

RULE 10-I

RADIO COMMUNICATION

Oral authorization and acknowledgements between Foremen and Engineers for trains to pass "Red Conditional Stop" signs must be worded in the following forms:

Foremen's Initiation

THIS IS W.P. FOREMAN IN CHARGE OF THE WORK BETWEEN MP..... AND MP..... W.P. TRAIN ORDER NO. WE ARE IN THE CLEAR AND YOU MAY PROCEED PAST THE RED CONDITIONAL STOP SIGN AND THROUGH THE LIMITS OF THE ORDER AT M.P.H.*

Engineer's Response

THIS IS ENGINEER W.P./S.P. TRAIN I MAY PROCEED PAST THE RED CONDITIONAL STOP SIGN AND THROUGH THE LIMITS OF W.P. ORDER NO. BETWEEN M.P. AND M.P. AT (Speed)* REPEAT (Speed) MILES PER HOUR.*

Foreman must acknowledge Engineer's response as follows:

W.P./S.P. TRAIN, BETWEEN M.P. AND M.P. (Speed)* MILES PER HOUR, OK ON ORDER NO.

*Foreman may authorize train to proceed "at maximum authorized speed" if no speed restriction is required account Form W train order.



**THE
WESTERN PACIFIC
SACRAMENTO NORTHERN
AND
TIDEWATER SOUTHERN
RAILROAD COMPANIES
TIMETABLE**

No. 6

**EFFECTIVE SUNDAY, APRIL 27, 1980
AT 12:01 A.M.
PACIFIC STANDARD TIME**

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

R. C. MARQUIS
Senior Vice President — Operation

R. E. ARTUSY
Vice President — Transportation

R. R. GENTRY
Division Superintendent, Eastern Division, Elko

C. AADNESEN
Division Superintendent, Western Division, Sacramento

M. C. McMANUS
Assistant Superintendent — Transportation Sacramento

COME TO WORK ALERT, ALWAYS KEEP ALERT
AND YOU AND OTHERS WON'T GET HURT



DIRECTOR — RULES & SAFETY

A. KINICKI San Francisco

DIRECTOR — TRAIN OPERATION

W. F. SCHOBBER San Francisco

SUPERINTENDENTS — TRAIN OPERATION

C. T. MALLORY San Francisco

A. G. MENDOZA San Francisco

CHIEF TRAIN DISPATCHER

R. L. MEYER Sacramento

OVERSPEED COUPLINGS ARE DAMAGING

RAILROAD SURGEONS

Location	Name	Title
San Francisco	Dr. R. B. Green	Chief Surgeon
San Francisco	Dr. Ruth Fleming	Local Surgeon
San Francisco	Dr. R. H. Bacon	Local Surgeon
San Francisco	Dr. E. E. Garvey	Aurist
San Francisco	Dr. W. J. Ferguson	Oculist
San Francisco	Dr. W. Casey	Oculist
Oakland	Dr. J. P. Evans (Medical Only)	Local Surgeon
Oakland	Dr. C. F. Burton (On Duty Injuries Only)	Local Surgeon
Oakland	Dr. R. F. Westerfield	Local Surgeon
Oakland	Dr. John Chokatos	Local Surgeon
Oakland	Dr. Bruce H. O'Neil	Local Surgeon
Oakland	Dr. Joseph R. Carlisle	Oculist
Hayward	Dr. H. C. Crockett	Local Surgeon
Hayward	Dr. R. C. Crockett	Local Surgeon
Hayward	Dr. B. Fisher	Local Surgeon
Hayward	Dr. C. L. Ritchey	Oculist
Fremont	Dr. C. Addario	Local Surgeon
Fremont	Dr. J. D. Furnary	Oculist
San Jose	Dr. R. A. Larocca	Local Surgeon
San Jose	Dr. W. A. Johnson	Local Surgeon
San Jose	Dr. J. Condie	Local Surgeon
San Jose	Dr. J. Parisi	Oculist
San Jose	Dr. R. C. Rayfield	Oculist
Tracy	Eaton Avenue Medical Group	Local Surgeon
Modesto	Husband Medical Group	Local Surgeon
Modesto	Dr. J. M. Carlson	Local Surgeon
Modesto	Dr. D. R. Hansen	Local Surgeon
Modesto	Dr. J. L. Stanton	Local Surgeon
Turlock	Dr. E. H. Johnson	Local Surgeon
Manteca	Dr. R. P. Carter	Local Surgeon
Stockton	Dr. E. G. Hermosillo	Local Surgeon
Stockton	Dr. V. S. Solis	Local Surgeon
Stockton	Dr. O. R. Vannucci	Local Surgeon
Stockton	Dr. J. D. Wilson	Local Surgeon
Stockton	Dr. F. N. Fowler	Local Surgeon
Stockton	Dr. B. S. Nichols	Local Surgeon
Stockton	Dr. L. Boettger	Local Surgeon
Stockton	Dr. J. H. Holmes	Local Surgeon
Stockton	Dr. L. P. Sanders	Local Surgeon
Stockton	Dr. W. H. Plageman	Oculist
Stockton	Dr. H. J. Zeiter	Oculist
Stockton	Dr. H. E. Hand	Oculist
Lodi	Dr. W. G. Fessler	Local Surgeon
Lodi	Dr. K. H. Mullen	Local Surgeon
Lodi	Dr. S. W. Leiske	Local Surgeon
Sacramento	Dr. B. A. Daley	Local Surgeon
Sacramento	Dr. R. M. Zinky	Local Surgeon
Sacramento	Dr. J. W. Swingle	Local Surgeon
Sacramento	Dr. J. A. Berg	Oculist
Sacramento	Dr. R. L. Alexander	Oculist
Sacramento	Dr. J. J. Fisher	Oculist
Sacramento	Dr. A. Calkin (Medical Only)	Local Surgeon
Sacramento	Dr. D. O. Kilroy (Medical Only)	Local Surgeon
Sacramento	Dr. M. D. Schermer	Oculist
Marysville	Dr. L. D. Bugni	Local Surgeon
Oroville	Dr. J. W. Patrick	Local Surgeon
Oroville	Dr. E. S. Fortner, Jr.	Local Surgeon
Oroville	Dr. W. H. Bunstock	Local Surgeon
Oroville	Dr. J. Floyd	Local Surgeon
Oroville	Dr. J. Clay	Local Surgeon
Oroville	Dr. N. F. Brooks	Oculist
Oroville	Dr. K. L. Wedin	Oculist
Quincy	Dr. M. L. Whitney	Local Surgeon
Quincy	Dr. S. L. Christenson	Local Surgeon
Quincy	Dr. L. A. Price	Local Surgeon
Greenville	Dr. B. Scherr	Local Surgeon
Westwood	Dr. H. S. Budhram	Local Surgeon
Fall River Mills	Dr. N. E. Wilson	Local Surgeon
Portola	Dr. C. W. Brown	Division Surgeon
Portola	Dr. G. Hesselschwerdt	Local Surgeon
Portola	Dr. L. J. Dura	Local Surgeon
Reno	Dr. D. E. Guisto	Local Surgeon
Reno	Dr. K. F. Maclean	Local Surgeon
Reno	Dr. W. M. Tappan	Local Surgeon
Reno	Dr. R. P. Schultz	Local Surgeon
Reno	Dr. J. K. DesMarteau	Local Surgeon
Reno	Dr. G. F. Magee	Oculist
Winnemucca	Dr. K. L. Hartoch	Local Surgeon
Winnemucca	Dr. A. T. Brown	Local Surgeon
Elko	Elko Clinic	Local Surgeons
Elko	Dr. W. Fritsche	Oculist
Wendover	Wendover Clinic	Local Surgeons
Tooele	Tooele Clinic	Local Surgeons
Salt Lake City	Dr. H. B. Harmon	Local Surgeon
Salt Lake City	Dr. S. A. Lawson	Local Surgeon
Salt Lake City	Dr. K. P. Kotrady	Local Surgeon
Salt Lake City	Dr. J. H. Quinn	Oculist
Salt Lake City	Dr. B. J. Fairbanks	Oculist

FIRST SUBDIVISION

EASTWARD ↓			↑ WESTWARD			
Miles from Oakland	Station Numbers	Mile Post	TIME TABLE NO. 6		SDGS in Feet	Miles from Stockton
			STATIONS	RULE 6-A		
.0	5	4.7	OAKLAND (YL)	BKFYPO		87.3
1.1	6	5.8	SP CROSSING (Magnolia)	i	3524	86.2
1.2	6	5.9	CHESTNUT JCT. (SP Conn.)	i		86.1
2.5	7	7.2	OAK ST. (SP X'ing.)	p	6922	84.8
3.0	8	7.7	CLINTON	p	4042	84.3
4.9	10	9.6	FRUITVALE	IP		82.4
5.9	11	10.6	MELROSE (SP X'ing.)	p		81.4
6.6	12	11.3	KOHLER	IP	3524	80.7
9.0	14	13.7	ELMHURST (SP X'ing.)	p		78.3
15.4	20	20.1	HAYWARD	Bp	6922	71.9
25.0	30	29.7	FREMONT	IP	4042	62.3
25.6	31	30.3	NILES TOWER (SP X'ing.)	YP		61.7
25.8	31	30.5	NILES JUNCTION	p		61.5
33.4	38	38.1	HEARST	AIp	4423	53.9
38.0	43	42.7	RADUM (SP X'ing.)	AI		49.3
38.27	43	42.97	RADUM (SP X'ing.)	p		49.03
42.3	47	47.0	LIVERMORE	p	4117	45.0
51.5	56	56.2	ALTAMONT	p	5560	35.8
58.6	63	63.3	MIDWAY	YP	5518	28.7
68.1	73	72.8	TRACY	AI	10692	19.2
69.35	74	74.05	SP CROSSING (Lyoth)	p		17.95
77.4	82	82.1	WYCHE	i	5555	9.9
79.75	84	84.45	SP CROSSING (Lathrop)	TO-YBKFTPO		7.55
87.3	92	92.0	STOCKTON (Yard)			0.0

Double Track Chestnut Jct. to Clinton.
Traffic Control System in effect Clinton to Stockton Yard inclusive. See Rule 540.

SAN JOSE BRANCH

EASTWARD ↓			↑ WESTWARD		
Station Numbers	Mile Post	TIME TABLE NO. 6		SDGS in Feet	
		STATIONS	RULE 6-A		
31	0.0	NILES JUNCTION	YP		
3031	3.3	IRVINGTON	p	E534	
5031	4.9	INLAND STEEL	p	488	
7031	6.8	WARM SPRINGS	p	E545	
8031	8.0	CURTNER	BKYP	E830 E3440 W4515	
12031	11.5	MILPITAS	p	E631	
14031	14.1	BERRYESSA	BKFP		
18031	17.5	SAN JOSE (Yard)		Yard	
19031	19.6	VALBRICK (SP X'ing.)	i		
20031	20.4	WILLOW GLENN (SP X'ing.)			
22031	22.3	WEST SAN JOSE (SP X'ing.)			
23031	23.0	SAN JOSE (End of branch)		Yard	

RULE 540. Traffic Control System extends from Niles Jct. to Absolute Signals at MP 10.1. Eastward signal at MP 10.1 displays aspects per Rules 288 or 292 only. San Jose yard limits extend from MP 10.1 to MP 23.0, San Jose Branch.

SECOND SUBDIVISION

EASTWARD ↓			↑ WESTWARD			
Miles from Stockton	Station Numbers	Mile Post	TIME TABLE NO. 6		SDGS in Feet	Miles from Oroville Yard
			STATIONS	RULE 6-A		
0.0	92	92.0	STOCKTON (Yard)	TO-YBKFTPO		110.9
1.2	93	93.2	AT&SF CROSSING	IP		109.7
1.8	94	93.8	WEBER AVE. (SP X'ing.)	IP		109.1
2.3	94	94.3	FLORA STREET	IP	2869	108.6
3.1	95	95.1	EL PINAL (SP X'ing.)	p		107.8
5.9	98	97.9	HAMMER LANE	p	5895	105.0
12.9	104	104.9	KINGDON	p		98.0
21.9	114	113.9	THORNTON	p	3638	89.0
29.9	122	121.9	PHILLIPS	p	6250	81.0
40.4	132	132.4	POLLOCK	BKFPO	4874	70.5
44.0	136	136.0	SOUTH SACRAMENTO	IYP	Yard	66.9
46.0	138	138.0	"R" ST. (SP X'ing.)	p		64.9
47.5	140	139.5	HAGGIN (SN & SP Conns)	p		63.4
48.7	141	140.7	GLOBE (SN Conn.)	p		62.2
51.6	144	143.6	DEL PASO	p	6247	59.3
60.5	153	152.5	SANKEY (SN Conns.)	p		50.4
64.5	156	156.5	PLEASANT GROVE	p	6242	46.4
70.0	162	162.0	TROWBRIDGE	p		40.9
80.85	173	172.85	MOUNKES	p	7290	30.05
83.63	176	175.63	CLEVELAND (SN Conn.)	p		27.27
86.8	179	178.8	MARYSVILLE	IP	5055	24.1
88.2	180	180.2	BINNEY JCT. (SP X'ing.)	p		22.7
88.42	180	180.42	SP CONNECTION	p		22.48
93.6	186	185.6	TAMBO	p		17.3
101.0	193	193.0	CRAIG	TO-TBKFPPO	6183	9.9
110.9	203	202.9	OROVILLE (Yard)			0.0

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.

Traffic Control System in effect Stockton Yard to Oroville Yard inclusive. See Rule 540.

TRACY BRANCH

EASTWARD ↓			↑ WESTWARD		
Station Numbers	Mile Post	TIME TABLE NO. 6		SDGS in Feet	
		STATIONS	RULE 6-A		
73	0.0	TRACY	YP	10688	
2073	1.7	KERLINGER	p	1746	
2073	1.92	TEEKAY (End of Branch)		1020	

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

Stop and inspect for material covering rail before crossing at MP 0.8. A member of crew will flag MacArthur Rd. Crossing No. 4C-0.5, Tracy Branch, before engine or cars proceed over this crossing.

Track on Tracy Branch extending beyond MP 1.92, Teekay, has been leased to Botsford Co. for scrapping railroad cars. It is permissible to shove cars over bridge, but engine must not pass sign located at MP 1.95 reading "ENGINE MUST NOT GO BEYOND THIS POINT."

Switch point derail installed at MP 1.95 and must be left in derailing position when not switching cars to and from this leased trackage.

When leaving cars on this trackage they must be secured.

THIRD SUBDIVISION

EASTWARD ↓				↑ WESTWARD			
Miles from Oroville Yard	Station Numbers	Mile Post	TIME TABLE NO. 6		SDGS in Feet	Miles from Portola	Miles from Bieber via KdWye
			STATION	RULE 6-A			
0.0	203	202.9	OROVILLE (Yard)	TO-TBKFYPO		114.5	185.4
2.2	205	205.1	OROVILLE (Siding)		4687	112.3	183.2
7.0	214	213.9	KRAMM		6311	107.5	178.4
13.1	220	220.0	ELSEY		6466	101.4	172.3
19.1	226	226.0	JAMES		6545	95.4	166.3
28.0	235	234.9	POE		6959	86.5	157.4
32.6	240	239.5	PULGA		6091	81.9	152.8
36.6	244	243.5	CRESTA			77.9	148.8
40.7	248	247.6	MERLIN		3683	73.8	144.7
48.7	255	255.6	CAMP RODGERS		6713	65.8	136.7
53.2	260	260.1	BELDEN		4657	61.3	132.2
57.6	265	264.5	RICH BAR			56.9	127.8
63.6	270	270.5	VIRGILIA		9825	50.9	121.8
66.8	274	273.7	TWAIN		4268	47.7	118.6
70.4	277	277.3	PAXTON		4202	44.1	115.0
74.6	281	281.5	KEDDIE	FPY	7169	39.9	
81.0	288	287.9	QUINCY JUNCTION		3791	33.5	
89.5	296	296.4	SPRING GARDEN		4610	25.0	
95.0	302	301.9	SLOAT		7892	19.5	
103.5	310	310.4	BLAIRSDEN		4869	11.0	
114.5	321	321.4	PORTOLA	TO-BKFYP	10771	0.0	

Traffic Control System in effect Oroville Yard to Portola inclusive. See Rule 540. Equation MP 205.47 equals MP 209.51, which are identical points. Equation is a result of Oroville line change being 4.04 miles shorter than original route.

RENO BRANCH

EASTWARD ↓				↑ WESTWARD		
Station Numbers	Mile Post	TIME TABLE NO. 6		SDGS in Feet		
		STATION	RULE 6-A			
342	0.0	RENO JUNCTION	YP	3000		
10342	10.1	PEAVINE, (CAL.)		480		
19342	18.8	ANDERSON, (NEV.)		1229		
21342	21.3	MARTIN		2000		
23342	23.37	PANTHER		419		E17424#
25342	25.4	COUGAR		E 640		
29342	28.53	NORTH RENO	TO-R	1202		
30342	30.3	COMSTOCK		632		
31342	30.6	SIERRA PACIFIC		W 1933		
31342	30.7	VAUGHN MILL NO. 1		W 939		
31342	31.2	VAUGHN MILL NO. 2		W 903		
31342	31.42	ROCKY MOUNT NO. 1		W 1033		
31342	31.57	ROCKY MOUNT NO. 2		E 830		
33342	33.1	RENO	O			

Reno Yard limits extend from MP 21.3 to Reno.
#Station "Leareno (yard)" Sta. No. 203342, located at end of spur from Martin.

EASTWARD ↓				↑ WESTWARD			
SECOND CLASS		TIME TABLE NO. 6		STATIONS		RULE 6-A	
10	8	6	4	5	7	9	11
Daily	Daily	Daily	Daily	Daily	Daily	Daily	Daily
PM 6.00	PM 12.01	AM 6.00	AM 12.01	AM 2.55	AM 8.55	PM 2.55	PM 8.55
6.25	12.25	6.25	12.25	2.35	8.35	2.35	8.35
6.35	12.35	6.35	12.35	2.25	8.25	2.25	8.25
6.45	12.45	6.45	12.45	2.15	8.15	2.15	8.15
7.10	1.10	7.10	1.10	1.50	7.50	1.50	7.50
7.30	1.30	7.30	1.30	1.30	7.30	1.30	7.30
8.15	2.15	8.15	2.15	12.40	6.40	12.40	6.40
8.55	2.55	8.55	2.55	12.01	6.00	12.01	6.00
PM	PM	AM	AM	AM	AM	PM	PM
				111.8	105.6	103.2	97.1
				4208	620	4236	7914
				4236	7914	4412	7236
				4219	6754	4192	0.0
				SDGS in Feet	Miles from Bieber	Miles from Bieber	Miles from Bieber
				FPY			
				KEDDIE	MOCCASIN	CRESCENT MILLS	GREENVILLE
				ALMANOR	CLEAR CREEK JCT	WESTWOOD	ROBBERS CREEK
				LODGEPOLE	HALLS FLAT	LITTLE VALLEY	BIEBER (Yd. Limits)
				TO-R-BKYP	TO-R-BKYP	TO-R-BKYP	TO-R-BKYP

Rule 540. Traffic Control System in effect Keddie to MP 38.6 Westward signal located at MP 39.6 is approach signal for Absolute Signal at MP 38.6.
Rule T-72. Westward Trains are superior to Eastward Trains of the same class. TCS signals must be respected.
Rule T-82. Eastward Trains must not pass Eastward Absolute Signal at East Almanor unless authorized by train order. T.C.S. signals must be respected.

FIFTH SUBDIVISION

EASTWARD ↓				↑ WESTWARD			
Miles from Portola	Station Numbers	Mile Post	TIME TABLE NO. 6		SDGS in Feet	Miles from Winnemucca	
			STATIONS	RULE 6-A			
0.0	321	321.4	PORTOLA	TO-BKFPY	10771	210.9	
6.1	328	327.5	HAWLEY		5770	204.8	
17.7	339	339.1	CHILCOOT		6245	193.2	
20.4	342	341.8	RENO JCT.		3000	190.5	
24.2	346	345.6	SCOTTS		6126	186.7	
41.2	363	362.6	DOYLE		6369	169.7	
50.3	372	371.7	HERLONG (Cal.)		4193	160.6	
62.1	384	383.5	FLANIGAN (Nev.)		6162	148.8	
63.0	384	384.4	SP CONNECTION			147.9	
72.3	394	393.7	SAND PASS		6162	138.6	
83.3	405	404.7	SANO		6152	127.6	
94.9	416	416.3	REYNARD		5647	116.0	
109.4	431	430.8	PHIL	KYP	6160	101.5	
116.5	438	437.9	GERLACH		6289	94.4	
129.8	451	451.2	TREGO		6145	81.1	
139.9	461	461.3	CHOLONA		6150	71.0	
149.2	471	470.6	RONDA		6158	61.7	
158.0	479	479.4	FLOKA		6167	52.9	
166.2	488	487.6	ANTELOPE		6156	44.7	
175.2	497	496.6	JUNGO		6163	35.7	
187.2	509	508.6	GASKELL		6148	23.7	
197.8	519	519.2	RAGLAN	BKPY	6145	13.1	
210.9	532	532.3	WINNEMUCCA		Yard	0.0	

Traffic Control System in effect Portola to Winnemucca inclusive. See Rule 540. Divison point between Eastern and Western Divisions is MP 384.38.

LOYALTON BRANCH

EASTWARD ↓			↑ WESTWARD		
Station Numbers	Mile Post	TIME TABLE NO. 6		SDGS in Feet	
		STATIONS	RULE 6-A		
328	0.0	HAWLEY		5770	
12328	11.8	LOYALTON		1554	

RULE 201. Train order authority is not required on Loyalton Branch and all movements on branch must be made at yard speed. Trains or engines moving over Highway crossing No. 4-E-12.4 Loyalton must come to a complete stop then be protected by a member of the crew in order to warn highway traffic that crossing is to be blocked. Split point derail installed about 210 feet west of chip track switch, TIP 713, Loyalton. Derail must be in derailing position except when main track is being used.

