

WORK SAFELY TODAY

EACH RULE VIOLATION IS A POTENTIAL ACCIDENT

ASSISTANT SUPERINTENDENTS

H. E. STAPP		 	 	Stockton
L. D. MICHE	ELSON	 	 	Sacramento

TRAINMASTERS

R. A. HENDERSON San	Francisco
P. E. RUTHERFORD	.Oakland
P. F. PRENTISS	San Jose
R. B. REDUS	·Oroville
W. W. GEIL	Keddie

ASSISTANT TRAINMASTERS

J. K. BRENNAN		San Jose
R. M. VERHAEGE		Stockton
R. A. CHRIST	South	Sacramento

TERMINAL TRAINMASTERS

V. H.	EDWARDS		 ٠			٠		O	ak	la	n	d-	S	a	n	Francisco
L. W.	BREINER.						, ,									Stockton

ROAD FOREMEN OF ENGINES

T. D.	HUNTER					٠.							 	Stockton
N. F.	ROBERTS				 		 ٠.	٠.		٠.				Oroville
J. C. 1	LUSAR		 											Keddie

CHIEF TRAIN DISPATCHER

E. J. HILLIER.....Sacramento

ASSISTANT CHIEF TRAIN DISPATCHER

G. L. HARLAN.....Sacramento

NIGHT CHIEF TRAIN DISPATCHERS

K.	w.	HUFF	MON	٠.					• •	٠.	٠	• •		٠	Sacramento
P.	JOS	SSERA	ND				 	 				. ,			Sacramento



WESTERN PACIFIC RAILROAD CO.



WESTERN DIVISION TIMETABLE

46

AT 12:01 A. M.
PACIFIC STANDARD TIME

FOR THE GOVERNMENT AND INFORMATION OF EMPLOYES ONLY

H. C. MUNSON,

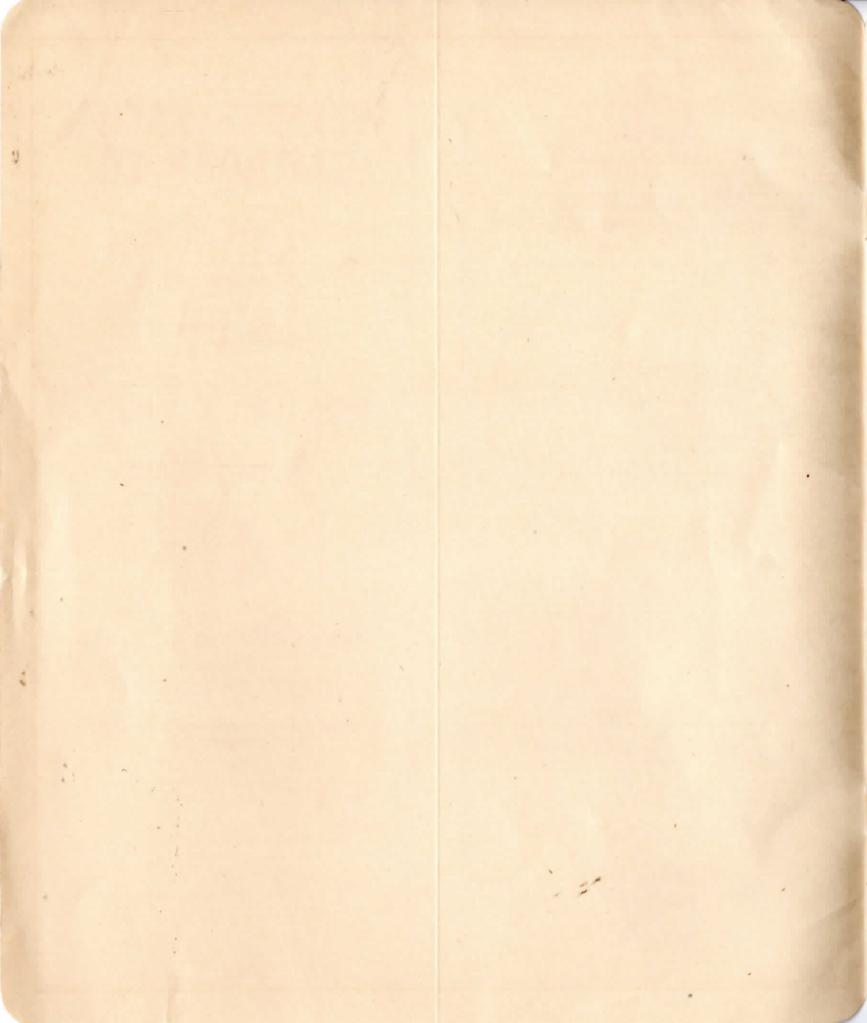
Vice-President and General Manager.

G. S. ALLEN,

Superintendent of Transportation.

M. M. CHRISTY,

Superintendent.



RAILROAD SURGEONS

LOCATION	NAME	TITLE
San Francisco, Calif	Dr. G. F. Cushman	Chief Surgeon
San Francisco, Calif	Dr. C. E. Smith	Asst. Chief Surgeon
San Francisco, Calif	Dr. Ruth Fleming	Local Surgeon
San Francisco, Calif	Dr. R. H. Bacon	Local Surgeon
San Francisco, Calif.	Dr. F. D. Fellows	Aurist
San Francisco, Calif	Dr. A. J. Brinckerhoff	Oculist
Oakland, Calif	Dr. J. P. Evans	Local Surgeon
Oakland, Calif	Dr. Bruce Fisher	Local Surgeon
Oakland, Calif	Dr. Fred Fisher	Local Surgeon
Oakland, Calif	Dr. R. F. Westerfield	Local Surgeon
Oakland, Calif	Dr. L. L. Coleman	Local Surgeon
Oakland, Calif	Dr. Wayne M. Caygill	Oculist
Oakland, Calif	Dr. Dudley Bell	Oculist
Alameda, Calif	Dr. D. D. Stafford	Local Surgeon
Alameda, Calif	Dr. John Ohanneson	Local Surgeon
Hayward, Calif	Dr. H. C. Crockett	Local Surgeon
Fremont, Calif	Dr. E. C. Grau	Local Surgeon
livermore, Calif	Dr. F. L. Herrick	Local Surgeon
San Jose, Calif	Dr. R. A. Larocca	Local Surgeon
San Jose, Calif	Dr. W. A. Johnson	Local Surgeon
racy, Calif	Dr. H. R. Ellis	Local Surgeon
Stockton, Calif	Dr. E. G. Hermosillo	Local Surgeon
stockton, Calif	Dr. P. H. McHugh	Local Surgeon
stockton, Calif	Dr. J. B. Pope	Local Surgeon
stockton, Calif	Dr. H. F. Ouinn	Local Surgeon
tockton, Calif	Dr. V. S. Solis	Local Surgeon
stockton, Calif	Dr. O. R. Vannucci	Local Surgeon
tockton, Calif	Dr. D. R. Powell	Oculist
stockton, Calif	Dr. Wm. H. Plageman	Oculist
odi, Calif	Dr. W. G. Fessler	Local Surgeon
odi, Calif	Dr. S. W. Leiske	Local Surgeon
acramento, Calif	Dr. D. O. Kilrov	Local Surgeon
acramento, Calif	Dr. P. W. Frame, Jr	Local Surgeon
acramento, Calif	Dr. B. A. Daley	Local Surgeon
Sacramento, Calif	Dr. R. M. Zinky	Local Surgeon
acramento, Calif	Dr. John A. Berg	Oculist
acramento, Calif	Dr. R. L. Alexander	Oculist
Marysville, Calif	Dr. P. B. Hoffman	Local Surgeon
roville, Calif	Dr. Chas. Benninger, Jr	Local Surgeon
roville, Calif	Dr. C. Craviotto	Local Surgeon
roville, Calif	Dr. C. Craviotto Dr. J. E. Patrick	Local Surgeon
roville, Calif	Dr. G. Boom	Local Surgeon
roville, Calif	Dr. E. S. Fortner, Jr	Local Surgeon
roville, Calif	Dr. R. D. Bethel	Oculist
uincy, Calif	Dr. D. J. Bleiberg	Local Surgeon
uincy, Calif	Dr. D. H. Mansell, Jr	Local Surgeon
uincy, Calif	Dr. J. F. Narkevitz	Local Surgeon
uincy, Calif	Dr. H. T. Unsell	Local Surgeon
reenville, Calif	Dr. W. C. Batson	Local Surgeon
Vestwood, Calif	Dr. H. G. Levin	Local Surgeon
lieber, Calif	Dr. A. O. Meier	Local Surgeon
ortola, Calif	Dr. C. W. Brown	Division Surgeon
Portola, Calif	Dr. W. S. Bross, Jr	Asst. Division Surgeon

WATCH INSPECTORS

LOCATION	NAME	TITLE
San Francisco, Calif San Francisco, Calif Oakland, Calif Oakland, Calif Oakland, Calif San Lorenzo, Calif Fremont, Calif San Jose, Calif Livermore, Calif Stockton, Calif Stockton, Calif Marysville, Calif Marysville, Calif Oroville, Calif	C. D. Fabrin A. Solari Fruitvale Jewelers Leroy D. Wertz Don J. Allphin Kurt J. Prosch Hoyle Easley Kochers C. Harlie Power Conrad Mantele H. T. Harger John J. Fargo Philip K. Schmidt E. L. Stewart	Manager of Time Service Watch Inspector

SPEED TABLE

PER	ILES PER IOUR
36"	97.3 94.7 92.3 90
41" 42" 43" 44" 45"	87.8 85.7 83.7 81.8 80
46" 47" 48" 49" 50"	78.3 76.6 75 73.5 72
51"	70.6 69.2 67.9 66.7 65.5
56"	64.3 63.2 62.1 61 60
1'01"	59 58.1 57.1 56.2 55.4
1'06"	54.5 53.7 52.9 52.2 51.4
1'11"	50.7 50 49.3 48.6 48
1'16"	47.4 46.8 46.2 45.6 45
1'25"	42.4 40 37.9 36 34.3
1'50"	32.7 31.3 30 26.7 24
2'45"	21.8 20 17.1 15 12
6'00"	10 8.6 8 7.5 6

