wye, Bulletin, Register Station, Standard Clock.	Distance from Terminous Jct.	STATIONS Telegraph Offices and Calls		Distance from Terminous	Car Capacity of Sidings
		Y. P.	0.0			TERMINOUS JCT. 3.5	7.8	34
	3.5	GARDEN 3.1	4.3	10	
	6.6	GRASS 1.2	1.2	6	
W. Y.	7.8	D TERMINOUS Us	0.0	Yard	

SPECIAL INSTRUCTIONS

SPEED RESTRICTIONS

SPEED RESTRICTIONS IN MILES AN HOUR WILL APPLY AS FOLLOWS:

Page	BETWEEN	Passenger		Freight			
		Maximum	Restriction	Maximum	Restriction		
2	First Subdivision	60	..	40	..		
	Over Interlocking Crossings	..	40	..	25		
	Over, along or upon all streets and highways within Oakland City Limits	..	15	..	10		
	Washington and Franklin Sts., Oakland	..	8	..	8		
	M.P. 7.2 over S. P. Crossing	..	10	..	10		
	M.P. 7.8 S. P. Crossing Clinton (see P. 9)	..	15	..	10		
	M.P. 9.5 just east 29th Avenue and M.P. 9.8 just east Fruitvale Avenue	..	10	..	10		
	M.P. 10.3 over S. P. Crossing	..	10	..	10		
	Bridge just west of San Leandro Depot and Williams Street, 5 blocks east of depot	..	20	..	15		
	Over "A" and "B" Streets, Hayward	..	45	..	30		
	M.P. 23.93 and M.P. 24.31	..	35	..	25		
	M.P. 29.4 on curve	..	40	..	30		
	Niles and M.P. 37	..	50	..	30		
	Through Tunnels Nos. 1 and 2	..	40	..	20		
	M.P. 38.6 on curve S. P. underpass	..	45	..	30		
	M.P. 40.0 on curve	..	55	..	40		
	City Limits Pleasanton	..	15	..	15		
	City Limits Livermore	..	25	..	20		
	M.P. 52 and M.P. 53 on curves	..	45	..	30		
	M.P. 53 and M.P. 54 on curves	..	35	..	25		
	M.P. 54 and M.P. 67 on curves	..	50	..	35		
	M.P. 58.0 on curve at sink	..	20	..	20		
	San Joaquin River Drawbridge M.P. 80.28	..	20	..	15		
	M.P. 84.45 S. P. Crossing (see Page 9)	..	30	..	25		
	M.P. 90 and M.P. 92.5 on curves	..	45	..	30		
	M.P. 92.5 and Stockton Depot Main Track	..	20	..	20		
	Other Tracks	..	8	..	8		
	3	Second Subdivision	60	..	40	..	
Stockton and M.P. 122		..	..	..	..
Stockton Depot and Park Street		..	..	..	..
Main Track		..	20	..	20		
Other Tracks		..	8	..	8		
M.P. 116.07 Mokelumne River Bridge		..	20	..	20		
Bradford Spur		..	..	..	10
M.P. 122 and M.P. 133.5		..	50	..	35		
M.P. 133.5 and M.P. 155		..	60	..	40		
12th Ave. and "C" Street, Sacramento		..	15	..	15		
M.P. 140.8 S. N. Crossing (see Page 9)		..	30	..	25		
M.P. 152.5 S. N. Crossing (see Page 9)		..	30	..	25		
M.P. 155 and M.P. 171		..	50	..	35		
M.P. 171 and M.P. 185		..	60	..	40		
On curve at Cleveland		..	50	..	35		
Joint track Marysville (see Page 8)		..	15	..	15		
M.P. 185 and M.P. 197		..	50	..	35		
M.P. 197 and Oroville		..	60	..	40		
M.P. 201.8 on curve		..	40	..	25		
Over interlocking crossings		..	40	..	25		
4		Third Subdivision	50	..	35	..	
		Oroville and Bidwell	
		Bidwell and Bloomer	..	40	..	30	
		Bloomer and M.P. 272.57 (Grays Flat)	..	35	..	25	
		Bridge 252.60	..	25	..	20	
		M.P. 272.57 and Quincy Jct.	..	40	..	30	
		Over Switch East end Tunnel 32	..	20	..	20	
		Quincy Jct. and Portola	..	50	..	30	
	Through Tunnel 35	..	..	..	20
	5	Fourth Subdivision	35	..	25	..	
		Keddie and Crescent Mills	
		Crescent Mills and Greenville	..	40	..	30	
		Greenville and Clear Creek Jct.	..	35	..	25	
		Clear Creek Jct. and Mason	..	35	..	30	
		Clear Creek Jct. and Westwood, on curves	..	25	..	25	
		Mason, trains using turnout	..	20	..	20	
		Mason and Norvell	..	40	..	25	
		Norvell 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	..	25	..	15	
		Pit River and Bieber	..	40	..	30	
		6	San Jose Branch	30	..	25	..
			Within city limits, San Jose	..	12	..	12
			Over all street and highway crossings within city limits, San Jose	..	5	..	5
			Carbona Branch	12	..	12	..
			Terminus Branch	20	..	20	..
			Terminus Jct. and Garden	15	..	15	..
Garden and Terminus			

MAXIMUM SPEEDS:

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

Engines backing—20 miles an 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.

Passenger trains with cabooses on rear or when handled by C-43 or MK-60-71 engine—50 miles an hour.

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

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

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

M-137-151 engines:

Handling passenger trains... speeds prescribed for freight trains

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

Second Subdivision... 30 " " " " " " " "

Fourth Subdivision

Btw. Keddie and Greenville	25	"	"	"	"	"	"	"	"
" Greenville and Almanor	20	"	"	"	"	"	"	"	"
" Almanor and Westwood	25	"	"	"	"	"	"	"	"
" Westwood and Mason	30	"	"	"	"	"	"	"	"
" Mason and Norvell	25	"	"	"	"	"	"	"	"
" Norvell and Halls Flat	30	"	"	"	"	"	"	"	"
" Halls Flat and Bieber	25	"	"	"	"	"	"	"	"
" Halls Flat and Bieber, on curves descending grade	20	"	"	"	"	"	"	"	"
While engine passing through crossovers or turnouts	5	"	"	"	"	"	"	"	"

Trains handling steam derricks, steam shovels, cranes, rotary plows or pile drivers, 25 miles an hour First and Second Subdivisions, 20 miles an hour Third and Fourth Subdivisions.

Trains handling triple loads of poles, 20 miles an hour Third and Fourth Subdivisions and between Carbona and Oakland.

Trains handling logs, 25 miles an 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 an hour.

All trains, through crossovers and turnouts—10 miles an hour.

MISCELLANEOUS

Dead engines handled in trains must be placed approximately 10 cars behind train engine.

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

DOUBLEHEADING: When D-225, M-80, M-137-151, GS-64-77, MK-60-71 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 MTP-44 engines may be doubleheaded with TP-29 engines; on Third Subdivision and between Stockton Yard and Altamont MTP-44 engines may be doubleheaded with C-43 engines; on First and Second Subdivisions MK-60-71 engines may be doubleheaded with TP-29 engines, and on Fourth Subdivision M-80 and MK-60-71 engines may be doubleheaded with C-43 or TP-29 engines.

When a TP-29 engine is doubleheaded on a passenger train over a passenger district with another engine of greater pump capacity it should be placed next to train. When used as a helper over part of the passenger district it should be placed in the lead.