SIXTH SUBDIVISION EASTWARD ↓ WESTWARD ↑

EFF: 12:01 AM 10/29/78

First Class	Miles from Winnemucca	Station Numbers	Mile Post	TIME TABLE NO. 6		SDGS in Feet	
				STATIONS	RULE 6-A		
6							
SP PSGR							
Daily							
	0.0	532	532.3	WINNEMUCCA	BKPY	Yard	
PM 9:55	3.7	536	536.0	WESO (SP Conn.)			
10:27	43.1	575	575.4	ELLISON		6268	Be governed by current time table, bulletins and rules of Southern Pacific Company, on SP track between Elko and Weso.
11:04	87.2	620	619.5	BEOWAWE (SP Conn.)		5999	
11:13	98.2	631	630.5	BARTH (SP Conn.)			
11:30	111.1	643	643.4	WEST CARLIN (SP Conn.)			
11:35	112.3	645	644.6	CARLIN			
	113.7	646	646.0	EAST CARLIN (SP Conn.)			
11:58 PM	133.1	665	665.4	ELKO (SP Conn.)		Yd. Lmts.	

Feet Capacity	Mile Post	SP Co. Stations	Station Numbers
300W...P	422.8	Tule	423536 (Spur)
1640W...P	434.0	Golconda	434536 (Spur)
6050...P	439.3	Preble	554
245W...P	448.1	Iron Point	448554
7550W...P	461.3	Valmy	461554 (Spur)
6500...P	466.3	Mote	466554 (Spur)
3185W...P	475.8	Battle Mtn.	476554
7100...P	487.7	Argenta	488554 (Spur)
245W...P	489.15	Hilltop	489554 (Spur)
2790W...P	492.9	Mosel	493554
Yd. Lmts.	508.2	Beowawe (WP Conn.)	620
	517.0	Harney	517620 (Spur)
	520.3	Barth (WP Conn.)	631
	525.7	Palisade	526631 (Spur)
	534.5	Carlin (WP Conn.)	534645
	544.7	Molene	545645

Traffic Control System in effect Winnemucca to Weso. See Rule 540. Automatic Block Signal System extends from Weso to Elko, Eastward only, except Westward Block Signal System in effect through Tunnels 39,40,41 and 42. See Page 39.

EASTWARD ↓ WARNER BRANCH ↑ WESTWARD

Station Numbers	Mile Post	TIME TABLE NO. 6		SDGS in Feet	
		STATIONS	RULE 6-A		
897	0.0	BURMESTER	YP	6168	
7897	7.0	MARSHALL		942	
14897	13.5	CONN. TOOELE ARMY DEPOT		1254	
16897	15.5	WARNER			

RULE 201. Train order authority is not required on Warner Branch and all movements on branch must be made at yard speed. Dispatchers phone located on east leg of wye Warner Branch at Burmester. Trains arriving from Warner Branch must be governed by Rule 340-A.

EASTWARD ↓ ELLERBECK BRANCH ↑ WESTWARD

Station Numbers	Mile Post	TIME TABLE NO. 6		SDGS in Feet	
		STATIONS	RULE 6-A		
893	0.0	ELLERBECK	P		
2893	2.7	WYE	Y		
3893	3.7	FLUX		1965	
5893	4.7	DOLOMITE		134	

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

Wye. East switch east leg of Wye must be left lined for straight track as derail. **Dolomite.** Look out for poor footing both sides of track on curve just east of plant, and all tracks vicinity plant. Main track and No. 1 track are out of service 630 feet east of west switch acc't dirt on and along tracks.

Flux. Main track out of service 200 feet west of east switch, run around track.

SEVENTH SUBDIVISION

EFF: 12:01 AM 10/29/78

First Class	EASTWARD ↓			↑ WESTWARD			
	Miles from Elko	Station Numbers	Mile Post	TIME TABLE NO. 6		SDGS in Feet	Miles from Roper
6							
SP PSGR							
Daily							
				STATIONS	RULE 6-A		
AM 12:01	0.0	665	665.4	ELKO (SP Conn.)	TO-R-BKFPY	Yd. Lmts.	264.9
	17.7	683	683.1	SP CONN.			247.2
12:17	17.9	683	683.3	ELBURZ		5844	247.0
12:32	34.6	700	700.0	DEETH		5769	230.3
	35.6	701	701.0	SP CONN.			229.3
12:48 AM	48.2	714	713.6	ALAZON (SP Conn.)			216.7
	52.3	718	717.7	WELLS		6198	212.6
	62.7	728	728.1	RUBY		6123	202.2
	72.8	738	738.2	VENTOSA		6160	192.1
	81.8	747	747.2	SPRUCE		6153	183.1
	92.1	758	757.5	SAGE		6183	172.8
	100.5	766	765.9	NN CROSSING			164.4
	101.0	766	766.4	SHAFTER (NN Conn.)		6198	163.9
	107.0	772	772.4	SILVER ZONE		6160	157.9
	115.7	781	781.1	CLIFSIDE		6143	149.2
	123.5	789	788.9	PILOT		6152	141.4
	133.2	799	798.6	OLA (Nev.)		6143	131.7
	141.2	806	806.6	WENDOVER (Utah)		6215	123.7
	150.1	816	815.5	SALDURO		6143	114.8
	159.7	825	825.1	ARINOSA		6143	105.2
	169.5	835	834.9	BARRO		6160	95.4
	179.9	845	845.3	KNOLLS		6150	85.0
	188.8	854	854.2	CLIVE		6161	76.1
	200.7	866	866.1	LOW		6146	64.2
	213.2	878	878.6	DELLE		8080	51.7
	227.5	893	892.9	ELLERBECK			37.4
	231.7	897	897.1	BURMESTER		6168	33.2
	246.04	911	911.44	SMELTER (WP-UP Jct.)			18.9
	247.8	913	913.2	GARFIELD (UP Conn.)		6050	17.1
	261.2	927	926.6	WP-UP JUNCTION			3.7
	261.3	927	926.7	WP-UP JUNCTION (10th West)			3.6
	261.8	927	927.2	POLLARD JCT.			3.1
	263.2	929	928.6	UP CROSSING			1.7
	264.9	930	930.3	ROPER (Salt Lake City)	TO-BKFPYO	Yd. Lmts.	0.0
				Additional Stations UP Trackage			
		768911	768.3	GARFIELD			
		779911	779.2	BUENA VISTA			
		780991	779.9	INDUSTRIAL CENTER SPUR			
		263.2	2927	NORTH YARD			

Be governed by current timetable, bulletins and rules of Southern Pacific Company on SP track between Alazon and Elko.

Feet Capacity	Mile Post	SP Co. Stations	Station Number
300W ...P	564.8	Osino	565665 (Spur)
7000 ...P	573.1	Elburz (WP Conn.)	683
4650 ...P	576.7	Halleck	577683
	589.6	Deeth	590683
	591.1	WPRR Connection	701

Automatic Block Signal System extends from Elko to Alazon, Eastward only. Traffic Control System in effect Alazon to Eastward Interlocking Home Signal, Pollard Jct., MP 927.2. See Rule 540.
 For operations between SMELTER (WP-UP Jct.) and UP North Yard, Salt Lake City, be governed by current UP-WP Joint Pamphlet governing joint operation.
 See special instructions under heading "Seventh Subdivision" for instructions concerning movement between Pollard Jct. and Roper Yard.

ROWLEY BRANCH

EASTWARD ↓		↑ WESTWARD	
Station Numbers	Mile Post	TIME TABLE NO. 6	
		STATIONS	RULE 6-A
878	0.0	DELLE	RYP
11878	10.6	ROWLEY	
11878	11.2	END OF BRANCH	
			SDGS in Feet
			8080
			3380

Rowley Branch. Derails located on east end of run-around track and on both legs of wye Delle.
 RULE 201. Train order authority is not required on Rowley Branch. All movements on Branch must be made at yard speed.

MARBLEHEAD BRANCH

Station Numbers	Mile Post	STATIONS	SDGS in Feet
871	0.0	MARBLEHEAD	1738
5871	4.66	PLANT	1230
5871	4.87	END OF BRANCH	

RULE 201. Train order authority is not required on Marblehead Branch and all movements on branch must be made at yard speed.
 Marblehead Branch. Normal position for the east connected spur 3491 feet east of Marblehead siding will be in a position lined and locked for the spur, and this switch must be left in this position also while switching at the plant. Trainmen must insure that all cars set out are properly secured. Deraill located 108 feet west of west switch of run-around track at plant must be left in derailling position, except when train is being switched. Look out for drifted sand on rails of this branch.

TUNNEL LOCATIONS

Number	West Portal	East Portal	Length
1	32.12	32.94	4320.9
2	33.39	33.47	407.3
3	57.67	57.75	414.7
4	224.66	225.12	2410.0
5	227.34	227.90	2922.5
6	228.14	228.63	2583.0
7	229.54	230.38	4406.5
8	230.42	232.11	8856.3
9	236.37	236.48	551.8
10	237.01	237.05	231.8
11	237.33	237.37	223.8
12	237.69	237.70	51.4
13	244.92	244.96	195.9
14	246.25	246.29	244.9
15	250.10	250.69	3117.81
16	257.43	257.54	600.9
17	257.85	257.91	324.5
18	258.08	258.11	150.1
19	258.16	258.19	164.0
20	258.32	258.38	291.5
21	258.85	258.93	405.0
22	259.55	259.61	306.1
23	262.87	263.11	1257.7
24	263.89	264.01	616.1
25	265.20	265.23	186.4
26	271.58	271.66	446.0
27	278.42	278.49	364.4
28	278.96	279.06	608.6
29	279.19	279.30	587.8
30	279.55	279.65	537.5
31	280.08	280.21	687.3
32	280.37	280.48	595.2
33	283.06	283.30	1270.7
34	283.71	283.77	304.6
35	297.18	298.57	7343.7
36	316.00	316.14	762.7
37	340.34	341.47	6001.7
39	635.37	635.57	1080.7
40	636.8	636.86	322.0
41	649.24	649.68	2341.8
42	650.71	650.91	1071.7
43	753.69	754.76	5675.9

FOURTH SUBDIVISION

Number	West Portal	East Portal	Length
1	0.00	0.12	685.9
2	0.97	1.08	588.3
3	2.61	2.73	621.0
4	3.39	3.47	470.2
5	3.71	3.76	278.7
6	21.03	21.24	1103.0

SPURS AND COMMERCIAL TRACKS

STATIONS	MILE POST	Connected	Capacity in Feet	Station No.
SAN LEANDRO	P 14.69	Both Ends	435	15
ESTUDILLO	P 16.14	Both Ends	3850	16
CARPENTER	P 24.9	Both Ends	1688	25
UNION CITY	P 25.9	Both Ends	1888	26
PABRICO	P			28
Pacific States Steel	26.96	W	3015	
PLEASANTON	P 41.7	W	500	41
RADUM	P 43.4	Both Ends	1758	43
TREVARNO				
Interchange	49.0	W	1402	49
Drill Track	49.16	W	6434	1049
LOX	P 50.3	W	1850	50
AYALA	P 70.92	E	5700	71
LYOTH	P			
U.S.Q.M. & SP Conn.	73.8	W	—	74
(Spur leads from east end Tracy siding)				
COCHRAN	P 75.6	Both Ends	759	76
ARMY SUPPLY DEPOT (LATHROP)	P 85.76	Both Ends	6241	86
FRENCH CAMP	P 88.35	Both Ends	1557	88
KINGDON	P 104.6	Both Ends	897	104
TERMINOUS JCT.	P 105.3			105
Track 1		W	1200	—
Track 2		W	3360	—
VILLINGER	P 107.8	W	641	108
LAGUNA CREEK	P 129.76	E	1400	129
KENWOOD	P 133.17	E	717	133
BOMBAY	P 146.6	E	510	147
TOBIN	P 253.1	E	1982	253
GRAY'S FLAT	P 272.6	W	546	273
MABIE	P 318.3	W	4158	319
INDIAN CREEK	P 3.1	W	781	
CHENEY	13.9	E	1045	14281
CHENEY (South)	13.9	Both Ends	438	14281
WILLOW SPRINGS	P 89.8	W	448	90281
LITTLE VALLEY LUMBER CO.	P 95.4	W	387	96281
POZLA	P 349.1	Both Ends	1670*	349
RED ROCK	P 352.2	W	1028	353
GOLCONDA	P 548.8	E	5020	548
RED HOUSE	P 562.97	E	5375	562
KNIGHT	P 570.1	E	316	570
VALMY	P 572.2	E	—	572
RUSSELL	P 582.5	E	341	583
RENNOX	P 591.3	E	5860	591
KAMPOS	P 601.3	E	5143	601
DUNPHY	P 610.12	E	5340	610
CLURO	P 627.14	E	5335	627
DUGGAN	P 631.9	E	1018	632
CARLIN	P 644.6	E	1296	645
TONKA	P 650.1	E	1248	650
HUNTER	P 656.97	E	6065	656
TULASCO	P 708.8	E	1026	709
TOBAR	P 733.5	W	818	734
BLAIR	P 808.7	W	4070	809
ARAGONITE	P 861.5	E	440	862
MARBLEHEAD	P 870.8	Both Ends	1737	871
TIMPIE	P 885.7	W	3500	886
SOLAR	P 893.4	W	2246	894
LAKE POINT	P 906.3	E	5030	906
GARFIELD PIT	P 911.7	Both Ends	3397	912
TERMINAL	P 922.1	W	480	922
BUENA VISTA	P 924.07	W	4110	924

Except as otherwise indicated, footage figures shown are for the tracks directly connecting to the main track and do not include additional auxiliary trackage.

*Includes tail track.

SACRAMENTO NORTHERN

Station Numbers	Mile Post	TIME TABLE NO. 6		SDGS in Feet
		STATIONS	RULE 6-A	
37093	37.21	CLYDE		Yard
39093	39.03	PORT CHICAGO		680
41093	41.19	NICHOLS		Yard
42093	42.46	MCAYVOY		830
44093	43.59	SHELL POINT		Y
45093	44.92	WEST PITTSBURG		510
	46.24	AT&SF Crossing		
47093	46.95	PITTSBURG		Yard
	47.39	AT&SF Crossing		
	48.06	AT&SF Crossing (10.85)		
48093	48.46	ATSF { EAST PITTSBURG JCT. AT&SF	Joint Track	Yard
92		ABS { STOCKTON YD.		Yard
136		WPTCS { SO. SACRAMENTO		Yard

VACAVILLE BRANCH

605140	4.21	VACAVILLE		Yard
508140	7.60	VACAVILLE JCT.		Yard
	7.87	CANNON, JCT. SPCO	D.T. SP Co. Rules	Yard
		ELMIRA		
		DIXON		
	94.98	DAVIS		Yard
140	95.49	HAGGIN		Yard

DOZIER BRANCH

458140	6.94	CANNON		Yard
465140	64.55	DOZIER		965
474140	74.12	LIBFARM		1425
480140	79.71	SAXON (22.10)		355

MONTEZUMA BRANCH

750140	49.98	MONTEZUMA		
752140	51.97	MOLENA		786
758140	57.78	RIO VISTA JCT.		W 320
465140	64.55	DOZIER		700

RULE 201. Train order authority is not required between Clyde and Pittsburg, between Vacaville and Cannon and on the Dozier and Montezuma Branches. All movements must be made at yard speed.

Dozier Branch. A barricade has been placed across main track 3000 feet east of east switch Lib Farm and main track east of this point is temporarily out of service. For movements over SPT Co. and ATSF trackage be governed by their respective rules and timetables. See pages 42 and 43.

**SACRAMENTO NORTHERN
HOLLAND BRANCH**

EASTWARD ↓		TIME TABLE NO. 6		↑ WESTWARD
Station Numbers	Mile Post	STATIONS	RULE 6-A	SDGS in Feet
92140	92.30	BRODERICK	Y	Yard
		0.74	OAI	ABS
92140	91.56	WESTGATE		Yard
		4.61		
87140	86.95	RIVERVIEW		2160
		5.89		
206140	5.89	CLARKSBURG		730
		4.62		
211140	10.51	GREENDALE		700
		2.69		
213140	13.20	SORROCA		1245
		1.06		
214140	14.26	VALDEZ		1005
		1.51		
216140	15.77	OXFORD		680

SACRAMENTO NORTHERN

179	136.31	ABS	MARYSVILLE, JCT. WPRR	PBO	Yard
		0.96	YUBA CITY, S.P.R.R. CROSSING		Yard
137179	137.27				Yard
		1.29			2050
138179	138.56	PALORO			Yard
		0.87			1365
139179	139.43	HARTER			Y
		0.34			
140179	139.77	COLUSA JUNCTION			Yard
		9.54			
149179	149.31	LIVE OAK SPCO. CONN.			765
SPT		FAGAN			} Joint Track
Co.		CTC	GRIDLEY		
Rules			RICHVALE		
			DURHAM SPCO. CONN.		
177179	177.29				501
		4.25			
181179	181.54	SPEEDWAY			Y
		0.48			
182179	182.02	STIRLING JCT., S.P.R.R. CROSSING			Yard
		1.01			Yard
183179	183.03	MULBERRY			1135
		1.32			
184179	184.35	CHICO			Yard

TARKE BRANCH

140179	0.00	COLUSA JUNCTION	Y	Yard
		5.24		635
205179	5.24	SUTTER		Yard
		5.04		
210179	10.28	TARKE (10.28)		1130

**SACRAMENTO NORTHERN
WOODLAND BRANCH**

EASTWARD ↓		TIME TABLE NO. 6		↑ WESTWARD
Station Numbers	Mile Post	STATIONS	RULE 6-A	SDGS in Feet
92140	92.40	WESTSIDE	BK	Yard
		0.10	Y	
92140	92.30	ABS BRODERICK	AIP	Yard
		1.55		
302140	1.55	MIKON, SPRR Crossing		
		1.18		
303140	2.73	LOVDAL		660
		13.84		
317140	16.57	WOODLAND (16.67)		Yard

RIO LINDA BRANCH

	153	109.649	SANKEY		1185
			0.479		
	153	109.17	SANKEY (WPRR X'ing)		
			4.76		
	104141	104.41	ELVERTA		W 260
			1.31		
	103141	103.10	RIO LINDA		1225

PEARSON BRANCH

	129176	129.70	PEARSON		260
			2.66		
	132176	132.36	ALICIA		405
			2.04		
	176	134.40	CLEVELAND, JCT. WPRR (4.70)		1160

SN ADDITIONAL STATIONS

STATIONS	Station Number	Mile Post	Facilities
MONTEZUMA Creed-Atlas Powder Co.	761140	59.80	680W
SACRAMENTO YARD Sacramento-Yolo Port	90140	90.94	Yard
West Sacramento	92140	92.24	Yard
Swanston	202141	98.06	480
PEARSON BRANCH Reed	127176	129.14	26E
HOLLAND BRANCH Central	209140	8.66	1585E 680E
WOODLAND BRANCH Conaway	312140	11.81	1030E (yard)
Hebron	315140	14.80	330W (yard)

RULE 201. Train Order authority is not required on Woodland, Rio Linda and Pearson Branches, and all movements must be made at yard speed.

RULE 201. Train Order authority is not required on Holland and Tarke Branches and all movements on branch must be made at yard speed.

RULE 201. Train Order authority is not required between Colusa Jct. and Live Oak and between Durham and Chico.

RULE T-83-A. Colusa Jct. is designated as register station for extra train operating between Colusa Jct. and Chico.

Extra trains must not leave Colusa Jct. until it has been ascertained from the train register that all preceding extra trains via the route have completed their trip and registered time and date of arrival at Colusa Jct.

RULE T-83-C. Will have been complied with when identification is ascertained by the above provisions.

Train register for Colusa Jct. is located in building at Bridge & Plumas Sts., Yuba City.

For movements over SPT Co. Trackage, be governed by SPT Co. Rules and Time table. See Page 43.

Holland Branch. Main track out of service ½ mile east of Clarksburg. Main track Riverview out of service, switches lined and spiked for siding.

Close clearance sugar plant eaves Clarksburg.

Tarke Branch. No movements will be made between Sutter and Tarke without authority from Superintendent or his representative.

TIDEWATER SOUTHERN

EASTWARD ↓	↑ WESTWARD	TIME TABLE NO. 6		SDGS in Feet
Station Numbers	Mile Post	STATIONS	RULE 6-A	
92	0.0	STOCKTON YARD	TO-PRBKQY } Joint Track	Yard
90	1.7	ORTEGA, JCT. WPRR	P }	Yard
3092	3.3	SHARPS LANE		1405 Yard
5092	5.2	MANTECA JCT.		2170
6092	6.2	TURNER		1065
12092	12.5	ATLANTA		1625 Yard
14092	14.2	SIMMS		1040
15092	15.4	CARROLTON		W 690
17092	17.0	ALBA		1160
20092	19.8	ESCALON		1390 Yard
26092	25.6	McHENRY		840
29092	29.5	AURORA		2310
30092	30.1	NORTH YARD JCT.	PRB } Joint Track	
32092	31.6	MODESTO	P }	
	32.7	S.P. CROSSING		PI
33092	33.2	MOORE		W 1635
34092	34.5	ROGERS		2010
37092	37.5	BRONCO		E 200
42092	41.6	HATCH		1240
45092	44.7	KEARNEY		
48092	47.9	TURLOCK (47.9)		Yard

MANTECA BRANCH

5092	0.0	MANTECA JCT.		P Yard
205092	5.1	MANTECA		Yard 1040
207092	6.6	SOUTH MANTECA		Yard

CHEMURGIC BRANCH

42092	0.0	HATCH		Y
303092	2.9	CHEMURGIC		

RULE 201. Train Order authority is not required on Manteca and Chemurgic Branch and all movements must be made at yard speed.
RULE T-72. Westward trains are superior to eastward trains of the same class.

