
WORK SAFELY TODAY
EACH RULE VIOLATION IS A
POTENTIAL ACCIDENT

TRAINMASTER

J. E. KENADY.....Yuba City

**TRAINMASTER—ROAD FOREMAN
OF ENGINES**

E. G. RATCLIFFE.....Sacramento

CHIEF DISPATCHER

F. R. JUSTIS.....Sacramento

DISPATCHERS

E. L. COKER.....Sacramento

J. E. TAYLOR.....Sacramento

J. L. BARRIER.....Sacramento

B. I. LONG.....Sacramento

85
**SACRAMENTO
NORTHERN
RAILWAY**

TIMETABLE

27

**EFFECTIVE SUNDAY, JANUARY 8, 1961
AT 12:01 A. M.
PACIFIC STANDARD TIME**

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

R. T. KEARNEY,
President and General Manager

H. J. MULFORD,
Superintendent

FIRST SUBDIVISION

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	Eastward				Time Table No. 27 January 8, 1961	STATIONS	Westward				Capacity of Sidelings in 50 ft. cars	Capacity of other tracks
	Symbols, Rule 6-A	SECOND CLASS		Milepost			Distance from East Pittsburg	THIRD CLASS		Arrive Daily		
			2					3				
			Leave Daily									
Yard Limits	PBK		6.00 AM	27.44	TO WALNUT CREEK	21.02	10.05 AM		10	50 E&W		
	P		6.05	29.46	2.02 SPARKLE	19.00	9.57			7 W		
			6.06	29.56	0.10 LAS JUNTAS (S.P.R.R.Orsg.)	18.90	9.56			5 W		
	P		6.07	30.11	0.56 BANCROFT	18.35	9.54			8 W		
Yard Limits	P		6.10	31.02	0.91 MEINERT	17.44	9.52		37	15 W		
	P		6.13	32.13	1.11 CONCORD	16.33	9.50			8 E		
	PAI		6.40	37.21	5.08 OLYDE (NAVAL R.R.Orsg.)	11.25	9.35			23 E		
Yard Limits	P		6.45	39.03	1.82 PORT CHICAGO	9.43	9.30		13	41 E		
	P		6.50	41.19	2.16 NICHOLS	7.27	9.23			15 W		
Yard Limits	P		6.55	42.46	1.27 McAVOY	6.00	9.20		16	12 W		
Yard Limits	P		7.00	43.59	1.13 SHELL POINT	4.87	9.15			2 W		
	PY		7.05	44.92	1.33 WEST PITTSBURG	3.54	9.10		10	34 E&W		
				46.24	1.32 AT&SF Crossing	2.22						
	PB		7.10 AM	46.95	0.71 TO PITTSBURG	1.51	9.00 AM			9 E&W		
				47.39	0.44 AT&SF Crossing	1.07						
				48.06	0.67 AT&SF Crossing	0.40						
			Arrive Daily		(21.02)		Leave Daily					
	P		(1.00 PM)	48.46	AT&SF ABS TCS EAST PITTSBURG Jct. AT&SF STOCKTON YARD SOUTH SACRAMENTO Joint Track	0.00	(8.00 AM)			Yard		
			(2.30 PM)				(7.00 AM)			Yard		
			(4.00 PM)				(5.00 AM)			Yard		
Time shown in brackets () is for information only.												

Movements between South Sacramento and Stockton Yard on Western Pacific are governed by Western Pacific Operating Department Rules and Special Instructions.

Movements between Stockton and Pittsburg on Santa Fe are governed by Santa Fe Operating Department Rules and Special Instructions.

Movements between West Pittsburg and East Pittsburg are governed by Rule 93.

FIRST SUBDIVISION

		Eastward			Time Table No. 27 January 8, 1961	Westward			Capacity of Siding in 50 ft. cars	Capacity of other tracks	
		Symbols, Rule 6-A	THIRD CLASS			Distance from Sacramento	SECOND CLASS				
			8	6			7	9			
			Leave Daily	Leave Daily			Arrive Daily	Arrive Daily			
Yard Limits	}		5.00PM	5.00AM	4.41	VACAVILLE 4.41	41.24	4.30AM	4.30PM		33 E&W
		P.Y.	5.13	5.13	7.60	VACAVILLE JCT. 8.71	36.83	4.17	4.17		
		P.Y.	5.33	5.33	64.55	DOZIER 9.57	28.12	3.57	3.57	22	30 E&W
Yard Limits		P	5.53	5.53	74.12	LIBFARM 1.11	18.55	3.37	3.37	26	32 W
		P	5.55	5.55	75.23	YOLANO 4.48	17.44	3.35	3.35	42	
		P	6.05	6.05	79.71	SAXON 7.24	12.96	3.25	3.25	4	
Yard Limits		P	6.20	6.20	86.95	RIVERVIEW 4.61	5.72	3.10	3.10	40	
Yard Limits	}	P.O.	6.30PM	6.30AM	91.56	WESTGATE 0.81	1.11	3.00AM	3.00PM		Yard
		P.Y.			92.37	BRODERIOK 0.30	0.30				Yard
					92.67	SACRAMENTO Front St. S.P.R.R. Crsg.	0.00				Yard
		P.B.K.I.									
			Arrive Daily	Arrive Daily		(41.24)		Leave Daily	Leave Daily		

Eastward				HOLLAND BRANCH		Westward				
Yard Limits	Symbols, Rule 6-A	SECOND CLASS		Mile Post	Time Table No. 27 January 8, 1961	Distance from Oxford	THIRD CLASS		Capacity of Siding in 50 ft. cars	Capacity of other tracks
		18	16				17	19		
		Leave Daily	Leave Daily		Arrive Daily		Arrive Daily			
	P	3.10PM	3.10AM	0.00	RIVERVIEW 5.89	15.77	4.50AM	4.50PM	40	
	P	3.25	3.25	5.89	OLARKSBURG 2.77	9.88	4.35	4.35	30	12 W
	P	3.34	3.34	8.66	CENTRAL 1.85	7.11	4.26	4.26	32	4 E
	P	3.40	3.40	10.51	GREENDALE 2.69	5.26	4.20	4.20	16	
	P	3.48	3.48	13.20	SORROCA 1.06	2.57	4.11	4.11	26	
	P	3.51	3.51	14.26	VALDEZ 1.51	1.51	4.08	4.08	21	11 E
	P	3.55PM	3.55AM	15.77	OXFORD	0.00	4.05AM	4.05PM	15	19 W
		Arrive Daily	Arrive Daily		(15.77)		Leave Daily	Leave Daily		

Eastward		WILLOTTA BRANCH		Westward		
Yard Limits	Symbols, Rule 6-A	Mile Post	Time Table No. 27 January 8, 1961	Distance from Willotta	Capacity of Sidings in 50 ft. cars	Capacity of other tracks
			STATIONS			
	Y.P.	7.60	VACAVILLE JCT. 5.31	9.42		
		12.91	FAIRFIELD 1.92	4.11		
		14.83	SUVAL 0.35	2.19		11 W
		15.18	OHADBOURNE 0.71	1.84	12	11 W
		15.89	RUSSELL 0.88	1.13		14 W
		16.77	DANIELSON 0.25	0.25	6	3 E
		17.02	WILLOTTA	0.00		12 W

Eastward		MONTEZUMA BRANCH		Westward		
Yard Limits	Symbols, Rule 6-A	Mile Post	Time Table No. 27 January 8, 1961	Distance from Dozier	Capacity of Sidings in 50 ft. cars	Capacity of other tracks
			STATIONS			
	P	49.98	MONTEZUMA 1.99	14.57		25 E
	P	51.97	MOLENA 5.51	12.58	15	
	P	57.78	RIO VISTA Jct. 3.00	6.77		10 W
	P	60.78	CREED 3.77	3.77		2 W
	Y.P.	64.95	DOZIER	0.00	22	30 E&W

Train-order authority is not required on Willotta and Montezuma branches, and all movements on these branches must be made at yard speed.

Permission of the Train Dispatcher must be obtained before leaving Dozier on movements to Montezuma Branch and before

Train-order authority is not required on Willotta and Montezuma branches, and all movements on these branches must be made at yard speed.