MK-60-71 engine being doubleheaded with TP-29 engine will not exceed 35 miles an hour over Bridges 24.31, 29.24, 35.09, 37.12, 38.69, 49.88, 53.40, 56.96, 64.43, 79.41, 80.37, 116.28, 116.37 and 166.25.

MTP-44 engine being doubleheaded with TP-29 engine, C-43 engine being doubleheaded with C-43 or TP-29 engine, or running light coupled, will not exceed 35 miles an hour over Bridge 64.43.

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

MK-60-71 engine and M-80 engine being doubleheaded with C-43 or TP-29 engine on Fourth Subdivision will not exceed 25 miles an hour over Bridges 9.04, 9.29, 9.45 and 9.79.

Two M-80 engines, a D-225 and M-80 engine or an M-137-151 and M-80 engine may be doubleheaded between Bieber and Halls Flat.

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 an 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 an hour.

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

TONNAGE RATING

EASTWARD Engine Class	1st Sub-division	2nd Sub-division	3rd Sub-division	4th Subdivision		
				Keddie to Greenville	Greenville to Almanor	Almanor to Bieber
TP-29	1073	2200	812	585	401	585
MTP-44	1650	5000	1250			
C-43	1650	5000	1250	900	617	900
MK-60	2500	6000	1800	1250	858	1250
MK-60-71	2700	6000	1800	1250	858	1250
GS-64-77	2800	6000	1900	1250	858	1250
M-80	3000	6000	2200	1690	1170	1690
M-137-151		6000	4000	2800	1900	2800
D-225	5800	6000	4000	3400	2000	3400
WESTWARD				Bieber to Halls Flat	Halls Flat to Keddie	
TP-29	910	2200	*	491	1040	
MTP-44	1400	5000	*			
C-43	1400	5000	*	756	1600	
MK-60	2350	6000	*	1051	2200	
MK-60-71	2500	6000	*	1051	2350	
GS-64-77	2500	6000	*	1051	2450	
M-80	2600	6000	*	1427	3500	
M-137-151		6000	*	2350	5500	
D-225	5000	6000	*	2800	6000	

*Descending grade, no tonnage limit. 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.

GENERAL

RULE 2 (A): Modified to the extent that watches subject to inspection need be presented to an authorized inspector only once per month. Such inspection must be made between the 1st and 15th of each month except at points covered by traveling inspectors.

RULE 10 (J): On Western Division slow boards, when used, will be placed one-half (1/2) mile from structure or track over which speed of train must be reduced.

RULES 11 and 11(A): Outside block system 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 fuse, it must be removed from under train at once. On Third Subdivision, freight trains finding burning fuse between rails must stop and have fuse removed at once before proceeding under first paragraph Rule 11.

RULES S-17 and 99: Figures indicating "Car Capacity of Sidings" are number of cars, based on an average allowance of 48 feet per car, that tracks will hold between clearance points, not including engines and cabooses. Due to increased number of 50 foot and longer cars being handled, trains may find sidings inadequate between clearance points. Care must be taken to see that flag protection is furnished when taking siding to meet trains and headlights must not be extinguished until it is known that train is clear of the main track. The conductor or brakeman at rear end must see that proper signal, day or night, is given to head end when 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.

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.

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

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

Block signals so equipped include in their circuits protective devices known as "Slide Detector Fences".

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. Where circumstances require train must be preceded by flagman.

RULE 927—TRAIN INSPECTION: When conditions are favorable and in judgment of Conductor it is safe to do so, run may be made for train inspection on freight and mixed trains on First and Second Subdivisions, from one water stop to next water stop, except a maximum distance of 70 miles must not be exceeded between inspections. When conditions are favorable and in judgment of Conductor it is safe to do so, run may be made on freight and mixed trains on Third and Fourth Subdivisions without stopping for train inspection for a maximum distance of 45 miles, except a standing or rolling inspection must be made on westward freight and mixed trains at Blairsden, Two Rivers or Sloat and at Halls Flat, Westwood, Almanor and Greenville and on eastward freight and mixed trains at Keddie or at some point between Keddie and Spring Garden and at Westwood and Halls Flat.

Trains containing carload shipments of TNT, bombs, loaded projectiles and other such articles of a highly sensitive nature must be stopped for inspection at intervals of not to exceed 50 miles unless all such cars are loaded less than 65 percent of marked capacity.

RULE 1155: When brake pipe has not been separated, air test as prescribed by Rule 1155 need not be made at Terminals.

RULE 1156: When doubleheading and lead engine is to be cut off train, air will be set by lead engine and stop made before being detached, after which train engine will fully release air brakes and regain full working pressure before proceeding. When second engine is to be attached to head end of train at intermediate point on a run for the purpose of doubleheading, engine next to train will stop with air brakes applied, after which lead engine will make the release.

When air connections have not been disturbed back of engine next to train, it will not be necessary to make rear end test as prescribed by Rule 1156.

RULE 1157: Southern Pacific Air Brake Rule No. 39 applies between Chestnut Jct. and Oakland Pier. See page 12.

FIRST SUBDIVISION

Street crossing Third and Broadway, Oakland, must not be blocked.

Switches leading off both sides of north track between Clinton and Filbert Streets, Oakland, must be left lined and locked for the north track.

Joint W. P. and S. P. drill track between Melrose and Elmhurst must not be used for meeting or passing trains.

Seminary Avenue crossing of Kohler siding is protected by flashing light signals, but trains and yard engines using this siding must cut crossing when blocked more than 5 minutes.

Any engine or cars moved over spur serving California Packing Corporation near 85th Ave., Oakland, must be under control and highway traffic protected by member of crew.

At 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.

At Hayward, trainmen must see that hinged apron over house track between W. P. packing shed and building on opposite side is in raised position before entering switch.

Westward trains except regular No. 39 and regular No. 11 take full tank of water at Niles.

Headlights and markers must be burning through Tunnel 1.

At Hayward, Pleasanton and Livermore, east siding switch is west of passenger station.

At 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.

At Lathrop H. & R. 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 an hour on interchange trackage with U. S. H. & R. Depot.

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

SECOND SUBDIVISION

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

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

At Terminous Jct., road crossing No. 4-105.7 must not be blocked more than five minutes. When a train stops at Terminous Jct. and there are three brakemen in crew, one brakeman must protect this crossing during time train is not out.

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

At Sacramento, 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.

At Marysville, spur track known as Cliff House Spur will not hold more than 10 cars.

JOINT TRACK MARYSVILLE—

Sacramento Northern trains operate over Western Pacific main track between junction switches 356 feet east and 355 feet west of Bridge 178.18, Yuba River. Sacramento Northern freight trains operate over W. P. siding between west switch and switch leading to Sacramento Northern track opposite Western Pacific passenger station, Marysville. These tracks are designated as Joint Tracks.

AUTOMATIC INTERLOCKING signals govern Joint Track operation as follows:

EASTWARD—Home signal 789 feet west of bridge 178.18. Distant signal 2500 feet west of home signal.

WESTWARD—Home signal 724 feet east of bridge 178.18.

SWITCH INDICATORS: West siding switch.
West switch Interchange track.

Derail switch on siding 193 feet east of switch, pipe connected and operated with main track switch.

Junction switches must be locked for Western Pacific main track when not in use.

AUTOMATIC BLOCK SIGNALS located as follows:

EASTWARD—Distant signal lower arm of two-arm signal M.P. 178.0; home signal M.P. 178.4; distant signal M.P. 178.8; home signal M.P. 179.0.

WESTWARD—Distant signal M.P. 179.7; two-arm home and distant signal M.P. 179.5, distant signal (lower arm) fixed at caution; home signal M.P. 178.9.