MAXIMUM SPEEDS IN MILES PER HOUR Between

First Subdivision

	1 Trains Not Exceeding 100 Cars or 5500 Tons	2 Trains Exceeding 100 Cars or 5500 Tons
Chestnut Jct. and SP Crossing MP 7.2	15	15
Over SP Crossing MP 7.2	10	10
SP Crossing MP 7.2 and MP 7.7 Clinton	15	15
MP 7.7 Clinton and SP Crossing MP 10.6	20	20
SP Crossing MP 10.6 and MP 15.2 Williams St.		
San Leandro	35	35
MP 15.2 Williams St. San Leandro and MP 23.93	60	60
MP 23.93 and MP 24.8	60	45
MP 24.8 and MP 29.25	60	60
MP 29.25 and MP 32.0	40	40
MP 32.0 and MP 33.0	25	25
MP 33.0 and MP 34.4	40	40
MP 34.4 and MP 38.8 curve at SP underpass	45	45
MP 38.8 and MP 52.3	45	45
MP 52.3 and MP 58.2	40	40
MP 58.2 and MP 67.0	45	45
MP 67.0 and MP 74.05 SP Crossing	60	50
Over MP 74.05 SP Crossing	50	50
MP 74.05 SP Crossing and MP 84.45 SP Crossing	60	50
Over MP 84.45 SP Crossing	30	30
MP 84.45 SP Crossing and MP 90.4	60	50
MP 90.4 and MP 90.85	45	45
MP 90.85 and MP 94.2	20	20
Other Tracks	10	10

Second Subdivision

MP 90.85 and MP 94.2	20	20
Other Tracks	10	10
MP 94.2 and MP 95.2 over SP Crossing	30	30
MP 95.2 and MP 97.3	50	50
MP 97.3 and MP 115.35	60	60
MP 115.35 and MP 116.7	60	50
MP 116.7 and MP 129.0	60	60
MP 129.0 and MP 135.2	40	40
MP 135.2 and "C" St. Sacramento	20	20
"C" St. Sacramento and MP 140.6	35	30
MP 140.6 and MP 166.25	60	60
MP 166.25 and MP 166.6 Bear River Bridge	60	50
MP 166.6 and MP 177.5	60	60
MP 177.5 and MP 180.19	40	40
MP 180.19 over SP Crossing	25	25
MP 180.19 and MP 181.1	45	45
MP 181.1 and MP 188	60	60
MP 188 and MP 198	50	50
MP 198 and MP 201.7	60	60
MP 201.7 and MP 201.9 on curve	40	40
MP 201.9 and MP 205.47	45	45

NOTE: The following trains do not exceed **10 MPH** while any portion of train is passing Oroville Yard office: FF, BN137, BN139, BN171, BN138, BN170, WPX, TOF, COFC.

Third Subdivision

MP 201.9 and MP 205.47	45	45	35
MP 205.47 and MP 215.4	45	45	40
MP 215.4 and MP 215.6	35	35	35
MP 215.6 and MP 224.25	45	45	40
MP 224.25 and MP 227.3	35	35	35
MP 227.3 and MP 232.2	45	35	35
MP 232.2 and MP 300.0	25	25	25
Grays Flat Spur	5	5	5
West Wye Switch Keddie, diverging route	15	15	15
MP 300.0 and MP 318.4	30	25	25
MP 318.4 and MP 323.7	40	40	30

NOTE: The following trains do not exceed **10 MPH** while any portion of train is passing Oroville Yard office: FF, BN137, BN139, BN 171, BN 138, BN170, WPX, TOF, COFC.

MAXIMUM SPEEDS IN MILES PER HOUR Between	OMW, CCVX, FF, PNA, TOF, COFC, and Other Designated, Not Over 70 Cars, Not over 80 Tons Per Operative Brake	1	2
		Trains Not Exceeding 100 Cars or 5500 Tons	Trains Exceeding 100 Cars or 5500 Tons
Fifth Subdivision			
MP 318.4 and MP 323.7	40	40	30
MP 323.7 and MP 340.3	65	60	50
MP 340.3 and MP 356.0	40	40	40
MP 356.0 and MP 363.0	60	60	50
MP 363.0 and MP 384.2	65	60	50
MP 384.3 WP-SP Conn. using turnout		20	20
MP 384.2 and MP 390.7	60	60	50
MP 390.7 and MP 397.8	45	45	35
MP 397.8 and MP 404.7	55	55	40
MP 404.7 and MP 488.3	65	60	50
MP 488.3 and MP 489.9	55	55	45
MP 489.9 and MP 494.5	40	40	30
MP 494.5 and MP 494.9	45	45	35
MP 494.9 and MP 495.6	55	55	45
MP 495.6 and MP 506.0	65	60	50
MP 506.0 and MP 527.0	60	50	50
MP 527.0 and MP 530.7 Winnemucca	65	60	50
MP 530.7 and MP 536.0	55	55	45
Sixth Subdivision			
MP 530.7 Winnemucca and MP 536.0	55	55	45
Using turnouts, Weso	25	25	25
MP 536.0 and MP 628.3	65	65	60
MP 628.3 and MP 636.8	50	50	40
MP 636.8 and MP 637.7	55	55	45
MP 637.7 and West Carlin	60	60	50
West Carlin and East Carlin	50	50	50
Using turnouts, West and East Carlin	15	15	15
East Carlin and MP 650.4	60	60	50
MP 650.4 and MP 650.8	50	50	40
MP 650.8 and MP 664.4	65	65	55
MP 664.4 and MP 665.4 Elko Yard	— Yard Speed —		
Seventh Subdivision			
MP 665.4 and MP 666.4 Elko Yard	15	15	15
MP 666.4 and MP 674.8	65	65	60
MP 674.8 and MP 683.1	55	50	45
MP 683.1 and Alazon	65	65	60
Using cross-over Alazon	25	25	25
Alazon and MP 727.4	60	60	45
MP 727.4 and MP 753.2	60	60	50
MP 753.2 and MP 755.2	45	45	35
MP 755.2 and MP 758.7	60	60	45
MP 758.7 and MP 765.78 (NN Crossing)	65	60	45
Over NN Crossing	50	50	45
MP 765.78 and MP 773.4	65	60	45
MP 773.4 and MP 775.3	60	30	25
MP 775.3 and MP 784.5	30	30	25
MP 784.5 and MP 799.5	45	45	35
MP 799.5 and MP 800.0	40	40	30
MP 800.0 and MP 810	45	45	45
MP 810 and MP 837	40	40	40
MP 837 and MP 864.3	60	60	50
MP 864.3 and MP 868.8	50	50	50
MP 868.8 and MP 880.0	60	60	50
MP 880.0 and MP 911.0	50	50	50
MP 911.0 and MP 926.5	60	60	50
MP 911.4 WP-UP Conn. using Crossover	35	35	35
MP 926.5 and Pollard Jct.	20	20	20
Pollard Jct. and Roper Yard	15	15	15

RULE 10-J. Where two speeds are shown on speed control boards, higher speed will be that authorized by column headed OMW, CCVX, FF, PNA, TOF, COFC, etc., and the other, Column 1.

Trains approaching interlocked crossings must reduce to speed shown before engine passes home signal.

On curves speed will be reduced below the maximum or restrictions provided, where necessary, on all Subdivisions and branches, to insure safety.

Southern Pacific Trains handling empty cars, do not exceed 55 MPH on WP track. Caboose will qualify as a load.

Southern Pacific Trains not authorized Column 1 speed on Southern Pacific by Southern Pacific Train Order are restricted on Western Pacific to a maximum speed of 55 MPH.

Southern Pacific Trains designated as RVOGP, OAOGF and RVNPP are permitted to operate at speeds shown in column headed "OMW, CCVX, FF, PNA, TOF, COFC and other designated" when they qualify with conditions in column heading, subject to other applicable speed restrictions.

Southern Pacific trains with UP units 3123 through 3489, do not exceed 50 MPH.

PASSENGER TRAINS

Passenger trains will observe speeds shown under column headed OMW, CCVX, GGV, TOF, COFC, etc., except as specified below for Sixth and Seventh Subdivisions.

Sixth Subdivision

MP 536.0 and MP 628.0 Posted speed plus 5 MPH
 MP 628.0 and MP 638.3 50 MPH
 MP 638.3 and West Carlin Posted speed plus 10 MPH
 West Carlin and MP 648.1 Posted speed
 MP 648.1 and MP 652.5 50 MPH
 MP 652.5 and MP 664.4 Posted speed plus 5 MPH
 except thru turnouts Weso and Carlin
 MP 664.4 and MP 665.4 Elko Yard Yard speed

Seventh Subdivision

MP 665.4 and MP 666.4 Posted speed plus 20 MPH
 MP 666.4 and MP 674.7 Posted speed plus 5 MPH
 MP 674.7 and MP 681.0 50 MPH
 MP 681.0 and MP 683.1 Posted speed
 MP 683.1 and Alazon Posted speed plus 5 MPH
 except thru turnouts Alazon.

For Maximum Speeds Westbound on WP see paragraph (B), under use of WP portion of paired track between Weso and Alazon inclusive.

MAXIMUM SPEEDS IN MILES PER HOUR Between	MAXIMUM SPEEDS	
	1	2
Fourth Subdivision		
MP 0.0 and MP 1.95	10	10
MP 1.95 and MP 6.19	25	25
MP 6.19 and West Switch Greenville	40	35
West Switch Greenville and MP 16.0	35	35
MP 16.0 and MP 34.55	25	25
MP 34.55 and MP 43.52	30	25
MP 43.52 and MP 78.71	45	45
MP 78.71 and MP 93.4	25	25
MP 93.4 and MP 98.1	30	25
MP 98.1 and MP 106.53	25	25
MP 106.53 and MP 111.81	30	25

Unless otherwise advised, trains on Fourth Subdivision will operate at speeds shown under Column 1.

**MAXIMUM SPEEDS
IN MILES PER HOUR
Between**

San Jose Branch	
MP 0.0 and MP 0.3 including East & West legs of Wye Niles Jct.	10
MP 0.3 and MP 7.5	35
MP 7.5 and MP 10.1	25
MP 10.1 and City Limits	
San Jose MP 15.7	20
MP 15.7 and MP 23 within City Limits, San Jose	10
Tracy Branch	
Kellogg Spur	5
Loyalton Branch	
Reno Branch	
Reno Jct. between main track switch and tail of Wye switch	10
Tail of Wye switch Reno Jct. and MP 30	25
Martin Spur	10
MP 30 and Reno	15
SP-WP Interchange Connection, Reno	5
Ellerbeck Branch	20
Warner Branch	20
Rowley Branch	30
Marblehead Branch	20

On curves speed will be reduced below the maximums or restrictions provided where necessary, on all Subdivisions and Branches to insure safety.

**OTHER MAXIMUM SPEEDS
All Subdivisions and Branches**

	Maximum MPH
Within the confines of car and locomotive repair and servicing areas	5
Engines operated in a movement other than from the leading control unit in the direction of movement.	
On curves and approaching highway or street crossings at grade	20
Where conditions require, speed must be further reduced to insure safety.	
Through turnouts, crossovers, on Wyes, on sidings and on all inside tracks* (except as otherwise provided for)	10
*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 Fremont and 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 Mounkes inclusive, Craig, East switch Oroville, Elsey, James, East switch Pulga, Virgilia, East switch Portola to East switch Winnemucca inclusive except Reno Jct. West switch Wells to Pollard Jct., inclusive, and through sidings at the stations and within the limits listed above	20
Trains handling WP derricks Nos. 37 and 79 straight track	35
On curves 5 MPH less than speed prescribed but not exceeding	30

**OTHER MAXIMUM SPEEDS
All Subdivisions and Branches
Continued**

	Maximum MPH
Trains handling derricks (other than WP derrick Nos. 37 and 79)	30
Third and Fourth Subdivisions	25
San Jose Branch (To east switch Milpitas)	20
East switch Milpitas to end of Branch	10
Tracy Branch	10
Reno Branch	20
Loyalton Branch	10
Marblehead Branch	10
Rowley Branch	20
Ellerbeck Branch	10
Warner Branch	10
Trains handling power shovels, cranes, except cranes 89 and 90, rotary plows, or pile drivers on own wheels	
Third and Fourth Subdivisions and Branches	20
All other Subdivisions	25
Trains handling cranes with booms leading, or spreaders in reverse movement	25
Jordan Spreaders Forward Movement	Column 2
Trains handling Cranes WPMW 89 and 90	
Third and Fourth Subdivisions and Branches	25
All other Subdivisions	35
Trains handling air dump cars, series WP-MW 11000, loaded or empty	25
Air dump cars, loaded or empty, are to be handled near caboose except when being handled in short trains, locals, etc., or for immediate set out.	
Scale test cars on own wheels must be handled next to caboose and trains handling such cars will not exceed	
Between Oakland and Roper	35
Between Keddie and Bieber	25
Branches	20
Hot Box detectors, when stop is required by continuing flashing "H" to designated stop point	15
Coiled steel in movement Geneva, Utah to Pittsburg, Calif. and empties returning	45
Loaded cars of steel in this movement are to be entrained on or near head of train.	
Trains handling blocks of 10 or more grain cars, loaded or empty	45
On Third Subdivision	40
Trains handling more than 50 grain cars, loaded or empty	40
On Third Subdivision	35
Trains handling ore in open top cars	Column 2
Ribbon Rail Train, loaded	40
Trains handling empty bulkhead flats	45
All WPMW (Maintenance of Way) cars are restricted to a maximum speed of 30 MPH and are restricted to movement in local freight or work trains unless otherwise specifically authorized by Chief Train Dispatcher, EXCEPT the following:	
WPMW 0196 thru 0199	(LOCO SAND)
WPMW 0211 thru 0250	(BOX)
WPMW 0400 thru 0410	(BALLAST)
WPMW 1201 thru 1299	(TANK)
WPMW 8593 thru 8599	(MATERIAL)
WPMW 8651 thru 8676	(FLAT)
WPMW 6,7 and 13	(JORDAN SPREADERS)

The movement of freight cars and cabooses onto or over turntables is prohibited except by Mechanical Department personnel.

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

WESTERN PACIFIC

Class	Unit HP	Engine Maximum Speed	Class	Unit HP	Engine Maximum Speed
1501-1503	1500	65	701-713	1500	65
913-921	1500	65	725-732	1750	65
601-608	1200	30	2001-2010	2000	71
SN ENGINES			3001-3022	2500	71
SN 402	600	35	3501-3579	3000	71
SN 607	1200	30	3051-3071	3000	75
SN 711-712	1500	65	2251-2265	2250	75

Foreign railroad diesel units, when used, will be permitted maximum speeds but will not exceed maximum speed stencilled in cab of each unit.

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

MISCELLANEOUS

Locomotive consist at head end of trains must not exceed six operative units. Any units in excess of six must be isolated.

Operative dynamic brake on head end of trains must not exceed four 6-axle units, six 4-axle units, or any combination thereof which totals 24 axles.

Diesel engines may be operated through water when its depth does not exceed three inches, measured from top of rail, at a speed not exceeding five miles per hour.

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

Backing a train, except work trains locals and road switchers, must be done only on an emergency basis with direct permission of Chief Dispatcher, train dispatcher or proper officer.

When necessary to back a train, including locals and road switchers, reduce the working locomotive consist to not more than three units by isolating all units above three units with working units against the train.

When stopping or stopped near a highway or street crossing equipped with crossing gates, movement must not be made into such crossing until crossing gates are in down position.

HANDLING SPREADERS 6, 7 and 13

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

TRACKS ON WHICH ENGINE MOVEMENTS RESTRICTED

Location and Description of Track	Class of Engine	Prohibited
OAKLAND, Gerber Spur No. 14-783	All except 601 and 1501 class.	Entire spur
RADUM	All	Beyond frog on all tracks except 1 and 2
STOCKTON Hunter Street Line	All except 601, 1501, 701, 725	Entire line.
MARYSVILLE Old SN freight connections	All	Beyond frog.
CRAIG, Outfit Spur	All	Beyond restricting sign.
GRAY'S FLAT	THREE axle trucks & all over one unit.	Entire spur.
QUINCY JCT. House Track	THREE axle trucks	Entire spur.
SLOAT, Chip Track	All	Beyond chip loader.

TRACKS ON WHICH ENGINE MOVEMENTS RESTRICTED
Continued

Location and Description of Track	Class of Engine	Prohibited
JUNGO	All	West of loading ramp No. 1 or 2 spur. Beyond frog.
LAKE POINT	All over 4 units	Beyond frog.

BRANCHES

Tracy Branch, Spur MP 0.5	All	Beyond frog.
RENO BRANCH	3051 & 3501 Class	Between MP 30 and MP 33.
LOYALTON BRANCH	3051 & 3501, Class Units & all over 4 units	Entire Branch
ELLERBECK BRANCH	All over 2 units	Between Flux & Dolomite

Movement of any locomotive over live rails of track scales is prohibited. When switching cars over track scales, the switches must be lined for movement across the dead rails.

EXCEPTION: Scale installed on industry track Pozla has live rails only and can be switched across at not to exceed 5 MPH.

Engine movements are restricted on the following spurs to the number of feet shown from clearance point. The spurs listed, except those at Elko, are to be used only for MofW or bad order setouts.

Sand Pass	310
Sano	200
Reynard	200
Phil	500
Trego	200
Cholona	200
Floka	230
Antelope	300
Gaskell	250
Raglan	200
Ellison	150
Kampos	150
Duggan	150
Tonka	150
Elko (Vogeler)	300
Elburz	150
Tulasco	150
Sage	600
Silverzone	450
Clifside	216
Ola	200
Barro	280
Clive	275
Low	580

SN SPEED RESTRICTIONS — In Miles Per Hour

Clyde to Pittsburg	20
Norman Road, MP 37.8	15
Main St., Port Chicago, MP 39.2	Stop and Flag
West Pittsburg, wye tracks	5
ATSF Crossing, MP 46.24	15
Montezuma St. MP 46.66 to Pittsburg MP 48.06	15

SN SPEED RESTRICTIONS — In Miles Per Hour
Continued

Pittsburg All Street crossings	10
ATSF Crossing Harbor St. MP 47.39	Stop and Flag
ATSF Crossing Columbia St. MP 48.06	Stop and Flag
Cannon to Vacaville Jct. MP 7.60	20
Vacaville Jct. to Vacaville MP 4.21	20
Holland Branch	
Jefferson Blvd. MP 10.40	Stop and Flag
Bascule Bridge (MP 90.66) to Riverview (MP 86.95)	25
Over Bascule Bridge	10
Linden Road Crossing MP 89.7	Stop and Flag
Davis Road Crossing MP 88.5	Stop and Flag
Riverview (MP 86.95) to Oxford (MP 15.77)	15
Dozier Branch	
Cannon to Saxon	20
Northgate Road MP 6.4	Stop and Flag
Montezuma Branch	
Dozier to Montezuma (MP 49.98)	15
Gum Grove Highway Crossing (MP 53.9)	Stop and Flag
Sacramento Yard	
MP 90.66 to MP 96.44 (Globe)	15
WP Conn "C" St. to CPC 11	5
19th St. at Q St. Sacramento	Stop and Flag
Swanston Line	15
Del Paso Blvd. Crossing No. 8E-0.5	5
Sacramento-Yolo Port RR	10
Yuba City to Live Oak	
Marysville (MP 136.31) Jct. WP RR (Westward Trains)	Stop
Marysville, all street crossings	Stop and Flag
MP 136.31 to Paloro (MP 138.56)	12
MP 137.08, SP Crossing (except on proceed signal from flagman)	Stop
MP 138.56 to MP 139.77	15
Live Oak City Limits (MP 148.22 to MP 149.38)	10
Durham to Chico	
MP 177.5 Highway Crossing (Durham)	30
MP 180.1 Sarona Highway Crossing	Stop and Flag
Stirling Jct. SP Crossing (MP 182.02)	15
Chico City Limits (MP 183.09 to MP 185.75)	Stop
Airport Line (MP 185.75 to MP 189.13)	12
Woodland Branch	
Broderick (MP 92.30) to Woodland (MP 16.57)	30
MP 1.55 SP Crossing (Mikon)	Stop
Harbor Blvd. (MP 2.1)	Stop within 100 feet and proceed when gates are down. Flag if gates fail to lower.
Kiesel Highway Crossing (MP 8.0)	15
Fremont Trestle (MP 10.17 to MP 11.71)	15
Woodland City Limits (MP 16.24 to end of track)	12
Rio Linda Branch	
Sankey (MP 109.649) to Rio Linda (MP 105.10)	15
Pearson Branch	
Cleveland (WP Jct.) to Pearson (MP 129.70)	15
MP 134.40 to MP 134.3	10
MP 130.9 Highway Crossing	Stop and Flag
Tarke Branch	
Colusa Jct. to Tarke (MP 10.28)	15
Township Road (MP 1.6)	Stop and Flag
Sutter Highway Crossing (MP 5.1)	Stop and Flag
Bridge 9.28 (Butte Slough)	10
Maximum speed through turnouts, crossovers, on sidings and other tracks	10

When handling loads with gross weight exceeding 220,000 on Woodland Branch, between Yuba City and Live Oak and between Durham and Mulberry, do not exceed 20 MPH.

SN LOCOMOTIVE RESTRICTIONS: WP Locomotive series 3051 and foreign locomotives of same or greater weight including all 6 axle locomotives are restricted from use on Sacramento Northern trackage unless special authority for their use is received from the proper officer. Between Sutter and Tarke, all locomotives prohibited except: SN 402.

TS SPEED RESTRICTIONS — In Miles Per Hour

Ortega, MP 1.7 to Turlock, MP 47.9	35
MP 14.2—Simms Highway Crossing	20
MP 17.0—Alba Winery Spur Highway Crossing	Stop and Flag
MP 19 to MP 21	20
MP 22.53 to MP 23.13—Stanislaus River Bridge and Curve East & West of Bridge	20
McHenry, MP 25.6 to Modesto City Limit MP 27.2	20
MP 27.2 to 9th & "P" Sts., Modesto	15
Modesto—No. Yard	10
Tully Road	Stop and Flag
Coldwell Ave.—Lyng Spur	Stop and Flag
Modesto—Between 9th & "P" and MP 33.3	10
MP 33.3 to MP 35.1	20
MP 41.5—Hatch—Highway Crossing	15
MP 43.7 and Turlock City Limits MP 45.7	20
Turlock City Limits	10
Broadway St. Crossing	Flag
Chemurgic Branch	20
Manteca Branch	20
Manteca City Limits	10
Spreckles Highway Crossing	Stop and Flag
Maximum speed through turnouts, crossovers, on sidings and other inside tracks	10

(On curves speeds will be reduced where necessary to insure safety).