PO	2						FIRS	ST SUE	BDIVISIO	N—Eastwa	rd			
Fo						MANIF	EST FRE	IGHTS		FIRST CLAS	ss .	H 83	Timetable No. 46	E par
PO		Symbols, Rule 6-A.	r Capacity of Sidings	Office Calls	8. W. G.				T. O. F.		California	Distance fr San Francis		Distance from Oakland yard
Pro			3		Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Ex Sun & Mon	Leave Sun., Wed., Fri.	Leave Daily		STATIONS	
DET Yard Mo PM PM PM PM PM PM PM		FO		Co							AM 10.00	0.0	San Francisco	
Fire		FO	-	<u> </u>							10.25		0akland Yard	
1	1	BK	Yard	Md	PM 10.00	AM 10.00		AM 7.00	AM 12.30		AM			0.
1				1110	10.00	10.00		1.00	12.00		10.00		1.1 SP Crossing	1.
S 4.40 \$10.45 6.6			-	_						4.32	10.36		0.1	1.
1	Yard imits	1	_	_									OAKLAND S	1.
1		-							·····-				0.6 SP Crossing	2
1		,								4.45	10.49		CLINTON (SP X'ing.)	3.
Total Control Contro		1									10,12		FRUITVALE	4
P 68		7	-							1.52			1.0	5
P			60								11.00		0.7	6
P			- 00	-							11.00		ELMHURST (SP X'Ing.)	•
P			4	Dr						5.05			SAN LEANDRO	10
P 76 Cn			147										HAYWARD	15
P		12.00		-					····		s11.22	29.7	9.6 FREMONT	25
NILES JUNCTION NILE			- 70	- 01		• • • • • • • • • • • • • • • • • • • •			•••••	3.23	<u> </u>		0.6	2!
P 87				_			AM 8 00							2
P			97	_			0.00						#FARST	3
P			- 0,	Tn						5.41	11.38		BI FASANTON	3
Table Tabl				-						3.41	11.50		1.2	3
P 80							• • • • • • • • • • • • • • • • • • • •						0.27	3
P				-				• • • • • • • • • • • • • • • • • • • •		5.51				4
P 109 6.13 12.06 63.3											11.57			5
YP 216 Cb				-		• • • • • • • • •					PM			5
Table Tabl				Ch									9.5 CARBONA	6
P			210	- 00		,				0.24			1.25	6
I			*111	-						6.35				7
BK FTPO Yard Sn AM PM AM AM AM AM AM AM				-						0.33			2.35	7
I 93.2 AT&SF Crossing S 6.53 8 12.37 93.8 STOCKTON (SP X'ing.) Arrive Daily Arrive Daily Arrive Daily Ex Sun & Mon Arrive Bun., Wed., Fri. Arrive Daily Med., Fri.			Vard	Se	1.30 AM	2.00 PM	10.00 AM	10.00 AM	3.30 AM	6.49	12 33		7.55	8
I S 6.53 8 12.37 93.8 STOCKTON (SP X'ing.) Arrive Daily Arrive Daily Arrive Daily Ex Sun & Mon Arrive Bun., Wed., Fri. Arrive Daily		10.22	Taid	- 511			,			0.40	12.55		1.2	8
Arrive Daily Arrive Daily Arrive Daily Arrive Daily Ex Sun & Mon Arrive Bun., Wed., Fri. Arrive Daily				-						s 6.53	812.37			8
			7	-	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily					
	-			-	The same and the s				- Za Gair & Mon	2	18			

Nos. 17 and 18 receive and discharge passengers to and from San Francisco at Middle Harbor Road, Oakland Yard.

Nos. 2 and 18 must obtain clearance at Oakland Yard.

Nos. 1 and 2 will stop on flag at any station to receive or discharge passengers.

No. 18 will stop on advance notice or on flag at Pleasanton for revenue passengers destined Salt Lake City or beyond.

No. 18 will stop at Pleasanton Monday to Friday inclusive to discharge baggage.

No. 17 will stop at Pleasanton to discharge revenue passengers from Salt Lake City or beyond.

RULE D-71. Trains have no timetable superiority between Clinton and Chestnut Jct.

Yard engines must obtain information as to when first-class trains are due and avoid delaying them and give way promptly to other trains.

Special instructions on pages 2 and 3 will apply to both pages where applicable.

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

RULE 92. First-class trains must respect schedule shown.

RULE D-151. Before trains are authorized to move against the current of traffic between Clinton and Chestnut Jct. train dispatcher must first contact yardmaster Oakland Yard advising him of such impending train movement. After yardmaster has informed train dispatcher yard engines have been notified and track to be used will be clear, train movement against the current of traffic will be authorized as follows:

Westward: By signal indication per Rule 292-A at absolute signal Clinton.

Eastward: By train order form reading "No._____ use westward main track Chestnut Jct. to Clinton."

Yard engines must move with current of traffic when practicable, using crossovers to move to other track to perform work. Yardmaster may authorize long moves against the current of traffic after obtaining information that opposing trains or yard engines will not be encountered. If impracticable to contact yardmaster and it is necessary to make a long move against the current of traffic, engine foreman may arrange such move after obtaining similar information. Short moves against the current of traffic may be made at any time except when first-class trains are due or when informed by yardmaster a train will move against the current of traffic.

Special instructions on pages 2 and 3 will apply to both pages where applicable.

4						SEC	OND S	UBDIVISI	ION—Eastw	/ard			
47-4	.,			M	ANIFEST	FREIGH	TS		FIRST CLAS	ss	from	Timetable No. 46	from
Symbols, Rule 6-A.	Car Capacity of Sidings	Office Calls	E.B.M.	EXP.	G. G. M. F. B.	N. C. X.	T.O.F.	8. W. G.	2 Zephyrette	18 California Zephyr	Distance from San Francisco	October 25, 1959	Distance from Stockton Yard
	3		Leave Daily	Leave Tues., Wed.,Sat.	Leave Daily	Leave Daily	Leave Daily Ex Sun & Mon	Leave Daily	Leave Sun., Wed., Fri.	Leave Daily		STATIONS	
BK TPO	Yard	Sn	PM 6.00	PM	PM 3.00	PM 1.00	AM	AM 3,00			92.0	TO-R STOCKTON YARD	0.
			-		9.55						93.2	AT&SF Crossing	1
						• • • • • • • • •			PM 6.55	PM 12.40	93.8	STOCKTON (SP X'Ing.)	1
	45	-		• • • • • • • • • • • • • • • • • • • •						12.10	94.3	FLORA STREET	2
P	1.0	-			•••••						95.1	EL PINAL (SP X'ing.)	3
	117	-									97.9	HAMMER LANE	-
	70	-							7.00	12.52	104.6	6.7 KINGDON	12
	70	-					• • • • • • • • •		7.09	12.52	104.6	TERMINOUS JUNCTION	13
P	71	- ND				• • • • • • • • •	• • • • • • •		7.20		113.9	1ERMINOUS JUNCTION 8.4 THORNTON	21
	71	- Nh				• • • • • • • • • • • • • • • • • • • •			7.20			8.0	29
	128	-				• • • • • • • •			7.42	10	121.9	PHILLIPS 10.5	
TDO.	96	-	PM	1	PM	PM	I		7.43		132.4	TO-R SOUTH SACRAMENTO	4
FPO	Yard	Jy	8.00		5.00	3,00			7.50	1.24	136.5	1.0	44
_		-									137.5	"X" ST. (CCT and SN X'ing.)	4
Y	-	Sr Ra									138.0	"X" ST. (CCT and SN X'ing.) 0.5 "R" ST. (SP Crossing) 0.6 SACRAMENTO	4
Р	-	Ds Ds							s 8.00	s 1.35	138.6	SACRAMENTO 0.9	4
											139.5	HAGGIN (SN Conns.)	4
											140.7	GLOBE (SN Conn.)	4
•	122								8.08		143.6	DEL PASO	5
,			Í						TV TV		152.5	SANKEY (\$N X'Ing & Conn.)	6
P	125								8.23	1.54	156.5	PLEASANT GROVE	6
P	76								8.30		161.5	TROWBRIDGE	6
P	73								8.43		172.5	EAST ARBOGA	80
P +									3-4-1		175.63	SN CONNECTION	8:
P	101								s 8.55	s 2.18	178.8	MARYSVILLE	8
IP									Jan Hall		180.2	BINNEY JCT. (SP X'ing.)	88
P	72								9.04		186.0	5.8 TAMBO	94
P	125								9.11		193.0	CRAIG	10
BKF TYPO	Yard	Yd	10.00 PM	7.20 PM	7,00 PM	5,30 PM	6,45 AM	6.15 AM	9.21		202.9	TO-R OROVILLE YARD	110
BKP	47	Vi					-	7	s 9.25	s 2.43 PM	205.1	TO-R OROVILLE	113
3Kr	-4.	· \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Arrive Daily	Arrive Tues., Wed.,Sat.	Arrive Daily	Arrive Daily	Arrive Daily Ex Sun & Mon	Arrive Daily	Arrive Sun., Wed., Fri.		200	CIO-R ONOTILL	
	-	-		Wett., pass		-	Ex bun & mon		2	18			

Nos. 1 and 2 will stop on flag at any station to receive or discharge passengers.

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

Sacramento Northern trains and engines will be governed by Western Pacific timetable and operating rules.

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

			SEC	OND SUBD	IVISION-	-West	ward					
from	Timetable No. 46	from	FI	RST CLASS	T		M	ANIFEST	FREIGHT	rs		
Distance from San Francisco	October 25, 1959	Distance from Oroville	1 Zephyrette	17 California Zephyr	G. W. S.	Р. С.	CAL.	C. F. S.	P. B. F.			
	STATIONS		Arrive Mon., Thurs., Sat.	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily				
92.0	TO-R STOCKTON YARD	113.1			AM 7.00	AM 10.00	AM 10,30	PM 2,00	PM 7.00			
93.2	AT&SF Crossing	111.9				10.00	10.00	2.00	1.50			
93.8	STOCKTON (SP X'ing.)	111.3	8 3.53	PM s 1.07								
94.3	FLORA STREET	110.8	8 3.33	1.04								
95.1	EL PINAL (SP X'ing.)	110.0			—							
97.9	HAMMER LANE	107.2										
104.6	KINGDON 0.9	100.5	3.39	12.52								
105.5	TERMINOUS JUNCTION	99.6		18							• • • • • • •	
113.9	THORNTON 8.0	91.2	3.29				• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •				
121.9	PHILLIPS 10.5	83.2		12.33			• • • • • • • • • • • • • • • • • • • •			• • • • • • • •		
132.4	POLLOCK 4.1	72.7	3.04				•••••		•••••	• • • • • • •		• • • • • •
136.5	TO-R SOUTH SACRAMENTO	68.6	2.58	12.18	5.00	1	9.00 AM					1
137.5	"X" ST. (CCT and SN X'ing.)	67.6	-		AM		AM					
138.0	0.5 "R" ST. (SP Crossing)	67.1									• • • • • • •	
138.6	SACRAMENTO	66.5	8 2.50	s 12.10	— ······		• • • • • • • • • • • • • • • • • • • •				• • • • • • • •	
	HAGGIN (SN Conns.)	65.6		PM						• • • • • • • • •		
40.7	GLOBE (SN Conn.)	64.4	-									
43.6	DEL PASO	61.5	2.38	11.58 AM								
152.5	SANKEY (SN X'ing & Conn.)	52.6	-	AM								
56.5	PLEASANT GROVE	48.6	2.24									
161.5	TROWBRIDGE	43.6	2.18	11.41								
172.5	EAST ARBOGA	32.6	2.07					• • • • • • • • •		• • • • • • • •	• • • • • • • •	• • • • • • •
175.63	3.13 SN CONNNECTION	29.47								• • • • • • • •		
178.8	3.17 MARYSVILLE	26.3	s 2.00	s 11.24								
180.2	BINNEY JCT. (SP X'ing.) 5.8	24.9	-									
86.0	5.8 TAMBO	19.1	1.50	11.14								
93.0	7.0 CRAIG	12.1	1.43									
202.9	TO-R OROVILLE YARD	2.2	1.33	10.58	2.30	6.30	7.00	10,30	4.00			1
205.1	TO-R OROVILLE	0.0			AM	AM 6.30	AM	_AM	PM_	100	-0,100	-
		-	1.30 AM Leave Mon.,	10.55 AM	I acua Dalli-	Leave Daily	Leave Daily	Lanua Dalli-	Lane Dall			
			Thurs., Sat.	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily			-
			1	17								

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

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

South Sacramento is register station for Sacramento Northern

trains originating and terminating only.
Sacramento Northern trains need not register at Stockton Yard.

RULE 92. First-class trains must respect schedule shown.