SWITCH INDICATORS: East switch Interchange track.
West switch of crossover.
Switch of S. P. Interchange track (two-way).

MOVEMENT OF TRAINS over Joint Track will be governed by Rule 663 and made in accordance with indication of block signals, regardless of right or class. All trains of both railroads must approach and pass through limits of Joint Track with caution, not exceeding 15 miles an hour. In using Joint Track freight trains should avoid delays to other trains of either railroad.

CROSSING OF SACRAMENTO NORTHERN PASSENGER TRACK OVER WESTERN PACIFIC HOUSE TRACK, 752 FEET EAST OF BR. 178.18:

Engines, cars or trains moving on Sacramento Northern passenger track must be brought to a stop at STOP signs 100 feet each side of crossing and preceded over crossing by member of crew. Engines, cars or trains operating on Western Pacific house track must approach with caution and be sure it is safe to proceed before moving over crossing.

THIRD SUBDIVISION

At Land, engines heavier than C-43 class must not use tracks 2, 3 and 4 except at west end of yard on tangent track. C-43 class engines and smaller type engines may use all tracks in entire yard at moderate speed and may use east lead as far as Swayne Railroad Crossing. No. 1 track, which is a crossover from siding to east end of yard, and No. 2 track used as a run around track, must be left clear. All classes of engines may use siding entire length.

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

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

Movement over Mill track between Blairsden 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 4 miles an hour east of derail.

At Graeagle, log unloading track is unsafe for either cars or engines beyond west end of log unloading dock.

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

FOURTH SUBDIVISION

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

At Crescent Mills, between 7:01 a.m. and 7:01 p.m. daily, ore may be loaded on house track, using movable ramps. Trains using house track between these hours must not move or couple into ore cars until sure men and equipment are in clear.

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 Dispatcher notified.

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

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.

At 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 R. R. main track 400 feet from junction switch.

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

WESTWOOD:

Trains or engines using main track over Veneer Plant crossing east of passenger station and Third Street crossing, west of passenger station, will reduce speed sufficiently to be able to stop before striking anything that might be on, or is about to use these crossings and between the following times, movement over these crossings must be preceded by flagman:

11.30 a.m. and 11.40 a.m.	4.30 p.m. and 4.40 p.m.
12.20 p.m. and 12.30 p.m.	7.30 p.m. and 7.30 a.m.

Gate tender at Third Street crossing on duty continuously.

Movement of trains and engines on tracks other than main track, over any crossing in yard, must be preceded by flagman.

When trains meet at Westwood, crossings at Veneer Plant, east of passenger station and at Third Street, west of passenger station, must not be blocked.

Crossings must be cut immediately when member of train or engine crew is notified by plant gate watchman of impending movement of ambulance or fire apparatus in either direction and kept completely clear until plant gate watchman advises it no longer is necessary.

Derail on west end R. R. L. Co. electric siding must be kept in derail position when cars are on siding. East switch of R. R. L. Co. electric siding must be left lined for siding. Derail located ten feet west of west No. 1 track switch on lead. Derails adjacent to main track on both legs of R. R. L. Co. wye.

Switch leading from west end of house track to gravel bin spur must be left lined for gravel bin spur to serve as derail.

INTERLOCKING PLANTS AND SIGNALS AND RAILROAD CROSSINGS NOT INTERLOCKED

M.P. 5.8—S. P. Crossing and M.P. 5.85—Chestnut Junction, Magnolia Tower, Interlocked.

Eastward: Two arm home signal 700 feet west of crossing; upper arm governs movement on main track; lower arm governs movement on main track to north track. Dwarf signal 490 feet west of crossing governs movement from siding eastward to main track or north track. No distant signals.

Westward: Home signals (on bracket mast) 750 feet east of crossing. Arm to right governs movement from north track over junction switch to S. P. or W. P. Yards. Arm to left governs movement from main track over junction switch to S. P. Suspended home signal governs movement main track to W. P. Yards. No distant signals.

M.P. 7.2 S. P. crossing—Main track and north track. Not interlocked. (See footnote, page 2.)

M.P. 7.8 Clinton, S. P. crossing. Interlocked. Home signals two-position color light 565 feet east and 440 feet west of crossing. Distant signal semaphore type 2000 feet east of east home signal. Maximum speed head end of trains between home signals, passenger trains 15 miles an hour, freight trains 10 miles an hour.

Electrically-locked, hand-operated switch west of crossing between home signals is east switch of north track. Double switch indicator showing track occupancy on Western Pacific is at switch. Electric lock with lock indicator is in box at switch.

Dwarf signal governs entrance to main track. For movement to main track FIRST check switch indicators; if they show track unoccupied door to electric lock may be opened. When lock indicator in box shows "Clear" move handle to right to unlock switch, then line switch and dwarf signal will clear.

For movement main track to siding, engines or cars must stop between home signals. Door to electric lock may then be opened and when lock indicator shows "Clear" handle moved to right to unlock switch.

After movements in or out of north track are completed, switch must be left lined and locked for main track, lock lever returned to left and door of electric lock closed and padlocked.

Three-minute time release operated by push button in electric lock. If switch indicator shows track occupied and reason is not apparent or there is a train stopped on Western Pacific track back of either home signal and crossing is not in use, door of electric lock may be opened and time release operated in accordance with instructions posted in lock.

M.P. 10.3 S. P. crossing. Not interlocked. (See footnote, page 2.)

M.P. 10.6 and M.P. 10.7 Melrose Tower, S. P. crossings. Interlocked. Home signals 450 feet west of crossing M.P. 10.6. Distant signal 2000 feet west of home signal. Home signal 685 feet east of crossing M.P. 10.7. Distant signal 2500 feet east of home signal.

M.P. 13.7 S. P. crossing. Not interlocked.

M.P. 30.3 Niles Tower, S. P. crossing. Interlocked. Home signal three-position color light 450 feet east of crossing. Distant signal three-position color light 4850 feet east of east home signal. Home signal 450 feet west of crossing. Distant signal 4950 feet west of west home signal (lower arm of Signal 29.4).

M.P. 42.7 and M.P. 43.0 Radum Tower, S. P. crossings. Interlocked. Home signals 480 feet east of crossing M.P. 43.0 and 480 feet west of crossing M.P. 42.7. Distant signals 2000 feet east and west of home signals.

NOTE: Towerman on duty 6:00 a.m. to 2:00 p.m. and 4:00 p.m. to 11:59 p.m. daily except Sundays and holidays. During hours towerman is off duty, normal operation of signals on the Western Pacific will be semi-automatic. Switch indicator located at west main track switch gives warning of approach of trains in either direction. See Rule 512.

M.P. 74.0 Lyoth Tower, S. P. crossing. Interlocked. Home signal 800 feet west of crossing. Distant signal 2658 feet west of home signal. Home signal 600 feet east of crossing. Distant signal 2766 feet east of home signal. Two-arm home signal 210 feet west of crossing. Upper arm governs main track; lower arm governs movement from main track through crossover to siding. Dwarf signal, located between main track and interchange track 230 feet west of main track switch, governs movement from siding to main track. Following are 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.

M.P. 84.45 S. P. crossing. Interlocked. Home signals 650 feet east and west of crossing. Distant signals 4590 feet east and 4538 feet west of home signals. Signals handled through remote control by telegraphers at Southern Pacific station, Lathrop.

East and west siding switches, Quigley and Lathrop, east entrance switch to H. & R. Depot, main track and inside switches to crossover west end H. & R. Depot are within control circuits of S. P. crossing and actuate interlocking signals on W. P. tracks on opposite side of crossing.