TS LOCOMOTIVE RESTRICTIONS: WP locomotives series 3051 and foreign locomotives of same or greater weight including all 6 axle locomotives are restricted from use on Tidewater Southern trackage unless special authority for their use is received from the proper officer.

SPEED RESTRICTIONS, SN & TS

When Handling —

Derricks (other than Nos. 37 and 79)

On TS or SN trackage
 20 MPH || On SN trackage rights via AT & SF or SP | 30 MPH |

Power Shovels, etc.

On TS or SN trackage
 20 MPH || On SN trackage rights via AT & SF or SP | 25 MPH |

Derricks Nos. 37 and 79

Limit to a maximum of 10 MPH, where following weights authorized by Chief Engineers Office:

379,000 lbs. gross on rail @ 19'-10" truck centers

Under no circumstance will derricks Nos. 37 and 79 be used without weight restriction clearance.

TABLE OF WEIGHT LIMITATIONS

BETWEEN	AND	GROSS WEIGHT (Car & Contents)
WESTERN PACIFIC (All tracks)		263,000
Except Following:		
Oakland	San Francisco	220,000
San Jose	San Jose	
	Freight Depot ...	220,000
Loyalton Branch		220,000
Warner Branch		220,000
Rough and Ready		
Island Bridge	5 MPH	
(Port of Stockton)	Max. with	263,000
	15 MPH	
	Max. with	251,000
Stockton	Fremont	
UP 221000 Series covered hoppers at Col. 2 speeds		315,000
SACRAMENTO NORTHERN		263,000
Except Following:		
Sacramento	Oxford	220,000
Cannon	Montezuma	220,000
Cannon	Saxon	220,000
Cannon	Vacaville	220,000
Sutter	Tarke	169,000
TIDEWATER SOUTHERN		263,000

Note: Greater weights may be handled by authority of VP — Transportation.

YARD LIMITS — WP

WEST MP		EAST MP
WP Mole	Oakland	7.7
BCH-10.1	San Jose	BCH-23.0
663.6	Elko	666.76
926.06	Salt Lake City	Yard Limit Signs
K-111.2	Bieber	BN-86.5
		(3.1 miles east of station)
BI-21.3	Reno	End of Branch

SWITCHING LIMITS — WP

WEST MP		EAST MP
7.7	Oakland	13.78
28.5	Fremont	31.38
	Niles Junction (San Jose Branch)	BCH-0.82
BCH-15.25	San Jose	BCH-23.0
70.14	Tracy	73.05
89.34	Stockton	96.59
133.4	Sacramento	140.69
177.62	Marysville	180.24
201.44	Oroville	210.04
280.0	Keddie	282.47
	Keddie (4th Subdivision)	K-0.48
319.94	Portola	323.09
437.03	Gerlach	439.45
530.02	Winnemucca	533.6
21.3	North Reno (Reno Branch)	30.5
642.96	Carlin	647.13
764.96	Shafter	767.73
805.28	Wendover	808.31
926.06	Salt Lake City	

YARD LIMITS — SN

WEST MP		EAST MP
38.6	Port Chicago	39.7
40.6	Nichols-McAvoy	43.25
44.5	Pittsburg	48.6
49.7	Montezuma Branch	64.6
4.2	Vacaville Cannon	6.7
90.4	Sacramento	96.4
1.85	Woodland Branch	0.0
11.5	Conaway-Woodland	16.7
102.5	Rio Linda-Elverta	104.7
129.7	Pearson Branch	134.4
134.7	Marysville-Yuba City	139.6
139.6	Colusa Jct.	140.2
0.0	Tarke Branch	0.5
4.9	Sutter	5.6
181.8	Chico	188.8

INTERCHANGE TRACKS — SN

Clyde-Pt. Chicago	Naval Ammunition Depot R.R.
Port Chicago	A.T. & S.F. Ry.
McAvoy	S.P.R.R.
Sacramento	W.P.R.R.
	S.P.R.R.
	C.C.T. Co.
Marysville	W.P.R.R.
	S.P.R.R.
Chico	S.P.R.R.

YARD LIMITS — TS

WEST MP		EAST MP
0.0	Stockton	2.3
3.0	Manteca Jct.	5.8
0.0	Manteca Jct. (Branch)	0.3
4.2	Manteca	6.6
13.5	Simms	15.2
19	Escalon	21.0
25.3	Modesto	35.0
0.0	Chemurgic Branch	2.9
46.0	Turlock	47.9

INTERCHANGE TRACKS — TS

Stockton	WP
	SP
	ATSF
	CCT
	ST&E
Modesto	SP
	M&ET
Turlock	SP

ALL SUBDIVISIONS

All times shown are Pacific Time.

This is a consolidated Eastern and Western Division Timetable and also includes Sacramento Northern and Tidewater Southern. The following Sub-divisions and branches are under the supervision of the Eastern Division Superintendent at Elko:

That portion of Fifth Sub-division between MP 384.38 and Winne-mucca
Sixth Sub-division
Seventh Sub-division
Warner Branch
Ellerbeck Branch
Rowley Branch
Marblehead Branch

The following Sub-divisions and Branches are under the supervision of the Western Division Superintendent at Sacramento:

First Sub-division
Second Sub-division
Third Sub-division
Fourth Sub-division
That portion of Fifth Sub-division between Portola and MP 384.38.
San Jose Branch
Tracy Branch
Loyalton Branch
Reno Branch

Sacramento Northern and Tidewater Southern are under the jurisdiction of the Western Division Superintendent.

FIRST, SECOND AND THIRD SUBDIVISIONS YARD OPERATIONS

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 these limits, with work authority limited to not more than four blocks at any one time. Yard conductor must obtain authority from train dispatcher whenever switching is to be done in a block or blocks and, when switching is completed, yard conductor 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 five minutes must elapse after switch is opened before 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 five 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 must be released to the dispatcher by both engines.

(B) Certain switches within above limits are not electrically locked or signalled. Yard 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 dispatcher before returning to the main track.

(C) Yard conductor 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.

STOCKTON YARD — BETWEEN MP 90.85 AND CHARTER WAY

SOUTH SACRAMENTO — BETWEEN EAST AND WEST ABSOLUTE SIGNALS

RULE 547. Except when Signal Aspect per Rule 288 is displayed, permission may be granted by yardmaster upon authority from train dispatcher to use main track between the points named above. When such authority has been obtained, a Form U is not required and that portion of Rule 547 is modified accordingly.

FIRST SUBDIVISION

OAKLAND.

(A) **Rule T-82-A.** Eastward trains do not require a clearance at Oakland.

Refer to Page 144, Rule 541, Operating Rules. Before departing Oakland conductor (or Engineer if there is no conductor) will contact train dispatcher for instructions for movement Clinton to Stockton. Dispatcher will then issue verbal authority to enter T.C.S. at Clinton.

Conductors will retain orders on inbound train for comparison with train dispatcher for eastbound movement.

If train has a car or cars of excessive dimensions, Yardmaster will issue message to conductor and engineer on orange colored paper and notify train dispatcher.

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: Verbal authority from yardmaster after he receives concurrence from train dispatcher, has notified yard engines and track to be used is clear.

(B) Yard engines must move with the current of traffic when practicable, using crossovers to move to other track to perform work. Before fouling or using crossover or before moving against the current of traffic, conductor must receive information from yardmaster or train dispatcher that no opposing train will be encountered.

(C) Street Crossing at Third and Broadway must not be blocked.

(D) Train and engine movements over Broadway Street crossing will be governed by vehicular traffic signals.

Eastward and westward trains and engines must approach Broadway Street expecting to find signals at STOP.

Trains and engines may proceed without stopping at Broadway Street on green traffic signal.

Lunar white light is located on near right-hand traffic light masts. When lighted, it indicates track circuit control is effective.

Eastward trains and engines, if stopped or delayed between Washington and Broadway Streets, and Westward trains and engines, if stopped or delayed between Webster and Broadway Streets, in excess of one minute and find traffic signals displaying red, must stop within ten (10) feet of curb line of Broadway Street and wait for green traffic signal. Should traffic signal fail to display green and lunar white marker is not lighted, flag protection over street crossing must be provided. Occupancy of the intersection by a train or engine will cause signals governing vehicular traffic to display red. When traffic signals are not lighted, flag protection over crossing must be provided.

After having crossed Broadway Street, trains or engines must clear the circuits as soon as possible.

(E) 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.

Spring switch located at end of double track Clinton normally lined for westward main track and may be trailed through eastward on eastward main track.

Westward Absolute Signal east of switch is a single unit signal with "S" unit on mast. This signal will display aspects per Rule 292, 292-A and 288. All westward movements will be authorized by flashing red aspect per Rule 288.

"S" Unit must be illuminated per Rule 292-A before spring switch is reversed. Trains or engines moving from eastward main track to westward main track or vice versa, must move beyond signal and receive proper signal indication for reverse movement. If authorized to pass this signal in STOP position, spring switch must be examined and points found to fit properly for movement desired.

(F) T.C.S. blocks within Oakland switching limits 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

(G) Joint WP and SP drill track between Melrose and Elmhurst must not be used for meeting or passing trains.

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

(I) Radio communication is now available with Magnolia Tower. In no way will such communication change the authority of the yardmaster to control movement of trains in and out of Oakland Yard. The sole purpose of communication with Magnolia Tower is to prevent blocking of Middle Harbor Road, in the case of Eastbounds, and Oak Street to Broadway inclusive, in the case of Westbounds, when towerman is unable to give WP train the route across SP.

HAYWARD.

(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) 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 telephone is located in booth adjacent to marker light mast.

(C) Westward trains or engines departing runaround track Hayward do not exceed three (3) MPH and make certain crossing gates are in the down position before entering "B" Street, Hayward.

UNION CITY. Whipple Road Crossing, MP 25.64 must not be blocked while setting out, picking up or switching Carpenter.

FREMONT. Train dispatcher must be notified when cars are left on siding Fremont.

Train dispatcher's telephone located inside east end of station building.

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.

NILES JCT. An electrically locked switch point derail has been installed near clearance point at west end of west leg of wye.

BRIDGE 35.09 ALAMEDA CREEK. "W" Sign — Whistle board is placed approximately one-quarter mile in advance of bridge. Whistle signal as prescribed by Rule 14.16, a succession of short sounds, will be sounded approaching bridge.

PERMASCO CAR SKATES: Located at Hearst and Midway as follows:
Hearst in phone booth at West Hearst.
Midway in phone booth at East Midway.

When setting cars out on these sidings, skates must be 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 replace the skates in the phone booths at West Hearst and East Midway.

In addition to the use of Permasco car skates, a sufficient number of hand brakes must be set. Cars must be coupled if practicable. Wheels must be further blocked if necessary to prevent their movement.

RHODES and JAMIESON SPUR. 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.

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.

TRACY.

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

(B) Main track and inside crossover switches at Lyoth on east end Tracy siding 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 train dispatcher. When signals display aspect 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 aspect per Rule 292 and reason is not apparent or if call light is lighted on adjacent telephone booth, train dispatcher must be contacted promptly.

(C) Siding Tracy included in signal circuits and must not be occupied or fouled unless authorized by an absolute signal indication or by permission of the Train Dispatcher.

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, FIRST AND SECOND SUBDIVISION

Block limits are as follows:

East switch Wyche to MP 90
MP 90 to MP 90.85
MP 90.85 to Charter Way
Charter Way 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.

(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, call yardmaster on phone located near absolute signal for track instructions.

Eastward trains which head in at MP 90.85, call yardmaster on talk-back speaker for track instructions.

Westward trains, caboose hops and lite engines will be governed by signal indication entering Stockton Yard.

Trains heading in at Charter Way will call Yardmaster on phone at Charter Way for instructions unless instructions have been received by radio prior to reaching Charter Way.

Clear radio instruction from yardmaster may be acted upon in lieu of calling on phone or speaker.

(B) Unless instructed by yardmaster, No. 3 lead will not be used for train movements.

(C) Switch leading to Tidewater Southern main track just west of 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 of 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.

(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.

(E) Flashing red indicator lights are located at MP 91.02 and at MP 91.88. When flashing, these indicator lights authorize switching movements between absolute signals at MP 90.85 and Charter Way MP 92.7 without contacting Train Dispatcher. All movements so authorized must be made at yard speed. It will not be necessary to wait five 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 main track within five minutes, the Train Dispatcher must be contacted.

(F) Charter Way. Westward signal is a two-unit signal and diverging route may be to either "B" lead or Track 1.

Normal position for dual control switch at Charter Way from B Lead to Santa Fe connection is for movement to Santa Fe. Upper unit of two unit dwarf signal governs movement from B Lead to main track and lower unit governs movement from B Lead to Santa Fe and will display aspect per Rule 288 to permit movement to Santa Fe. Dwarf signal on Santa Fe connection near Charter Way governs movement from Santa Fe to B Lead and will display aspect per Rule 288 for such movement. Power operated switch operates in tandem with main track switch to B Lead. When either of these switches or the switch from main track to No. 1 track is in hand throw, power is disconnected from the other switches in the circuit and other switches need not be placed in hand throw unless they must be thrown. See Rule 545.

(G) ATSF Conn: Train and yard movements are prohibited with cars 61 feet or longer on track between W.P. main and ATSF main.

SECOND SUBDIVISION

THORNTON.

Sound Whistle Signal 14.11 approaching MP 114, Thornton Cannery.

An electrically-operated steel pedestrian bridge over cannery track, located about two car lengths west of Door No. 12. This bridge is controlled by electric switch pushbuttons inside a wall box, secured by switch lock, adjacent to bridge.

Before commencing switching on this track, crew must insure that bridge is in fully raised position. If bridge is in down position, press electric pushbutton marked "Raise" until bridge comes to rest in fully raised position.

SOUTH 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 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 beneath Sutterville overpass, 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 five 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) 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.

(D) Dual control power operated split point derail in service at clear point east end siding. Derail operates in conjunction with power operated main track switch. When east switch is hand operated, power operated derail must also be hand operated. It is permissible for a 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 switch 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 R Street and at west end authority to switch in the block between west switch South Sacramento and Pollock. 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 paragraph (B).

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) A yard conductor 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).

SACRAMENTO.

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

HAGGIN.

(A) Eastward SN trains and engines at Haggin must contact train dispatcher for instructions to move Haggin to Globe or beyond.

(B) "S" light signal located on short mast about 100 feet west of westward absolute signal, 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 "S" light signal it indicates switches are lined to siding.

In order to operate toward SP Transfer at East Haggin obtain permission from Dispatcher to operate derail. After derail is removed, aspect per Rule 287 can be displayed. After movement to SP transfer is completed, restore derail to derailling position and notify dispatcher.

SANKEY.

Eastward absolute signal on SN is a two-unit signal.
Upper unit governs movements to WP main track.
Lower unit governs movements to Sankey.

MARYSVILLE

(A) SN trains or engines must contact train dispatcher for permission to enter siding and for instructions to move Marysville to Cleveland or beyond.

(B) 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.

Electric lock has been removed from switch to Montgomery Ward spur, TIP279, and trains or engines must not clear main track at this point. See Rule 552.

(C) **RULE 547.** Governs switching operations. Block limits are:

Absolute signal at Cleveland to west siding switch Marysville.
West siding switch Marysville to east siding switch Marysville
East siding switch Marysville to Tambo

Yard conductor 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.

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

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

(E) Inside crossover switch on siding and hand-throw tandem derails on east end of tracks 1 and 2 are not electrically-locked and must NOT be operated before obtaining electric lock D-26.

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

BINNEY JCT.

SP Connection MP 180.42.

The hand-operated switch is east connected to main track, equipped with electric lock and protected by separate hand-operated derail located on turnout approximately 110 feet west of main track switch.

Instructions for operation of electric lock located in telephone box adjacent to main track switch. Electric lock switch must be operated before derail, otherwise electric lock will not release. See Rule 550.

Eastward SP trains and engines at MP 180.42 must contact train dispatcher to obtain permission to operate electric lock and for instructions to move MP 180.42 to Oroville Yard. Westward SP trains and engines must contact train dispatcher for instructions to move Oroville Yard to MP 180.42.

OROVILLE YARD, SECOND AND THIRD SUBDIVISION

(A) 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. 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) 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 aspect per Rule 288, movements may be made over this switch without placing it in hand-throw position. If signals display STOP aspect per Rule 292 and reason is not apparent, or if call light is lighted on adjacent telephone booth, train dispatcher must be contacted promptly.

(C) Approach circuits for the flashing light signals protecting the Louisiana Pacific Crossing No. 4-203.9c on the Adelaide Spur have been shortened to 440 feet either side of crossing. All movements approaching this crossing must not exceed 10 MPH.

THIRD SUBDIVISION

Permasco Car Skates: Located at Merlin, Twain and Paxton as follows: Merlin — approximately 20 car lengths from east end and at clearance point, west end. Twain and Paxton — approximately 15 car lengths east of west switch and 15 car lengths west of east switch.

When setting out cars on any of these sidings, see that skates 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 crews making pick up will see skates are re-hung on post or pole in place provided.

In addition to the use of Permasco skates a sufficient number of hand brakes must be set. Cars must be coupled if practicable. Wheels must be further blocked if necessary to prevent their movement.

RULE 105. Sidings on third subdivision, are included in signal circuits. None of these sidings may be occupied or fouled unless authorized by an absolute signal indication or by permission of the train dispatcher.

RULE 288. At locations listed below, aspect per Rule 288 will indicate a detector device has been actuated and train may proceed not exceeding restricted speed looking out for rocks on track or other condition which would have actuated the detector device.

Eastward Absolute Signal at Rich Bar and Westbound Signal 2675.
Eastbound Signal 2576 and Westbound Absolute Signals at West Belden.
Eastbound Signals 2362 and 2368, Westbound Signals 2371 and 2379 and Westbound Absolute Signals at West Pulga.

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

Twain. Dual control power operated split point derail in service at clear point, west end Twain siding. Derail operates in conjunction with power operated main track switch.

When west switch Twain is hand operated, power operated derail must also be hand operated. Rule 545 will govern.

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), must be left lined for the siding. Inside crossover switch at the west end of siding is dual-control, power-operated and, when in power position, works simultaneously with west siding main track crossover switch. When west siding main track crossover switch is in hand-operated position, inside crossover switch must also be hand-operated.

Sloat. A sign reading "STOP, Trainmen must not operate beyond this point" has been installed on Track No. 621, 122 feet beyond chipper.

DRAGGING EQUIPMENT DETECTORS

West switch Poe. Indicator lamp 50 feet west of detector.

Signal 2238. Indicator lamp 50 feet east.

When indicator lamp is actuated, it will display a lighted "D" and trains must be stopped promptly before reaching West Branch Bridge, and inspection made.

FOURTH SUBDIVISION

Rules T-82-A and 204. Train orders will be issued at Oroville Yard and Portola which affect movement on Fourth Subdivision. Train orders will be issued at Bieber which affect movement on Third Subdivision. Clearance is not required at Keddie. TCS Signals will govern movements between MP 38.6 and Oroville Yard or Portola. Eastward Trains will check with Fourth Sub Dispatcher and Westward Trains with Third Sub Dispatcher to determine they have all applicable orders before leaving Almanor.

Rules T-83A and T-83-B Almanor. Westward Trains will report arrival Almanor to Fourth Subdivision Dispatcher when entire train has cleared east switch Almanor. Eastward Trains will report departure Almanor to Fourth Subdivision Dispatcher when engine passes east switch Almanor. Refer to Rule 40. Radio communications will be utilized when available. If not available, telephone communication will be used.

Permasco car skates at Moccasin, Greenville, Robbers Creek, Lodge Pole, and Little Valley.

When setting cars out on any of these sidings, see that 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 skates, a sufficient number of hand brakes must be set. Cars must be coupled if practicable. Wheels must be further blocked if necessary to prevent their movement.

Rule 552. (T) Applies at Crescent Mills, Almanor Wye, Almanor House Track, and Clear Creek Jct. Hand throw switches not equipped with electric locks. Trains and engines must not clear the main track at these switches.

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

(B) Upper unit of 2-unit absolute signal governs eastward movement from inside tracks Keddie to the Fourth Subdivision.

Absolute dwarf signal on Fourth Subdivision lead when displaying aspect per **RULE 288** will govern westward movement from Fourth Subdivision to siding or yard.

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.

Normal position junction switch lined for Western Pacific main track. Rule 552 applies.

Westwood. (A) No. 2 track and old electric siding connected with No. 2 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.

(B) Weyerhaeuser Spur is west connected to mainline at MP 38.60. Length 950 feet from point of switch. Switch point derail installed.

Bieber Yard Trains will be governed by Burlington Northern Inc. timetable and transportation rules. Applicable portion of Rule 93, Burlington Northern Inc. Rules reads as follows:

Yard limits will be indicated by yard limit signs. Within yard limits the main track may be used, clearing first class trains when due to leave the last station where time is shown. Protection against second and third class trains, extra trains and engines is not required.

In Non-ABS territory, in case of failure to clear the time of first class trains, protection must be provided as prescribed by Rule 99.

Second and third class trains, extra trains and engines must move within yard limit at reduced speed unless the main track is known to be clear. BN definition of reduced speed: Proceed prepared to stop short of train, engine or obstruction.

THIRD AND FIFTH SUBDIVISIONS

Portola.

(A) No. 1 track designated as siding, to include drill tracks to main track at each end of yard.

(B) Derail at west end siding Portola is power operated and when switch is in hand operated position, derail, if used, must also be hand operated.

(C) 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.

FIFTH SUBDIVISION

Tunnel 37. Slide detector device is in service in Tunnel 37. Eastward absolute signals at East Chilcoot and Westward absolute signals at Reno Jct. may display aspect per Rule 288, which will indicate a detector device has been actuated and trains may proceed not exceeding restricted speed.

Reno Jct. Permasco skates are on post at clear point between East leg of wye and Reno branch. See section entitled "Permasco skates" under heading "Third Subdivision" for instructions regarding their use.

Pozla. Split point derail east end. Switches are not electrically locked. Do not clear main track unless main track switch is open continuously.

Gerlach. U.S. Gypsum Co. engine uses east end of siding Gerlach as a tail track when delivering or receiving cars from WP Co. When using siding Gerlach, approach east end of siding looking out for U.S. Gypsum Co. engine.