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

6						THI	RD SU	BDIVISI	ON—Eastwo	ard				П
				M	ANIFEST	FREIGHT	rs	7 1	FIRST CLA	FIRST CLASS		Timetable No. 46		n p
Symbols, Rule 6-A.	Car Capacity of Sidings	Office Calls	G. G. M. F. B.	N. C. X.	EXP.	T. O. F.	s. w. c.	E. B. M.	2 Zephyrette	18 California Zephyr	Distance from San Francisco		October 25, 1959	Distance from Oroville Yard
	2		Leave Daily	Leave Daily	Leave Tues., Wed., Sat.	Leave Daily Ex Sun & Mon	Leave Daily	Leave Daily	Leave Sun. Wed., Fri.	Leave Daily			STATIONS	
KF YPO	Yard	Yd	PM 8.30	PM 8.00	PM 7.45	AM 7.15	AM 7,15	AM 12,01			202.9	TO-R	OROVILLE YARD	0.0
KP	47	Vi	0.00	0.00	7,40	1.10	1,10	12.01	PM 9.35	PM 2.50	205.1	TO-R	OROVILLE	2.
	84								9.42	2.56	209.3		QUARTZ	6.
	88								9.48	3.01	212.9		BIDWELL	10.
	83				• • • • • • • • • • • • • • • • • • • •				9.56	5.01	217.6		BLOOMER	14.
	90								10.09	3.20	224.1		BERRY CREEK	21.
	93								10.24	3.33	231.2		DAVID	28
	76								10.34	3.41	235.2	- 100	4.0 POE	32.
	122	_							10.44	3.49	239.5		PULGA	36
	79								10.54	3.57	243.5		CRESTA	40
	73								11.04	4.05	247.6		MERLIN	44
	55								11.16	4.15	253.1		TOBIN	50
	83								11.21	4.19	255.3	System	CAMP RODGERS	52
	94								11.37	4.28	260.1	ol Sy	BELDEN	57
	73								11.47	4.37	264.6	Control	RICH BAR	61
	75								PM 11.58	4.48	270.2	Traffic	VIRGILIA	67
	85								AM 12.06	1.10	273.7	4	TWAIN	70
	84								12.13	5.01	277.3		PAXTON	74
TP	Yard	Kd		AM 1.00	10.40 PM		AM 11,30		s12.23	s 5.10	281.5	TO-R	4.2	78
	84	ILU		5			11,00		12.28	5.16	284.5		SIERRA	81
	76	_							12.35	5.22	287.9		QUINCY JUNCTION	85
	83								12.43	5.30	292.6		MASSACK	89
	92								12.50	5.37	296.4		SPRING GARDEN	93
	85								12.59	5.46	301.6	-	SLOAT	98
	85	-							1.05				TWO RIVERS	102
	98	-							1.14				BLAIRSDEN	107
	82	_							1.14				MABIE	115
K YPO	Yard	Ki	2.00 AM	3.00 AM		12.30 PM	PM 1.30	6.00 AM	s 1.35	s 6.20	321.4	TO-R	2.7	118
110	Tard	Ai	Arrive Daily		Arrive Tues., Wed., Sat.	Arrive Daily			Arrive Mon., Thurs., Sat.		JE114	(10-1	I be try add to be t	
		-							2	18				

RULES 83-A and 83-B. Keddie is register station for trains originating and terminating only.

Nos. 17 and 18 register by ticket at Portola.

RULE 92. First-class trains must respect schedule shown.

Nos. 1 and 2 will stop on flag at any station to receive or discharge passengers or express.

The regularly assigned local freight trains may handle passengers to and from points between Oroville Yard and Keddie on days on which they operate.

Special Instructions on pages 6 and 7 will apply to both pages where applicable.

The following will govern use of retainers on westward freight trains Portola to Bloomer:

Retainers will not be used on westward freight trains handled by four unit locomotive with dynamic brakes operative unless, in the judgment of engineer, their use is necessary.

On westward freight trains being handled by locomotive with dynamic brake inoperative, if in the judgment of engineer retainers are necessary, sufficient retainers will be used to control speed of train while brake pipe pressure is being restored.

If, in the judgment of engineer, the number of retainers is unsatisfactory, stop must be made and retainers turned up in accordance with his instructions.

When retainers are used, they will be applied to cars on head end in a block of not less than 15 cars. Retainers are to be used in low pressure position, which is horizontal. Should wheels show a tendency to heat retainers must be alternated.

Special Instructions on pages 6 and 7 will apply to both pages where applicable.

8			F	OU	RTH SUBDIVISION	l—Eastv	vard		11
				SECOND C	LASS		mm.)	Timetable No. 46	
		Symbols, Rule 6-A.	Car Capacity of Sidings	Office Calls	24	156 N. C. X. or EXP.	154 s. w. g.	Distance from San Francisco (Via 4th Sub. Conn.)	October 25, 1959
			0			Leave Daily	Leave Daily		STATIONS
	Yard Limits	BKFTP	Yard	Kd		PM 8.00	AM 11.00	280.8	TO-R KEDDIE
	Limite	P	86	110	\ \	8.16	11.19	287.0	MOCCASIN 6
		P	13			8.20	11.23	289.4	CRESCENT MILLS
		P	86	Gi		8.29	11.32	295.5	TO GREENVILLE 14
		WYP	86			8.55	PM 12.07	306.2	10.7 ALMANOR 25 7.0
		P	86			9.12	12.24	313.2	LASSEN VIEW 32
		P				9.18	12.31	316.0	CLEAR CREEK JCT. 35
	Yard Limits	KYP	Yard	Wd		9.27	12.41	320.2	TO WESTWOOD
		P		_		9.35	12.50	324.3	MASON 2 4
			86	_		9.36	12.51	324.9	8.4
		P	86	_		9.48	1.07	333.3	10.4
		P	86	_		10.02	1.21	343.7	13.5
		YP	86	-		10.20	1.39	357.2	7.9
		P	86	-		10.39	1.58	365.0	6.0
		P	86	-		10.54	2.13	371.0	4.6
		P	86	-		11.05	2.24	375.6	6.1
		P	86	_		11.20	2.39	381.7	8.6
	Yes 1	P	86	_		11.40	3.00	390.3	PIT RIVER 109
	Yard Limits	BKYP	Yard	В		11.45 PM		392.6	TO-R BIEBER 111
						Arrive Daily	Arrive Daily		

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

The following will govern use of retainers on freight trains being handled by locomotives with dynamic brake operative on four units:

Almanor to Greenville

D-225. One retainer for each 50 tons in excess of 3600 tons. D-239. One retainer for each 50 tons in excess of 4250 tons.

Halls Flat to Little Valley

D-225. One retainer for each 50 tons in excess of 3900 tons. D-239. One retainer for each 50 tons in excess of 4700 tons.

In the event one or more units become inoperative, or in the judgment of the engineer, more retainers are needed, stop must be made and trainmen must turn up retainers in accordance with his instructions.

When handled by locomotive with dynamic brake inoperative, trainmen will turn up one retainer for each 90 tons in train.

On westward trains between Dixie and Little Valley, Norvell and Almanor, Moccasin and Keddie, and on eastward trains between Dixie and Pit River, retainers will not be used unless in the judgment of engineer their use is necessary to assist in controlling speed of train while brake pipe pressure is being restored.

When retainers are used, they will be applied to cars on head end in a block of not less than 15 cars. Retainers are to be used in low pressure position which is horizontal. Should wheels show a tendency to heat, retainers must be alternated. Trains carrying SWG, EXP and CAL symbols will not handle passengers to or from any intermediate points between Keddie and Bieber.

Other trains will handle passengers.

154

156

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

In Bieber Yard trains will be governed by Great Northern timetable and transportation rules. Rule 93, Great Northern

10.20

Leave Daily

153

4.30 PM

Leave Daily

155

TO-R

BIEBER

Transportation Rules, reads as follows:
"Within yard limits the main track may be used, clearing firstclass trains when due to leave the last station where time is shown. 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 protect-

ing against second and inferior class, extra trains and engines.
"Within yard limits second and inferior class, extra trains and

engines must move at restricted speed. "Within yard limits when running against the current of traffic or on a portion of double or three or more tracks used as single track,

all trains and engines must move at restricted speed."

Definition of "Restricted Speed" in Great Northern Transporta-

tion Rules is:
"Proceed prepared to stop short of train, obstruction or anything that may require the speed of a train to be reduced."

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

Serviceable portion of west leg of wye ends 584 feet west of east wye switch (109 feet east of Bridge 280.61) and bumper in place at that location.

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

Poison Lake. Log loading track. Due to impaired clearance on both sides and overhead on this track at the log loading dock, midway of track, trainmen and enginemen are not permitted to operate over the track in front of the log loading dock. Signs reading "W. P. TRAIN AND ENGINE CREWS MUST NOT OPERATE BEYOND THIS POINT" are placed at either approach to loading dock.

Switch point derail in service at clearance point both ends of log loading track. These derails must be left in derailing position except when track is actually being switched.

Jellico. Log loading track capacity 40 cars connected both ends leads off south side of siding.

Switch point derail on east end of this track and there must be no failure to leave it in derailing position except when track is actually being switched.

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

10	Ec	astwo	ırd	FIRST SU	FIRST SUBDIVISION "A"—SAN JOSE BRANCH			CH	Westward			
				MANIFEST FRE	EIGHT		71 4 11 N 40	_=	M	ANIFES	T FREIGH	T
	Symbols, Rule 6-A.	r Capacity of Sidings	Office Calls		A. P. F.	Distance from Niles Junction	Timetable No. 46 October 25, 1959	Distance from San Jose Freight Station	8. J. P.			
		Car			Leave Daily	OZ	STATIONS	Sa	Arrive Daily			
	P	76	Cn				FREMONT					
	YP.				PM 10.00	0.0	NILES JUNCTION	23.0	AM 8.00			
	P	Spur 1E				3.3	NILES JUNCTION 3.3 IRVINGTON	19.7				
	P	Spur 1E 10				6.8	WARM SPRINGS	16.2				
	P	Spur 1E				8.0	CURTNER	15.0				
	P	E71 W77				11.5	CURTNER 3.5 MILPITAS	11.5				
	P	Spur 1E				14.1	BERRYESSA	8.9				
	BK FTPO	Yard	Sx		12.01 AM	17.5	TO-R SAN JOSE YARD	5.5	AM 6.00			
						19.6	VALBRICK (SP X'ing.)	3.4				
Yard Limits	I				2	20.4	WILLOW GLENN (SP X'ing.)	2.6				
	I					22.3	WEST SAN JOSE (SP X'ing.)	0.7				
l		Yard				23.0	SAN JOSE FREIGHT STATION	0.0				
					Arrive Daily				Leave Daily	141		
	-											

Eastv	ward F		FIRST SUBDIVISION "B"—CARBONA BRANCH						
	Symbols, Rule 6-A.	Car Capacity of Sidings	Office Calls		Distance from Carbona	Timetable No. 46 October 25, 1959	Distance from End of Branch	111	
						STATIONS			
	YP	216	Cb		0.0	CARBONA	2.2		
	РО	63			1.7	KERLINGER	0.5		
	7	Spur 1W 18			1.92	TEEKAY	0.28	ed as the second	
					2.2	END OF BRANCH	1 0.0	inc mail Mar	

RULE 201. Train order authority is not required on Carbona Branch and all movements on branch must be made at yard speed.