Permission of the Train Dispatcher must be obtained before leaving Dozier on movements to Montezuma Branch and before leaving Vacaville Jct. on movements to Willotta Branch.

SECOND SUBDIVISION

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SECOND SUBDIVISION									
Eastward					Westward				
Symbols, Rule 6-A	SECOND CLASS		Mile Post	Time Table No. 27 January 8, 1961	Distance from Sacramento	THIRD CLASS		Capacity of Siding in 60 ft. cars	Capacity of other tracks
	22	20				21	23		
	Leave Daily	Leave Daily				Arrive Daily	Arrive Daily		
Yard Limits	P.B.Y.K.	5.00 PM	5.00 AM	94.99	SACRAMENTO, B ST. Jct. W.P.R.R.	41.02	9.20 AM	9.20 PM	Yard
	P.			95.49	0.50 HAGGIN, Jct. WPRR	40.52			Yard
	P.			96.44	0.95 GLOBE, Jct. WPRR	39.57			
	P.	5.12	5.12	97.16	0.72 NORTH SACRAMENTO	38.85	9.08	9.08	6 W
Yard Limits	P.	5.17	5.17	98.99	1.83 DEL PASO	37.02	9.03	9.03	7 W
	P.	5.26	5.26	103.10	4.11 RIO LINDA	32.91	8.54	8.54	35
	P.	5.29	5.29	104.41	1.31 ELVERTA	31.60	8.51	8.51	5 W
	P.	5.35	5.35	107.85	2.94 RIEGO	28.66	8.45	8.45	8 W
Yard Limits	P.	5.40	5.40	109.17	1.82 SANKEY WPRR Conn.	26.84	8.40	8.40	25
	P.			134.40	23.13 WP MP 175.63 Jct. WPRR	3.71			
	P.			136.31	2.75 MARYSVILLE Jct. WPRR	0.96			Yard
	P.	6.35 PM	6.35 AM	187.27	0.96 YUBA CITY S.P.R.R. Crossing	0.00	7.45 AM	7.45 PM	Yard
	Arrive Daily	Arrive Daily		(41.02)		Leave Daily	Leave Daily		

Eastward

EAST NICOLAUS BRANCH

Westward

EAST NICOLAUS BRANCH						
Symbols, Rule 6-A	Mile Post	Time Table No. 27 January 8, 1961	Distance from Sankey	Capacity of Siding in 60 ft. cars	Capacity of other tracks	
Yard Limits	P. AI	109.17	SANKEY, W.P.R.R. Cross.	9.83	25	
	P.	114.75	5.58 CATLETT	4.25		36 E
	P.	119.00	4.25 EAST NICOLAUS	0.00	17	31 W
		(9.83)				

Eastward

PEARSON BRANCH

Westward

PEARSON BRANCH						
Symbols, Rule 6-A	Mile Post	Time Table No. 27 January 8, 1961	Distance from Pearson	Capacity of Siding in 50 ft. cars	Capacity of other tracks	
Yard Limits	P.	129.70	PEARSON	4.70	5	32 E&W
	P.	132.36	2.66 ALICIA	2.04	25	8 W
	P.	134.40	2.04 WP MP 175.63 Jct. WPRR	0.00		
		(4.70)				

Movements on Western Pacific between Haggin and Globe and between Sankey and Marysville are governed by Western Pacific Operating Department Rules and Special Instructions.

Train order authority is not required on East Nicolaus and Pearson branches, and all movements on these branches must be made at yard speed.

Permission of the Train Dispatcher must be obtained before leaving Sankey on movements to East Nicolaus Branch and before leaving Alicia siding on movements to Pearson Branch.

SECOND SUBDIVISION

	Eastward				Westward					
	Symbols, Rule 6-A	SECOND CLASS		Milepost	Time Table No. 27 January 8, 1961	Distance from Yuba City	THIRD CLASS		Capacity of Siding in 50 ft. cars	Capacity of other tracks
26		24	25				27			
Leave Daily		Leave Daily	Arrive Daily				Arrive Daily			
					STATIONS					
Yard Limits	P.O.K.B.	6.00 PM	6.00 AM	137.27	YUBA CITY	47.08	6.35 AM	6.35 PM		Yard
	P.	6.03	6.03	138.56	PALORO	45.79	6.32	6.32		40 W
	P.	6.05	6.05	139.43	HARTER	44.92	6.30	6.30	25	28 W
Yard Limits	P. Y.	6.06	6.06	139.77	COLUSA JUNCTION	44.58	6.29	6.29		
	P.	6.13	6.13	143.82	SANDERS	40.73	6.21	6.21		7 W
Yard Limits	P. AI	6.25	6.25	149.31	LIVE OAK S.P.R.R. Cross.	35.04	6.10	6.10	20	25 E
	P.	6.35	6.35	154.39	EAST GRIDLEY	29.96	5.59	5.59	10	28 W
	P.	6.39	6.39	156.06	PEACHTON	28.29	5.55	5.55		7 E
	P.	6.51	6.51	162.18	LORRAINE	22.17	5.43	5.43		9 W
	P.	7.22	7.22	177.29	DURHAM	7.06	5.13	5.13		15 W
	P.	7.32	7.32	181.54	SPEEDWAY	2.81	5.03	5.03	12	
Yard Limits	P.	7.33	7.33	182.02	STIRLING JCT., S.P.R.R. Cross	2.33	5.02	5.02		
	P.Y.	7.35	7.35	183.03	MULBERRY	1.32	5.00	5.00		Yard
				183.37	CHICO 16TH ST.	0.98				Yard
	P. B. K.	7.45 PM	7.45 AM	184.35	TO CHICO	0.00	4.50 AM	4.50 PM		Yard
		Arrive Daily	Arrive Daily		(47.08)		Leave Daily	Leave Daily		

SECOND SUBDIVISION

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	Eastward				WOODLAND BRANCH		Westward			
	Symbols, Rule 6-A	SECOND CLASS		Mile Post	Time Table No. 27 January 8, 1961	Distance from Woodland	THIRD CLASS		Capacity of Siding in 50 ft. cars	Capacity of other tracks
		12	10				11	13		
		Leave Daily	Leave Daily				Arrive Daily	Arrive Daily		
Yard Limits	P.	6.30 PM	6.30 AM	0.00	BRODERICK 1.55	16.57	8.10 AM	8.10 PM		Yard
	AI	6.34	6.34	1.55	MIKON, S.P.R.R. Cross. 1.18	15.02	8.06	8.06		
	P.	6.37	6.37	2.73	LOVDAL 6.95	13.84	8.03	8.03	14	
	P.	6.52	6.52	9.68	FREMONT 2.13	6.89	7.48	7.48	15	
Yard Limits	P.	7.00	7.00	11.81	CONAWAY 2.90	4.78	7.40	7.40		30 E
	P.	7.06	7.06	14.80	HEBRON 1.77	1.77	7.34	7.34		10 W
Yard Limits	P.	7.10 PM	7.10 AM	16.57	TO WOODLAND	0.00	7.30 AM	7.30 PM		Yard
		Arrive Daily	Arrive Daily		16.57)		Leave Daily	Leave Daily		

Eastward			MERIDIAN BRANCH				Westward		
Yard Limits	Symbols, Rule 6-A		Mile Post	Time Table No. 27 January 8, 1961	Distance from Meridian		Capacity of Siding in 50 ft. cars	Capacity of other tracks	
	P.Y.		0.00	COLUSA JUNCTION 5.24	13.64				
	P.		5.24	TO SUTTER 5.04	8.40		14	35 E&W	
	P.		10.28	TARKE 1.90	3.38		24		
	P.		12.18	BEET SPUR 1.46	1.46		24		
	P.		13.64	MERIDIAN	00.0			18 W	
				(13.64)					

Train order authority is not required on Meridian Branch and all movements on the branch must be made at yard speed. Permission of the Train Dispatcher must be obtained before leaving Colusa Jct. on movements to the Meridian Branch.