Switch at west leg of wye and Balloon Track is to be left lined and locked for Balloon Track. This does not relieve employees using this switch from knowing its position prior to use.

FIFTH AND SIXTH SUBDIVISIONS

Winnemucca. RULE T-82-A. No clearance is required at WP Winnemucca for movement to Fifth or Sixth Subdivisions.

Outbound crew members will contact train dispatcher prior to arrival of their train and train dispatcher will advise the order numbers or other instructions the train received prior to arrival Winnemucca. Train dispatcher will issue any further instructions and will give verbal authority to depart Winnemucca. Crew members will check the order numbers and messages against orders and instructions on the train.

Train orders or other written instructions regarding track conditions, underfoot conditions load dimensions, train movement, work to be performed, or other instructions concerning Fifth and Sixth Subdivisions will be issued to Westward WP Trains at Elko and Carlin and to Eastward WP Trains at Portola. At Winnemucca, inbound engineer leave such information on locomotive and inbound conductor leave such information in desk drawer of caboose. Additional clearance issued at Elko to Westward Trains will list orders in effect on Fifth Subdivision and additional clearance issued at Portola to Eastward Trains will list orders in effect on Sixth Subdivision.

Elko. Westward WP trains require a WP clearance in addition to an SP clearance.

RULE 105. North siding Winnemucca is included in signal circuits and must not be occupied or fouled unless authorized by an absolute signal indication or by permission of the train dispatcher.

First track south of main track Winnemucca will be used as a siding for the meeting and passing of trains. All switches except main track switches must be left lined for this track when switches not in use.

OPERATION OF SP TRAINS BETWEEN FLANIGAN AND WESO INCLUSIVE FIFTH AND SIXTH SUBDIVISIONS

SP trains and engines are authorized to operate over WP tracks between Flanigan and Weso, subject to WP Rules, Timetable, Special Instructions, and Timetable Bulletins.

RULES T-82-A and 204. Wendel. SP trains will be authorized by clearance at Wendel which will be authority for movement on WP track Flanigan to Carlin. Train orders may be issued at Wendel which will affect movement Flanigan to Carlin.

Flanigan. Connection to SP at MP 384.4. Connection switch east connected and is equipped with a dual-control power-operated switch.

Westward absolute signal governing movement over connection is a two-unit signal. Upper unit governs movement to WP main track. Lower unit has "S" light indicators mounted on signal which indicate as follows:

"S" light illuminated to the right of the mast indicates route lined to SP connection.

"S" light illuminated to the left of the mast indicates route lined for WP into Flanigan siding.

Movement through connection to WP main track is governed by upper unit of absolute signal located at clear point west end SP double track Flanigan, (SP MP 336.51).

All signals governing movement through SP connection MP 384.4 are absolute signals under control of WP train dispatcher. "SA" and "P" apply to SP trains only. WP Rule 509 applies.

SP train may enter or leave WP track on PROCEED signal indication, without member of crew contacting train dispatcher, but must contact WP train dispatcher promptly if they are unable to comply with authority granted by signal aspect.

Winnemucca. Rule T-82-A. No clearance required. Clearance received at Carlin authorizes movement Weso to Flanigan. Clearance received at Wendel authorizes movement Flanigan to Carlin.

Weso. SP trains diverging from SP track to WP track Weso will be governed by instructions applicable to WP westward trains.

Carlin. Rules T-82-A and 204. Train orders may be issued to westward SP trains at SP Carlin which will affect their movement between Weso and Flanigan.

SIXTH SUBDIVISION

RULE T-97. Eastward extra trains must have train order or clearance authority for movement before leaving Weso. See (K) RULE T-97., SIXTH AND SEVENTH SUBDIVISIONS, Use of WP Portion of Paired Track between Weso and Alazon, inclusive.

RULE 540. Weso. Westward trains may leave Weso without contacting the train dispatcher when westward signal indicates PROCEED and will retain their identity.

Valmy. A number 20 hand throw east connected switch is located at MP 572, Pole 8, Valmy, serving Sierra Pacific Power. trains will operate at yard speed making setouts and pickups on spur -A- located approximately 3,200 feet from main line switch spotting cars at location marked by white paint on rail.

Trains working at Valmy must leave cars on main track or main track switch open. Should a train be required to clear main track at Valmy under emergency conditions, be governed by Rule T-340 (T) to re-enter main track.

SIXTH AND SEVENTH SUBDIVISIONS

Use of WP Portion of Paired Track Between Weso and Alazon Inclusive

(A) Between Weso and Alazon, track of WP and SP will be used jointly. All eastward trains of both companies will use WP track, and all westward trains of both companies will use SP track, unless otherwise instructed by train order, except as provided in Sections (S) and (W) hereof.

(B) Current of traffic on WP track, Weso to Alazon, is eastward. Movements against the current of traffic must not be made except under flag protection or as authorized by train order.

Manual block may be established by train order to govern movements between given points, requiring trains to receive clearance reading, 'Block Clear' or 'Block Occupied', before entering the block.

Trains or engines must not be permitted to enter the block until all opposing movements have cleared the block.

Trains and engines receiving clearance showing 'Block Occupied' must move through the entire block at restricted speed, unless information is received from train dispatcher that block has been cleared.

Passenger trains must not be operated unless the block is clear.

Train dispatchers will use following form of train order to authorize movement of a westward train or to create a work extra.

Example 1: "Eng. run extra on WP track. to." with right over Eastward trains."

This order must be given to all opposing trains on WP track.

Example 2: "Eng. works extra on WP track. M until. M between. and."

This form of order must be given to trains before entering territory covered.

When moving westward on WP track between Alazon and Weso, maximum speed of passenger trains and light engines is 59 MPH, and for freight and mixed trains 49 MPH, but all other speed restrictions must be observed. Unless proceed signal received or it is known that warning devices are operating, such trains and engines must stop approaching road crossings where automatic warning devices are installed, and may proceed after member of crew protects crossing.

(C) RULE 19. When the rear car of an SP passenger train is equipped with a combination oscillating red light and auxiliary green marker light, oscillating red light must be displayed by day as well as by night when train is on main track, and when so displayed, will be considered as markers. Oscillating red light must be extinguished and green marker light displayed when train has stopped clear of main track to be met or passed by another train.

(D) RULE 20. All sections except the last must display two green lights by day and night in place provided on the front of engine as classification signals.

RULE 21. Extra trains must display two white lights by day and night in place provided on the front of engine as classification signals.

When two or more engines are coupled only the lead unit will display classification signals.

RULE 24. Trains must be identified by engine number on lead or other unit in engine consist and the number designated for identification must be illuminated day and night. Other engine numbers must not be illuminated.

(E) RULE T-82-A. SP trains which are to operate east of Weso on WP must, unless otherwise instructed, receive WP clearance at Sparks and Lovelock.

A clearance authorizing an eastward SP first-class train at Sparks for movement over the WP at Weso will apply only to Carlin, where another clearance must be obtained authorizing train Carlin to Alazon.

(F) RULES T-82-A and T-83 will not apply to SP trains at Elko, but they will be governed by train-order signal.

(G) RULES T-83-A and T-83-B.

Weso. Eastward SP inferior trains arriving Weso may run ahead of superior trains Weso to Carlin when T.C.S. signal at Weso displays PROCEED indication. Under the same conditions, eastward inferior WP trains may run ahead of superior trains Weso to Alazon. This does not relieve inferior trains from providing flag protection if stopped or delayed. Eastward superior trains must run expecting to find inferior trains running ahead under these conditions.

Carlin. Register station for eastward first-class trains only. Registration will be by ticket and SP operator will enter same on joint register SP station Carlin.

Elko. Eastward SP first-class trains register by ticket. Other eastward SP trains will not register.

(H) RULE T-83-B. When an eastward schedule or section is checked on register at Sparks, or visual identification is made between Sparks and Weso, such identification or register check may be applied at Weso.

When an eastward schedule or section is checked on register at Carlin, or visual identification is made between Carlin and Elko, such identification or register check may be applied at Elko.

(I) RULE T-83-B. Second paragraph will not apply at Carlin to work extras and westward extras. Such trains must not leave Carlin until it has been ascertained whether all regular trains due have arrived or left.

(J) RULE T-96. Sections of regular trains may be created Weso to West Carlin or Carlin.

(K) RULE T-97. Eastward extras between Weso and Alazon may be authorized by clearance as follows:

Eastward SP extras may be authorized by clearance issued at Wendel or Sparks which will confer authority to run extra Weso to Carlin.

Eastward SP extras may be authorized by clearance issued at Carlin which will confer authority to run extra Carlin to Alazon.

Eastward WP extras may be authorized by clearance issued at Portola which will confer authority to run extra Weso to Elko.

Eastward WP extras may be authorized by clearance at Elko which will confer authority to run extra Elko to Alazon.

Any other eastward extra movements must be authorized by train order.

When necessary to annul the authority of an extra which has been authorized by clearance, a train order will be issued in the following form:

"Eng is annulled as an extra from"

(L) RULE 204. Train orders may be issued to eastward SP trains at Sparks which will affect their movement between Weso and Carlin.

Train orders may be issued to eastward SP trains on Sixth Subdivision which will affect their movement on the Seventh Subdivision between Elko and Alazon.

Train orders may be issued to westward SP and WP trains at SP Carlin which will affect their movement on WP between Weso and Flanigan, and Weso and Portola.

Train orders may be issued to eastward SP trains at Wendel which will affect their movement between Weso and Carlin.

Train orders may be issued to eastward WP trains at Portola which will affect their movement between Weso and Elko.

(M) RULE 221. Apples only to eastward SP trains at Elko.

(N) RULES 509 and 510. When a block signal indicates STOP (in either direction) trains will be governed by Rules 509 or 510.

Signals in paired track territory which are not equipped with number plates are STOP signals. When these signals display STOP indication, member of crew will contact train dispatcher in accordance with Rule 509.

At Elburz, when signal indicates STOP and train dispatcher knows there is no opposing movement involved, he may orally authorize train to proceed at restricted speed to the next governing signal.

When member of crew is unable to contact train dispatcher within five minutes, train may proceed at restricted speed to the next governing signal without sending a flagman ahead.

(O) West Carlin. Main track detour switch at MP 643.4 is interlocked.

Interlocking limits extend from home signal MP 643.4, located 100 feet west of remote-controlled switch, to dwarf home signal, located 350 feet east on main track, governing westward movements, and to dwarf home signal, located 350 feet east on detour, governing westward movements to main track. Dwarf signals will display aspects per Rules 288 or 292 only.

If signals indicate STOP be governed by Rule 663. If route is not properly lined, call signal operator and obtain authority to operate this dual-controlled switch by hand.

SP passenger trains and light engines, and other trains when so instructed, are authorized to use WP main track at Carlin provided Signal 643.4 indicates proceed on WP main track. If signal 643.4 indicates movement over west detour to SP yard, such trains will enter detour and proceed to SP yard at Carlin.

West Carlin detour extends from remote-controlled switch on WP main track at West Carlin to connection with SP main track at west end of Carlin yard.

(P) Carlin. When trains on which crew changes are made at Carlin, are departing, they must move at restricted speed until reaching a point where next signal indication can be clearly seen and intervening track can be seen to be clear.

All SP switch movements on WP main track between West Carlin and East Carlin must be made with authority of WP train dispatcher and under provisions of Rule 99.

(Q) East Carlin. Detour extends from East lead on SP to East Carlin on WP. Movements over dual-controlled power operated switch are governed by absolute signals bearing the letter "A." Trains or engines finding these signals displaying aspect per Rule 292 will be governed by WP Rule 509.

When these signals display an indication permitting eastward movement, signal authorizes SP eastward inferior trains to run ahead of eastward superior trains from East Carlin to Alazon, being governed by signal indications displayed. Eastward superior trains must run expecting to find inferior trains moving in advance East Carlin to Alazon authority of the eastward absolute signal indication. This does not relieve inferior trains from providing flag protection if stopped or delayed.

(R) Eastward SP freight trains, unless otherwise instructed, and other trains when so directed, also engines moving between WP and SP yards will use East Carlin and/or West Carlin detours.

(S) Elko. Crossover, Third St. WP Elko yard. Inside siding switch of crossover electrically-locked. Release of electric lock must be obtained before main track switch is lined. Instructions for operating the lock are posted in electric lock case.

Dwarf signal governing westward movements, located between main track and siding, at MP 665.5. Approach lighting circuit starts 300 feet east of Signal 6655.

When engine on eastward train on main track passes the limits of restriction at MP 666.4, speed may be increased to 30 MPH until the rear of the train passes the speed restriction limits at MP 666.4.

(T) Spring switch, 12th Street, east end of old main track, WP Elko yard, normally lined for eastward main track and may be trailed through eastward onto main track.

Trains or engines trailing through spring switch old main track to main track East Elko must not exceed 5 MPH until engine is on 12 St. Crossing then 20 MPH through switch.

Eastward trains leaving Elko on old main track finding Signal 6660 displaying aspect per Rule 291, must stop short of signal and operate push button. Eastward trains leaving Elko on main track finding Signal 6662 displaying aspect per Rule 291 must stop and operate push button when there is an eastward train on old main track. Instructions for operating push buttons are posted in push button housings.

Telephone located on instrument case south side of tracks opposite Signal 6662 for purpose of contacting train dispatcher when Signal 6660 or 6662 does not clear promptly after push button operation. If signal continues to display aspect per Rule 291 after expiration of time release interval, train may proceed at restricted speed after obtaining permission from train dispatcher.

Westward trains and engines must stop and examine switch points before moving over spring switch, East Elko.

Dwarf signal located 250 feet west of spring switch at east end old main track Elko, governs movements against current of traffic on main track to dwarf signal 6655 located at 4th St., Elko.

(U) East detour extends from SP siding to WP freight yard, Elko.

(V) Weso. T.C.S. controlled by WP train dispatcher. Westward home signal governs movements to SP or to enter T.C.S. on WP main track. When STOP indication is displayed and movement via WP is desired, WP Rule 509 will apply. When STOP indication is displayed and movement via SP is desired, SP Rule 776 will apply.

("A" applies to WP only and "SA" applies to SP only.)

Switches on SP end of crossovers are dual-control. Permission of WP train dispatcher is required for hand operation, governed by WP Rule 545.

Spring switches on WP end of crossovers are normally lined for WP track. WP Rule 104-D applies.

Electric lock on west crossover spring switch releases when the power switch on this crossover has been reversed by the WP train dispatcher.

Obtain permission from the WP train dispatcher for movement from WP track to SP track over crossovers and be governed by SP Rule 776.

Westward movement from WP A.B.S.S. to WP "enter T.C.S." will be made by signal indication. If signal fails to display proceed indication WP Rule 509 will apply.

Instructions for operation of dual-control switches and electric switch locks are posted in telephone booths located at signal.

(W) Alazon. C.T.C. controlled by SP dispatcher, Eastward home signal governs movements to SP or to enter T.C.S. on WP main track. When STOP indication is displayed and movement via WP is desired, WP Rule 509 will apply. When STOP indication is displayed and movement via SP is desired, SP Rule 776 will apply.

("A" applies to WP only and "SA" applies to SP only.)

Dual-control switches are under control of SP dispatcher. When necessary to hand-throw these switches, permission must be obtained from dispatcher and be governed by SP Rules 771 and 772.

West switch of crossover between SP and WP main track is a spring switch and normal position is for SP main track. Movements over this switch must be made in accordance with SP Rule 535.

(X) RULE T-86. WP inferior trains may run ahead of superior trains from Elko to Alazon. Eastward superior trains must run expecting to find inferior trains running under these conditions. This does not relieve inferior trains from providing flag protection if stopped or delayed. This shall not apply to engines using main track within Elko Yard limits.

ENGINE WHISTLE SIGNALS

Carlin: Westward: Approaching east end yard:
SP freight trains, o — c
WP trains, — o.

Alazon: Eastward WP trains must sound whistle signal o — — at sign reading "WP WHISTLE" located at MP 706 Pole 21.

WESTWARD AUTOMATIC BLOCK SIGNAL SYSTEM CIRCUITS

(A) Signals 6511 (200-ft. east of Tunnel 42), and 6497 (200-ft. east of Tunnel 41), and Signal 6475 at MP 647.50 are controlled from east absolute signals at East Carlin Detour; "Block System Limit" signs are opposite clearing points East Carlin Detour.

(B) Signals 6369 (100 feet east of Tunnel 40) and 6357 (624 feet east of Tunnel 39); "Block System Limit" sign opposite Signal 6352, controlled from 2400 feet east of MP 632.

(C) Signals 6313 (3650 feet west of MP 632) and 6287. "Block System Limit" sign opposite Signal 6274, controlled from 1000 feet east of MP 623.

SEVENTH SUBDIVISION

Alazon. RULE 540. Eastward trains may leave Alazon without contacting the train dispatcher when eastward interlocking signal indicates PROCEED and will retain their identity.

Shafter. Engines must not exceed 10 MPH on straight track and 5 MPH on turnouts in NN yard and are prohibited from using NN rip track. Nevada Northern crossing must not be blocked while switching.

Flood detectors. Located on south side of track at twenty-five points between MP 788.46 and MP 797.50, interconnected with signal system.

Wendover: West Switch to South Siding has been permanently removed. Bumper installed 1250 feet west of West Wye Switch.

Garfield Pit, KCC Interchange. Rules 550, 550-A, 551, and 551-A. Pit Tracks 1 and 2, TIP 801 and 802, north of WP main track at MP 911.7, will be used for interchange of cars with KCC. KCC trains and engines will contact WP train dispatcher for authority to use joint track between eastward absolute signal at Smelter and eastward absolute signal at West Garfield.

RULE 204. WP train orders may be issued at Roper and Elko which cover speed restrictions and track conditions on UP portion of joint track between Smelter and North Yard.

Roper, RULE T-82-A. All trains departing Roper or North Yard which will operate via SP, Alazon to Elko, must, in addition to WP clearance, receive SP clearance at Roper, together with any SP orders in effect between Alazon and Elko.

POLLARD JCT. AND ROPER YARD INSTRUCTIONS

Eastward and westward freight trains will enter and leave D&RGW running tracks through interlocking between Pollard Jct. and 1st So. St., Salt Lake City. Trains must keep to the right. Movement against current of traffic on these two running tracks will be made in accordance with D&RGW Operating Rule 93. Eastward trains arriving Roper, unless otherwise instructed, will stop at 21st So. St. and get track instructions from yardmaster through the two-way speaker located near 21st So. St.

Audible annunciator located 430 feet west of 13th South St. A sign reading, "Grant Tower Annunciator" has been installed at this location and the following whistle signals will be given:

WP trains and engines departing. o o o o .

Ogden trains and engines departing _____ .

WP engines moving Roper to North Yard. o o .

When operating in joint yard territory east of T.C.S. limits, Pollard Jct. (MP 927.2), WP crews will obey instructions of terminal officers, including D&RGW officers having supervision over the terminal and, in addition to WP rules, will be governed by D&RGW Rule 93, which reads as follows:

Yard limit rules will be indicated by yard limit signs and designated in the timetable.

Within yard limits main tracks may be used without protecting against other trains or locomotives.

All trains and locomotives must move within yard limits at restricted speed, prepared to stop within one half the range of Vision unless main track is known to be clear by ABSS indication.

Movement against the current of traffic on the main tracks must not be made unless authorized and protected by Yardmaster or other designated official.

Restricted speed. Speed that permits stopping short of another train or obstruction, but not to exceed 20 MPH.

SAN JOSE BRANCH

Trains do not require a clearance at San Jose or Milpitas. Refer to Rule 221-A.

Trains in turnaround service from First Subdivision will retain orders, and before departing Milpitas, Conductor (or Engineer if there is no Conductor) will contact Train Dispatcher before entering T.C.S. for any additional instructions. Refer to Rule 541.

Trains originating at Milpitas will contact Train Dispatcher before entering T.C.S. for any instructions. Refer to Rule 541.

If train has a car or cars of excessive dimensions, Yardmaster, yard or station forces will issue a message covering, on orange colored paper and immediately notify Train Dispatcher.

NILES JUNCTION.

(A) Westward Automatic Signal Number 08 located MP Branch 0.8 just east of Morrison Canyon Road governs approach to absolute signal at Niles Jct. and may display aspects per Rules 281, 285 or 291.

(B) Trains in excess of 40 car lengths including caboose which find this signal displaying aspect per Rule 291 or Rule 285 must stop and contact train dispatcher for instructions.

(C) Trains must not block Morrison Canyon Road or Pickering Avenue unnecessarily.

(D) When aspect per Rule 283 is displayed on westward main track absolute signal, East Niles Junction, this will authorize movement from Niles Junction to Curtner.

(E) Tail of wye switch hand operated, normally lined for east leg of wye. Trains or engines using west leg of wye must do so at yard speed and must not operate tail of wye switch or pass clearance point without permission of train dispatcher.

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) Derail on west leg of wye located at clearance point. Derail on east leg of wye located 392 feet west of main track switch.

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

(D) At the Ford plant there are electrically-locked derrails 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 derrails 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 derrails 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 derrails. 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 derrails installed on Track F-4, 388 feet east of west switch to Track F-3 and on Track F-5, 238 feet east of entrance switch.

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

RENO BRANCH

NORTH RENO.

Trains moving on spur track to Bender Warehouse over Parr Blvd. Crossing, MP 28.2, must determine that crossing gates are down before entering crossing. Approach circuits on spur track to actuate gates extend about 30 feet from edge of crossing. If gates do not lower, crossing must be protected by flagman.

SIERRA PACIFIC.

Do not exceed 10 MPH approaching Valley Road Crossing, MP 30.7, on Sierra Pacific Spur. Signal approach circuits extend approximately 400 feet either side of crossing.

ROCKY MOUNT NO. 2.

No derail, keep hand brakes set and do not leave cars east of first road crossing.

SURPRISE VALLEY ROAD CROSSING, MP 31.5. On all tracks except main track, movement is to be stopped within the crossing signal circuits before reaching street. Do not enter street until crossing signals are operating.