East	ward	SECC	ND SUBDI	VISION "	A"—TERMINOUS I	BRANCH	West	ward
	Bymbols, Rule 6-A.	Car Capacity of Bidings		Distance from Terminous Jct.	Timetable No. 46 October 25, 1959	Distance from Terminous	to service of the ser	
- 5		"			STATIONS			
- 15	YP	31		0.0	TERMINOUS JCT.	7.8	(4)	M1
1		16		3.5	GARDEN	4.3		
Yard J		3		6.6	GRASS	1.2		
Yard Limits		Yard		7.8	TERMINOUS	↑ 0.0		

RULE 201. Train order authority is not required on Terminous Branch and all movements on branch must be made at yard speed.

ALL SUBDIVISIONS

All times as shown for trains at Stations on schedule pages are Pacific Standard Time. Trains will continue to operate on Pacific Standard Time during period that Daylight Saving Time is in effect.

RULE 10-J. Yellow round speed-control boards indicate the maximum permissible speed of California Zephyr trains, except between Oroville and Portola, California Zephyr trains will be governed by speeds indicated on white oval speed-control boards for passenger

RULE S-17. Figures indicating "Car Capacity of Sidings" are number of cars, based on average allowance of 48 feet per car, that tracks will hold between clearance points, plus 250 feet for engine

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

RULE 34. The fireman on a freight train must not leave the forward cab while train is in motion unless authorized by the engineer, who must give four short sounds of alarm gong to indicate that head brakeman must immediately come forward and comply with Rule 34 before fireman leaves and until return of fireman. When third seat is available, head brakeman will ride in forward cab.

RULE 82-A. Trains in T. C. S. territory which change engines at intermediate stations need not obtain a new clearance.

RULE 101-B. When tracks are covered by water and it is known they are safe for movement, engines may be operated over them only if the water is below the traction motor frames, not exceeding 5 MPH.

RULE 105. On First Subdivision, except Carbona, on Second Subdivision and at Oroville and Keddie, sidings between clearance points are not included in signal circuits.

RULE 110. Freight trains need not stop for train inspection if train is operating normally, except westward trains on Third Subdivision requiring use of retainers must stop for inspection at Belden unless train has been inspected at Keddie, in which case, they may run from Keddie to Bloomer for inspection.

If stops for train inspection are contemplated and if practicable to do so, train dispatcher should be notified in advance of any such

stops

When weather conditions restrict visibility, the conductor will designate any stops or additional stops for inspection that in his judgment, are necessary.

RULE 342. When operating RDC 375 and 376 in T.C.S. or block signal territory every precaution must be taken when using sand to prevent coming to a stop with wheels resting on layers of sand. Conditions permitting, sand should be shut off at least two car lengths in advance of the point where car finally stops. When conditions require sand to be used until car is stopped, immediately after stopping the engineer or hostler will sound signal 14 (b), and upon receiving proceed signal from trainman or hostler helper will move car forward at least fifteen (15) feet. Trainmen must not permit passengers to detrain or entrain until after second stop is made.

RULE 509. When a train becomes disabled in a block between stations, and the conductor or engineer has given train dispatcher assurance it is unable to proceed, the train dispatcher may, after an understanding has been reached with the conductor or engineer of the disabled train, verbally authorize another train in opposing direction to enter the block under flag protection to relieve the dis-abled train. When a train is reported disabled to the train dispatcher, it must thereafter not be moved in either direction until relief train has arrived, or unless otherwise instructed by the train dispatcher.

RULE 540. Traffic Control System extends from Clinton to Portola and from absolute signals located just west of tail of wye

switch at Niles Junction to west yard limit San Jose, MP BR-15.25.
On First, Second and Third Subdivisions, including First Sub--San Jose Branch, trains will be authorized by clearance at terminals. Trains originating at intermediate stations will be authorized verbally by train dispatcher, except at a station where an operator is on duty.

Conductor, or engineer if there is no conductor, of a train authorized verbally, must ascertain from the train dispatcher what instructions are outstanding as to track conditions on that portion of the

system over which movement is to be made.

Trains on First and Second Subdivisions which are operated through Stockton and Stockton Yard with the same conductor may be issued Form Y train orders affecting their movement on either or both Subdivisions and may assume corresponding schedules or run extra from Stockton or Stockton Yard without obtaining clearance. When engine crews are changed at Stockton or Stockton Yard, incoming engineer must deliver clearance, train orders and instructions to outgoing engineer.

RULE 547. When a train is standing or switching in a block at a station, train dispatcher may authorize another train to flag into the block to perform work. Crew of train so authorized must have an understanding with crew of train occupying the block before entering and must fully protect their movements against any movements by the train originally occupying the block.

Switching movements not to exceed one initial and one reversal of direction may be made by signal indication. In each case, the movement must be completed beyond the opposing absolute signal. The foregoing is not to conflict with a reverse movement as prescribed

by Rule 548.

RULE 550. The areas in which authority will be granted to use switches within work limits when work time is obtained are between:

East switch Kohler and west switch Stockton Yard (MP 90). East switch Flora St. and west switch Oroville Yard, except

electrically-locked switches between switches of sidings and North Channel line switch.

San Jose Branch, Niles Jct. and MP BR-15.25.

When a train or engine is to clear the main track at an electrically-locked switch, after it has entered the block in which the switch is located, the train dispatcher must hold all signals governing movement into that block at STOP and apply red tags to the levers controlling such signals. When movement is clear of main track and switch again normal, crew member will then report to train dispatcher that train or engine is clear. Until crew member so reports train dispatcher must not remove red tags from levers controlling the signals involved.

RULE 825. Modified to extent that diesel engines not exceeding two units, may be used behind 400 and 600 series cabooses.

RULE 826. When necessary to handle a car ahead of the engine between stations, it must be chained to engine unless air brakes are cut in and operative.

RULE 830. When setting out cars with hot boxes trainmen must make sure the fire from burning or blazing packing has not been communicated to body of the car or lading. Where conditions warrant a member of the crew must go underneath and make very close inspection of car flooring to make sure that there is no smouldering fire therein.

RULE 831. When steam shovels, cranes, pile drivers, ditchers, spreaders or similar equipment are handled in trains, other than work trains in service, they must be placed on rear, unless otherwise directed. If picked up at a point where they cannot be placed on rear, they may be placed on head end and switched to rear at first station where possible to do so.

RULE 1011. When engine is not detached from train on No. 17 or No. 18 at Oroville, or on No. 17 at Portola, it will not be necessary for outgoing enginemen to check supplies and equipment.

FIRST SUBDIVISION

RULE 292-A. Switches of certain tracks are not electrically-locked or signalled. Except in emergency a train must not clear main. track on such tracks. If necessary to clear, permission must be obtained from the train dispatcher before again entering main track and provisions of Rule 520 will apply.

Switching may be done at these switches without work authority provided part of train is left at all times on main track within the block being used. Train dispatcher should be advised when such

switching is to be done between stations.

Oakland.

(a) Street Crossing at Third and Broadway must not be blocked. A westward train finding an eastward passenger train at passenger station will not pass Franklin St. until eastward train leaves

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

(c) 66th and Seminary Avenue Crossings must be cut when blocked more than five minutes.

San Leandro. Absolute signal governing movement from siding to main track, lock 430-C, will display aspect per Rule 288 when main track switch is in reverse position and will continue to display aspect per Rule 288 for movement from siding as long as main track switch is in reverse position.

When signal displays aspect per Rule 288, trains and engines may proceed at restricted speed prepared to stop until the next signal

in advance can be determined.

(a) 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 or horn and bell only when necessary to prevent accident.

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

operate beyond this point.

(c) A lunar white marker light on 7-foot mast is located to the right of the siding at MP 20.15. Eastward trains moving on siding finding this lunar white marker light illuminated may proceed to east siding switch and be governed by signal indication displayed there. Eastward trains finding this marker light extinguished must stop before passing it and contact train dispatcher for instructions.

Train dispatcher's telephones are located in booth adjacent to

marker light mast and in baggage room.

Decoto. Eastward trains setting out, picking up or doing other work stop clear of and west of the "F" Street grade crossing (No. 4-26.4), leaving sufficient room for cars picked up and engine west of that crossing.

Pabrico. Spur serving American Forge Co. east connected. Switch is electrically-locked and is protected by hand-throw derail. Derail is not electrically-locked and must remain in derailing position until release of electrically-locked switch is obtained. Derail actuates signals on main track when not in derailing position.

Instructions for operation of electrically-locked switch and derail

posted in telephone booth.

Engines will not operate beyond a point 15 feet inside of industry's gate.

Fremont. Look out for heavy movement of gravel trucks using Shinn Road crossing over main track, siding and back track 800 feet west of Station. Engineers must prolong horn or whistle signal 14 (1) approaching and passing over this crossing on any of the above named tracks.

Train dispatcher's telephone located in baggage room.

Niles Tower. RULE 670. Reverse movements may be made within interlocking limits without obtaining permission from the towerman provided a portion of the train or engine is between interlocking home signals.

Rhodes and Jamieson Spur. Switch is electrically-locked and is protected by hand-operated derail. Derail is not electrically-locked and must remain in derailing position until release of electric locked switch is obtained. Derail will actuate signals on main track when not in derailing position.

Trevarno. Drill track, Switch is electrically-locked and is protected by hand throw derail. Derail is not electrically-locked and must remain in derailing position until release of electrically-locked switch is obtained. Derail actuates signals on main track when not in derailing position.

Instruction for operation of the electrically-locked switch are

posted in telephone booth.

Altamont. Water cars spotted on house track are connected with underground water line. They must not be moved except on special instructions.

Carbona.

(a) Engines must move with extreme care not exceeding 3 MPH while moving over frogs and switches and around curves on

(b) Main track and inside crossover switches at east end are dualcontrol. When either switch is placed in hand-throw position the other switch is disconnected from power operation and it is then un-

necessary to place it in hand-throw position.

Signals governing movement over inside dual-control switch are controlled by train dispatcher. When signals display indication per Rule 288, movements may be made to or from SP interchange and engines may drill over this switch without placing it in hand-throw position. If signals display STOP indication per Rule 292 and reason is not apparent or if call light is lighted on adjacent telephone booth, train dispatcher must be contacted promptly.

Carbona siding is included in signal circuits and must not be fouled or occupied unless authorized by an absolute signal indication or by permission of the train dispatcher.

San Joaquin River Bridge. Train dispatcher's telephone located in booth on north side of track east end of bridge.

Army Supply Depot (Lathrop).

(a) At west end, normal position of all switches in switching lead lined for switching lead. Do not exceed 10 MPH on switching lead or interchange trackage with Army Supply Depot.

(b) Tracks 2 and 3 are to be used for setting out and picking up cars.

Stockton Yard.

(a) Eastward trains, caboose hops and light engines will be governed by signal indication entering Stockton Yard.

Eastward trains which head in at MP 90.85 call yardmaster on

telephone located near switch for track instructions.

Eastward trains which head in at MP 90, stop at phone booth south side of track just west of Bridge 90.4 and call yardmaster for track instructions. Eastward caboose hops and light engines which head in at MP 90 will proceed via No. 2 lead through crossover west of Bridge 90.97-C to No. 3 lead and No. 15 track to yard office and roundhouse track.

(b) Switch leading to Tidewater Southern main track just west Bridge 90.4, normal position lined for entering and leaving No. 1 lead. Diverging switch between No. 1 and No. 2 leads at east end Bridge 90.4, normal position toward No. 2 lead and trains entering

No. 1 lead at this point must be sure switch lined back to normal position.