Authority must be secured from signal operator before moving eastward from Quigley siding, westward from Lathrop siding or westward through crossover west end of H. & R. Depot on to main track. Telephones located near east siding switch, Quigley, and in booth adjacent to crossover near fence of H. & R. Depot for this purpose.

Telephone also located at crossing. When signals are in stop position be governed by Rule 663.

When switching is to be done at either Quigley, Lathrop or Lathrop H. & R. Depot using main track, signal operator must be notified by telephone length of time to be used so signal lineup may be changed if necessary.

Maximum speed head end of trains between home signals, passenger trains 30 miles an hour, freight trains 25 miles an hour.

M.P. 90.3 Ortega Tower, S. P. crossing. Interlocked with Hunter Street track. Home signals 450 feet east and 230 feet west of crossing. No distant signals.

NOTE: Towerman on duty 6 p.m. to 3 a.m. daily. Trains or engines moving westward must not foul W. P. main track and W. P. main track junction switch must not be opened until it has been ascertained from dispatcher through operator Stockton Yard that it is safe to do so. Telephone located near main track junction switch for this purpose. Trains or engines on main track must approach Ortega with CAUTION.

M.P. 93.2 A.T. & S.F. Tower, A.T. & S.F. crossing. Interlocked. Home signal 450 feet east of crossing, no distant signal. Two-arm home signal 450 feet west of crossing, upper arm governs movement on Western Pacific main track, lower arm governs movement to and over A.T. & S.F. main tracks to interchange track. Reflectorized amber approach warning sign located on "RR Crossing One-half Mile" sign 2190 feet west of west home signal. Tower equipped with electric siren. Two short blasts repeated several times is warning to yard and trainmen to clear plant.

M.P. 93.8 Weber Avenue Tower, S. P. crossing. Interlocked. Main Track: Home signals 423 feet east and 315 feet west of crossing. No distant signals. Siding: Home signals 428 feet east and 73 feet west of crossing.

M.P. 95.1 El Pinal Tower, S. P. crossing. Interlocked. Home signals 650 feet east and west of crossing. One distant signal 3000 feet east of east home signal.

M.P. 137.5 "X" Street, C. C. T. and S. N. Crossing. Automatic interlocked. Home signals 450 feet east and west of crossing. Distant signal 1480 feet west of west home signal. Distant signal, permanently at caution, 1270 feet east of east home signal. If signals are in STOP position send flagman to crossing to operate time release inside box at crossing. Instructions for operation of time release inside of box. If signals remain in STOP position, be governed by Rule 663. Switch indicator at head block west switch to interchange track gives warning of approach of trains on W. P., C. C. T. and S. N. Hayes derail 171 feet east of west switch to interchange track is pipe connected to main track and switch must not be closed until rear of train has passed derail.

M.P. 138.0 "R" Street Tower, S. P. crossing. Interlocked. Two-arm semaphore type home signal 796 feet east of crossing. Upper arm governs main track; lower arm governs leg of wye. Two-unit color-light home signal 700 feet west of crossing. Upper unit governs main track; lower unit governs leg of wye. Two-arm dwarf signal on west leg of wye 800 feet from main track switch (200 feet from S. P. crossing). Upper arm governs movement from "R" Street line over crossing to W. P. main track; lower arm governs movement over crossing to California Builders' Supply spur. Dwarf signal on east leg of wye 165 feet from main track switch governs movement from "R" Street line to main track. Following are whistle signals: Main line to wye, either leg, one long, one short. Wye to main line, either leg, one short, one long.

M.P. 139.2 "C" Street, S. N. Crossing. Automatic interlocked. Home signals 480 feet east and 450 feet west of crossing. Distant signals, permanently at caution, 3190 feet east and 1584 feet west of home signals. If signals are in STOP position send

flagman to crossing to operate time release in box at crossing. Instructions for operation of time release inside of box. If signals remain in STOP position be governed by Rule 663. Switch indicator at head block main track switch to Haggin transfer track gives warning of approach of trains on W. P. and S. N. Hand operated derail on Haggin transfer track 226 feet east of west main track switch.

M.P. 140.8 Globe, S. N. crossing. Interlocked. Manual control two-position color light signals, approach lighted. Home signals 605 feet east and west of crossing. Distant signals 4200 feet east and 3032 feet west of home signals. Maximum speed head end of train between home signals, passenger trains 30 miles an hour, freight trains 25 miles an hour.

M.P. 152.5 Sankey, S. N. Crossing. Automatic interlocked. Home signals 600 feet east and west of crossing. Distant signals 3000 feet east and west of home signals. All signals color-light type approach lighted. If signals are in STOP position, send flagman to crossing to operate time release in box at crossing. Instructions for operation of time release inside of box. If signals remain in STOP position, be governed by Rule 663.

JOINT TRACK MARYSVILLE (See special instructions Page 8, Second Sub-division).

M.P. 180.2 Binney Jct. Tower, S. P. crossing. Interlocked. Home signals 650 feet east and west of crossing. Distant signals 3100 feet east and 2060 feet west of home signals. Switch indicator located east high line switch, 1400 feet west of M.P. 180, gives warning of approach of trains either direction. See Rule 512.

SAN JOSE BRANCH

M.P. 20.4 S. P. crossing. Not interlocked.

M.P. 21.0 Willow Glenn, S. P. crossing. Interlocked. Semi-automatic home signals 225 feet east and west of crossing. No distant signals.

M.P. 23.1 West San Jose, S. P. crossing. Interlocked. Home signals 250 feet east and west of crossing. No distant 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 in inside of derail lock box at each crossing before proceeding over either crossing.

AUTOMATIC BLOCK SIGNALS:

Niles: Eastward: Three-position color light signal M.P. 28.4; two-arm signal M.P. 29.4, upper arm is automatic block home signal, lower arm interlocking distant signal; home signals M.P. 30.4 and M.P. 31.2.

Westward: Distant signal M.P. 31.7; color light home signal M.P. 31.3; home signal M.P. 30.3.

Marysville: See special instructions page 8 under Joint Track Marysville.

Oroville Yard: See special instructions governing movements between Oroville Yard and West End C. T. C., Page 11, for location and limits.

Keddie: Fourth Subdivision:

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

Westward: Three position color-light signal 45 feet east of Tunnel 2. Two position color-light signal 60 feet east of east wye switch.

TUNNEL SIGNALS

Automatic Block signals govern movement through Tunnels 1 and 2 on First Sub-division.

Tunnels 1 and 2. Home signal 1500 feet west of west portal Tunnel 1. No distant signal. Home signal 200 feet east of east portal Tunnel 2. Distant signal 4500 feet east of home signal.