DERAIL located on main track at MP 31.69 which is 630 feet east of Rocky Mount No. 2, must be lined and locked for main track except when switching is being done on Vaughn Mill No. 1, Vaughn Mill No. 2, Rocky Mount No. 1, or on Rocky Mount No. 2 spurs. This derail must first be opened and locked open while switching is being done and not be relined for main track until switching is completed and cars properly coupled to engine, and have been charged to full air pressure.

RENO.

Movements over street crossings east and west of Nevada Transportation Company warehouse must be protected by flagman.

Trains or engines must approach East 6th Street carefully. This crossing is protected by flasher lights and bell signals.

Flasher light and bell signals, 4th St.—Engines or cars must stop within 30 feet of and before fouling outer edge of sidewalks on either side of 4th Street, before entering or occupying either crossing from either direction.

Yellow marker lights installed on top of instrument case will be illuminated upon occupancy of track circuit and after 15 to 18 seconds will flash. Movement into or through the crossing may then be made. If yellow marker fails to light, flag protection must be provided unless signals are known to be operating. This to provide 20 second operation of signals prior to occupancy of crossing by engine or cars as required by Nevada State Law.

Cars or engines must not be spotted within signal circuit limits as indicated by illumination or flashing of marker lights on these instrument cases.

SN SPECIAL INSTRUCTIONS

GENERAL

Applicable instructions appearing in other portions of this timetable will be observed on Sacramento Northern in addition to instructions appearing in Sacramento Northern section.

RULE 10-H, first paragraph — Amended:

A metal banner at right of track displaying yellow indicates that trains must reduce speed over track to 10 miles per hour until rear of train has passed temporary resume speed signal unless otherwise directed by train order or bulletin. Such signal must be placed one-fourth (¼) mile before the location is reached where speed of trains must be reduced.

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

RULE 17-D. First line of this rule is extended to include the word "Amber" as well as the word "White." Reverse movements over grade crossings must be protected per the provisions of this rule by engineer operating the oscillating white (or amber) light, reversing handle located inside the locomotive cab roof as necessary so that this light is displayed in the direction of movement prior to entering the crossing.

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

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

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

RULE 21 of the Operating Department Rules is suspended.

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

RULE T-82-A. Trains will be authorized at their initial stations and at intermediate stations by permission of the Train Dispatcher. A written clearance is not required.

Slow Orders pertaining to unusual conditions will be handled verbally and subsequently issued in a green "C" Notice on Monday of each week. These notices will be posted in regular Notice book.

Conductors and/or engineers will call dispatcher before commencing trip to determine if there are any orders.

MISCELLANEOUS

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

(B) City Ordinances require all trains and yard engines within one hundred feet of an intersection to stop immediately on the approach of any police, ambulance, or fire apparatus sounding siren or signal. If occupying intersection when such emergency vehicles approach, clear crossing and then stop.

Civil, Military or Funeral processions must not be obstructed.

(C) The following regulations will govern movement of Sacramento Northern trains and engines on joint track between Front Street and "R" Street, Sacramento, on single track crossing of the Interstate 5 freeway overpass bridge:

Wait indicators located East and West ends of joint track. Trains and engines must stop at the "W" indicators.

Operation of pushbutton will extinguish "W" indicator and flashing white light will authorize movement over the route to opposing "W" indicator. If, after receiving flashing white light, movement over the route is not made, cancel button is provided.

Should "W" indicator be found extinguished or flashing white light cannot be activated by operation of pushbutton, movements must be made with caution protecting against opposing trains or engines.

Pushbutton box located on case of "W" indicator. Advance pushbutton provided east of Third Street for Westward movements to minimize blocking 3rd Street crossing.

Switches on the joint track are equipped with targets to indicate their normal position and when movement is completed must be left properly lined.

JOINT TRACK

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

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

Bulletin books containing Santa Fe, Valley Division, TM bulletins governing train operations are maintained at the Trainmen and Enginemen's locker room at South Sacramento and at the Pittsburg depot. Trainmen and enginemen and others concerned

must consult the Santa Fe bulletins before departing on trains operating over Santa Fe tracks.

(B) Sacramento Northern trains and engines use Southern Pacific tracks between Cannon and 19th Street, Sacramento.

Sacramento Northern movements between Haggin and Westgate are made on Southern Pacific between 19th Street and Sacramento-Yolo Port RR connection.

Southern Pacific also uses Sacramento-Yolo Port RR between Broderick and Southern Pacific main line.

At 19th Street and at Port RR connection stop clear of fouling point and contact SP yardmaster for permission to enter SP tracks. Before entering SP at 19th Street, it must be known by observation that there is no movement closely approaching the track to be occupied.

Southern Pacific third rail between 19th and 23rd Streets, Sacramento, and east leg of wye between its connection with SP third rail and SN main track at 20th and B Streets will be used by SN crews to turn engines and cars. Permission of SP yardmaster must be obtained before entering third rail.

Southern Pacific uses Sacramento Northern tracks between junction switches of Sacramento-Yolo Port RR east and west of Broderick. All movements on the joint track at Broderick will be governed by block signals whose indications supersede the superiority of trains. Indicators at entrance switches indicate track occupancy. When indicator shows block clear, switch may be reversed and movement started when yellow aspect is displayed by the signal. If indicator shows block occupied, switch must not be reversed until it is known that there is no opposing or conflicting movement. If, after switch has been reversed, signal displays stop indication, train or engine must wait five (5) minutes and then be preceded by flagman through joint track area.

Flag protection to rear is not required on joint track at Broderick or on Sacramento-Yolo Port RR connection. All movements must be made at yard speed not exceeding ten (10) MPH.

(C) Speed of trains handling loaded air dump cars on Southern Pacific is restricted to twenty-five (25) MPH.

(D) Sacramento Northern trains and engines use Southern Pacific tracks between Live Oak and Durham.

Hand operated switches equipped with electric locks located at SP MP 152.20 and SP MP 152.21. Live Oak, provide access to SP main track for movements between Live Oak and Durham. Signals governing movements to SP main track located in advance of junction switches.

Hand operated switch equipped with electric lock located at SP MP 178.2, Durham, provides access to SP main track for movements between Durham and Live Oak. Sign reading DO NOT FOUL MAIN TRACK WITHOUT DISPATCHER'S PERMISSION located in advance of junction switch.

Contact SP Train Dispatcher for permission to operate electric locks. Instructions for operation of electric locks located in telephone boxes adjacent to junction switches.

(E) Trainmen and Enginemen using Southern Pacific tracks will be governed by SP Co. Transportation Dept. Rules and Special Instructions and must have copy of Southern Pacific book of rules, current timetables with special instructions, and switch key in their possession while on duty on Southern Pacific.

Bulletin Books containing Southern Pacific Western Division and Sacramento Division timetable bulletins are located at Westside, Sacramento Yard. Southern Pacific Sacramento Division timetable bulletins are located at Yuba City. These bulletins must be reviewed before operating over trackage of SPT Co.

(F) Sacramento River Drawbridge, MP 88.65, is a Train Order Office for westward Sacramento Northern trains to the Western Division, SPT Co.

Sacramento Northern trains originating Sacramento 19th and B Sts. or Sacramento-Yolo Port District connections to Western Division SPT Co. must obtain SP clearance at Sacramento River Drawbridge.

Sacramento Northern crews are to contact Operator by use of telephone at Drawbridge (Ext. 339) to receive orders.

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

Between South Sacramento and Stockton yard.

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

Between WP MP 138.2 and Marysville

See instructions under "SECOND SUBDIVISION, (WP)."

SACRAMENTO NORTHERN

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

Stop boards on both sides of crossing.

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

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

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

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

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

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

Trains, motors, engines and cars of Sacramento Northern Railway shall approach said crossing at speeds not in excess of fifteen (15) miles per hour, prepared to stop in the event such crossing is occupied by trains, motors, engines or cars of The Atchison, Topeka & Santa Fe Railway Company or in the event such gate is in other than its normal position, and one long blast of the engine whistle shall be sounded by the Sacramento Northern Railway when approaching said crossing in accordance with Rule 14.12.

Distance warning signs located 1000 feet from crossing.

(D) Private PG&E grade crossing, Pittsburg, SN Ry MP 46.25. Sound whistle signal 14.11 approaching this crossing and do not exceed 5 MPH while engine passes over crossing.

(E) Sacramento Northern industrial lead taking off of the main track approximately ¼ mile west of Pittsburg crosses industrial lead track of A.T. & S.F. Ry, at grade.

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

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

(F) Harbor Street, Pittsburg: MP 47.37

No train, engine, motor or car shall be operated over said crossing of Harbor Street unless said train, engine, motor or car is brought to a stop and traffic on the highway is protected by a member of the train crew or other competent employee acting as a flagman.

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

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

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

(I) Eastward trains will make air brake test as prescribed in Rule 1117, Initial Terminal Road Train Air Brake Test, at Pittsburg, before entering Santa Fe main track.

(J) Trains and engines approaching highway crossings on the Rice Mill Lead and River Spur at MP 92.35, Westside, Sacramento yard, will allow not less than twenty (20) seconds to elapse from time flashing light crossing signals start operating before engines or cars enter the highway traffic lanes. Indicators are installed on the crossing signal masts which govern movements in the Westward direction only and operate in conjunction with the highway crossing signals.

When train or engine occupies approach circuit, indicators will, after a lapse of twenty (20) seconds, display a flashing yellow aspect indicating that the crossing signals are operating and train or engine may proceed.

If the flashing light indicators fail to operate, allow not less than twenty (20) seconds to elapse before entering the highway crossing.

(K) Trains and engines operating on Sacramento-Yolo Port Railroad trackage will stop at 15th Street, Westgate, and no movement made over this crossing until a flagman has proceeded to the crossing and ascertained that it is safe to proceed.

(L) Eastward trains will make air brake test as prescribed in Rule 1117, Initial Terminal Road Train Air Brake Test, before entering Southern Pacific main track at Cannon.

(M) Old junction switch at Riverview must be left lined and locked for Holland Branch main track.

(N) East leg of Wye Vacaville Junction is out of service and cannot be used.

(O) Track between MP 65 and Saxon on Dozier Branch is out of service and cannot be used.

(P) Track on Montezuma Branch between Rio Vista Junction MP 57.78 and Montezuma is out of service. Before movements are made between Dozier and Rio Vista Junction secure Roadmaster's permission.

(Q) Track between Riverview and MP 86.95 and MP 84.0 end of track Arcade Spur is out of service and cannot be used.

Pearson, MP 130.9, Highway Crossing:

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

Automatic block signals between Marysville and Yuba City:

Two indication color light home signals located as follows:

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

Signal 1397 feet west of Yuba City depot governs westward movements.

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

Flashing white light located on pole about 100 feet west and across main line from Trainmen's Locker Room is to apprise trains and yard engines of condition of route between home signals. When flashing, route is unoccupied.

Before proceeding from Yuba City depot to Marysville, member of crew shall press push button mounted on outside wall of Trainmen's Locker Room which holds route for westward movements for a period of ten (10) minutes and causes flashing light to burn steadily. Train or yard engine may then proceed, being governed by indication of home signal.

YUBA CITY, MP 137.5:

The "B" lead, track 99, crosses the main track at grade on the east side of Bridge and Plumas Streets. Movements on "B" lead, track 99, will have priority in use of the crossing and trains and yard engines on the main track will approach the crossing prepared to stop if the crossing is occupied or a conflicting movement is approaching the crossing on the intersecting track.

BRIDGE AND SHASTA STREETS, YUBA CITY: Traffic signal pre-emption equipment is installed and in service at intersection of Bridge and Shasta Streets, Yuba City. Track circuits extend approximately 150 feet each side of crossing. When train or engine occupies the track circuit, traffic signals will be pre-empted and will, after a pre-determined time, change to flashing red indication. When traffic signals display a flashing red indication, and it is safe to do so, train or engine may proceed over the crossing.

BRIDGE & PLUMAS STREETS, YUBA CITY: Traffic signal pre-emption equipment is installed and in service at intersection of Bridge and Plumas Streets, Yuba City. Track circuits connected to the traffic signals extend approximately 30 feet each side of the crossing on main and "B" lead tracks, except that on main track east of crossing, track circuits extend approximately 50 feet east of the edge of Bridge Street and are so arranged when a train or engine occupies the circuit, traffic signals will be pre-empted and will, after a predetermined time, change to flashing red indication. When traffic signals display a flashing red indication, and it is safe to do so, train or engine may proceed over the crossing. When switching or through movements are to be made on the main track affecting vehicular traffic on Bridge Street, wait for the traffic signals to display flashing red indication before proceeding into the vehicular traffic lanes on Bridge Street.

COOPER AVE., YUBA CITY: Two canitlever type flashing light signals in service. Trains or engines approaching crossing on main track must observe that amber light installed on top of signal instrument case adjacent to the crossing which operates in conjunction with the automatic crossing signals is flashing before entering the crossing. If the amber light is not flashing, stop and flag the crossing.

Movements over the crossing on other than the main track will be governed as follows:

(1) Stop clear of crossing. When the amber light displays a steady aspect, it indicates that engine or cars are in the track circuit that controls the flashing light signals. When the amber light displays a flashing aspect, it indicates that the crossing protection has been in operation for the required twenty seconds.

(2) Wait until steady aspect of amber light changes to a flashing aspect (after about 20 seconds).

(3) Proceed over crossing on flashing aspect in accordance with traffic conditions.

(4) In the event the amber light is inoperative, stop clear of the crossing for twenty seconds and then flag across.

COLUSA JCT.: Gates have been installed across main track East leg of wye (140179-069) and are equipped with switch locks. A member of crew must open and latch gates open when entering and must close and lock gates after train or engine has passed.

CHICO: (A) On city streets, trains and engines must use caution where movements are made against current of vehicular traffic and must stop if necessary before crossing vehicular traffic lanes.

(B) Track circuits connected to the traffic signals are installed on Main Street and Park Avenue, Chico. Traffic signals are located at each of the intersections between First Street and Humboldt Street (just west of 9th St.) and at the intersections of 12th, 14th and 16th Streets.

The track circuits extend approximately 40 feet on each side of the intersections and are so arranged that when an engine or train occupies the

circuit, traffic signals are preempted and signals governing movements on Main Street and Park Avenue will display a flashing yellow aspect and those governing movements on the intersecting streets will display a flashing red aspect. The flashing aspects will continue until the rear of the train clears the track circuit at the intersection.

Movements on Main Street and Park Avenue will proceed without stopping when the flashing yellow aspect is displayed.

(C) The following regulations apply to movements on Main St., Chico:

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

Train and engine movements are prohibited on Main Street, Chico, between the hours of 7:00 a.m. and 7:00 p.m.

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

(D) Trainmen are prohibited from riding on the side of engines and cars between MP 184.5 and MP 185.8 on the Esplanade at Chico.

(E) A lighted red fusee must be placed at the rear of all eastward movements on city streets in Chico.

(F) Engines so equipped with display oscillating or revolving lights for all movements within Chico yard limits. In addition, a lighted fusee will be displayed on leading end of engine when moving on city streets.

TS — SPECIAL INSTRUCTIONS GENERAL

Applicable instructions appearing in other portions of this timetable will be observed on Tidewater Southern in addition to instructions appearing in Tidewater Southern section.

Slow orders pertaining to unusual conditions, other than speed, will be handled verbally and subsequently issued in a white "C" Notice for TS only on Monday of each week. These notices will be posted in regular Notice book.

Conductors and/or Engineers will call Dispatcher before commencing trip to determine if there are any orders.

RULE 11. During the hours of darkness, or when visibility of motorists is impaired by weather conditions, the front brakeman on all trains entering or leaving the Modesto Yard at 9th and E Streets must drop a lighted fusee to the pavement as near the center of the intersection as possible.

RULE 17-C. Headlight must be dimmed while moving over 9th St., Modesto.

RULE 21 of the Operating Department is suspended.

RULE T-72. Westward trains are superior to eastward trains of the same class.

RULE 103 (B). When leaving cars on main track or passing tracks at Escalon or Aurora, all private crossings must be left open.

RULE 104. Main track switches in yards must be left lined and locked for main track. Switch leading to S.P. transfer, Modesto, must be kept lined for transfer, except when using Lyng spur. Switches in joint M&ET-TS Yard, Modesto, must be kept locked and lined for lead tracks.

STOCKTON: Tidewater Southern trains and engines use Western Pacific tracks in Stockton Yard.

STOCKTON YARD:

(A) Normal position for switch between No. 2 and No. 3 leads at the west end of the leads is lined for No. 2 lead.

(B) Normal position for switch between No. 1 and No. 2 leads at west end of leads is lined for No. 2 lead.

(C) Normal position for switch leading to Tidewater Southern main track off No. 1 lead is lined for No. 1 lead.

ORTEGA: Arrival time at Stockton Yard will be determined by the actual time of arrival at Ortega. This time will be used for:

1. Reporting arrival to the train dispatcher.
2. Wheel reports.
3. Delay reports and final terminal delay.

AURORA. In compliance with PUC Order, observe the following instructions governing use of Aurora Siding, Tidewater Southern MP 29.5.

Aurora Siding must not be used except as follows:

Emergency operations resulting from unforeseen circumstances such as equipment failure, unsafe track structure, derailments, or other events over which railroad had no control.

Running around more than six cars between 6:00 AM and 12 Midnight for purpose of pulling rather than shoving to SP transfer.

Parking of train between 6:00 AM and 12 Midnight when Hours of Service have expired and crew was unable to leave train at another location without violation of Hours of Service. When necessary to leave train on siding, locomotive must be shut down. It should also be noted that train should not be left at Aurora Siding under these circumstances if conditions will permit leaving it elsewhere, and crews must plan in advance utilizing all information to avoid the necessity of terminating their train at Aurora Siding due to Hours of Service.

Air Brake Tests must not be conducted in the vicinity of Aurora Siding and when mechanical refrigeration cars are left on siding for any reason, the motors must be shut down.

Except for emergency operations as described above, Aurora Siding is not to be used between 12:01 AM and 6:00 AM.

MODESTO: (A) Tracks in Modesto between E Street and Tuolumne River Bridge and Joint yard are operated jointly with the M&ET Co.

(B) **M&ET Crossing 9th and B Sts.** Trains and engines of M&ET shall be brought to a stop and crew shall ascertain that no conflicting movement is being made or about to be made before fouling this crossing. Trains of TS shall have precedence over movements of M&ET in the event of simultaneous arrival at the crossing.

(C) All movement on 9th Street, Modesto, will be governed by traffic signal indication except at 9th and B Streets where traffic lights are synchronized with track circuit and when trains enter circuit lights go red on both 9th and B Streets to stop vehicular traffic and allow trains to proceed through intersection. Trains must not stand in circuit but should proceed so as to reduce delay to vehicular traffic to a minimum.

Traffic signals on Ninth St. will be set to flash amber for Ninth St. and red for cross street during off-peak periods as follows:

Ninth at D, G, H, I, J, K and L - 1 a.m. to 6 a.m.

Ninth and B - 11 p.m. to 6 a.m.

At 9th and P Streets traffic signals are synchronized with track circuits. Trains and engines will not foul the intersection until signals governing movement through the intersection display flashing red. Signal timing circuits are so arranged that flashing red will not be displayed until after the end of a normal green period for 9th Street traffic.

(D) City ordinances require trains and yard engines within 100 feet of an intersection to stop immediately on the approach of any police, ambulance or fire apparatus sounding siren or signal gong, except they may be at the time on, or crossing an intersection in which event crossing must be cleared and then stop. Civil, military or funeral processions must not be obstructed.

ROAD CROSSINGS: No train, engine or car shall be operated over any crossing where special signs appear reading: STOP - FLAG HIGHWAY TRAFFIC or CAUTION - FLAG HIGHWAY TRAFFIC unless same be first brought to a stop or caution observed (as indicated by sign) and traffic on crossing protected by member of train crew or other competent employee acting as flagman.

INTERLOCKING PLANTS AND SIGNALS AND RAILROAD CROSSING NOT INTERLOCKED

Refer to Rule 6-A., pages 28 and 29, Operating Rules 1971 and add A1-automatic interlocking.

MP 5.8-SP Crossing and MP 5.9-Chestnut Junction, Magnolia Tower. Interlocking. Towerman on duty.

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: Two-unit home signal on westward main track 700 feet east of crossing; upper unit governs movement 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.

Eastward whistle signals:

East yard to eastward main track, - .

to westward main track, - o - .

No. 1 track, east yard, to eastward main track, o - .

to westward main track, o - o .

MP 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 movement on WP in either direction. Trains must approach under control and not proceed over this Crossing unless it is known to be clear.

SP crews desiring to cross WP main tracks at this point must contact WP train dispatcher for permission prior to making the move.

Before giving permission, WP Dispatcher will protect the move as follows:

1. Place Westward Signal at Clinton at stop and place plug in appropriate jack on block time board.

2. Check on eastward trains or engines with Oakland Yardmaster.

3. Make entry in block time book.

After SP crew has reported movements over WP main tracks complete plug is to be removed, and entry in block time book closed out.

MP 10.6 and MP 10.7 Melrose, SP Crossings. Interlocking. Remote-Controlled.

That part of Rule 663, referring to waiting time, is modified to five minutes instead of ten minutes at this Crossing.

MP 13.7 Elmhurst, SP Crossing. Interlocking. Remote-Controlled.

RULE 509 also applies. That part of Rule 663, referring to waiting time, is modified to five minutes instead of ten minutes at this Crossing.

MP 30.3 Niles Tower, SP Crossing. Interlocking. Towerman on duty.

MP 42.7 and MP 42.97 Radum, SP Crossing. Interlocking. Automatic.

That part of Rule 663, 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. Automatic.

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. Remote-Controlled. Under control SP Train dispatcher.

When interlocking signals display STOP aspect and reason not apparent, contact SP train dispatcher. When westward home interlocking displays STOP aspect, westward trains will stop to clear Lathrop highway crossing.

WP emergency release box located adjacent to crossing must be operated when instructed to do so by SP train dispatcher or when instructed by SP train dispatcher to flag through interlocking. If unable to contact SP train dispatcher and no trains can be seen or heard approaching, operate emergency release and observe rule 663.

When switching is done on main track at West Lathrop or cross-over west end of Army Supply Depot track, SP train dispatcher 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.