SPECIAL INSTRUCTIONS

SPEED RESTRICTIONS — in miles per hour apply as follows:

LOCATION

FIRST SUBDIVISION — Pages 1 and 2

Walnut Creek, Yard limits between MP 26.9 and MP 27.6.....	15 MPH
Walnut Creek, Bonanza St., MP 27.3.....	Stop and Flag (See Special Rule on Page 7)
Walnut Creek, Trinity Ave., MP 27.4.....	Stop and Flag (See Special Rule on Page 7)
Walnut Creek, Highway Crossing, MP 28.0.....	20 MPH
Las Juntas, MP 29.56 SP Crossing.....	Stop (See Special Rule on Page 7)
Concord—City limits between MP 33.40 and MP 34.96.....	15 MPH
MP 36.04 to MP 37.21—Eastward trains descending Ohmer grade.....	20 MPH
Clyde—MP 37.21 U. S. Naval RR Crossing.....	15 MPH
Clyde, Norman Road, MP 37.8.....	15 MPH
Port Chicago, Main St., MP 39.2.....	Stop and Flag (See Special Rule on Page 7)
Nichols, Road Crossing, MP 41.0.....	15 MPH
Shell Point — MP 43.59 SP Crossing.....	Stop (See Special Rule on Page 7)
West Pittsburg — Underpass curve between MP 44.02 and MP 44.50.....	20 MPH
Between West Pittsburg, MP 44.92 and Pittsburg, MP 48.06.....	15 MPH
ATSF crossing, MP 46.24.....	15 MPH (See Special Rule on Page 7)
Pittsburg — All street crossings.....	10 MPH
ATSF crossing east of Harbor Street, MP 47.39.....	Stop and Flag (See Special Rule on Page 7)
Pittsburg — Columbia Street, MP 47.98.....	Stop and Flag
ATSF crossing East of Columbia Street, MP 48.06.....	Stop and Flag (See Special Rule on Page 7)
Between Vacaville Jct., MP 7.60 and Vacaville, MP 4.41.....	20 MPH
Vacaville MP 4.3 Highway crossing protected by flashing light signals.....	Caution
Sacramento, MP 92.4 Highway Crossing west end Tower Bridge.....	10 MPH
Sacramento, Tower Bridge between MP 92.4 and MP 92.6.....	15 MPH
Sacramento, Front and Capitol, MP 92.67 SP crossing. Movements governed by flagman.....	Stop (See Special Rule on Page 7)

Montezuma Branch, Page 2:

Gum Grove, Highway crossing, MP 53.9.....	Stop (See Special Rule on Page 8)
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Willotta Branch, Page 2:

Between Vacaville Jct. MP 7.60 and Willotta MP 17.02.....	20 MPH
MP 10.6, Highway Crossing.....	Stop (See Special Rule on Page 8)
MP 11.6, Highway Crossing.....	Stop (See Special Rule on Page 8)

Holland Branch, Page 2:

Between MP 86.95 and MP 15.77 all curves.....	15 MPH
Greendale, Highway crossing, No. 8J-9.9.....	20 MPH (See Special Rule on Page 8)

Sacramento Belt Line

Sacramento, City Limits between MP 92.55 and MP 95.15.....	20 MPH
Except — All street intersections.....	15 MPH
Except — C Street, westward trains and yard engines.....	5 MPH
Sacramento — Arterials, trains and yard engines.....	Stop
Exception — Does not apply to arterial stop located at Front Street and Capitol Avenue.	
Sacramento — Traffic light signals All movements governed by signal indication	
Sacramento — Street intersections When traffic officer on duty, all movements governed by traffic officer signals.	

Swanston Line

North Sacramento, Del Paso Blvd., Crossing No. 8E-0.5..Stop

SECOND SUBDIVISION — Pages 3 and 4:

Sacramento, "B" Street, MP 94.99 Jct. WPRR.....	Caution
Globe — MP 96.44 Junction WPRR.....	Stop
Del Paso, MP 99.2 — Highway crossing.....	15 MPH
Rio Linda, MP 103.5 — Street crossing.....	15 MPH
Riego, MP 107.5 — Road crossing.....	15 MPH
Sankey, MP 109.17 — WPRR crossing and connection.....	10 MPH
Pearson, MP 130.9 — Highway crossing.....	Stop (See Special Rule on Page 8)
MP 134.3 — Arboga Highway crossing protected by flashing light signals.....	Caution
MP 134.40 east of Alicia, Junction WPRR (WP MP 175.63).....	10 MPH
Marysville, MP 136.31 (Junction WPRR) Eastward trains and yard engines.....	10 MPH
Westward trains and yard engines.....	Stop
Marysville, Arterials — Trains and yard engines.....	Stop
Marysville, All street crossings.....	Stop and Flag
Yuba City, City Limits — Between MP 136.71 and MP 138.07.....	12 MPH
Yuba City, SP Crossing, MP 137.08.....	Stop
Except when proceed signal is received from flagman	
Yuba City, Cooper Avenue, MP 137.7.....	Stop
Yuba City, Street intersections — When traffic officer on duty all movements governed by traffic officer signals.	
Sanders, MP 143.8 Road Crossing.....	15 MPH
MP 144.8 Encinal road crossing.....	15 MPH
Live Oak City limits, between MP 148.22 and MP 149.38.....	15 MPH
Live Oak Arterials.....	Caution
Live Oak, SP crossing MP 149.31.....	20 MPH
Live Oak, MP 149.6 Highway crossing east of SP crossing.....	20 MPH
MP 158.6 East Biggs Highway crossing.....	15 MPH
MP 159.5 Rio Bonito Highway crossing.....	15 MPH
MP 161.4 Road crossing in cut east of Hazelbusch.....	15 MPH
Durham, MP 177.5 Highway crossing.....	15 MPH
MP 180.1 Savona Highway crossing.....	15 MPH
Stirling Jct. SP crossing MP 182.02.....	Stop
Chico, MP 182.5 Highway crossing.....	20 MPH
Chico, City limits, between MP 183.09 and MP 185.27.....	12 MPH
Chico, Arterials — Train and Yard engines.....	Stop

Woodland Branch, Page 5:

MP 2.1 Rose Orchard, highway crossing — Trains must reduce to 20 MPH 300 feet from crossing and speed must not exceed 15 MPH when head end of train moves over the crossing.....	15 MPH
Mikon, MP 1.55, SP crossing.....	Stop (See Instructions on Page 11)
MP 8.0 Kiesel Highway crossing.....	15 MPH
MP 10.17 and MP 11.71 Fremont Trestle.....	15 MPH
Woodland City Limits, MP 16.24 to end of tracks.....	12 MPH
Woodland, MP 16.4, Road crossing Shell Oil Plant..	6 MPH

Meridian Branch, Page 5:

MP 1.6 Alamendra road crossing.....	15 MPH
Sutter, MP 5.1 Highway crossing.....	15 MPH

Speed Restrictions — General

Maximum speed through turnouts, crossovers, on sidings and other inside tracks.....	10 MPH
Approaching and passing over spring switches.....	12 MPH
Trains handling loaded air dump cars.....	25 MPH
Trains handling steam shovels, derricks, cranes or pile drivers on own wheels.....	25 MPH
Maximum permissible speed, Trains and engines.....	30 MPH
Speed restriction sign located at various places where speed shall be reduced must be observed.	
Speed permitted by city ordinances within city limits as shown in above speed restriction table does not dispense with the observance of Rule 93.	

FIRST SUBDIVISION

Walnut Creek, Bonanza St., Crossing No. 8-27.3;
Walnut Creek, Trinity Ave., Crossing No. 8-27.4:

Stop boards are located on both sides of these crossings.

No train, motor, engine or car shall be operated over these crossings without first having been brought to a stop and unless traffic on the highway be protected by a member of the train crew or other competent employee acting as a flagman.

Trains originating at Walnut Creek must obtain a clearance.

Southern Pacific Crossing at Las Juntas (MP 29.56) is protected by Stop Boards. All trains, engines, motors and cars must stop at stop boards and signal 14-B sounded before proceeding over the crossing, providing that there is no locomotive, motor, train or car of the Southern Pacific approaching the crossing from either direction.