FIRST SUBDIVISION "A" — SAN JOSE BRANCH

Electric locks applied to main track switches and associated derails at the following locations:

Warm Springs..... MP BR-6.75 Curtner..... MP BR-7.95

These locks cannot be released by train dispatcher to enter main track. Therefore trains and engines must not clear main track at these locations unless specifically instructed to do so by train dispatcher. Rules 520 and 547 will apply at all switches between Niles Junction and MP BR-15.25 not protected by absolute signals or electrically-locked.

RULE 547. When a train has been granted working and time limits, the conductor of such train may authorize another train to move within his working limits after a definite understanding is had between conductor of each train and train dispatcher advised of this

Trains entering working limits under these conditions may pass STOP indications as prescribed in Rule 547 and must move at re-

stricted speed through these working limits.

Conductor of train which has entered working limits of train holding working authority must clear out to the conductor of that train when leaving such working limits. The conductor of the train holding working authority is strictly responsible for knowing the other train is clear of the working limits before releasing working and time limits.

Niles Junction.

(a) Absolute signals governing eastward movements on branch, located at clearance point of switch at tail of wye.

(b) Switch at tail of wye is a spring switch, normal position lined for movements toward east leg of wye. This switch is equipped with electric switch indicator displaying yellow light when switch is in normal position. If yellow indicator lamp is found not illuminated by a westward train or engine, it must stop and examine spring switch at tail of wye before passing over it to make sure that point is fully closed.

Crews switching over this spring switch must stop and examine switch points if yellow indicator lamp is not illuminated after trailing movement is completed. This inspection must be made regardless of direction of movement to be made after using switch. Rule 519 applies.

c) A lunar white marker light on 11 foot mast is located at MP BR-0.8 just east of Morrison Canyon Road governing movement

of westward trains to the east leg of the wye.

Such trains finding lunar white marker light illuminated may proceed; those finding marker light extinguished must stop before passing and contact train dispatcher for instructions, unless train consists of less than forty cars including caboose, it may pass marker light without stopping and pull ahead to next absolute signal, making sure Morrison Canyon Road crossing is open and clear for vehicular

Movement on either east or west leg of wye must be made at

yard speed.

Milpitas.

(a) Track adjoining south side of main track west of office is known as "West Siding" and track adjoining south side of main track east of office is known as "East Siding."

(b) Absolute signals installed at crossovers, MP BR 11.65, just

east of office building.

RULES 341 and 509 (B). When instructed by the train dispatcher to line crossover switches to enter west or east siding, both switches to crossover to be used must be lined before any portion of train or engine passes absolute signal and thereafter, to enter siding only, trains may pass absolute signal displaying aspect per Rule 292.

(c) Crossover movement from either east or west siding to main track may be made by signal indication after train dispatcher has authorized lining of crossover switches by display of illuminated "S"

indicator per Rule 292-A.

Dwarf signals located adjacent to crossover govern crossover movements to main track only and do not apply to siding movements. Except when in use for movement through crossover these signals

(d) Trains setting out, picking up or doing other work will contact train dispatcher for instructions when ready to depart.

(e) At the Ford plant there are electrically-locked derails on Tracks F-1 and F-2, located 200 feet west of the west track entrance and 227 feet east of the east track entrance to the assembly building. The doors to the track entrances at each end of the building cannot be closed until the derails are lined in derailing position and locked. Unless requested by the Ford Motor Co. cars must not be left on either track at either end of the building between the derails and point of entrance to the building.

In addition, at the west end, not more than two cars may be left (while switching or otherwise) on either Tracks F-1 or F-2 between the diverging switch to these tracks and the derails. If Ford Co. orders two cars left on either Tracks F-1 or F-2 as above the east car must be left as close to derail as safety permits to allow clearance on

west end of these cars

Hayes type derails installed on Track F-4, 388 feet east of west tch to Track F-3 and on Track F-5, 238 feet east of entrance switch.

Gates, doors to buildings and derails on both east and west ends of Ford plant are controlled and operated by Ford security police.

San Jose Yard.

Westward absolute signal located opposite west yard limit sign, MP BR-15.25.

After obtaining clearance, westward trains must contact train dispatcher by telephone before leaving yard tracks at William Street for authority to proceed to absolute signal at MP BR-15.25.

SECOND SUBDIVISION

Stockton Yard.

(a) Diner Siding. West switch governed by absolute signals with "S" unit on entering and leaving signals. When "S" unit is illuminated electric lock is released and must be unlocked before switch is changed by hand operation.

(b) Charter Way. Westward signal is a two-unit signal and diverging route may be to either "B" lead or Diner Siding. When either of the dual-control switches in this block is placed in hand-throw position the other switch is disconnected from power operation and it is not necessary to place it in hand-throw position when switching over it unless it is used.

Stockton.

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

(b) North Channel Line. Governed by absolute signals and electric lock. Eastward signal is a two-unit signal with "S" unit. When the "S" unit is illuminated electric lock is released and must be un-

locked before switch is changed by hand operation.

Engines and cars must be brought to a stop at Country Club Highway crossing and must be preceded by flagman over crossing. Bridge over Smith Canal will not clear man on top of car.

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

South Sacramento.

(a) Campbell Soup Co. track. West crossover switches both electrically-locked. After lock is released main track switch must be opened before inside switch can be opened and inside switch must be closed before main track switch can be closed.

(b) Sutterville Road crossing at west end of train yard, must not be blocked excessively by freight trains or switch movements.

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

Westward absolute signal at east end is a two-unit signal with two marker lights on bracket which, when signal indication is per Rule 287, will show whether switch to north or south side is open.

(d) Both switches of crossover from main track to No. 1 track at west end of train yard electrically-locked. After lock is released, main track switch must be opened before inside switch can be opened and inside switch must be closed before main track switch can be closed.

Sacramento.

(a) RULE 509. Train dispatcher may issue Form B covering blocks Globe to east end South Sacramento, inclusive, in either direction.

(b) Normal position of switch at tail of wye "R Street Line" is lined for west leg of wye.

(c) 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.

Marysville.

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

(b) SN connection switch on siding must be locked for siding when not in use. All movements on siding must be made at yard

speed.

THIRD SUBDIVISION

Sidings are included in signal circuits except Oroville and Keddie. No siding may be occupied or fouled unless authorized by an absolute signal indication or by permission of the train dispatcher.

Oroville.

(a) West switch is governed by absolute signals with "S" unit. When "S" unit is illuminated, electric lock is released and must be unlocked before switch is changed by hand, after which signal will

show indication for movement.

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

(b) A sign reading "Diesel Stop" painted on a yellow marker post located between main track and siding 804 feet east of east end

passenger station building.

Engineers of eastward diesel powered passenger trains should endeavor to stop with cab of engine opposite this post so that water

tanks of engine can be filled without respotting.

Engineers of westward diesel powered passenger trains should endeavor to stop just to clear of westward leaving signal at west end

of siding.

Land. Engines heavier than two-unit diesels must not use tracks 2, 3 and 4 except portions at west end on tangent track.

Two-unit diesels and smaller engines may use all tracks and may use east lead as far as derail and sign reading "WPRR engines must not go beyond this point" located 125 feet east of extreme east switch of interchange tracks with the Feather River Railway Co.

No. 1 track, which is a crossover from siding, and No. 2 track used as a runaround track, must be left clear. All classes of engines

may use siding entire length.

Camp Rodgers. West connected switch to tracks serving PG&E Co. located in siding 1472 feet east of west siding switch. Hayes derail on lead track 200 feet east of connecting switch. Unless some portion of train is left on siding, derail must be set in derailing position while engine is on PG&E tracks and thereafter siding must not be entered without permission of train dispatcher. Cars must not be left on grade on lead track between connecting switch and switchback 550 feet from east end of lead track.

Grays Flat Spur, MP 272.6. Cars must not be left at top of hill or on descending grade on this spur.

Keddie.

(a) When calling in flagman from east on Fourth Subdivision enginemen will sound six long blasts of horn.

(b) 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.

c) Both switches of west crossover between No. 1 track and Fourth Subdivision lead are included in circuits of eastward absolute entering signal west end Keddie siding. These switches must be left lined for No. 1 track and Fourth Subdivision lead respectively

when not in use.

d) Movements of trains or engines between yard tracks and tail track east of upper crossover may be made by, first obtaining release of electric lock on switch from roundhouse lead to tail track from the train dispatcher. After obtaining release of electric lock and reversing switch, then line inside switch of upper crossover to tail track. Movements must not be made west of roundhouse lead switch or on tail track east of eastward dwarf absolute signal at inside switch of upper crossover until this is done. Signal will display aspect per Rule 287 for eastward movement to tail track.

Hayes derail on tail track, pipe-connected to inside switch to

After this lineup is made, roundhouse lead switch must not be lined back until engine or cars are clear of section of tail track between dwarf signal and derail. (e) Main track switch and derail at east end of house track is

not pipe-connected.

Separate switch stand and electric lock 106A installed on this derail. The switch stand and electric lock is located 25 feet from track on south side of derail. Electric locks 106 and 106A can be unlocked by train dispatcher when either door of electric locks is opened

f) Emergency water facilities for supplying water for steam heat units on passenger diesels located adjacent to telephone booth

just east of telegraph office.

Quincy Junction. East house track switch operates pipe-connected derails on east end house track and east end interchange track simultaneously.

FOURTH SUBDIVISION

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

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

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

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

Westwood. No. 4 track and old electric siding connected with

No. 4 track at west end will be used as siding.

Derails on west end old electric siding and house track must be kept in derail position except when being used. East switch of old electric siding must be left lined for siding.

RULE 827. Permasco car skates at Moccasin, Greenville, Lassen View, Robbers Creek, Lodge Pole, Jellico, Willow Springs and

Little Valley.

When setting cars out on any of these sidings see they are used. If cars already on siding, arrange to couple cars to be set out with the cars already there, resetting skates under outside pair of wheels of truck of first car on the down hill side. When coupling into car or cars on siding make coupling carefully and see skates removed before cars are pulled or pushed.

When all cars are removed from siding crew making pickup will

see skates are re-hung on post or pole in place provided.

In addition to the use of Permasco car skates, provisions of second paragraph Rule 827 pertaining to use of hand brakes are also applicable.

AUTOMATIC BLOCK SIGNALS

Keddie. Fourth Subdivision:

Eastward two position signal at west portal Tunnel 1 and westward two position signal 60 feet east of east wye switch are not equipped with number plates. When aspect per Rule 292 is displayed by either of these signals Rule 509 (A), will not apply and it will not be necessary to contact the train dispatcher. Rule 509(B) will govern. Train or engine will proceed under flag protection to block system limit sign.

Three position signal 45 feet east of Tunnel 2.

Overlap for westward signal east end of Tunnel 1 extends 528 feet west of signal at west portal Tunnel 1. Signal east end of Tunnel 1 is actuated by both switches of first crossover west of Tunnel 1.

Eastward two-position signal at west portal Tunnel 1 is approach lighted. When train enters approach circuit 480 feet in advance of signal it will be lighted and when inside switch "A" crossover is in

reverse position signal will be lighted.

INTERLOCKING PLANTS AND SIGNALS AND RAILROAD CROSSINGS NOT INTERLOCKED

At certain Interlocking Crossings aspects per Rules 281 through 292 will be supplemented by semaphore arms as follows:

RULE 281. A single semaphore arm 60 degrees below horizontal position.