MP 90.5 Ortega, Hunter Street Line, SP Crossing. Interlocking. Automatic.

Movements over SP Crossing will be made in accordance with signal indication.

Westward interlocking signal is also absolute signal. **RULE 663** applies.

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. Towerman on duty.

RULE 509 also applies. Limits of AT&SF Stockton Tower include that portion of main track and siding on the AT&SF to Fresno Street and signal indications will supersede the superiority of trains for both opposing and following movements on the same track. The movement of trains and engines in these limits will be supervised by the Tower who will issue instructions as may be required. The Tower must be advised in advance of any known condition that will delay the train or engine or prevent it from making usual speed.

Speed limit between Stockton Tower and Fresno Street 20 MPH.

Following fixed signals and indications are effective in above specified territory:

Red - Stop and communicate with Tower for instructions.

Flashing Red - Proceed prepared to stop short of train obstruction or switch not properly lined but not exceeding 20 MPH.

Red over Yellow - Same as Flashing Red.

Telephones to AT&SF Tower located in booth at Hazelton Avenue Lead, Commerce Street and Fresno Street.

WP train dispatchers telephone located in booth at Hazelton Avenue Lead.

Absolute signal governing movement from Hazelton Avenue Lead may display aspect per Rules 288 or 292 for movement to WP main track at MP 93.2. When aspect per Rule 288 is displayed, proceed to next governing signal.

Signal governing movement from Commerce Street and Fresno Street to AT&SF main track or siding may display aspect per Rules 288 or 292. When aspect per Rule 288 is displayed, this authorizes movement to AT&SF main track and siding.

When aspect per Rule 292 is displayed, crew must contact Tower for instructions.

Last governing signal on AT&SF main track and siding will authorize movement to WP main track. If aspect per Rule 292 is displayed, authority for movement may be obtained through towerman.

Dwarf signals at Center Street govern movement from AT&SF main track and siding to Commerce Street.

Following whistle signals will be observed:

From WP to AT&SF enroute Hazelton Avenue o o o - .

From WP to AT&SF enroute Commerce Street and beyond . . - o .

From AT&SF to WP main track and WP main track either direction - .

MP 93.8 Weber Avenue, SP Crossing. Interlocking. Remote-Controlled.

RULE 509 also applies. That part of Rule 663, referring to waiting time, is modified to five minutes instead of ten minutes at this Crossing.

MP 95.1 El Pinal, SP Crossing. Interlocking. Remote-Controlled. Under control of SP train dispatcher.

When interlocking signals display STOP aspect and reason not apparent, contact SP train dispatcher.

SP dispatchers telephone and WP emergency release box located adjacent to crossing. Emergency release must be operated when instructed to do so by SP train dispatcher or when instructed by SP train dispatcher to flag through interlocking. If unable to contact SP train dispatcher and no trains can be seen or heard approaching, operate emergency release and observe Rule 663.

MP 138.0 "R" Street, SP Crossing. Interlocking. Remote-Controlled.

RULE 509 also applies. 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 display aspect per Rule 288.

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, Rule 663 will apply and waiting time modified to three minutes.

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.

That part of Rule 663, referring to waiting time, is modified to three minutes instead of ten minutes at this Crossing.

RULE 509 also applies.

MP 152.5 Sankey, SN Crossing and Connection.

RULES 509 and 546 apply. Westward absolute signal is a two-unit signal. Upper unit governs movements on WP main track. Lower unit governs movements to SN main track.

MP 180.2 Binney Junction, SP Crossing. Remote-controlled. Under control SP train dispatcher.

When interlocking signals display STOP aspect and reason not apparent, contact SP train dispatcher.

SP dispatchers telephone and WP emergency release box located adjacent to crossing. Emergency release must be operated when instructed to do so by SP train dispatcher or when instructed by SP train dispatcher to flag through interlocking. If unable to contact SP train dispatcher and no trains can be seen or heard approaching, operate emergency release and observe Rule 663.

MP 765.9 NN Crossing. Interlocking. Remote-controlled. Rules 509 and 663 apply.

When using dual-control switch west end Shafter siding in hand-throw position, movement must be made in accordance with Rules 545 and 663.

Derail installed in NN connection at clearance point for Shafter siding. Connection switch and derail equipped with electric locks which normally are in release position. If lock fails to release when padlock is removed, follow instructions in phone booth nearby.

MP 927.2 Pollard Jct.	Interlocking.
Grant.	Towerman on duty.
	WP Rules apply

D&RGW RULE 290.

Aspect	Name.
Red over red over lunar,	
or red over lunar,	Restricting
or lunar.	

Indication

Proceed at restricted speed:

- (1) Within ABS to next signal governing in the same direction.
- (2) At interlocking outside ABS through interlocking limits.
- (3) Onto non-signaling track until entire train is through turnout.

D&RGW RULE 508. The absence of a light or white light displayed where a color or lunar light should be, on an ABS, must be regarded as the most restrictive indication that can be given by that signal.

The following signals may display lunar aspect: Signal 66A governs movements entering Roper Yard from north and west; Signal 66B governs movements entering spurs lined to south or eastbound track to Roper Yard; Signal 68B governs movements departing Roper Yard to north and west; Signal 72 governs westbound movements out of Roper Yard on the eastbound running track; Signal 74 governs movements west out of Saucer No. 2.

MP 928.6 UP Crossing. Interlocking. Automatic. WP Rules apply.

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 signals.

All trains must come to STOP at home signals, and a member of crew go to Crossing and carefully follow instructions pasted inside of derail lock box at Crossing before proceeding over Crossing.

MP 22.3 West San Jose, SP Crossing. No Interlocking.

Protection by Stop Boards. All trains, engines and cars shall come to a STOP before proceeding across this Crossing and shall not thereafter proceed until it has been ascertained that no trains, engines or cars are approaching from either direction upon the conflicting route within a distance and at a speed which will in any way render them liable to conflict with the movement about to be made over the Crossing.

Southern Pacific Company shall have precedence in the use of the Crossing.

SN — INTERLOCKING PLANTS AND SIGNALS

MP 109.17, SANKEY, WP CROSSING AND CONNECTION.

Sacramento Northern:

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

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

Westward — Absolute Signal governs movements to SN Rio Linda Branch.

Western Pacific:

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

Dual control switches provide entrance to and crossing over WP main track. Instructions for operating Dual Control switches by hand are posted in telephone booth adjacent to the crossing.

Speed on approach curves and through turnouts of Dual Control switches shall not exceed 10 miles per hour.

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

WOODLAND BRANCH. MP 1.55 MIKON, SP CROSSING INTERLOCKING. AUTOMATIC.

Home signals located 500 feet east and west of crossing.

Inoperative fixed yellow signal arms located 2,000 feet from home signals.

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

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

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

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

Instructions for operating time release are posted in time release box at crossing and are as follows:

1. Rotate time release handle (clockwise) as far as possible, and hold in that position for approximately three seconds; then release handle.

2. After time interval of 4'30" red light in time release box should be displayed; indicating time release has completed timing function.

3. If home signal does not indicate proceed, and red indicator light in time release box is displayed, train may proceed over crossing, complying with Rule 663.2d. Note-Red indicator light at Mikon Crossing in lieu of "yellow" indicator light referred to in Rule 663.2d.

4. If home signal does not display proceed indication and red indicator light in time release box is not displayed after time release has completed movement; train may proceed across crossing, complying with Rule 663.2e.

HOLLAND BRANCH, BASCULE BRIDGE, INTERLOCKING:

Bascule type drawbridge at MP 90.66 west end of Westgate, Sacramento Yard. This is a combination rail and highway bridge. Normal position of lift span is closed and locked for train movements and vehicular traffic.

Automatic interlocking governs movements on the bridge:

Two indication color light interlocking home signals displaying red and green aspects located 522 feet west of the bridge and 524 feet east of the bridge. APPROACH LIGHTED.

Approach signal for eastward movements displaying yellow aspect only per Rule 285, located 1551 feet west of the eastward home signal. This signal is approach lighted at a point 562 feet west of the signal. No approach signal for westward movements.

Approach circuits extend 2635 feet west and 1201 feet east of bridge.

All movements approaching and passing over the bridge will be made at yard speed, not exceeding ten (10) MPH.

If automatic interlocking home signal does not display a proceed indication, train or engine must be brought to a stop. Before passing home signal at Stop, the following regulations must be observed:

(1) Member of the crew will inform the Lockmaster or his Assistant that signal is at Stop and movement will be made under flag protection. (Applies only when Lockmaster or his Assistant is on duty).

(2) A member of the crew will examine the rail locks at the west end of the lift span of the bridge to determine that the locks are in normal position with the bridge in proper surface and alignment for rail movement.

(3) Unless Lockmaster or his Assistant informs the crew that bridge is about to be raised, train or engine may proceed with caution on signal of member of crew acting as flagman.

Release mechanism adjacent to signal relay case at east end of the bridge and rail locks at west end of the lift span MUST NOT be operated by trainmen or enginemen.

TS — INTERLOCKING PLANTS AND SIGNALS

MP 32.7 — SP Crossing — Remote Controlled.

Remote controlled interlocking signals are located each side of crossing and are under the control of the Southern Pacific Train Dispatcher.

Approach circuits 500 ft. in advance of interlocking signals indicate to the Southern Pacific Train Dispatcher the approach of a Tidewater Southern train.

Approach signals displaying aspect per Rule 285, located 1432 feet east and 890 feet west of home signal. Proceed from approach signals complying with Rule 285 and proceed through crossing upon proper signal indication at home signal. Diesel engine throttle must be placed in off position while locomotive is moving over crossing frog.

If signals fail to indicate proceed after a reasonable time, a member of the train crew must contact the Southern Pacific Train Dispatcher by telephone located at the crossing.

Emergency time release box is located adjacent to the crossing. The box is marked T.S. Ry. and locked with a switch padlock. Instructions for the operation of the emergency release are posted in the box.

The emergency release must only be operated when instructed to do so by the Southern Pacific dispatcher or if conditions are such that the Southern Pacific dispatcher cannot be contacted within ten minutes. The release may be operated only after it has been determined that no trains can be seen or heard approaching on the SP tracks. Rule 663 will govern after the emergency release has been operated.

Any defect in connection with this interlocker must be reported immediately to the Southern Pacific Train Dispatcher that he may notify signal maintainer. SP telephone line circuit switch is located inside the telephone booth above the door.

Operators of motor cars must stop at Southern Pacific crossing and when there is more than one man on the car the crossing will be flagged. Operator must know there are no Southern Pacific trains approaching before going over crossing.

RULE 302. AUTOMATIC HOT BOX DETECTOR

Automatic Hot Box Detector is in service at MP 556.90.

Hot Box Indicator is located on Signal 5596.

"Wait" Indicator is located on Signal 5550.

Hot Box Locator is located at Red House.

Hot Box Indicator will normally display a flashing "H" until approaching train has been checked. If no hot journal has been found, indication will change to steady "H".

Flashing "H" indication will not change if a hot journal has been found and the train must stop at Red House.

The automatic locator at Red House will indicate the location of the hot box in the train in accordance with posted instructions.

"Wait" indicator on Signal 5550 will normally display a steady "W".

If train ahead has a hot journal, Signal 5550 will indicate aspect per Rule 291 and a flashing "W".

If flashing "W" continues after train has stopped, communicate with train dispatcher for further instructions. If unable to communicate with train dispatcher, train may, after waiting five minutes, pass flashing "W" and be governed by Rule 291.

An indicator lamp is mounted on the Hot Box Detector house. If head end of train finds the indicator lamp displaying a steady light, Hot Box Detector is in service. If indicator lamp is out, Hot Box Detector is out of service. If rear of train finds the indicator lamp displaying a flashing light, a hot box has been found.

RULE 302. HOT BOX DETECTORS ARE IN SERVICE AT THE FOLLOWING LOCATIONS:

MP 358.34 between Red Rock and Doyle
Westbound "H" indicator located MP 355.3
Eastbound "H" indicator located MP 360.2
Westbound trains stop at West Red Rock
Eastbound trains stop at East Doyle

MP 387.1 between Flanigan and Sand Pass
Westbound "H" indicator located MP 385.3
Eastbound "H" indicator located MP 390.5
Westbound WP trains stop at West Flanigan
Westbound SP trains stop at SP connection Flanigan MP 384.4
Eastbound trains stop at East Sand Pass

MP 434.25 between Phil and Gerlach
Westbound "H" indicator located MP 431.92
Eastbound "H" indicator located MP 436.93
Westbound trains stop at West Phil
Eastbound trains stop at East Gerlach

MP 475 between Ronda and Floka
Westbound "H" indicator located MP 472.5
Eastbound "H" indicator located MP 477.5
Westbound trains stop at West Ronda
Eastbound trains stop at East Floka

MP 503.8 between Jungo and Gaskell
Westbound "H" indicator located MP 501.1
Eastbound "H" indicator located MP 507
Westbound trains stop at West Jungo
Eastbound trains stop at East Gaskell

MP 585.80 between Ellison and North Battle Mountain
"H" indicator located on Signal 5880. Trains stop at East Rennox

MP 615.4 between Dunphy and Beowawe
"H" indicator located MP 617.6. Trains stop at East Beowawe

MP 693.5 between Elburz and Deeth
"H" indicator located MP 697.2. Trains stop at West Deeth

MP 733 between Ruby and Ventosa
Westbound "H" indicator located MP 730.14
Eastbound "H" indicator located MP 735.4
Westbound trains stop at West Ruby
Eastbound trains stop at East Ventosa

MP 783.3 between Clifside and Pilot
Westbound "H" indicator located MP 781.5 (East Clifside)
Eastbound "H" indicator located MP 785.5
Westbound trains stop at West Clifside
Eastbound trains stop at East Pilot

MP 830 between Arinosa and Barro
Westbound "H" indicator located MP 827.7
Eastbound "H" indicator located MP 832.2
Westbound trains stop at West Arinosa
Eastbound trains stop at East Barro

MP 860.4 between Clive and Low
Westbound "H" indicator located MP 856.4
Eastbound "H" indicator located MP 864
Westbound trains stop at West Clive
Eastbound trains stop at East Low

MP 893.7 between Delle and Burmester
Westbound "H" indicator located MP 891.3
Eastbound "H" indicator located MP 895.8
Westbound trains stop at West Switch Timpie
Eastbound trains stop at East Burmester.

Hot Box indicator will normally display a flashing "H" until approaching train has been checked. If no hot journal is found, the indicator will change to a steady "H".

If "H" indicator is still flashing when passed, a hot journal has been found. Train will reduce speed to 15 MPH and prepare to stop at inspection point shown. In addition, member of crew on engine will call train dispatcher to ascertain if hot box graph shows any extremely high deflections. If so, train should, if practicable, stop short of initial switch of siding where inspection is to take place. If train dispatcher observes any high deflections on hot box graph, he should initiate call to the head end of train involved without waiting to receive a call.

Train crew will communicate with train dispatcher for location of hot journal. He will advise the side of the train noted, the car count ahead of caboose or behind the engine and the axle number from the head end of the car. The crew must check the car shown, also the car ahead and the car behind that car. It will not be necessary to inspect the entire train with the following exception:

When multiple alarms are seen on the graph, this condition can be caused by heavy braking of the train while passing the detector account sparks generated by the brake shoes, and also by abnormal operation of the carrier system. It is easily possible for a genuine hot box to be missed under these conditions and the train must therefore be inspected.

A light out in the "H" indicator must be regarded as a flashing "H".

When a train is stopped by a hot box detector, and if member of crew is unable to contact train dispatcher, entire train must be inspected. When inspection has been completed, Hot Box indication will have been complied with and no further attempt to communicate with train dispatcher concerning hot box indication need be made.

If power is "off" in hot box detector territory, or if Hot Box Detector is temporarily out of service, train dispatcher may instruct crew members to disregard flashing "H." Keeping a close watch for hot journals.

**ASSISTANT CHIEF DISPATCHERS
AND TRAIN DISPATCHERS**

J. E. Taylor
C. L. Foss
J. P. Wirick
R. A. Ditmanson

W. J. Goolsby
D. F. Meyer
R. C. Ditmanson

D. D. Bradford
M. E. Edgeman
P. C. Sanchez
J. C. McCall
J. R. Summers
R. G. Cotton
G. Wigley, Jr.
K. F. Arnoldsen
W. B. Robblee

H. L. Belew
R. R. Taillefer
J. P. Blissenbach
J. R. Welch
S. G. Oels
G. P. Sharp
C. M. Dunn
J. E. Fortner
P. D. Flynn

WATCH INSPECTORS

Location	Name	Title
Oakland	Allphin Jewelers	Watch Inspector
Oakland	Leslies Jewelry	Watch Inspector
San Jose	Frank Scholes	Watch Inspector
Stockton	W. K. Bank & Son	Watch Inspector
Modesto	W. P. Shoemake's	Watch Inspector
Fremont	Easley Jewelry	Watch Inspector
Sacramento	Grebitus & Son	Watch Inspector
Roseville	Martin's Jewelers	Watch Inspector
Oroville	Chuck's Time Shop	Watch Inspector
Quincy	Rollo Jewelers	Watch Inspector
Winnemucca	Dan Ramasco	Watch Inspector
Elko	Blohm Jewelers	Watch Inspector
Salt Lake City	H. B. Miller Co.	Watch Inspector
Salt Lake City	Burrell Jewelry	Watch Inspector

**AVOID DAMAGE—SWITCH CUSTOMERS'
CARS CAREFULLY**

OVERSPEED Couplings are DAMAGING—Here's what happens:

Speed	SAFE COUPLING SPEED
4 miles per hour <input type="checkbox"/>	Damage begins
5 miles per hour <input type="checkbox"/>	2 1/4 times as damaging as 4 MPH
6 miles per hour <input type="checkbox"/>	3 times as damaging as 4 MPH
7 miles per hour <input type="checkbox"/>	4 times as damaging as 4 MPH
8 miles per hour <input type="checkbox"/>	5 times as damaging as 4 MPH
9 miles per hour <input type="checkbox"/>	6 times as damaging as 4 MPH
10 miles per hour <input type="checkbox"/>	

Damage to freight or car can be avoided by always keeping coupling speed within the safe range — **NOT OVER 4 MILES PER HOUR—A BRISK WALK.**

**HANDLE FREIGHT CAREFULLY AND
KEEP OUR CUSTOMERS!**

ALL SUBDIVISIONS

RULE 1137 (T). Use of retaining valves.

When locomotive will control speed of train and total brake pipe reduction does not exceed 18 pounds, or if dynamic brake becomes inoperative and total brake pipe reduction does not exceed 18 pounds, the use of retainers will not be required.

Between the following points, if total brake pipe reduction exceeds 18 pounds, stop must be made immediately, required number of retainers set to control train and brake system fully charged before proceeding.

WESTWARD

MABIE to Oroville Yard — One retainer for each 250 Tons in train. (Ruling Grade 1%)

MPK-52 to Westwood — One retainer for each 220 Tons in train. (Ruling Grade 1.5%)

ALMANOR to Greenville — One retainer for each 150 Tons in train. (Ruling Grade 2.2%)

EASTWARD

HALLS FLAT to Little Valley — One retainer for each 200 Tons in train. (Ruling Grade 1.8%)

SILVER ZONE to Wendover — One retainer for each 250 Tons in train. (Ruling Grade 1%)