When view is obscured by fog or inclement weather, a member of the crew must go forward to the crossing and ascertain that no train is approaching on the Southern Pacific Railway before proceeding over the crossing.

Port Chicago, Main St., Crossing No. 8-39.2:

Stop boards on both sides of crossing.

All trains, engines, motors or cars must come to a stop and no movement made over the crossing until a member of the train crew has protected traffic on the crossing.

Signs reading—Cars must not be switched beyond this point by S. P. Co. - S. N. Ry. — are located on track 1 at the Shell Chemical Plant, Shell Point.

During periods of heavy fog or when visibility is restricted, sound crossing whistle when approaching and before passing over private roadway northeast corner Shell Chemical plant, Shell Point.

Westward trains originating at West Pittsburg will report their departure to the Train Dispatcher.

A two-indication color light train order signal is located on the depot building at Pittsburg. This signal governs movements in the westward direction only.

The signal will indicate "stop" when there is an operator on duty, except when changed to indicate "proceed" to allow a train or engine to pass when there are no train orders for any train or engine in the westward direction. When the signal is dark, the office will be considered a closed train order office.

Westward trains and engines must call for the signal, except when it indicates a closed office.

The tracks at the Shell Chemical Company's plant at Shell Point are used jointly by the Sacramento Northern and Southern Pacific. All movements over these tracks must be made with caution. The tracks leading from the Sacramento Northern and from the Southern Pacific cross at grade. All trains, motors, engines or cars of the Sacramento Northern shall stop at the "STOP" signs located at each approach to the crossing, and shall not proceed over the crossing until it has been ascertained that it is safe to do so. Several derrails, properly signed, are installed on the various tracks.

A gate has been installed on the Santa Fe track which crosses the Sacramento Northern main track at MP 46.24, Pittsburg. This gate is equipped with a Santa Fe switchlock and a switch lamp is mounted at the top of the mast supporting the gate.

This gate normally shall be locked in position across the line of railroad of The Atchison, Topeka & Santa Fe Railway Company and all trains, motors, engines and cars of The Atchison, Topeka & Santa Fe Railway Company shall stop before proceeding across said crossing and said gate shall not be unlocked and moved from its normal position until a member of the train crew or other competent employee has gone upon the crossing to ascertain that it is safe to do so. As soon as trains, motors, engines and cars of The Atchison, Topeka & Santa Fe Railway Company have proceeded across said crossing, such gate shall be returned to its normal position.

Trains, motors, engines and cars of Sacramento Northern Railway shall approach said crossing at speeds not in excess of fifteen (15) miles per hour, prepared to stop in the event such crossing is occupied by trains, motors, engines or cars of The Atchison, Topeka & Santa Fe Railway Company or in the event such gate is in other than its normal position, and one long blast of the engine whistle shall be sounded by the Sacramento Northern Railway when approaching said crossing in accordance with Rule 14 (M).

Distance warning signs located 1000 feet from crossing.

Sacramento Northern industrial lead taking off of the main track approximately $\frac{3}{4}$ mile west of Pittsburg crosses industrial lead track of A. T. & S. F. Ry. at grade.

All engines, motors, cars or trains approaching the crossing shall come to a stop not less than ten (10) nor more than fifty (50) feet from nearest rail of the crossing and shall not proceed thereafter until receiving an appropriate signal from a flagman or other qualified employee. Such signal shall not be given until it has been definitely ascertained that no engines, motors, cars or trains are approaching from either direction on the conflicting route under conditions which will render it possible for an interference to occur with the movement about to be made over the crossing.

The A. T. & S. F. Ry. have precedence in the use of the crossing.

A. T. & S. F. Ry. crossing east of Harbor Street, MP 47.39, Pittsburg, is protected by stop boards. All engines, trains, motors and cars must come to a stop at the "STOP" boards located on either side of the crossing and no movement made over this crossing until a flagman has preceded over the crossing and ascertained that it is safe to proceed. A. T. & S. F. Ry. have the preference at this crossing.

At a point 360 feet east from the curb line of Columbia Street, MP 48.06, Pittsburg, a rail crossing at grade over the Atchison, Topeka & Santa Fe Railway lead track is installed. The following instructions will govern in operating over this crossing.

All trains, motors, engines and cars of the Sacramento Northern Railway, the Atchison, Topeka & Santa Fe Railway, and Columbia Steel Company shall come to a stop not less than ten feet (10') nor more than fifty feet (50') from the nearest rail of the crossing, and shall not proceed thereafter until a member of the train crew or other competent employee has gone upon the crossing and has ascertained that it is safe so to do and shall have given a suitable signal to proceed. In event the trains, motors, engines and cars of either railroad have approached the crossing and made the stop, as hereinbefore required, and any trains, motors, engines and cars are approaching upon the conflicting route within a distance which will render them in any way liable to conflict with the movement over the crossing about to be made, such movement shall not be made until the trains, motors, engines and cars approaching upon the conflicting route have been brought to a stop.

Southern Pacific Railroad crossing at Front and Capitol Ave., MP 92.67, Sacramento, is protected by flagman.

Southern Pacific trains moving on Front Street, Sacramento, and yard engines switching on Front Street, shall stop before reaching the crossing at Front and Capitol Ave., and will proceed on hand signals from flagman on the ground at the crossing, flagman using a green flag by day and green light by night.

Sacramento Northern trains and yard engines moving over the crossing shall stop before reaching the crossing at Front and Capitol Ave., and will proceed on hand signals from the flagman using a yellow flag by day and a yellow light by night.

Rules governing movements over the SP crossing at Front and Capitol Avenue and movements through the interlocking plant on the Tower Bridge require that all movements over the SPRR. crossing are authorized by the flagman, using a yellow flag by day and a yellow light by night, and Rule 628 authorizes the signalman (tower operator) to use yellow signals whenever the interlocking signals are inoperative, therefore, when the interlocking signals are inoperative, engineers must receive a hand signal from the signalman (tower operator) in addition to the hand signal from the flagman, both using yellow signals.

Trains and yard engines approaching highway crossing on Westside lead, west of Tower Bridge, Sacramento, will allow not less than twenty (20) seconds to elapse from time flashing light signals start operating before engine or cars enter the highway traffic lanes.

FIRST SUBDIVISION (Continued)

The Sacramento-Yolo Port Belt Railroad crosses the Soule spur track of Sacramento Northern Railway at grade in Westgate, Sacramento Yard.

All engines, cars or trains of the Port Belt Railroad shall come to a stop not less than ten (10) feet nor more than fifty (50) feet from the nearest rail of said crossing and shall not thereafter proceed until it has been observed or it is known that no engines or cars are approaching from either direction on the conflicting route under conditions which will render it possible for an interference to occur with the movement about to be made over the crossing. The engines or cars of Sacramento Northern Railway shall have precedence in the use of this crossing.

These regulations apply to Sacramento Northern Railway engines and cars when movements are made on the Port Belt Railroad.

Stop boards are located in advance of crossing on the Port Belt Railroad.

Westward trains will report arrival at Riverview.

HOLLAND BRANCH, Greendale, Highway Crossing No. 8J-9.9:

Movements of trains, engines, motors or cars approaching this highway crossing are restricted to twenty (20) MPH 800 feet from crossing.

MONTEZUMA BRANCH, Gum Grove Highway crossing No. 8-53.9, approximately 3.9 miles west of Rio Vista Jct.:

No train, motor, engine or car shall be operated over this crossing without first having been brought to a stop before entering the crossing. Proceed with caution.

WILLOTTA BRANCH, MP 10.6, HIGHWAY CROSSING No. 8F-10.6:

All trains, engines and cars must be brought to a stop before entering this highway crossing and wait not less than twenty (20) seconds after highway flashing light signals start operating before proceeding over crossing.

Fairfield Willotta Branch, MP 11.6:

North Texas Street, Fairfield — All trains, engines, motors or cars must come to a stop, and no movement made over the crossing until a member of the train crew or other competent employee acting as a flagman has protected traffic on the crossing.