DRAWBRIDGE SIGNALS

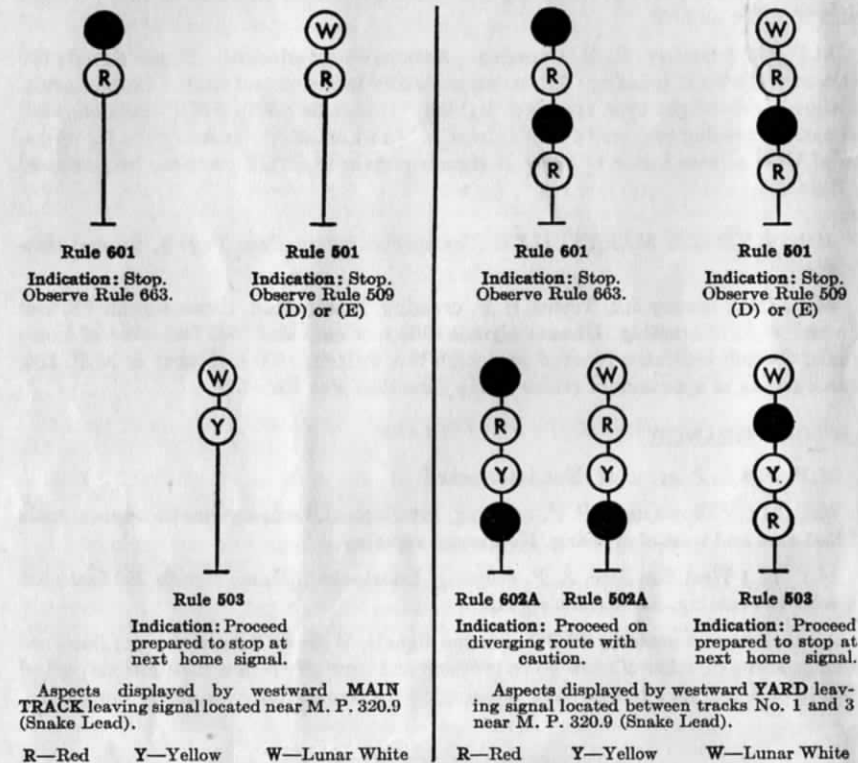
San Joaquin River drawbridge M.P. 80.28. Interlocked. Home signals 650 feet east and 600 feet west of bridge indicate position of draw. Distant signals 4500 feet east and west of home signals.

SPECIAL INSTRUCTIONS

OPERATION OF TRAINS BETWEEN END OF CENTRALIZED TRAFFIC CONTROL AND PORTOLA PASSENGER STATION.

(A) Train and engine movements between East End of Centralized Traffic Control, M. P. 320.035 (Delleker) and M. P. 321.386 (Portola passenger station), will be made by block signal indication, and under block signal rules, except as otherwise provided by following rules and special instructions:

(B) Signal Indications are as follows:



(C) RULES S-71, 72, S-72, 73 and 83. Superiority of trains is abolished. Schedules shown in time table are for the purpose of permitting compliance with Rule 780 (C. T. C. S.) and certain special instructions included herein.

(D) All movements in this territory must be made with caution, as prescribed by Rule 93, and will be governed by indication of block signals and switch indicators as follows:

- Westward signals located at the Snake Lead are equipped with white markers in lieu of number plates. Aspects and indications peculiar to these signals are shown above. Trains desiring to enter main track at this point are authorized to operate the crossover switches, provided the east indicator shows clear and the westward (yard) leaving signal displays aspect per Rule 502(A). After the switches have been properly set, the move may be made under the aspect then displayed.
- The eastward C. T. C. signal at Delleker governs train movements in the block extending eastward from the sign "END CTC" to Signal 3208. For the purpose of identification, a plate bearing the letters "SA" will be displayed on Eastward C. T. C. signal at Delleker, in addition to the letter "A". C. T. C. rules will govern west of the sign "END CTC".
- All other signals in this area (except those listed in 1 and 2 above) are automatic block signals bearing a number plate for identification.

(E) Rule 512(A) is modified to the extent that rear end protection is not required within these limits. This does not modify Rule 99-A. Trains carrying passengers must be fully protected.

(F) At Portola, yard engines, light engines, switch cuts and others moving within yard must clear main track when required to avoid delay to sections of Nos. 40, 12, 39 and 11, or to other through trains entering or leaving C. T. C. limits. Howlers, controlled by dispatcher, are provided at following locations:

- West roundhouse lead switch.
- West train yard lead switch (snake lead).
- West switch to No. 10 track.

When these howlers are operated, main track must be cleared without delay.

(G) In addition, dispatcher will furnish information to telegrapher, Portola, as to times Nos. 40 and 12 or sections thereof are expected to reach Portola. Employees in charge of switch engines, light engines and similar moves must ascertain from telegrapher whether these trains are due before occupying main track and not delay them.

(H) Westward trains will be authorized by clearance at Portola but must not leave until given permission by C. T. C. Dispatcher after member of crew advises him they are ready to leave. Telephones for purpose of communicating with C. T. C. Dispatcher only are located as follows:

- West switch No. 10 track.
- West train yard lead switch (snake lead).
- West rip track lead switch.
- East roundhouse lead switch (Booth just west of middle car inspectors' shanty).

(I) Push button is located on signal mast, Signal 3208, for the purpose of clearing signal for eastward movements after a westward movement out of train yard. When eastward Signal 3208 indicates "Stop", after being passed on westward move, operate push button and if no train in block, signal will change in sixty seconds to indicate "proceed, prepared to stop at next home signal".

(J) Telephones for communication within Portola Terminal are located as follows:

- West train yard lead switch (snake lead).
- West car inspectors' shanty (snake lead).
- Middle car inspectors' shanty (at east roundhouse lead switch).
- East lead switch shanty.

(K) Yard engines, light engines, switch cuts and other similar movements stopped by block signal or switch indicator indication which does not clear within three minutes, and for which reason is not known, will communicate with yardmaster who will arrange to have track cleared or appropriate arrangements made for the desired movement. If unable to contact yardmaster, will be governed by and proceed under Automatic Block Signal Rules.

(L) DELLEKER—Entrance to spur is through electrically-locked, hand-operated switch. Obtain permission from C. T. C. dispatcher (by telephone in instrument house near switch) for movement in and out.

(M) Derails on Delleker spur, West lead lower yard Portola and West end of west siding Portola Yard are pipe connected to main track switches. Switches must not be lined for main track until engines or cars have passed over derail.

CENTRALIZED TRAFFIC CONTROL—SPECIAL INSTRUCTIONS

(A) Centralized Traffic Control extends from M. P. 320.035 (Delleker) to M. P. 205.5 (eastward absolute signals 252 feet west of east siding switch, Oroville, on main track and 183 feet west of east siding switch, Oroville, on siding).

(B) Train movements between Portola passenger station and Delleker will be by signal indication and in accordance with special instructions; between Delleker and west end of C. T. C. by signal indication under C. T. C. rules; between west end of C. T. C. and Oroville Yard by signal indication under interlocking rules and in accordance with special instructions.

(C) Signals within C. T. C. limits, at Portola and between Oroville and Oroville Yard are color-light type signals.

(D) RULES 95 and 97: Oroville is the terminal for first class trains and Oroville Yard the terminal for extra trains, Third Subdivision. First class trains or sections thereof will be authorized at Portola or Oroville by clearance card, addressed as instructed by dispatcher. If sections are authorized clearance card will designate whether or not signals are to be displayed. Extra trains, including work extras, will be authorized at their initial station by clearance card, addressed as instructed by dispatcher, and will not require running orders for movement to Oroville Yard or Portola. All trains will register; also display signals in the usual manner.

(E) RULE 83: Registers need not be checked in connection with movement of Third Subdivision trains, including movements between Oroville and Oroville Yard.

(F) RULE 85: Within C. T. C. limits a section may pass and run ahead of another section of the same schedule without exchanging train orders, signals or numbers.

(G) 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).

(H) Slide detector fences are located between M. P. 236.4 and M. P. 236.8. Signals P-2362 and P-2371 are actuated by these devices.

(I) At eastward absolute signal, M.P. 280.34, indications per Rule 751, Fig. 2, Rule 752, Fig. 2, or Rule 755, Fig. 2, will govern movements eastward on main track, and indications per Rule 751, Fig. 2, or Rule 754, Fig. 1, will govern movements eastward, main track to west leg of wye through dual-control, power-operated switch at M.P. 280.48 (east end of Tunnel 32). Telephones for communicating with C. T. C. dispatcher are located in small telephone booth at eastward absolute signal at M.P. 280.34 (west end of Tunnel 32) and in instrument house at west leg of wye switch.