NAME. CLEAR.

INDICATION. PROCEED.

RULE 292. A single square-ended red semaphore arm in horizontal position. NAME. STOP. INDICATION. STOP.

MP 5.8—SP Crossing and MP 5.9—Chestnut Junction, Magnolia

Tower. Interlocking.

Eastward: Two-unit home signal 490 feet west of Crossing. Upper unit governs movement to eastward main track; lower unit to westward main track. Single unit dwarf signal 490 feet west of Crossing governs movement from No. 1 track to either eastward or westward main track.

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

main track to WP yard or SP.

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

IP 7.2 SP Crossing. Both Main Tracks. No Interlocking.

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

MP 7.7 Clinton, SP Crossing. Interlocking.

Spring switch located 60 feet west of Crossing at end of double track normally lined for westward main track and may be trailed

through eastbound on eastward main track.

Home signal east of Crossing is a two-unit signal with "S" unit on mast. Upper unit governs movement over Crossing to westward main track; lower unit to eastward main track after spring switch has been lined. The "S" unit must be illuminated before spring switch is changed. Trains or engines moving from eastward main track to westward main track or vice versa must move beyond home signal and receive proper signal indication for reverse movement. If authorized to pass this signal in STOP position, in addition to observing Rule 663, spring switch must be examined and points found to fit properly for movement desired.

MP 10.6 and MP 10.7 Melrose, SP Crossings. Interlocking.

MP 13.7 Elmhurst, SP Crossing. Interlocking.
RULES 509 and 664 apply. That part of second paragraph of
Rule 664 referring to waiting time is modified to five minutes instead of ten minutes at this crossing.

MP 30.3 Niles Tower, SP Crossing. Interlocking.

MP 42.7 and MP 42.97 Radum, SP Crossings. Interlocking. RULE 664 applies. That part of second paragraph of Rule 664 referring to waiting time is modified to five minutes instead of ten minutes at this crossing

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

governed by home signals.

MP 74.05, SP Crossing. Interlocking.

While doing work on tracks adjoining this Crossing train or cars must be left outside of interlocking plant circuit governed by home signals in order to avoid delay to trains on opposing route.

Signals are approach clearing. If train or engine fails to reach

home signal within eleven minutes after proceed aspect is displayed, train or engine must expect to find STOP aspect displayed. Secondary clearing circuits extending 500 feet in approach to home signals, must be occupied before signal may again display proceed aspect. MP 84.45 SP Crossing. Interlocking.

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

MP 90.5 Ortega, Hunter Street Line, SP Crossing. Interlocking. Movements over SP Crossing will be made in accordance with

Westward interlocking signal is also absolute signal. Rules 509

and 663 apply.

Electric locks on WP main track switch to Hunter Street Line and derail located north side SP Crossing are under control of WP train dispatcher. Both switch and derail are equipped with spring device for trailing movements.

Instructions for handling movements over SP Crossing posted in

telephone shelters adjacent to both switch and derail.

MP 93.2 AT&SF Tower, AT&SF Crossing. Interlocking. Whistle signals: Main track either direction—one long; to or from Hazelton Avenue line—three short and one long.

MP 93.8 Weber Avenue, SP Crossing. Interlocking.

RULES 509 and 664 apply. That part of second paragraph of Rule 664 referring to waiting time is modified to five minutes instead of ten minutes at this crossing.

MP 95.1 El Pinal, SP Crossing. Interlocking.
Under control of SP train dispatcher. SP telephone and instructions located in box adjacent to the Crossing. When interlocking signals display STOP indication and reason is not apparent, contact SP train dispatcher and thereafter be governed by Rule 663.

MP 137.5 "X" Street, CCT and SN Crossing. Interlocking. Dwarf signals with "S" indicators on Sacramento Valley Tractor Co. spur and west end interchange track. For movement out of spur or interchange track first contact train dispatcher, then when "S" or interchange track, first contact train dispatcher, then when is illuminated line switch and signal should clear for movement.

RULES 509 and 664 apply. That part of second paragraph of Rule 664 referring to waiting time is modified to five minutes instead

of ten minutes at this Crossing.

MP 138.0 "R" Street, SP Crossing. Interlocking.

Low dwarf absolute signal bearing letter "A" located 80 feet east of "S" Street on west leg of wye governs movement from west leg of wye to main track only and does not apply to movements to California Builders Supply spur. When switch is lined for movement to California Builders Supply spur, this signal will be dark.

Interlocking Home signals, located 75 feet west and 200 feet east

of SP Crossing west leg of wye govern movements over SP Crossing only. When these signals display aspect per Rule 288, movement may be made over SP Crossing at yard speed. If aspect per Rule 288 is not

displayed, second paragraph Rule 665 will govern.
Switches leading to California Builders Supply spur and CAL-PAK 15 spur are manually operated. These switches will be lined and locked normally for through movements on west leg of wye. Movements into and out of these spurs can be made without contacting train dispatcher.

Rule 670 is modified at this location to permit reverse movements to be made within interlocking limits provided a portion of switch cut or engine is between interlocking home signals.

RULES 509 and 665 apply. That part of first paragraph of Rule 665 referring to waiting time is modified to three minutes instead of ten minutes at this Crossing.

MP 152.5 Sankey, SN Crossing and Connection. RULES 509 and 546 apply. Westward absolute signal is a twounit signal. Upper unit governs movements on WP main track. Lower unit governs movements to SN main track.

MP 180.2 Binney Junction Tower, SP Crossing. Interlocking.

SAN JOSE BRANCH

MP 19.6 Valbrick, SP Crossing. No interlocking.

MP 20.2 Willow Glenn, SP Crossing. Interlocking.

Home signals 225 feet east and west of Crossing. No approach

MP 22.3 West San Jose, SP Crossing. Interlocking.

Home signals 250 feet east and west of Crossing. No approach signals.

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

OAKLAND - BETWEEN CLINTON AND EAST SWITCHING LIMIT

STOCKTON — BETWEEN WEST AND EAST SWITCHING LIMITS SACRAMENTO — BETWEEN WEST AND EAST SWITCHING LIMITS

OROVILLE — BETWEEN WEST AND EAST SWITCHING LIMITS

(A) RULE 547. Will apply within above limits, with work authority limited to not more than four blocks at any one time. Engine foreman must obtain authority from train dispatcher whenever switching is to be done in a block or blocks and, when switching is completed, engine foreman personally must release block or blocks to the train dispatcher.

When initially entering a block at a switch where there is no signal or electric lock permission must be obtained from the train dispatcher and three minutes must elapse after switch is opened be-

fore engine or cars foul main track.

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

The granting of work authority does not relieve trains or engines from complying with the indications of any interlocking signals within the working limits. Any movements within the interlocking limits or to enter the interlocking limits must be made in accordance with interlocking rules, except when a train or yard engine, after entering the limits as prescribed by such rules, finds it necessary to temporarily leave a portion of their train or switch cut within the interlocking limits and permit their engine to leave the interlocking limits in the process of completing a switch movement, they may, after stopping, pass the interlocking signal governing entrance to the interlocking limits in stop position to again couple to their train or switch cut. In such cases if the crossing involved has been left clear, no movement must be made to foul or cross same without first

protecting against movement on conflicting route.

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

If main track has been cleared and switches restored to normal position new authorization must be obtained from the train dis-

patcher before returning to the main track.

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

OAKLAND

(a) Block limits are as follows:

Clinton, MP 7.7 to absolute signal MP 8.8 Absolute signals MP 8.8 to MP 9.9 Absolute signal MP 9.9 to west switch Kohler West switch Kohler to east switch Kohler East switch Kohler to absolute signal MP 13.7.

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

STOCKTON

- (a) Block limits are as follows: East switch Wyche to MP 90 MP 90 to MP 90.85 MP 90.85 to west switch Diner Siding West switch Diner Siding to east switch Diner Siding East switch Diner Siding to AT&SF Crossing AT&SF Crossing to Weber Avenue Crossing Weber Avenue Crossing to west switch Flora Street West switch Flora Street to east switch Flora Street East switch Flora Street to North Channel Line North Channel Line to west switch Hammer Lane.
- (b) Work authority is not required for straight moves to or from SP Transfer or through other switches protected by electric locks.
- (c) Hazelton Ave. Line. When yard engines desire to move to or from Hazelton Ave. Line train dispatcher must be advised when signal lineup for the move is requested and he will arrange for towerman at AT&SF Crossing to line the route.

(d) Main track and inside crossover switches at west end of train yard, MP 90.85, are dual-control. When either switch is placed in hand-throw position the other switch is disconnected from power operation and it is then unnecessary to place it in hand-throw position.

Dwarf signals governing movement on No. 1 lead track over inside switch of power-operated crossover MP 90.85, are absolute signals controlled by the train dispatcher. When these signals display aspect per Rule 288, movement may be made over this switch

without placing it in hand-throw position.

These signals may be set to display STOP per Rule 292 by the train dispatcher at any time. If these signals display STOP indication per Rule 292 and reason is not apparent or if call light is lighted on signal house north of main track, contact train dispatcher promptly by telephone.

SACRAMENTO

(a) Block limits are as follows:

East switch Pollock to west switch South Sacramento West switch South Sacramento to east switch South Sacramento

East switch South Sacramento to absolute signal SN-CCT crossing X Street
Absolute signal SN-CCT crossing X Street to absolute signal

SP crossing R Street Absolute signal SP crossing R Street to absolute signal west switch Haggin

Absolute signal west switch Haggin to absolute signal east switch Haggin

Absolute signal east switch Haggin to absolute signal Globe.

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

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

dispatcher must be contacted.

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

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

Power switch to be used must be placed in hand-throw position before passing absolute signals and must be restored to motor position immediately when switching movements are completed.

- (d) In connection with the power-operated derail at east end of No. 1 track, South Sacramento, it is permissible for yard engine to make an eastward move over it by signal indication, then, without reaching main track, move westward without placing the derail in hand-throw position. However, if there are a series of such moves the derail must be placed in hand-throw position to avoid hazard of train dispatcher changing lineup during the switching operations
- (e) At South Sacramento authority to place power switches at east end in hand-throw position will carry with it authority to switch in the block between east switch South Sacramento and eastward absolute signal at "X" Street and at west end authority to switch in the block between west switch South Sacramento and Pollock, as well as between east and west switches South Sacramento. This means that two yard engines may be granted authority to switch over power switches at each end of South Sacramento at the same time but, only the yard engine which has specific authority from the train dispatcher to do so may use the main track block between east and west switches. The foregoing not in conflict with instructions in paragraphs (b) and (c).

It will not be necessary for train dispatcher to record switching authority in connection with permission to use these power switches except when authority includes the main track block between east

and west switches.

- (f) An engine foreman may permit road crews to use his switching authority for moves, such as engine to or from train, etc., or other switch crews crossing over, but must insure that there is no hazard by reason of his own switching operations. Train dispatcher may not issue switching authority (including operation of power switches in hand-throw position) to more than one person at a time (except to switch both ends of a train).
- (g) Yard track indicators located opposite absolute signals governing movements of eastward or westward freight trains into yard will indicate to trains or engines the number of the track on which they are to yard their trains.

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

OROVILLE

- (a) RULE 547. Train dispatcher may grant permission to different engines in different parts of the same block to operate a dual-control switch by hand or use the main track for switching and will not be required to protect work limits by absolute signals in each direction or apply red tags to the signal levers. However, he must not grant such permission if a train or engine is moving by signal indication in the block toward point where work is to be done or is closely approaching such block.
- (b) Switch to house track, Oroville, operates derails on east end of house track and east end of team track simultaneously.
- (c) Oroville Yard. Yard track indicators located opposite absolute signals governing movements of eastward or westward freight trains into yard will indicate to trains or engines the number of the track on which they are to yard their trains.