After stopping and when traffic on the crossing permits and it is safe to proceed, the employee acting as flagman shall display lighted fusee from front end of the deck of the engine both during the daylight and at night, until the engine passes over the crossing.

SECOND SUBDIVISION**Pearson, MP 130.9, Highway Crossing:**

All trains, engines and cars must come to a stop and no movement made over the crossing until a member of the train crew, or other competent employee, acting as a flagman, has protected the traffic on the highway. After stopping, and when traffic on the highway permits, and it is safe to proceed, the employee acting as a flagman shall display a red flag by day and a lighted red lantern by night from the leading end of engine or car until front end of engine or car passes over the crossing.

BLOCK SIGNALS

Automatic block signals between Marysville and Yuba City:

Two indication color light home signals located as follows:

Signal 190 feet east of junction switch opposite Marysville depot governs eastward movements.

Signal 1074 feet west of Yuba City depot governs westward movements.

Movement of trains and yard engines within home signal limits will be made in accordance with indication of signals subject to the following regulations:

Flashing white light located on track side of Yuba City depot is to apprise trains and yard engines of condition of route between home signals. When flashing, route is unoccupied.

Before proceeding from Yuba City depot to Marysville, member of crew shall press push button mounted on pole adjacent to west crossover switch near Yuba City depot which holds route for westward movements for a period of ten (10) minutes and causes flashing light to burn steadily. Train or yard engine may then proceed, being governed by indication of home signal.

The following regulations apply to movements on Main Street, Chico:

Trains, cuts of cars, or single cars or locomotives shall not be permitted to stop or stand on any track located in Main Street, except to do so for vehicular traffic, traffic signals, or in the event of emergencies such as derailments, mechanical failures and the like.

Train and engine movements are prohibited on Main Street, Chico, between the hours of 7:00 a.m. and 7:00 p.m., except during the period when Daylight Saving Time is in effect commencing with the last Sunday in April to the last Sunday in September each year, train and engine movements are prohibited on Main Street, Chico, between the hours of 6:00 a.m. and 6:00 p.m. (PST).

Freight trains are limited to engine and 20 cars on Main Street, Chico.

Trainmen must not ride on top or side of cars in the area between Sacramento Avenue and 5th Avenue on the Esplanade, Chico.

In addition to displaying a red light to the rear as required by Rule 18-Modified, a lighted red fusee must be placed at the rear of all eastward movements on city streets at Chico.

Amber revolving light mounted on top of engine will be displayed for all movements within Chico yard limits. If amber light is inoperative or when using an engine not equipped with amber revolving light, a lighted red fusee will be displayed on leading end of engine in direction of movement.

GENERAL**RULE 10-H, first paragraph—Amended:**

A metal banner at right of track displaying yellow indicates that trains must reduce speed over track to 10 miles per hour until rear of train has passed temporary resume speed signal unless otherwise directed by train order or bulletin. Such signal must be placed one-fourth ($\frac{1}{4}$) mile before the location is reached where speed of trains must be reduced.

RULE 17-C. Headlights must be dimmed while moving within city limits.

RULE 18—Modified. Yard engines when making a continuous movement along city streets will not display the headlight at the rear by night. A red light must be displayed to the rear, and on the rear of the last car when cars are being handled.

It shall be the responsibility of the rear brakeman to see that a red light is continuously displayed at the rear until movement is completed.

When stop is made and train or yard engine is left standing in street, trainman will place lighted fusee in street at rear of cut. When necessary for trainman to leave rear of cut and go ahead one or more lighted fusee will be dropped in street.

Rule 21 of the Operating Department Rules is suspended.

RULE S-72. Westward trains are superior to Eastward trains of the same class.

RULE 82-A—Amended. Regular trains will be authorized at their initial stations and at intermediate stations by permission of the Train Dispatcher. A written clearance is not required unless train orders are issued to regular trains.

Rule 93 permits the main track to be used in yard limits; therefore enginemmen approaching yard limits where the view of the yard limit board is more or less obstructed account of curves or cuts (like the board in the East end of the yard at Walnut Creek) must be mindful of this rule and approach the yard limits with caution, expecting to find the main track occupied and without flag protection.

RULE 103 (B). Public streets and highway crossings must not be blocked longer than necessary and in no case longer than five (5) minutes.

Back-up hose must be used by crews when shoving more than five cars ahead of engine over city streets.

GENERAL (Continued)

Second paragraph of Rule 15, Air Brake Rules, on Page 88 of Operating Rule Book effective May 1, 1958, is amended as follows:

Standard Brake Pipe Pressure: Freight and mixed trains, 90 pounds, and passenger trains including RDC cars, 110 pounds. Minimum differential brake pipe and main reservoir with brake valve in running position, 15 pounds.

Air must be cut in and air brakes in operation on all yard cuts, and on trains within yard limits, when moving over and along city streets except when doing station work or yard switching.

Air must be cut in and air brakes in operation on all yard cuts, and on trains within yard limits, when moving or working on grades where air brakes are necessary to keep cars under control.

During and immediately following stormy weather which may impair the roadway, Engineers must take extraordinary precautions to insure safe movement of their train, reducing speed where in their judgment it may be required.

Amber revolving light mounted on top of engine and the oscillating headlight may be used when in the judgment of the engineer their use will provide additional protection for train and yard movements, except that the amber revolving light must not be displayed on Western Pacific tracks at any time.

City Ordinances require all trains and yard engines within one hundred feet of an intersection to stop immediately on the approach of any police, ambulance, or fire apparatus sounding siren or signal gong except they be at the time on, or crossing an intersection, in which event crossing must be cleared and then stop.

Civil, Military or Funeral processions must not be obstructed.

When trains and yard engines approach a street intersection simultaneously, except where traffic is controlled by traffic signals in service or by traffic officer, the train or yard engine moving eastward must reduce speed, stopping if necessary, and must not enter the intersection until the train or yard engine moving in the westward direction has passed entirely out of the intersection or has completely blocked the intersection, thus preventing vehicular traffic from crossing the tracks.

Movement over street intersections or around sharp curves in switching service when the engineer's view (or the fireman's view if working on the fireman's side) is obstructed must be protected by a member of the crew acting as a flagman. The conductor is jointly responsible with the engineer for this protection being given.

Conductor will see that trainmen are so distributed over the train as to control it most effectually and be able to pass signals from any part of it to the enginemen. This rule applies to continuous movements over and along city streets and in yards, and where required a trainman must take a position at the rear of yard cuts.

To reduce automobile accidents, special care should be used when approaching grade crossings known to be obscured or hazardous. Where vehicles are moving in public streets in the same direction as the train and are not clear of the track on which train is operating, speed should be so controlled as to permit train being stopped in case vehicle makes a sudden or unexpected stop or turn. When about to pass a vehicle moving in the same direction as train, the engineer should satisfy himself that the driver is aware of approach of the train.

The following instructions cover the use of push poles:

(a) The use of push poles in freight operations is prohibited, except in emergencies when poling of cars cannot otherwise be avoided.

(b) When such emergencies arise and it becomes absolutely necessary to pole cars, as quickly as pole is in position, member of crew placing pole must move into the clear a sufficient distance to insure his personal safety; being careful to place pole in pole pocket or in such position that pole will not slip. Such poling movements must be executed with great care and without cars coupled to engine, being careful to avoid misunderstandings of signals or damage to equipment. The use of non-standard push poles is strictly prohibited.

Cars of gasoline when spotted for unloading at any oil spur must be left between the insulated joints and the end of the spur. No cars are to be left standing over the insulated joints or coupled to cars spotted between the insulated joints and end of spur.

Where power switches are installed on gasoline unloading tracks, they must not be closed until it has first been ascertained by a member of the crew that all cars have been disconnected and are ready to move. The power switches must be left open after switching has been completed.

The trolley or pantograph must be down before removing any jumpers, handling 600-1200 volt switches, or when the engineer is repairing electrical equipment.

Should the pantograph become damaged so as to render it inoperative it must be locked or tied down and the pole trolley used instead. Should the damaged pantograph require repairs in order to lock or tie it down, extreme caution must be used to prevent the pantograph coming in contact with the trolley wire while repairs are being made.