(J) 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.

Westward absolute signals 245 feet east of west leg of wye switch on both main track and west leg of wye govern westward movements through this switch. Advance indication of aspect of the absolute signal on main track will be obtained on westward absolute leaving signals at Keddie.

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 C. T. C. 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.

(K) Sidings shown on page 4 are controlled sidings except Oroville and Portola.

East and west siding switches at these points are dual-control, power-operated. East siding switch at Oroville and main track switch to west leg of wye, M.P. 280.34, are dual-control, power-operated.

Telephones for communicating with 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 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 C. T. C. dispatcher.

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

(M) 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.

(N) 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.

(O) Where train order signals are in service they must be respected in accordance with Rules 221 and 221(A) except that 9th, 10th, 12th and 13th paragraphs of Rule 221 do not apply within C. T. C. limits when C. T. C. system is operative.

(P) Rules 14(k), 72, S-72 (except as provided by Rule S-88), 73 and 92 (except as provided by C. T. C. S. Rule 780 and special instructions on page 4) do not apply within C. T. C. limits.

(Q) Rules 14(n), 16(l), S-17, 19(A), S-71, 86, S-87, S-88, S-89, S-90, S-90(A), S-90(B), S-90(C), 91, 93, 93(A), 94 and 97 do not apply within C. T. C. limits when C. T. C. system is operative.

INSTRUCTIONS GOVERNING OPERATIONS BETWEEN OROVILLE YARD AND WEST END C. T. C.

(A) Movement of trains and engines between west end of C. T. C. (M.P. 205.5) and east entrance switch to Oroville Yard (M.P. 203.8) is governed by interlocking signals under control of operator at Oroville passenger station. Interlocking signals on main track are located at east switch Oroville siding (westward signal, joint C. T. C. and interlocking), west switch Oroville siding and east entrance switch to Oroville train yard. Interlocking rules apply.

(B) Switches are hand operated except east siding switch, Oroville.

(C) Trains must not exceed 25 miles an hour through interlocking limits.

(D) Oroville Yard is the terminal for second class and extra trains, Second and Third Subdivisions. Westward first class trains will be authorized by clearance card or train order at Oroville. Train orders may be issued for extra trains to or from Oroville in connection with movement on Second Subdivision beyond Oroville Yard. Eastward first class trains will be authorized at Oroville and eastward extra trains at Oroville Yard or Oroville by clearance card addressed as instructed by dispatcher, but must not leave until given permission by C. T. C. dispatcher after member of crew has advised him they are ready to leave.

(E) When crew changes are made at Oroville on eastward trains, after permission to leave is obtained from C. T. C. dispatcher movement may be made with caution to eastward C. T. C. absolute leaving signal at east end of siding.

(F) Westward absolute C. T. C. and interlocking signal at west end of C. T. C. is jointly controlled by C. T. C. dispatcher and signal operator, Oroville. C. T. C. rules apply as far as sign "End C. T. C." and interlocking rules beyond. Authority is required first from C. T. C. dispatcher and, second, from signal operator to pass this signal in stop position or to work with east siding switch in hand throw position.

(G) Eastward absolute C. T. C. signals on main track and siding at east end of siding, Oroville, are under exclusive control of C. T. C. dispatcher and the east switch of siding is dual-control, power-operated under his control.

(H) **RULE 105:** Oroville is not a controlled siding. Tracks at Oroville, Oroville Yard and between, other than main track are not included in signal circuits beyond clearance points from main track switches.

(I) Eastward three-position color-light automatic block home signals, approach lighted, are located at M.P. 201.6 and M.P. 202.6 (west end of Oroville Yard). Approach circuit begins at M.P. 200.8, 4,000 feet west of Signal 2016.

(J) All signals are of color-light type and are single unit except westward C. T. C. and interlocking signal at east end Oroville siding and as listed herein.

Two-unit signals are located as follows:

Eastward: Leaving signal south side of No. 1 track at east entrance switch to Oroville train yard (M.P. 203.8)

West switch to siding, Oroville.

Westward: East entrance switch to Oroville train yard (M.P. 203.8)

Indications on two-unit signals are as follows:

Red over red —Stop

Red over yellow—Proceed on diverging route with caution.

Yellow over red—Proceed prepared to stop at next home signal.

Green over red —Proceed except on diverging route.

(K) The two-unit signals listed above and, in addition, the westward single-unit dwarf leaving-siding signal at west end of siding, Oroville, have on the signal mast a unit, which when illuminated displays a letter "S" on a black background. When the "S" is illuminated it is an indication that signal operator desires the switch or switches to be lined. If the train is on the main track, switches are to be lined for the diverging route. If the train is on the siding at Oroville or on yard track in Oroville Yard switches are to be lined for movement to the main track. After switches are lined, the lamp in the "S" unit will be extinguished and the signal will show indication for movement over the route lined. When it is desired to make a movement at these locations requiring switches to be changed, signal operator first must be contacted, then when "S" is illuminated switches may be changed. They must not be changed unless the "S" is illuminated except when working over switch by permission of signal operator in accordance with Section (P) of these instructions.

(L) Main track and crossover switches must be left lined for straight track after being used. It is not necessary to contact signal operator in connection with lining switches back.

(M) When trains or engines are stopped by an interlocking signal and "S" is not illuminated at signals so equipped, signal operator must be contacted for instructions.

(N) At east entrance switch to Oroville train yard, the normal route for eastward trains leaving from any of the yard tracks is through crossover to main track. When switches are lined for movement eastward from yard tracks to main track, signal will

indicate "Proceed prepared to stop at next home signal". When switches are lined for movement from train yard tracks eastward on drill track, signal will indicate "Proceed on diverging route with caution". See last paragraph Rule 104(C).

(O) At east entrance switch to Oroville train yard, westward main track Signal SA-2039 is semi-automatic. Interlocking limits extend to the eastward interlocking signal on cantilever and to eastward leaving signal from yard. The automatic portion of the block beyond the interlocking limits extends to "Block System Limit" sign at M.P. 202.7.

When this signal displays green over red or yellow over red aspect, trains are thereby given superiority over all trains to the "Block System Limit" sign at M.P. 202.7, and will hold main track at Oroville Yard, but when the yellow over red aspect is displayed all trains or engines must move with caution west of the interlocking limits.

(P) When switching is to be done over any switch within interlocking limits, FIRST obtain permission from the signal operator, after which movements may be made without regard to signal indications within the limits of the block or blocks. All movements must be made with caution when working under such permission. Signal operator must be notified when work is completed.

If signal operator specifies clock time during which block or blocks may be used, new authorization must be obtained if the work is not finished within the time specified. (Also see instructions in Section (S)).

When signal operator gives such permission at east entrance switch to Oroville train yard he can provide signal protection against eastward moves only within interlocking limits; therefore Rule 509 applies to all movements on main track west of the eastward interlocking signal on cantilever under this permission.

(Q) **RULE 670:** It will not be necessary to secure permission from signal operator for each individual reverse movement provided permission has first been obtained for moves planned. When a reverse movement is made, trains or engines must move with caution until next signal in direction of movement is reached.