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

(d) Main track and inside crossover switches at east end of train yard, MP 203.75, are dual-control. When either switch is placed in hand-throw position the other switch is disconnected from power operation and it is then unnecessary to place it in hand-throw position.

Signals governing movement over inside dual-control switch are controlled by the train dispatcher. When these signals display indication per Rule 288, movements may be made over this switch without placing it in hand-throw position. If signals display STOP indication per Rule 292 and reason is not apparent or if call light is lighted on adjacent telephone booth, train dispatcher must be contacted promptly.

(e) East drill track switch is located just west of Third Ave.

crossing. Switch is electrically-locked.

Ehman Spur switch leading from east drill track is located 379 feet west of east drill track switch and when in normal position it is lined for Ehman Spur, also electrically-locked and serves as derail.

Electric locks on both these switches work simultaneously but switches are not pipe-connected to one another and must be hand operated separately.

SACRAMENTO NORTHERN CREWS

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 simular 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 simular instructions at Globe for movement beyond, except to obtain

permission to operate electric lock.

SANKEY

Eastward absolute signal on Sacramento Northern is a two-unit signal.

Upper unit governs movements to Western Pacific main track. Lower unit governs movements on Sacramento Northern main

Western Pacific Operating Rules 509 and 546 apply.

MARYSVILLE

- (a) All switches for entrance to WP main track are governed by absolute signals or electric locks. Movements of SN trains or yard engines will be made by signal indication or by permission of the WP train dispatcher. Western Pacific Rules will apply.
 - (b) RULE 547. Governs switching operations. Block limits are: Absolute signal at SN Connection MP 175.63 to west siding switch Marysville.

West siding switch Marysville to east siding switch Marysville.

East siding switch Marysville to west siding switch Tambo. Engine foreman must obtain authority from train dispatcher whenever switching is to be done in a block or blocks and, when

switching is completed, engine foreman personally must release block or blocks to the train dispatcher.

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

Work authority is not required for straight moves across WP main track through switches protected by electric locks.

(c) Instructions for operating electric locks are posted in tele-

phone booths adjacent thereto.

Permission must be obtained from train dispatcher before electric locks can be released and he must be notified after movement is completed and electric lock has been locked.

(d) Switch point derail on California Packing Corp. Spur 172 feet west of main track switch at MP 179.2.

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

- When signal aspect per Rule 288 is displayed by automatic signals between east train yard switch, MP 322.13, and west train yard switch, MP 320.25, authorizes yard switching or engine movements on the main track within these limits and is an indication the electrically-locked switches within these limits have been unlocked by the train dispatcher. Complete instructions for operation of electrically-locked switches are posted in telephone box located vicinity of switches.
- (B) The absence of signal aspect per Rule 288, or its removal, is an indication that the train dispatcher desires the main track cleared for through train movements. Howlers controlled by the train dispatcher are located throughout the yard, and when operated the main track must be cleared immediately.
- C) In addition, train dispatchers will furnish information to operator as to times passenger trains are expected to reach Portola. Employes in charge of yard engines, light engines, and similar moves must ascertain from operator whether these trains are due before occupying main track and not delay them.
- When main track is used on authority of signal aspect per Rule 288, all movements must be made at yard speed.
- (E) When a westward train or engine is stopped at absolute signal at east train yard switch, MP 322.13, or an eastward train or engine is stopped at absolute signal at west train yard switch, MP 320.25, by a STOP indication and train or engine is instructed by the train dispatcher to proceed under flag protection per Rule 509(A) 2, it must be preceded by a flagman. When next signal in advance can be seen displaying aspect per Rule 288, and intervening track to such signal can be seen to be clear, train or engine may pick up flagman and proceed at yard speed.
- (F) Eastward absolute signals at west train yard switch are under electrically-coordinated joint control of train dispatchers for the Third Subdivision, Western Division and First Subdivision, Eastern Division.

Permission to take switch or derail at west end train yard in hand-throw must be obtained from Western Division train dispatcher. Western Division train dispatcher will in turn contact Eastern Division train dispatcher for his concurrence.

When west train yard switch is in hand-operated position, de-

railing switch, if used, must also be hand-operated.

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

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

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

govern:

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

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

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

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

- No. 17, California Zephyr, will make station stop so that baggage car will be spotted at west end of hard-surface platform. In event it is too cold to wash train, engineer will be notified accordingly.
- (H) After being authorized by clearance, trains must not leave until given permission by train dispatcher after member of crew advises him they are ready to leave, except Nos. 17 and 18 will leave when ready being governed by signal indications.
- I) Derail at west end of west siding is hand-operated independent of switch. Derail will actuate signals on main track when not in derailing position.
- (J) Yard track indicators located opposite absolute signals governing movements of eastward or westward freight trains into yard will indicate to such trains the number of the track on which they are to yard their trains.

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

TRACKS ON WHICH ENGINE MOVEMENTS RESTRICTED

Location and Description of Track	Class of Engine	Prohibited
Radum	All	Beyond frog on all tracks except 1 and 2.
Carbona Branch Spur MP 0.5	All	Beyond frog.
Stockton N. Channel Line* Terminous Branch	All Road ½ D-225 or heavier	Beyond frog. On entire branch.
East Arboga, Outfit Spur	All	Beyond 300 feet from frog.
Marysville Old SN freight Connections Cliff House Spur	All	Beyond frog. Beyond frog.
Adelaide Spur Pond Track	All	Beyond frog.
Oroville Ehman Spur	½ D-225 or heavier	Beyond restricting sign
Land See special instructions page 14, under third subdivision.		
Bloomer, River Spur	All	Beyond 6 cars from clearance point.
Belden, House Spur	All	Beyond MP 260. Beyond clearance point
West Leg of Wye	All	Beyond frog from Fourth Subdivision.
Westwood Standard Oil Spur**	Heavier than ½ D-225 (also SP engines of similar weight and type includ-	
	ing steam)	Beyond frog.

All yard engines, except S-50 class (501-511), must be separated from any loaded cars by at least 1 empty while handling cars over Smith Canal drawbridge, North Channel Line, Stockton.

^{**} Necessary to have hold of at least 4 cars to switch Standard Oil spur.

SPURS AND COMMERCIAL TRACKS MAIN LINE

STATIONS	Distance from San Francisco	How Connected	Car Capacit
ESTUDILLO	16.5	1 E	11
CARPENTER (P)	24.9	Both Ends	39
DECOTO	26.6	Both Ends	18
PABRICO	20.0	Doon Laids	10
Pacific States Steel	27.8	Both Ends	51
American Forge.	27.8	1 E	-
EBERLY	28.9	Both Ends	20
DADUM (D)	43.4	Both Ends	33
RADUM(P) RHODES and JAMIESON(P)		1 E	50
TREVARNO (P)	44.6	1 E	90
Interchange	49.0	1 W	24
	49.16	1 W	24
Drill track	70.9	1 E	6
AYALA(P) LYOTH (P)	70.9	1 E	. 0
LYOTH (P)	73.8	1 W	
U.S.Q.M. & SP Conn	10.8	1 14	
(Spur leads from east end			
Carbona siding) RHODES (P)	75.6	Both Ends	26
ARMY SUPPLY DEPOT	15.0	Doth Ends	20
(LATHROD) (P)	85.76	Both Ends	130
(LATHROP).(P)FRENCH CAMP (P)	88.35	Both Ends	29
KENCH CAMP (P)		1 W	13
VILLINGER(P)	107.8	1 W	49
LAS VINAS(P)	109.5	1 W	
GLANNVALE(P)	118.5		13
ALBERT(P)	127.2	1 W	9
BOMBAY(P)	146.6	1 E	13
VISTA ROBLES.(P)	198.8	1 E	33
ADELAIDE	202.7	1 E	::
JARBO (P) GRIZZLY (P)	212.2	Both Ends	28
JARBO(P)	236.1	Both Ends	17
GRIZZLY(P)	246.1	1 E	11
ROCK CREEK(P)	249.1	Both Ends	18
DALITE (P)	256.8	1 W	12
GRAY'S FLAT. (P)	272.6	1 W	74
" (PSGR STOP)	273.0		
CLIO(P)	313.72	1 E	18

FOURTH SUBDIVISION

STATIONS	Distance from Keddie	How Connected	Car Capacity
INDIAN CREEK(P)	3.1	1 W	14
CHENEY	13.9	1 E	16
BOX(P)	15.5	1 W	34
POISON LAKE (P)	70.4	Both Ends	40
LUMBER CO. (P)	95.4	1 W	12

YARD LIMITS

West MP	East MP
WP Mole	Oakland 7.7
BR-15.25	San Jose
MJ-6.0	Terminous
K-38.25	WestwoodSP-409.45
K-111.2	Bieber

* SWITCHING LIMITS

West MP		East MP
7.7	Oakland	13.78
28.5	Fremont	31.38
	Niles Junction (San Jose Branch)	BR-0.82
70.14	Carbona	73.05
89.34	Stockton	96.59
133.4	Sacramento	140.69
177.62	Marysville	180.24
201.44	Oroville	206.0
280.0	Keddie	282.47
319.94	Portola	323.09
* Indicated	by "SL" signs.	

ADDITIONAL STATION STOPS MAIN LINE

STATIONS	Distance from San Francisco
SUNOL	35.2
COUNSMAN	150.6
PALERMO	199.3
LAS PLUMAS	221.4
CHINO CREEK	229.5
ISAIAH	230.5
MAYARO	240.9
STORRIE	250.6
SPANISH CREEK	285.4

FOURTH SUBDIVISION

STATIONS	Distance from Keddie
COHALA.	17.0
WOLF CREEK	21.5

TONNAGE RATING

				4th Sut		
Engine Class	1st Sub- division	2nd Sub- division	3rd Sub- division	Keddie to Greenville and Almanor to Bieber	Greenville to Almanor	San Jose Branch
Eastward			ii le sau			- 11
D-176*	2620	5950	1810	1250	858	2620
D-225**	7300	10000	4375	3340	2350	7300
D-239**	9100	12250	5500	4330	3250	9100
S-50	1050	2645	880	600	435	2800
S-57***	1450	3340	1150	790	535	3160
S-60	1450	3340	1150	790	535	3250
S-62***	2350	3925	1500	1175	875	3340
RS-62***	2350	3925	1500	1175	875	3340
D-62***	2350	3925	1500	1175	875	3340
D-64***	2600	4175	1750	1425	1125	3590
				Bieber to Halls Flat	Halls Flat to Keddie	145
Westward						
D-176*	2350	5950	4 e	1051	2305	2650
D-225**	5500	10900	grade	3025	5950	7300
D-239**	6850	13600	20:II	4150	7300	9100
S-50	880	2645	86.08	530	1350	2800
8-57***	1150	3340	cending	660	1855	3160
S-60	1150	3340	i ii	660	1855	3250
S-62***	1715	4150	Descending No tonnage	1125	2350	3340
S-62***	1715	4150	No	1125	2350	3340
D-62*** D-64***	1715 1965	4150 4400	HA	1125 1375	2350 2600	3340 3590

Ratings shown above are actual tonnage.

*Three unit engine. Reduce $33\frac{1}{3}$ % of tonnage rating for each inoperative, or detached unit.