Engineers must shut off power at all sectional insulators in trolley except at places where insulators have been designed for pantograph operation.

SACRAMENTO BELT LINE

Trains and yard cuts must stop and flag before crossing the SP and WP tracks at Front and R Streets except when a proceed signal is received from flagman. This rule means that trains must actually stop and be flagged over the crossing by a member of the crew unless a flagman is at the crossing in advance of the arrival of the train.

When Sacramento Northern trains and engines are moving on WP tracks on Front Street and R Street, they must stop before crossing the SN tracks on Front Street as provided for in WP Transportation Rule 98.

All movements from point of switch to CPC Box Lot spur, Broadway side, Front and X Streets, Sacramento, will be made with caution not exceeding four (4) miles per hour.

JOINT TRACK

Sacramento Northern trains and engines use Santa Fe tracks between Stockton and Pittsburg.

Trainmen and Enginemen using Santa Fe tracks will be governed by Santa Fe Operating Department rules and must have copy of current Santa Fe Operating Department Book of Rules, copy of current Santa Fe, Valley Division, timetable, and Santa Fe switch key in their possession at all times while on duty on Santa Fe.

The tracks on X Street and Front Street, Sacramento, are operated jointly with the C. C. T. Company.

Sacramento Northern trains and engines use Western Pacific tracks as follows:

Between South Sacramento and Stockton yard.

R Street line, Sacramento, between Front Street and east wye switch at WP MP 138.2.

Between WP MP 138.2 and Globe.

Between Sankey and Marysville.

Trainmen and enginemen using Western Pacific tracks will be governed by Western Pacific Operating Department rules and special instructions and must have copies of current Western Pacific Operating Department Book of Rules, current Western Pacific, Western Division, Timetable, and current Western Pacific Air Brake Rules and Regulations in their possession when on duty on Western Pacific.

The WP tracks on Front and R Streets leading to the C. P. C. Plant may be used by SN yard crews under yard rules. WP yard engines have preference on these tracks.

On eastward movements from Haggin, inform Western Pacific dispatcher by telephone when ready to leave.

On westward movements from Globe, inform Western Pacific dispatcher by telephone when ready to move.

Telephones for communication with dispatcher are located near main track or junction switches.

Lunar White marker at east switch Haggin, WP MP 139.8:

Lunar white marker displayed in connection with aspect per Rule 287 on westward absolute signal at east switch Haggin indicates that switches are lined for movement to Sacramento Northern yard.

When aspect per Rule 287 is displayed without display of lunar white marker it indicates switches are lined to siding.

JOINT TRACK (Continued)

Eastward SN trains and engines at Haggin must contact train dispatcher for instructions to move Haggin to Globe. It will not be necessary to obtain similar instructions at SN-WP connection at Sankey for movement beyond if leaving signal on SN displays a proceed indication.

When Westward SN trains or engines at Marysville have contacted train dispatcher for instructions to move Marysville to SN-WP connection at MP 175.63 or Sankey, it will not be necessary to obtain similar instructions at Globe for movement beyond, except to obtain permission to operate electric lock.

The tracks in Haggin Yard, Sacramento, are used by Western Pacific yard engines and crews when switching their cars to and from Southern Pacific interchange. WP crews will contact the SN yardmaster before using these tracks and be governed by his instructions. These tracks are within yard limits.

Sacramento Northern Crews Marysville:

(See SPECIAL INSTRUCTIONS IN CURRENT WESTERN PACIFIC, WESTERN DIVISION, TIMETABLE.)

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

Trains and yard engines must have permission from the Western Pacific dispatcher to enter the siding at Marysville.

Westward trains and engines must stop to clear the passing track at Marysville and contact the Western Pacific dispatcher before entering the siding.

Trainmen must not leave master switch or crossovers at Marysville in other than normal position on Western Pacific control system unless they are working in the immediate vicinity.

Junction switch on siding at Marysville must be locked for siding when not in use.

All movements on siding at Marysville must be made at yard speed.

The following instructions govern the use of Western Pacific telephone circuits: When calling the train dispatcher at Sacramento on either the train dispatcher's circuit or code line telephone, discontinue the practice of first saying "Dispatcher." The person calling, as well as the dispatcher, should follow the formula outlined below: Person Calling—"West Merlin," Dispatcher's reply—"Dispatcher," Person Calling—"Conductor Jones, West Merlin, Exa. 905 West."

Before calling on any telephone, first listen to make sure the dispatcher is not busy on the line; if he is not busy, then follow the procedure outlined above.

JOINT TRACK, SACRAMENTO

Southern Pacific has trackage rights over SN Ry. track in Sacramento yard between Sacramento Yolo Port Railroad connection east of Washington underpass and connection to Sacramento Yolo Port Railroad east of county road crossing at Broderick. These tracks will be used jointly by SN Ry. and SP Co. crews. Movements on joint track will be governed by block signals whose indications supersede the superiority of trains.

Automatic signals located as follows:

Westbound

Woodland Branch 169 feet east of Sacramento Yolo Port RR connection switch-Washington.

Clear point Sacramento Yolo Port RR connection east of Washington underpass.

Eastbound

234 feet west of east wye switch Woodland Branch.

Clear point Sacramento Yolo Port RR connection.

37 feet east of west wye switch connecting with Oakland main track, Broderick.

Westbound distant signal displaying steady yellow indication located 3327 feet east of westbound automatic signal on Woodland Branch 169 feet east of Sacramento Yolo Port RR connection switch, Washington.

Indicators located at switches show condition of the joint track with regard to occupancy and switches are equipped with joint SN Ry. - SP Co. switchlocks. Before fouling joint track, member of crew required to handle switch must observe and respect the indicator.

When indicator shows block clear switch may be reversed and movement started when yellow aspect is displayed by the signal.

If indicator shows block occupied, switch must not be reversed until it is known that there is no opposing or conflicting movement.

If after switch has been reversed signal displays Stop indication (Red aspect or light is not displayed in signal), train or engine must wait five minutes and then be preceded by flagman through joint track area.

Maximum speed permitted on joint track is ten (10) MPH and all movements must be made with caution.

Normal position of switches connecting with joint track is as follows:

Sacramento Yolo Port Railroad connection east of Washington underpass lined for Woodland Branch.

East Wye switch, Woodland Branch, lined for movement west leg of wye.

Sacramento Yolo Port RR connection east of county road crossing, Broderick, lined for west leg of wye.

West wye switch connecting with Vacaville main track, Broderick, is normally lined for movement on the main track. Signal governing movements on west leg of wye is normally dark. Train or engine using main track must determine that the wye switch is in normal position after which dark signal may be passed without stopping.

Sacramento Yolo Port Railroad yard tracks will also be used jointly by SN Ry. and SP Co. crews and all movements must be made with caution not exceeding ten (10) MPH.

Flag protection to rear is not required when operating in joint track area or over Sacramento Yolo Port Railroad yard tracks.

INTERLOCKING PLANTS AND SIGNALS

MP 37.21, CLYDE, NAVAL AMMUNITION DEPOT RAILROAD CROSSING, INTERLOCKING.

Home signal located 610 feet east of crossing governs movement of trains over the crossing westward. Home signal located 578 feet west of crossing governs movement of trains over the crossing eastward. The westward distant signal is located 2410 feet in advance of the home signal. The eastward distant signal is located 3269 feet west of the home signal.

Distant signals are permanently lighted and display yellow aspect only per Rule 285, "Proceed, preparing to stop at next signal," not exceeding fifteen (15) MPH.

When train approaches the crossing and enters the approach circuit, the home signal should indicate PROCEED.

If home signal displays STOP indication, be governed by Rule 664.

Speed must not exceed fifteen (15) MPH between home signals and crossing.

X STREET, SACRAMENTO, WP Crossing, Interlocking:

Home signals governing movement of trains with the current of traffic over the crossing located at the curb line 72.5 feet on either side of crossing; back-up signals governing reverse train movements over the crossing are located at the curb line 72.5 feet on either side of crossing. No distant signals.

Cars must not be left standing between the home signals unless coupled to another car or an engine which is standing outside of the home signals.