(R) Main track switches at following locations are included in the circuits and entrance to main track is governed by indications of single-unit dwarf interlocking signals:

- ... Dant & Russell Lumber Co. spur, M.P. 204.2
- ... East switch to drill track, east end Oroville Yard, M.P. 204.3
- ... S. N. transfer, M.P. 204.35
- ... Mt. Ida spur, M.P. 204.45
- ... Ehman spur, M.P. 204.5
- ... House track, Oroville.

(S) When engines have entered tracks listed in Section (R), closed switch and left main track unoccupied, permission must be obtained from signal operator before again lining switch for movement to main track. This applies regardless of whether permission has been obtained from signal operator in accordance with Section (P).

(T) **RULE 671:** When necessary, running switches may be made over the switches listed in Section (R).

(U) Howler, controlled by signal operator, is installed near Sacramento Northern transfer switch. When this howler is operated, main track must be cleared without delay.

(V) Double switch indicators located at following main track switches:

- ... Crossover switch, M.P. 202.65 (First switch east of Signal 2026, west end Oroville Yard).
- ... Crossover switch to west train yard.
- ... Adelaide spur.
- ... West switch gravel pit track.
- ... East switch gravel pit track.

(W) A double switch indicator is located also at west switch to west drill track. When entering main track at this point three minutes must elapse after switch is lined before main track is fouled and a member of crew must remain at switch during the interval.

(X) Telephones for purpose of communicating with signal operator or C. T. C. dispatcher are in telephone booths adjacent to following locations:

- ... East switch gravel pit track.
- ... *East entrance switch to train yard, M.P. 203.8.
- ... East drill track switch.
- ... S. N. transfer switch.
- ... West siding switch, Oroville.
- ... *East end station platform, Oroville.
- ... *House track switch.
- ... *East siding switch, Oroville (Telephone in instrument house).

*Connected with either C. T. C. dispatcher or signal operator. Locations not so marked are connected only with signal operator.

SPURS AND COMMERCIAL TRACKS

MAIN LINE

STATIONS	Distance from San Francisco	How Connected	Car Capacity
HUDSON.....	15.9	1 E	20
ESTUDILLO.....	16.5	1 E	13
DECOTO.....	26.6	Siding	18
PABRICO.....	27.8	1 E	16
EBERLY.....	28.9	Siding	20
RADUM.....	43.4	1 W	11
TREVARNO.....	49.0	1 W	24
REDMOND CUT.....	59.3	Siding	33
VALPICO..... (P)	68.3	Siding	30
RHODES.....	75.6	Siding	19
LATHROP, H. & R. DEPOT.....	85.7	Siding	130
HARTE.....	100.5	1 W	18
ALSCO.....	106.8	Siding	20
VILLINGER.....	107.8	1 W	16
LAS VINAS.....	109.5	Siding	50
BRADFORD.....	119.0	1 W	....
ALBERT.....	127.2	1 W	9
RUNYON.....	128.7	Siding	20
CORDOVA.....	133.7	1 E	7
HAGGIN.....	139.5	Siding	41
BOMBAY.....	146.4	Siding	13
CLEVELAND.....	176.2	1 W	16
GRAYBROS.....	187.7	1 W	7
VISTA ROBLES.....	198.8	1 E	33
ADELAIDE.....	202.7	1 E	....
LAND.....	212.2	Siding	28
BRUSH.....	227.4	1 W	3
BLINZIG..... (P)	228.6	1 W	11
JARBO..... (P)	236.1	1 E	17
GRIZZLY..... (P)	246.1	1 E	11
ROCK CREEK..... (P)	249.1	Siding	18
GRAY'S FLAT..... (P)	272.6	1 W	74
STODDARD..... (P)	279.3	1 W	15
CROMBERG..... (P)	303.2	Siding	31
FEATHER RIVER INN..... (P)	309.3	1 E	2
INDIAN CREEK..... (P)	K 3.0	1 W	14
CHENEY LUMBER CO.....	K13.8	1 E	16
BOX..... (P)	K15.4	1 W	34
POISON LAKE..... (P)	K70.2	Wye	....
ARCHIE..... (P)	K72.3	1 W	25
BUTTE VALLEY LBR. CO.....	K95.5	1 W	10

RAILROAD SURGEONS

DR. A. R. KILGORE.....	Chief Surgeon.....	San Francisco, Calif.
DR. CURTIS E. SMITH.....	Asst. Chief Surgeon.....	San Francisco, Calif.
DR. RUTH FLEMING.....	Local Surgeon.....	San Francisco, Calif.
DR. GEORGE N. HOSFORD.....	Oculist.....	San Francisco, Calif.
DR. FRANK HAND.....	Aurist.....	San Francisco, Calif.
DR. ROBT. R. THOMSON.....	Local Surgeon.....	Oakland, Calif.
DR. RAY H. FISHER.....	Local Surgeon.....	Oakland, Calif.
DR. RAYMOND JOHANSEN.....	Oculist.....	Berkeley, Calif.
DR. C. M. WESEMAN.....	Aurist.....	Berkeley, Calif.
DR. A. VELARDE.....	Local Surgeon.....	San Leandro, Calif.
DR. H. C. CROCKETT.....	Local Surgeon.....	Hayward, Calif.
DR. E. M. GRIMMER.....	Local Surgeon.....	Niles, Calif.
DR. PAUL E. DOLAN.....	Local Surgeon.....	Livermore, Calif.
DR. H. G. ZANGER.....	Local Surgeon.....	San Jose, Calif.
DR. ALLAN POWERS.....	Local Surgeon.....	Tracy, Calif.
DR. E. G. HERMOSILLO.....	Local Surgeon.....	Stockton, Calif.
DR. DEWEY POWELL.....	Oculist and Aurist.....	Stockton, Calif.
DR. D. J. ENGELBERG.....	Local Surgeon.....	Sacramento, Calif.
DR. JOHN KASSIS.....	Local Surgeon.....	Sacramento, Calif.
DR. S. J. WELLS.....	Asst. Local Surgeon.....	Sacramento, Calif.
DR. CLAUDE C. GRAY.....	Oculist.....	Sacramento, Calif.
DR. PHILIP B. HOFFMAN.....	Local Surgeon.....	Marysville, Calif.
DR. E. A. KUSEL.....	Local Surgeon.....	Oroville, Calif.
DR. D. I. BLEIBERG.....	Local Surgeon.....	Quincy, Calif.
DR. ELMO ALEXANDER.....	Local Surgeon.....	Westwood, Calif.
DR. W. B. McKNIGHT.....	Division Surgeon.....	Portola, Calif.
DR. F. B. GALBRAITH.....	Asst. Division Surgeon.....	Portola, Calif.