**Four unit engine. Reduce 25% of tonnage rating for each inoperative, or detached unit.

***One unit engine. When operated in multiple control, add together the rating for each operative unit.

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

SPEED RESTRICTIONS—in miles per hour will apply as follows:

Between		California Zephyr		Other Passenger Trains		All Freight Trains	
and discours	Maxi-	Restric- tions	Maxi- mum	Restric- tions	Maxi- mum	Restric- tions	
First Subdivision—Pages 2-3 Chestnut Jct. and Oak St., Oakland	15		15		15		
Over Washington and Franklin Streets, Oakland		8		8		8	
Oak St., Oakland and SP Crossing, MP 10.6	20		20		20		
MP 7.2 over SP Crossing *MP 7.7 over SP Crossing, Clinton		10 15		10	::	10 15	
MP 9.5 just west 29th Ave. and MP 9.8 just east of Fruitvale Ave		10		10		10	
*SP Crossing MP 10.6 and East Oak- land Swg. Limit	35	10	35	10	25	10	
*MP 13.7 over SP Crossing		30		30			
East Oakland Swg. Limit and MP 29.7 Bridge 14.55 just west of San Lean- dro depot and Williams St., 5	70	••	60		50		
blocks east of depot Over "A" and "B" Streets, Hayward		20 45		20 45		15 30	
MP 23.93 and MP 24.31		50		45		35	
MP 29.25 and MP 29.6 on curve MP 29.7 and MP 39	55	45	50	40	40	30	
*MP 30.3 over SP Crossing MP 30.3 and MP 35 on curves and		30		25		20	
through Tunnel 1		45	••	40		30	
and at SP underpass	70	50	60	45	50	35	
MP 39.9 and MP 40.3 on curve		60		55 45		45 40	
*MP 42.7 and MP 42.97 SP Crossings	::	50 50		40		35	
City Limits, Livermore	• •	45		45		45	
at SP underpass	::	60		55 55	::	::	
MP 52 and MP 60.5	50	45	45	40	35		
MP 60.5 and MP 68	79		70		50	à è	
MP 63.3 and MP 67 on curves		60 50	::	55 45		45 40	
MP 67.3 and MP 68 on curve MP 68 and Stockton Depot	79	::	70		60	45	
MP 71.8 and MP 72.2 on curve *MP 74.05 SP Crossing		70 50		60 40		50 30	
MP 79.8 and Fast End Bridge 80.28		50		40		30	
MP 81.8 and MP 83.4 on curve *MP 84.45 SP Crossing		70 40		60 30		50 25	
MP 88.3 and MP 89.9 on curves MP 90.4 and MP 90.55 on curve	::	50		45	::	50 35	
MP 92.4 and Charter Way on curves Charter Way and Stockton Depot,		50		45		30	
Main Track	::	20 12	::	20 12		20 12	
Second Subdivision—Pages 4-5 Stockton Depot and MP 122 Stockton Depot and MP 95,	70		60		50		
Main Track		20		20		20	
Other Tracks*MP 95.1 over SP Crossing	::	12 40	::	12 40		12 30	
MP 95.2 and MP 97.5	::	45	::	40	::	40 35	
Over Bridges 116.28 and 116.37 MP 122 and MP 133.5		45		40		35	
MP 133.5 and MP 140.1	55 60		50 60		35 40		
Over and between Sutterville Road and "C" St., Sacramento		15		15		15	
"C" St. and MP 140.1	70	20	60	20	50	20	
MP 140.1 and MP 142						45 40	
MP 178 and MP 179.1		45	::	40		30	
*MP 180.2 SP Crossing	79	50	70	45	50	35	
MP 201.7 and MP 201.9 on curve MP 202 and MP 202.5 on curve	::	45 70		40 60		35	
MP 204.7 and MP 205.1 on curve		50		45	::	35	

Between		All Passenger Trains		All Freight Trains	
	Maxi- mum	Restric- tions	Maxi-	Restric	
Third Subdivision—Pages 6-7	mum	tions	mum	tions	
Droville and East Switch Bloomer	50		35	100	
MP 205.1 and MP 205.5		45		25	
MP 207.1 and MP 207.55 on curves.		30		25	
MP 208.6 and MP 209.4 on curves.		40		30	
MP 211.4 and MP 212.1 on curves MP 212.7 and MP 213.1 on curves		45			
MP 214 and MP 214.1 on curve		40			
MP 214.8 and MP 215.8 on curves.		40			
MP 216.15 and MP 216.75 on curves		35		30	
East Switch Bloomer and MP 272.6	35		25		
MP 218.15 and MP 218.3 on curve		30			
MP 220.9 and MP 223.2 on curves		30			
MP 230.2 and MP 230.45 on curves.		30			
MP 231.9 and MP 234 on curves		30			
MP 235.25 and MP 238.9 on curves.		30			
MP 241.4 and MP 241.5 on curve		30			
MP 244.2 and MP 245 on curves MP 248.6 and MP 252.6 on curves	• •	30			
Over Bridge 252.6		30 25		20	
MP 252.7 and MP 252.9 on curves	• •	30			
MP 254 and MP 256.2 on curves		30			
MP 257.8 and MP 259.2 on curves.		30			
MP 260.9 and MP 271.5 on curves.		30			
MP 272.6 and MP 283.8	40		25		
MP 273.3 and MP 273.5 on curve		35			
MP 275.3 and MP 282.9 on curves		30			
MP 282.9 and MP 283.5 on curves		35			
MP 283.8 and Portola	45		30		
MP 284.9 and MP 285.32 on curve		40			
MP 286 and MP 287.1 on curves		30		25	
MP 287.1 and MP 287.65 on curves		40		25	
MP 288.9 and MP 291 on curves		40		::	
MP 291.9 and MP 295.1 on curves		30		25	
MP 295.9 and MP 296.15 on curve		40		::	
MP 298.55 and MP 299.7 on curves.		30		25	
MP 300.85 and MP 301.05 on curve. MP 304.05 and MP 305.25 on curves	• •	35 35	• •		
MP 306.15 and MP 307.3 on curves.		40	٠.	• • •	
MP 310.7 and MP 314.25 on curves.		40	• • •		
MP 314.25 and MP 314.35 on curve.		35			
MP 314.8 and MP 315.8 on curves		40			
MP 316.1 and MP 316.45 on curves.		30		25	
MP 316.65 and MP 316.98 on curves		40			
MP 318.1 and MP 318.3 on curve		40			
ourth Subdivision—Pages 8-9					
Keddie and Moccasin	35		25		
Aoccasin and West switch Greenville.	40		40		
Vest switch Greenville and Cohala	35		35		
West switch Greenville and Cohala					
westward trains			or.	25	
Cohala and Clear Creek Jct	35 35		25 30		
Clear Creek Jct. and Wason	30		30		
curves		25		25	
curves	45		45		
Ialls Flat and Pit River	35	• • •	25		
Halls Flat and Pit River, on curves		25			
it River and Bieber	40		30		
an Jose Branch—Page 10					
Viles Jct. and MP 7.5	35		35		
MP 0.0 and MP 0.3		15		15	
IP 7.5 and MP 10.5	30		25		
IP 10.5 and city lmts. San Jose MP 15.7	20		20		
IP 15.7 and MP 23 within city limits.					
San Jose	12		12		
arbona Branch—Page 10	12		12		
erminous Branch—Page 10	00				
	20		20		
erminous Jct. and Garden	15		15		

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

On curves speed will be reduced below the maximums or restrictions provided where necessary to insure safety.

Light engines must not exceed freight train speed.

SPEED RESTRICTIONS FOR ENGINES: Maximum speed in miles per hour shown below is subject to further restrictions applicable to certain territories as shown in Speed Restrictions for Trains:

Class		Engine Maximum Speed
D-176	(801-805)*	. 79
D-225	(901-912)	. 65
D-239	(913-924)	. 65
S-50	(501-503)	. 45
S-50	(504-511)	. 65
S-57	(551-564)	. 35
S-57	(559-564 in multiple)	. 30
S-60	(581-585)	. 65
S-62	(601-606)	. 30
RS-62	(701-713 and 725-732)	. 65
D-62	(801D)	65
D-64	(2001-2006)	65

*Units 801A and 802A are equipped with freight gears, Maximum speed 65 MPH.

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OTHER MAXIMUM SPEEDS Maximu	m MI
When engineer is operating D-176, D-225 and D-239 class engines from other than leading control cab in direction of movement	20
On curves and where track conditions are unfavorable, and when approaching highway or street crossings at grade, speed of engines running backward must be further reduced to a rate consistent with safety.	
Through turnouts, crossovers, on sidings and on all inside tracks* (except on "Other Tracks" between Charter Way and MP 95 and except as provided in following paragraph)	10
paragraph) *On inside tracks when curvature or other conditions require, speed will be further reduced to insure safe operation.	
Through turnouts with power-operated switches in reverse position— Kohler to Wyche inclusive, except east leg of wye switch, Niles Junction.	
Westward trains leaving Stockton yard, after receiving signal from rear to indicate rear end has passed Tidewater Southern Jct., Hammer Lane,	
Phillips, Del Paso to Craig inclusive, and through sidings at the stations and within the limits listed above	20
Passenger trains with 400 series caboose may make authorized passenger train speeds.	
Passenger trains with other series cabooses and freight trains with all series cabooses	60
Trains handling steam derrick No. 37—straight track On curves 5 MPH less than speed prescribed for freight	35
trains but not exceeding	30
Trains handling steam derricks (other than derrick No. 37), steam shovels, cranes, rotary plows or pile drivers on own wheels—	
First and Second Subdivisions	25 20
Trains handling logs loaded on flat cars When two trains meet, either of which is handling logs, the standing train will remain standing until other train has cleared or come to a stop unless necessary to saw by.	20 ·
Maximum speed of train passing	15
Trains handling loaded air dump cars	25
Between Oakland and Portola	30
Between Keddie and Bieber	25 20
North Channel Line, Stockton	12

MISCELLANEOUS

Trains handling diesel engines dead in train must not exceed the maximum speed for such class engine.

Diesel freight engines dead in train must have automatic brake valves cut out in cabs 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 and reversers locked in neutral position in all units. Distributing valve pops must be set to 25 pounds pressure. Same procedure should be followed on passenger engines.

Diesel yard engines dead in train must have automatic brake valve 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.

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

Coupling snow plow ends of diesel engines to passenger equipment or to other engines is prohibited.

When the plow end of Jordan Spreaders 6, 7 or 13 are to be coupled to other cars or locomotives, an empty flat car must be placed next to plow end, to prevent damage to locomotive or equipment.

AIR BRAKE RULES

RULE 15. Superseded by the following: STANDARD AIR PRESSURE FOR MAIN RESERVOIRS-Freight locomotives 135 pounds, passenger locomotives and RDC cars 140 pounds; reducing valve for independent air brake, 35-40 pounds. Safety valves will be set at 68 pounds.

STANDARD BRAKE PIPE PRESSURE — Freight and mixed

trains 80 pounds and passenger trains including RDC cars 110 pounds. Minimum differential brake pipe and main reservoir with brake valve in running position, 15 pounds.

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

On No. 18 at Oroville and on No. 17 at Portola and Oroville, except when engine is to be detached, the incoming engineer, after making station stop, must make a 20 pound brake pipe reduction with the automatic brake. Release will be made by outgoing engineer upon receiving the proper signal (hand or air whistle).

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

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

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