Cars or trains finding the home signals at "STOP," will stop clear of signal to permit it to change to "PROCEED" position when train on the Western Pacific has passed out of home signal limits.

An indicator lamp mounted on time release housing located in the northeast corner of the crossing governs as follows:

This lamp will be lighted when the Western Pacific train dispatcher lines up for WP movement through the interlocking. It will remain lighted until such movement has passed the interlocking signal or until the signals have been returned to Stop by the train dispatcher.

If this indicator lamp is lighted, member of crew of train or yard engine having switching to do in this area must contact Western Pacific train dispatcher for instructions before passing the interlocking signal.

INTERLOCKING PLANTS AND SIGNALS (Continued)**EMERGENCY RELEASE**

If no cause for signals being at STOP is seen, obtain permission from Western Pacific Train Dispatcher by telephone to operate the Emergency release. Telephone for this purpose located in box on side of instrument house adjacent to the crossing.

When authorized by Western Pacific Train Dispatcher to operate Emergency Release, trainmen will operate release in box mounted on signal governing reverse movements over the crossing for the track involved. Instructions for operation of the Emergency Release are posted in the release housing and are as follows:

Speed of cars or trains over Automatic Interlocking must not exceed ten (10) miles per hour.

Note: The word trains includes yard engines.

MP 109.17, SANKEY, WP CROSSING AND CONNECTION.**Sacramento Northern:**

Eastward—Inoperative distant signal located 3385 feet west of absolute signal.

Absolute Signal is a two-unit signal. Upper unit governs movements to WP main track. Lower unit governs movements on SN main track.

Westward—Inoperative distant signal located 3685 feet east of absolute signal.

Absolute Signal governs movements on SN main track.

Western Pacific:

Westward—Absolute Signal is a two-unit signal. Upper unit governs movements on WP main track. Lower unit governs movements to SN main track.

Dual control switches provide entrance to and crossing over WP main track. Instructions for operating Dual Control switches by hand are posted in telephone booth adjacent to the crossing. Speed on approach curves and through turnouts of Dual Control switches shall not exceed 10 miles per hour.

When train or engine is stopped by Absolute Signal displaying STOP indication, a member of the crew must contact WP Train Dispatcher by telephone. Rules 509 and 546 apply.

MP 149.31, LIVE OAK, SP CROSSING, INTERLOCKING.

Home signals located 600 feet east and west of crossing.

The westbound distant signal is located 3000 feet in advance of the home signal. The eastbound distant signal is located 1300 feet in advance of the home signal.

Distant signals are permanently lighted and display yellow aspect only per Rule 285.

The approach circuit for westward movements begins 1800 feet east of the westbound home signal.

The approach circuit for eastward movements begins at the distant signal, 1300 feet west of the eastbound home signal.

Speed of trains between home signals and over SP crossing shall not exceed twenty (20) MPH.

Normal Indication of Interlocking Home Signals—"STOP":

When train approaches the crossing and enters approach circuit, the home signal should change to "PROCEED."

If no cause for signals being at "STOP" is seen or if there is a train on intersecting tracks standing outside of the home signals, with no indication that it is to immediately proceed, flagman must be sent ahead to operate a release located in box at the crossing. Box is provided with standard switch lock. Instructions for the operation of release are posted inside box.

WOODLAND BRANCH. MP 1.55 MIKON, SP CROSSING INTERLOCKING.

Home signals located 500 feet east and west of crossing.

Inoperative approach signals located 2000 feet from home signals display aspect per Rule 285.

Speed of trains shall not exceed fifteen (15) MPH between approach signals and home signals.

All trains, engines and cars must be brought to a stop before passing home signals at Southern Pacific crossing at Mikon and wait sixty (60) seconds before proceeding.

CLOCKWORK TIME RELEASE: When trains are stopped by signals governing the use of automatic interlocking, flagman must be sent to crossing to operate clockwork time release located in box just west of crossing locked with Sacramento Northern switch lock.

Release must not be operated when trains are within interlocking limits as defined by interlocking home signals, or seen or heard approaching on intersecting tracks.

Approximately four minutes after release has been operated, a red indication light for train direction will be displayed over release, and home signal should indicate proceed. If, for any reason, home signal cannot indicate proceed, red indication light on home signal (located on mast below home signal) will be displayed and this will be authority to proceed through interlocking limits.

If home signal is in stop position and red indication light on home signal (located on mast below home signal) is not displayed, train may proceed over crossing as provided by Rule 664.

Instructions for operating time release are posted inside of box.

TOWER BRIDGE, SACRAMENTO**Bridge Interlocking Signals and Derails:**

Signals are located 305 feet east of Bridge on Front Street, and 500 feet west of Bridge. The switch leading to the River Spur serves as a derail west of the Bridge.

The interlocking home signal at River Spur derailing switch is a two-unit signal; the upper signal governs movements to Front Street, and the lower signal governs movements to the River Spur.

Signal located at the east end of the Bridge governing eastward movements is a two-indication light signal. Green indication governs movements to Front Street. The red indication is a stop signal.

Switch Indicator:

The switch leading into the main track from Westside Spur is protected by switch indicator. The switch leading from the River Spur to the main track is protected by light signals operated from the tower.

Movements of Trains and Yard Engines:

Movements through interlocking plant shall be made in accordance with signal indication. In case of signal failure, be governed by Rule 663.

Trains and yard engines must not exceed a speed of 15 miles per hour over the bridge and 10 miles per hour over the highway crossing west of the bridge.

On Westward movements from Front Street to Tower bridge, Sacramento, if on account of stalling or being blocked by vehicular traffic, it becomes necessary to make a reverse movement, train or engine after sounding signal 14(h) may back and then proceed within interlocking limits without permission from the Towerman, provided the movements are protected by trainmen. If reverse movement results in train or engine moving out of interlocking limits, forward movement must not be made without the proper interlocking signal or permission from the Towerman.

Telephones:

Telephones are installed in the tower, on Front Street, between River Spur and Westside Spur for trainmen to communicate with the towerman.

Whenever there is switching to be done on the River Spur or Westside Spur, which requires several movements from the main track to these spurs, the conductor shall communicate with the towerman and advise him so that there shall be no delay in the operation of signals or switches.

There is a signal box located on the interlocking home signal on Front Street which is operated by using a switch key. Operation of this signal box gives the towerman an indication in the tower that a train is on Front Street, and ready to move through the plant. This signal box is to be used when whistle signal cannot be heard.

Route Whistle Signals:

From Front Street to Westside	
and Westside to Front Street.....	o
From main track to River Spur	
and reverse	o o

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

TABLE OF LOCOMOTIVE RATING IN TRAILING TONS

Between	And	142 CLASS	201 CLASS	501 CLASS
		44-ton Diesels	70-ton Diesels	100-ton Diesels
Walnut Creek	Meinert	250	750	1000
Meinert	Concord	650	1500	2000
Concord	Clyde	200	500	650
Clyde	Pittsburg	650	1500	2000
Except Eastward Montezuma St. to Harbor St., Pittsburg		400	750	1000
Except Westward Harbor St. to Montezuma St., Pittsburg		200	600	800
Montezuma	Dozier	700	1500	2000
Dozier	Sacramento	800	2000	2500
Dozier	Vacaville Jct.	800	2000	2500
Except from MP 6.0 to Vacaville Jct.		550	1000	1250
Vacaville Jct.	Vacaville	800	1500	—
Vacaville Jct.	Willotta	800	1500	—
Sacramento	Marysville	800	2000	60-Ton Electric
Marysville	Yuba City	450	900	950
Yuba City	Chico	800	2000	—
Colusa Jct.	Meridian	800	2000	—
Broderick	Woodland	800	2000	—
Riverview	Oxford	700	1500	—
So. Sacramento	Clyde	301 class		3000 trailing tons per unit

Note—Safe operating limits as prescribed in operating instructions for type of locomotive in use must be observed.
Tonnage ratings for 201 class engines apply to TS 741 Class, 70 ton diesels.