WATCH INSPECTORS

S. A. Pope, Manager of Time Service, San Francisco

San Francisco, Calif.....	E. J. Land, 745 Third St.
Oakland, Calif.....	E. S. Griffin, R. 214 Easton Bldg.
Oakland, Calif.....	E. W. Becker, 3357 East 14th St.
Oakland, Calif.....	L. L. Hoffman, 740 Broadway
Livermore, Calif.....	C. Harlie Power
San Jose, Calif.....	Kochers, 179 So. First St.
Stockton, Calif.....	Conrad Mantle, 129 N. Sutter St.
Sacramento, Calif.....	H. T. Harger, 1026 "K" St.
Oroville, Calif.....	M. C. Tieck

TRACKS ON WHICH ENGINE MOVEMENTS RESTRICTED

Location and Description of Track	Class of Engine	Prohibited
Oakland, Kaiser Ready-Mix Spur Balloon track	C-43 or heavier MTP-44 or heavier	Beyond frog
San Leandro, Radich & Brown Spur Bechtel Spur Caterpillar Tractor Calif. Pack. Corp. Hyrup Spur	All Classes MTP-44 or heavier " " "	Beyond frog " " "
Hayward, Farm Produce Spur Poultry Prod. Spur	" "	" "
Delta Finance R. R. (M.P. 24.9)	All Classes	On entire Line
Niles, Transfer Track P. C. A. Gravel Plant	MTP-44 or heavier All Classes	Beyond frog On Trestle
San Jose Branch	MTP-44 or heavier	On Entire Branch**
Radum	All Classes	Beyond frog on all tracks except 1 and 2
Livermore, Brick Yard Track Stock Track	MTP-44 or heavier "	Beyond frog "
Carbons, Track No. 2 (Tomato Spur) Bean Spur	" "	" "
Carbons Branch (Main Track) Spur M. P. 0.5 Kerlinger Pit	" " C-43 or heavier	{Beyond West Switch Kerlinger Beyond frog Beyond clearance point west end tracks 1 and 2 Beyond Moy Stock Yds.
Stockton, North Channel Spur Harte Spur	MTP-44 or heavier All Classes	Beyond frog Beyond Br. 100.56
Terminus Branch Villinger Spur	MTP-44 or heavier "	On entire Branch Beyond frog
Glannvale, Stock Yard Spur Bradford Winery	" "	" "
So. Sacramento, Track 68	"	Beyond clearance point
Sacramento, Old House Track (T&XSt) "R" Street Line	" MK-60 or heavier	Beyond frog Beyond 17th Street
Pleasant Grove, House Track	MTP-44 or heavier	Beyond depot
Trowbridge, Rice Growers Elevator Spur Team Track	" "	Beyond frog "
East Arboga, Outfit Spur	"	"
Cleveland Spur	MTP-44 or heavier	"
Marysville, Both old S. N. Passgr. Connections Old Frt. House and Sand Plant Cliff House Spur High Line	All Classes MTP-44 or heavier All Classes MTP-44 or heavier	Beyond S. N. Crossing Beyond frog "
Graybros Spur	"	"
Craig Spur	"	"
Vista Robles Spur	"	"
Adelaide Spur (Oroville Yard)	"	"
Oroville, Dant and Russell Spur S. N. Transfer Hokes Spur Mt. Ida Spur Ehman Spur Sunkist Spur Coach Spur—House Track	" " " " " " "	Beyond clearance point " " " " " Beyond 85 lb. rail (740 ft. from Main Track)
Land—See special instructions, last column, page 8, under		"Third Subdivision".
Bloomer, River Spur	All Classes	Beyond frog
Berry Creek, House Spur	{MTP-44 or heavier All Classes	Beyond clearance point Beyond water column
Blinzig	MTP-44 or heavier	Beyond clearance point

Tracks on which engine movements restricted (continued)

Location and Description of Track	Class of Engine	Prohibited
Jarbo Spur	MTP-44 or heavier	Beyond 500 ft. from frog
Grizzly Spur	"	Beyond frog
Rock Creek, Outfit Spur Highway Spur	" "	Beyond clearance point "
Tobin, River Spur No. 1 Loading Track River Spur No. 2	" " All Classes	" " "
Belden, House Track	MTP-44 or heavier All Classes	Beyond frog Beyond M.P. 260
Rich Bar, Outfit Spur	MTP-44 or heavier	Beyond clearance point
Virgilia, River Spur	"	"
Twain, Outfit Spur	"	Beyond frog
Paxton, House Track	"	Beyond clearance point
Stoddard Spur	"	Beyond frog
Keddie, Kelly Spur Depot Back Track	" "	" "
Spring Garden, Stock Track Back Track	" "	West of Stock Chute Beyond frog
Sloat, Log Spur All Mill Tracks	" "	Beyond frog "
Cromberg Siding	"	Beyond clearance point
Blairsdan, Richfield Oil Spur	"	Beyond frog
Graeagle, All Tracks	"	Beyond sign 1166 feet east of house track switch Blairsdan. Beyond west end log unloading dock.
Log Unloading Track	All Classes	Beyond west end log unloading dock.
Clio Spur	MTP-44 or heavier	Beyond frog
Westwood, Fredonia Track and Standard Oil Spur***	" D-225, MK 60-71 and M-80 (also S. P. engines of similar type and weight)	Beyond frog***
Archie, Wye and Interchange Track	M-80 or heavier	Beyond clearance point
Poison Lake, Interchange tracks R. R. L. Co. Spur off west leg of wye	" All Classes	" Beyond frog
Halls Flat, Logging Industry Track	M-80 or heavier	Beyond clearance point
Butte Valley Lbr. Co. Spur	MTP-44 or heavier	Beyond frog

SOUTHERN PACIFIC AIR BRAKE RULE NO. 39

Running Test:
As soon as speed permits, after engine and/or engine crew has been changed, helper engine added or detached, or an angle cock closed, except for detaching cars from rear, train brakes must be applied with sufficient force to determine whether they operate properly. Steam or power must not be shut off unless conditions require. This test will also be made not more than 3 miles before reaching railroad crossings at grade, drawbridges or descending grades of 1.8 percent or over, and at such other points as may be designated by the superintendent.

During a test, a trainman must station himself at retaining valve of last car so equipped, and if air escapes from it while brakes are being released, must signal the engineer to increase speed. Communicating signal should be used when possible, in which case 5 sounds of the whistle must be given. If air does not escape, train must be stopped and the cause ascertained and corrected.

West M.P.		YARD LIMITS		East M.P.
W.P. Mole	Oakland.....			13.78
28.50	Niles.....			31.38
	" San Jose Branch.....			BR-1.41
15.2	San Jose.....			23.0
70.14	Carbons.....			73.05
89.34	Stockton.....			96.49
6.0	Terminus.....			End of branch
133.4	Sacramento.....			140.69
177.62	Marysville.....			180.24
201.44	Oroville.....			206.0
280.51	Keddie.....			282.47
	" 4th Subdivision.....			K-0.48
319.94	Portola.....			323.09
34.89	Clear Creek Junction.....			35.61
38.25	Westwood.....			SP-409.45
			(2 1/4 miles west of Mason)	
75.17	Halls Flat.....			78.70
111.2	Bieber.....			3.1 miles east of passenger station

ASSISTANT SUPERINTENDENT
C. E. McDONALD.....Sacramento

TRAINMASTERS
L. D. BRADY.....Stockton
H. E. STAPP.....Stockton
P. F. PRENTISS.....Stockton
J. J. McNALLY.....Keddie
A. W. TAYLOR.....Keddie

TERMINAL TRAINMASTERS
E. A. THOMPSON.....Oakland
L. P. HAMILTON.....Stockton

ROAD FOREMEN OF ENGINES
K. W. MUHL.....Stockton
HUGH ALLEN.....Stockton
R. McILVEEN.....Stockton
T. D. HUNTER.....Oroville
N. F. ROBERTS.....Oroville

ASSISTANT TRAINMASTER
L. A. HENRY.....Stockton

ASSISTANT TERMINAL TRAINMASTERS
C. DOWNS.....Oakland
T. A. NELLIGAN.....Oakland
G. H. EVANS.....Stockton

CHIEF TRAIN DISPATCHERS
G. S. ALLEN.....Sacramento
E. J. HILLIER.....Keddie

ASSISTANT CHIEF TRAIN DISPATCHER
W. A. WHEELER.....Sacramento

NIGHT CHIEF TRAIN DISPATCHERS
L. C. JASKALA.....Sacramento
P. JOSSERAND.....Sacramento
R. W. HUFFMON.....Keddie
F. S. BENTLEY.....Keddie