SPEED RESTRICTIONS
FOR ENGINES

Maximum speed in miles per hour for engines is subject to speed restrictions for trains shown on page 6.

CLASS	ENGINE NUMBERS	MAXIMUM SPEED
44-Ton Diesels	142-147	35 MPH
70 " "	201-202	55 "
100 " "	501-503	45 "
100 " "	504-511	65 "
120 " "	301 Class	50 "

Speed restrictions for 201 class apply to TS 741 class, 70 ton diesels.

When handled dead in train:

142 class engines,
maximum speed 30 MPH.
electric engines,
maximum speed 35 MPH.

TABLE OF WEIGHT LIMITATIONS

BETWEEN	AND	GROSS WEIGHT (Car & Contents)
Walnut Creek	Sacramento	210,000
Sacramento	No. Sacramento	
"	Swanston	
"	Vacaville Jct.	
Riverview	Oxford	
Dozier	Montezuma	169,000
Vacaville Jct.	Vacaville	
"	Willotta	
N. Sacramento	Marysville	210,000
Marysville	Yuba City	
Yuba City	Chico	169,000
Colusa Jct.	Meridian	
Broderick	Woodland	

LOCATION	NAME OF RR.	PROTECTION	RESTRICTION	RIGHT
FIRST SUBDIVISION				
Las Juntas.....	S. P. Co.....	No Signals.....	Stop.....	S. P. Co.
Clyde.....	Naval Ammunition Depot R. R.	Automatic Interlocking Signals.	15 mi. per hr.....	Governed by Signal
Shell Point				
Shell Chem. Co.....	S. P. Co.....	No Signals.....	Stop.....	S. N. Ry.
Pittsburg:				
East of Harbor St.....	A. T. & S. F. R. R.....	No Signals.....	Stop and Flag.....	A. T. & S. F. Ry.
East of Columbia St.....	A. T. & S. F. R. R.....	No Signals.....	Stop and Flag.....	(See instructions on page 7)
S. N. Ry. industrial track between West Pittsburg and Pittsburg.....	A. T. & S. F. R. R. Industrial Track.....	No Signals.....	Stop. (See instructions on page 7)	A. T. & S. F. Ry.
Between West Pittsburg and Pittsburg.....	A. T. & S. F. R. R.....	Crossing Gate.....	15 mi. per hr.....	S. N. Ry.
Sacramento:				
Front St. & Capitol Ave..	S. P. Co.....	Flagman.....	Stop.....	Governed by Flagman
SECOND SUBDIVISION				
Globe, Jct. Jt. Track.....	W. P. R. R.....	T. C. S.....	Stop.....	Governed by Signal
Sankey.....	W. P. R. R.....	T. C. S.....	10 mi. per hr.....	Governed by Signal
MP 134.40, Jct. Jt. track (W P MP 175.63).....	W. P. R. R.....	T. C. S.....	Caution.....	Governed by Signal
Marysville—Joint Track.....	W. P. R. R.....	T. C. S.....	Caution.....	Governed by Signal
Yuba City.....	S. P. Co.....	No Signals.....	Stop—Except when proceed signal is received from flagman..	S. P. Co.
Live Oak.....	S. P. Co.....	Automatic Interlocking Signals.	20 mi. per hr.....	Governed by Signal
Stirling Jct.....	S. P. Co.....	No Signals.....	Stop.....	S. P. Co.
Sacramento:				
Front St.....	S. P. Co. Industry Tracks	SACRAMENTO BELT LINE No Signals.....	Caution.....	S. P. Co.
Front & "R" Sts.....	S. P. Co. & W. P. R. R.....	No Signals.....	Stop and Flag—Except when proceed signal is received from flagman.....	S. P. Co. & W. P. R. R.
Front & "X" Sts.....	C. C. T. Co.....	No Signals.....	Caution.....	Caution
19th & "X" Sts.....	W. P. R. R.....	Automatic Interlocking Signals.	10 mi. per hr.....	Governed by Signal
Alhambra Blvd. & "X" St.				
Jct. Joint Track.....	C. C. T. Co.....	No Signals.....	Stop.....	C. C. T. Co.
Alhambra Blvd. & "R" St.	S. P. Co.....	No Signals.....	Stop and Flag—Except when proceed signal is received from flagman.....	S. P. Co.
"R" St., Jct. Joint Track.	W. P. R. R.....	No Signals.....	Obtain permission from WP Dispatcher to enter Joint Track.	Caution
"B" St., Jct. Joint Track..	W. P. R. R.....	T. C. S.....		Governed by Signal
Haggin, Jct. Jt. Track.....	W. P. R. R.....	T. C. S.....		Governed by Signal
Sacramento, Westgate Yard.	Port Belt R. R.....	No Signals.....	See instructions on page 8.....	S. N. Ry.
WOODLAND BRANCH				
Mikon.....	S. P. Co.....	Automatic Interlocking Signals.	Stop. See instructions on page 11.	Governed by Signal
CHICO YARD				
D. M. Yard, all crossings....	D. M. Co.....	No Signals.....	Stop.....	D. M. Co.

YARD LIMITS			SIDE AND OVERHEAD OBSTRUCTIONS (Not Standard Clearance)		STOCK CORRALS			
WEST MP	YARD	EAST MP			Montezuma—SD	Peethill—SD		
26.9	Walnut Creek	27.6	General—All loading platforms—side.		Hebron—SD	Yolano—SD		
30.4	Meinert-Concord	32.4	General—Bulk loading chutes—side.					
38.6	Port Chicago	39.7	General—Receiving pipes at oil company spurs—side.					
42.2	McAvoy	42.8	Chico—Trees, side and overhead.					
44.5	Pittsburg	48.6	Marysville—Diamond Match Warehouse—side.					
49.7	Montezuma-Dozier	65.0	Marysville—Orange St. track—two dwellings—side.					
	Willotta Bch. }	0.3	Clarksburg—Sugar plant eaves—side.					
7.3	Vacaville Jct. }		Sacramento—Subway, side and overhead. Trainmen must not ride on top or side of cars when going through subway.					
	Vacaville }	4.5	Trainmen will at all times look out for low hanging trolley and span wires.					
7.3	Vacaville Jct. }		INTERCHANGE TRACKS					
	Willotta }	17.1	Las Juntas —S. P. R. R.					
73.7	Libfarm }	74.8	Clyde —Naval Ammunition Depot R. R.					
85.7	Riverview }	87.5	Port Chicago—A. T. & S. F. Ry.					
	Holland Bch. }	1.0	McAvoy —S. P. R. R.					
90.4	Sacramento }	97.7	Sacramento —W. P. R. R.					
	Woodland Bch. }	0.9	S. P. R. R.					
15.9	Woodland }	16.7	C. C. T. Co.					
11.5	Conaway }	12.1	Marysville —W. P. R. R.					
102.5	Rio Linda }	103.6	S. P. R. R.					
109.2	Sankey-E. Nicolaus }	119.1	Chico —S. P. R. R.					
129.7	Pearson-Alicia }	134.4						
134.7	Marysville }	139.6						
139.6	Colusa Jct. }	140.2						
0.0	Col. Jct.-Meridian }	13.6						
148.3	Live Oak }	149.3						
181.8	Chico }	188.8						

ADDITIONAL COMMERCIAL STATIONS			
Stations	Facilities for Handling	Mile Post	Capacity in Freight Cars
Dudley.....	CL	91.83	23
West Sacramento..	CL & LCL	92.24	15
Peethill.....	CL	92.84	15
Pencilwood.....	CL & LCL	97.84	5
Swanston.....	CL & LCL	98.06	9
Reed.....	CL & LCL	132.10	26
Oroville Jct.....	CL & LCL	165.07	6
CL—Carload freight. LCL—Less Carload Freight.			

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Dudley.....	CL	91.83	23
West Sacramento..	CL & LCL	92.24	15
Peethill.....	CL	92.84	15
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Reed.....	CL & LCL	132.10	26
Oroville Jct.....	CL & LCL	165.07	6

CL—Carload freight.
LCL—Less Carload Freight.

MAP OF SACRAMENTO NORTHERN RAILWAY AND CONNECTIONS