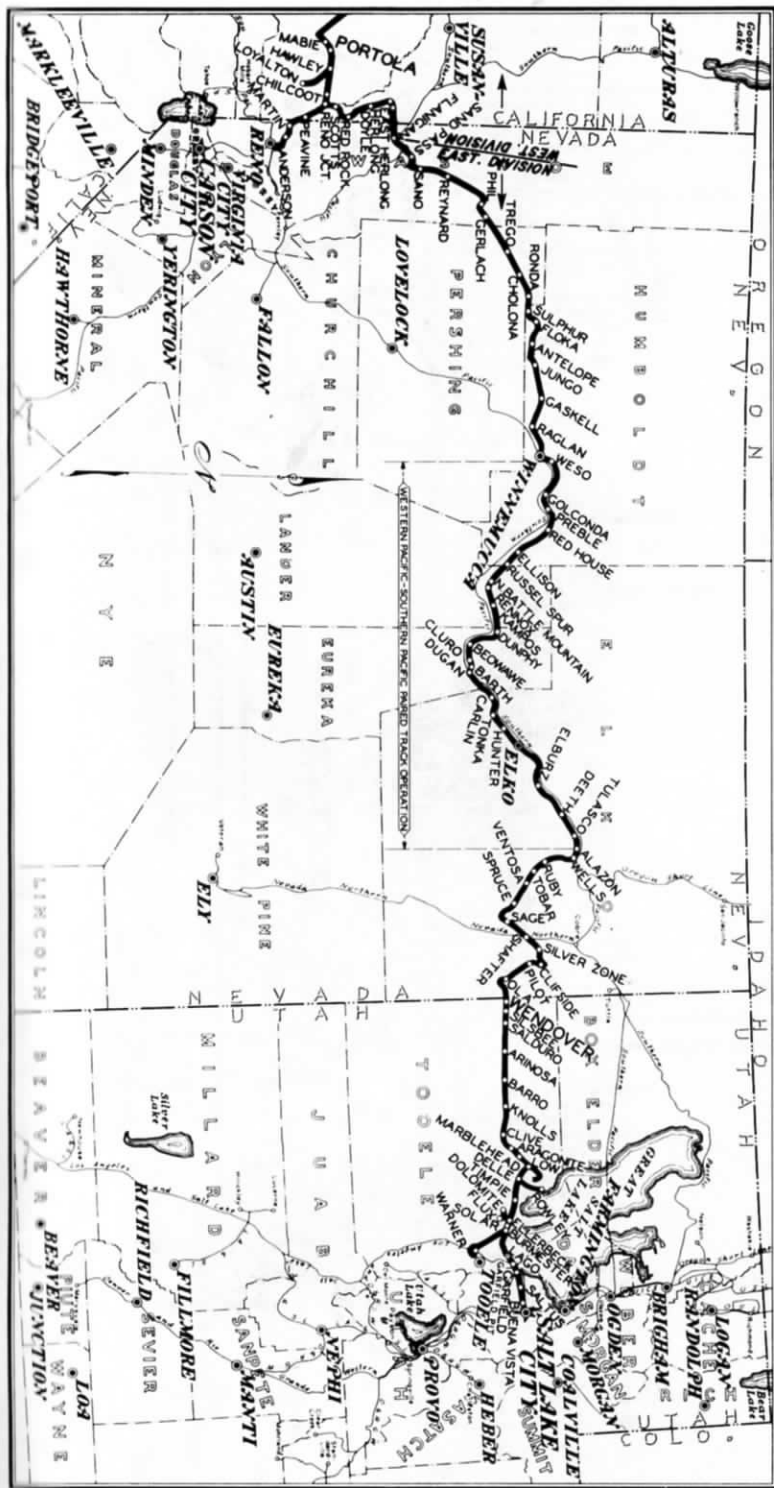
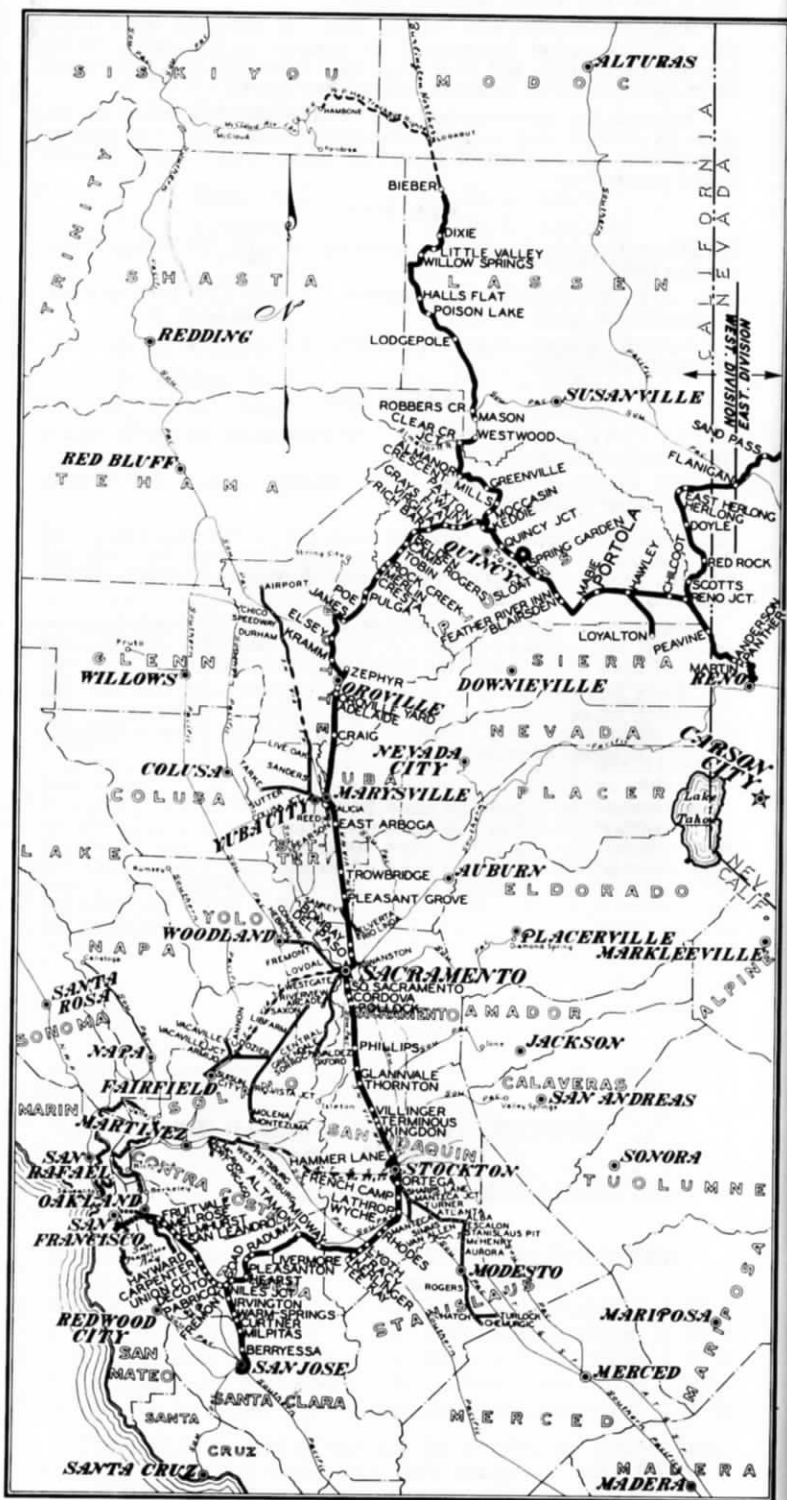
When it is known before reaching any of the above locations that the use of retainers will be necessary, stop must be made and required number of retainers set before leaving the initially named points.

On other descending grades if the use of retainers becomes necessary, stop must be made and sufficient retainers set to control speed of train while brake pipe pressure is being restored.

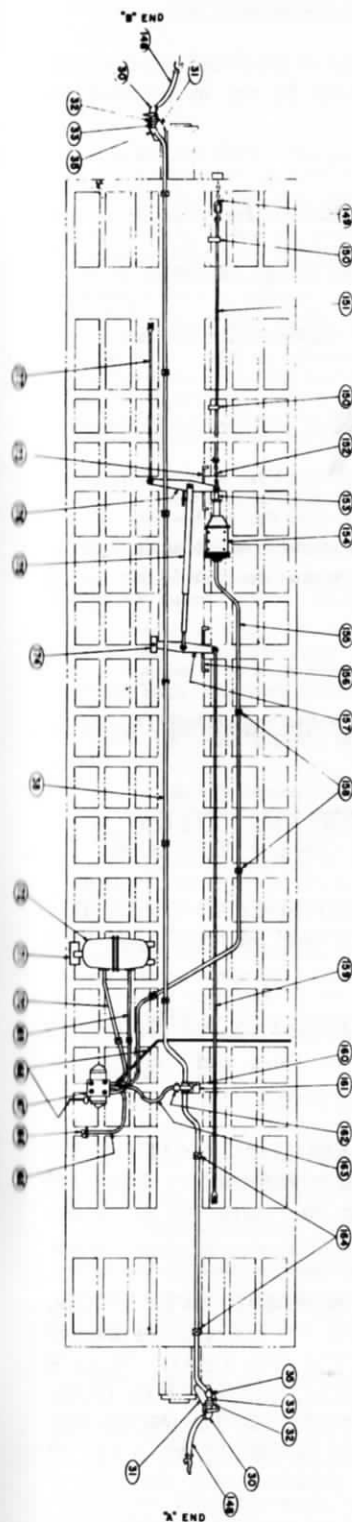
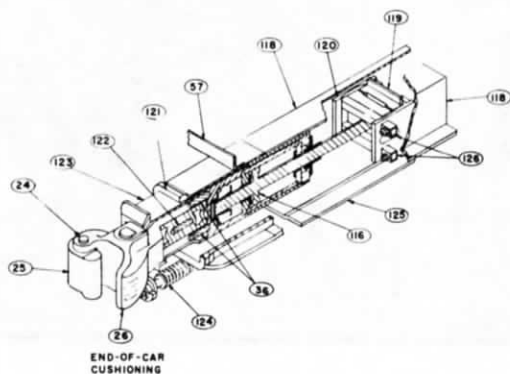
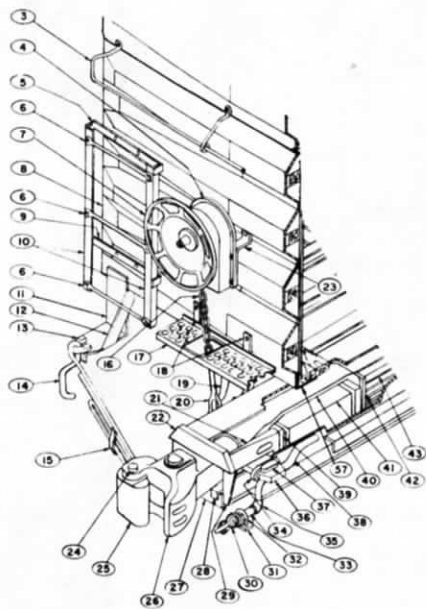
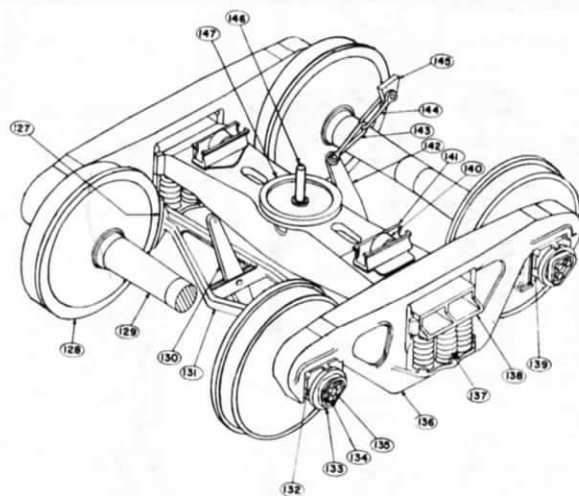
When retainers are used they will be applied to cars on head end in a block of not less than ten cars. Retainers are to be used in the low pressure (horizontal) position. Should wheels show a tendency to heat, retainers must be alternated.

Formulae

1 % = 6000 Ton — 250 Ton per = 24 Retainers
1.5% = 6000 Ton — 220 Ton per = 27 Retainers
1.8% = 6000 Ton — 200 Ton per = 30 Retainers
2.2% = 6000 Ton — 150 Ton per = 40 Retainers
vs. 100%



CAR CHART



3. Horizontal end handhold
4. Hand brake housing
5. End Ladder support—top
6. End ladder tread
7. Hand brake wheel
8. Steel end—bottom
9. End ladder support—bottom
11. Uncoupling lever bracket
12. Uncoupling lever bracket support
13. Uncoupling lever support
14. Telescoping uncoupling rod
15. Uncoupling lever guide
16. Hand brake chain
17. End platform (combined crossover and brake stop)
18. End platform support
19. Bell crank
20. Vertical hand brake rod
21. Front draft gear stop
22. Striker
23. Hand brake housing support
24. Coupler knuckle pin
25. Coupler knuckle
26. Type E coupler head
27. Coupler carrier
28. Coupler wear plate
29. Striker flange
30. Angle cock
31. Angle cock support
32. Angle cock "U" bolt
33. Nipple
34. Draft key washer
35. 45° elbow
36. Draft key
37. Draft key retainer
38. Brake pipe 1 1/4" (Train line)
39. Follower block
40. Coupler yoke
41. Draft gear
42. Rear draft gear stop
43. Rear draft gear stop reinforcement
116. Hydraulic piston
118. Center sill
119. Back stop plate
120. Rear lug casting
121. Striker casting
122. Coupler key
123. Cushioning unit
124. Restoring mechanism
125. Inspection plate
126. Rear cross key
127. Brake shoe
128. Wheel
129. Axle
130. Truck live lever
131. Brake beam
132. Roller bearing adapter
133. Roller bearing end cap
134. End cap retaining bolt
135. End cap locking plate
136. Truck slide frame
137. Truck spring
138. Truck bolster
139. Roller bearing assembly
140. Truck side bearing roller
141. Truck side bearing housing
142. Truck dead lever
143. Clevis at dead lever
144. Clevis at dead lever fulcrum
145. Dead lever anchor—underframe mounted
146. Center pin
147. Truck center plate cast integral with truck bolster
148. Air hose
149. Hand brake chain at bell crank
150. Hand brake rod guide
151. Hand brake rod
152. Hand brake chain at cylinder
153. Cylinder push rod
154. Air brake cylinder
155. Cylinder pipe, 3/4"
156. Floating lever guide
157. Floating lever
158. Pipe clamp, 3/4"
159. Top rod "A" end
160. Branch pipe tee
161. Branch pipe tee support
162. Combined dirt collector and cut-out cock
163. Connection hose
164. Pipe clamp, 1-1/2"
165. Retainer pipe
166. Retainer valve
167. ABD Control valve
168. Release rod
169. Auxiliary reservoir pipe, 3/4"
170. Emergency reservoir pipe, 3/4"
171. Reservoir support
172. Combined auxiliary and emergency reservoir
173. Cylinder lever guide
174. Brake lever fulcrum
175. Brake slack adjuster
176. Cylinder lever
177. Top rod "B" end

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FUEL SAVER OPERATION

STEP 1

All set up switches mounted on panel of electrical cabinet near battery charging AMP Meter should be set in position as follows:

- A — LEAD UNIT — Lead
- B — SECOND UNIT EQUIPPED WITH SELECTOR SWITCH — #2
- C — THIRD UNIT EQUIPPED WITH SELECTOR SWITCH — #3
- D — FOURTH UNIT EQUIPPED WITH SELECTOR SWITCH — #3

Units not equipped with selector switch will operate normally.

STEP 2

Control switches located on control stand consist of fuel saver switch and rotary switch. Normal operation should be set in normal, rotary switch in lead.

STEP 3

When tractive effort exceeds demand, the following should be performed:

- A — PLACE FUEL SAVER SWITCH THROTTLE #1 DYNAMIC BRK NORMAL — IN UP POSITION
- B — MOVE ROTARY SWITCH FROM LEAD TO #2. This will reduce throttle on second unit only equipped with fuel saver to #1 power position
- C — MOVE ROTARY SWITCH FROM #2 POSITION TO #3. This will reduce throttle on third and fourth units equipped with fuel saver to #1 power position
- D — MOVE ROTARY SWITCH FROM #3 POSITION TO #2 AND #3. This will reduce throttle on 2nd, 3rd and 4th units equipped with fuel saver to #1 power position

TO RETURN ALL UNITS TO NORMAL OPERATION, HAVE THROTTLE IN POSITION #1 THROUGH #4, #7 OR #8. PLACE ROTARY SWITCH TO LEAD. PLACE FUEL SAVER SWITCH IN NORMAL OPERATION POSITION. IF ONLY ONE UNIT IS NEEDED TO INCREASE POWER, MOVE ROTARY SWITCH FROM #2 AND #3 TO #3, ETC.

IF UNITS STOP, THROTTLE WAS IN #5 OR #6 POSITION AND UNITS WILL HAVE TO BE RESTARTED.

EMERGENCY ACTION GUIDE FOR HAZARDOUS MATERIALS INCIDENTS

INTRODUCTION—This guide is intended for ready reference by personnel making on-the-scene decisions as to emergency actions to be taken for incidents involving hazardous materials in transportation. Hazardous materials in transportation are classified by their individual hazard characteristics, and are identified by "Hazard Class" on shipping papers or waybills, by labels on containers, and by placards applied to rail cars or trailers. Personnel at the scene of an incident should follow the procedures in the guide if possible; however, it must be realized that on-the-scene judgement based on the actual circumstances involved, at the time, is the final guide in protecting lives and the environment. These procedures should be followed whenever an emergency, such as a fire, collision, derailment, rupture of containers, leaks, or spills occurs involving hazardous material. These actions are directed at handling an immediate emergency, and **do not** spell out all potential hazards of the materials involved, nor all of the actions which can be taken; expert advice and assistance should be obtained and followed as rapidly as possible.

EMERGENCY ACTION—The following actions are to be taken as rapidly as possible by personnel at the scene of an emergency involving hazardous materials—if it is safe to do so:

1. **Rescue injured**, remove them to a safe area and administer first aid.
2. **Survey the scene and adjacent area, determine conditions and notify, by quickest means available, appropriate authority.**
3. **Protect life and property.** This phase may require evacuation of people from the area, fire fighting, removal of cars or containers and contents. **The course of action to be taken depends on conditions and the hazardous materials involved.** Steps to be taken are as follows:
 - a. **Identify cars/trailers** containing hazardous materials (all placarded cars) involved in the incident, or in the immediate area, and **determine their condition.**
 - b. **Identify contents and "Hazard Class"** of all cars or containers involved from the shipping papers or waybills. The 2-letter 'Consist Key' on the computer consist (Haz--) identifies the Hazard Class and the placard.
 - c. **Notify dispatcher** or appropriate authority as soon as possible of **contents** of cars or containers involved in the incident, and their **condition**—fuming, leaking, burning, etc.
 - d. **Refer** to the appropriate block on the guide for the hazardous materials involved. Review the characteristics of the hazard class of the material, and **advise emergency personnel of the hazards and recommended emergency actions to follow.** If emergency personnel are not available, follow recommended action to save lives and to protect the environment. **Take actions** as directed by appropriate authority or officer in charge.

MAJOR HAZARDS

1. If materials marked "**EXP**" (Explosive) on the guide are involved in a fire, all persons should be evacuated for a distance of **1 mile** from the scene.
2. If materials marked "**VRP**" (Violent Rupture Potential) on the guide are involved in a fire, all persons should be evacuated for a distance of **1/2 mile** from the scene.
3. If materials marked "**TOX**" (Toxic) on the guide are involved and leaking, fuming or venting, all persons should be kept out of the area, and contact with the material, fumes or smoke avoided.
4. If any hazardous materials are burning, or their container or car is involved in a fire, all persons should be kept out of the area, and contact with fumes or smoke avoided.

PREVENTION OF FURTHER INJURY OR PROPERTY DAMAGE—This phase involves limiting the spread of materials, damming, ditching, wetting down, covering with earth, etc. When advice and assistance are available, full cooperation with state and local officials, emergency personnel from the Bureau of Explosives, shippers, etc., is essential. These persons can assist in maintaining order, evacuating the area, handling materials, administering first aid, etc. **This guide should be reviewed frequently** so that those who may be in a position to use it are familiar with its contents.



XA

EXPLOSIVES "A" (**EXP**) are capable of exploding or detonating in mass when involved in fire or subjected to strong impacts or shocks. When involved in fires, all persons should be evacuated for a distance of **one mile**. When not on fire, they should be protected from being struck, crushed, exposed to fire, or contact with corrosive materials. Examples of Class A Explosives: High Explosives; Explosive Bombs; Initiating Explosives; Black Powder.



XB

EXPLOSIVES "B" (**VRP**) are capable of burning rapidly, and causing sudden, violent rupture of cars or containers when involved in fires. When they are involved in fire, all persons should be evacuated for a distance of **1/2 mile**. When not on fire, they should be protected from being struck, crushed, exposed to fire or contact with corrosive materials. Examples of Class B Explosives: Railway Torpedoes; Special Fireworks.



XC

EXPLOSIVES "C" are fire hazards. Placards are applied only to cars, trailers or freight containers carrying packages bearing the "EXPLOSIVES C" label. If material is involved in a fire, extinguish from a safe distance. When not on fire, the material should be protected from sparks and other sources of ignition. Examples of Class C Explosives: Common Fireworks; Small Arms Ammunition. (NOTE-This placard is also applied to cars, trailers or freight containers carrying Flammable Liquids or Solids, see next page)



FG

FLAMMABLE GASES (**VRP**) are usually ignited immediately when punctures or serious leaks occur. If not, the gas is easily ignited, and will result in rapid combustion of the entire cloud; ignitable atmospheres may extend well beyond any visible cloud. Fires from leaks in containers that cannot be shut off should be allowed to burn. Tanks containing flammable gases that are exposed to intense fire and flame impingement are likely to rupture violently, involving the immediate area in a large fire ball. When compressed gas tank cars are involved in fires or exposed to flame impingement, all persons should be evacuated for **1/2 mile** from the scene. When compressed gas cylinders are involved in fires, personnel should remain several hundred yards away. These materials may be toxic or irritating, and contact with liquefied gases will produce serious frost bite. Examples of Flammable Gases: Liquefied Petroleum Gas, Propane, Butadiene, Inhibited, Vinyl Chloride (See also "Cryogenics" below)



NG

NONFLAMMABLE GASES (**VRP**) can cause suffocation of persons entering the gas cloud when leaks occur. Tanks containing nonflammable gases can rupture when exposed to intense fire conditions, and persons should be evacuated for **1/2 mile** from the scene. These materials may be toxic or irritating, and contact with liquefied gases will produce serious frost bite. Examples of Non-flammable Gases: Anhydrous Ammonia, Refrigerant Gases, Sulfur Dioxide, Carbon Dioxide, Liquefied (See also "Cryogenics" below)



PA

POISONS "A" (**TOX**) are extremely toxic materials, and very small quantities can cause rapid illness or death. These materials, when spilled or vented, must be avoided by all persons, except protected specialists. Evacuate personnel from the immediate area, and if a gas is leaking evacuate all persons downwind as far as necessary to avoid contact with the material. If spilled material enters streams, community authorities and persons down-stream must be notified immediately. Examples of Poisons A: Hydrocyanic Acid; Phosgene; Phosphine.



PB

POISONS "B" are moderately toxic materials, and can cause illness or death if persons remain in contact with them or inhale or ingest them in moderate quantities. These materials, when spilled or vented, must be avoided by all persons, except protected specialists. Evacuate personnel from the immediate area to avoid contact. If possible, confine spread or flow of material to the immediate area. If spilled material enters streams, community authorities and persons downstream must be notified immediately. Examples of Poisons B: Aniline Oil; Carbolic Acid; Motor Fuel Antiknock Compound; Organic Phosphate Compound Mixtures



CH

CHLORINE (**TOX**) is a nonflammable gas with highly toxic properties; material itself will not burn; however, it will support combustion. Leakage of the material should be treated the same as "POISONS "A".



FL

FLAMMABLE LIQUIDS (**VRP**, if polymerizeable material, see below) are materials which when spilled give off flammable vapors that will ignite on contact with an open flame, spark or hot metal surface. Their vapors are usually heavier than air and will flow into low areas, ditches or ravines. Vapors, when ignited, burn rapidly spreading flame back to the source of the spill. Contact with corrosive materials can cause ignition and should be prevented. Personnel should evacuate areas of vapor concentration and avoid contact with the material. Action should be taken to keep ignition sources out of the area of vapor concentrations; smoking, engines, and other ignition sources must be prohibited in the area of spills. Examples of Flammable Liquids: Gasoline, Acetone, Toluene, Methyl Ethyl Ketone.



CB

Polymerizeable materials (**VRP**), indicated by "inhibited" or "uninhibited" in the commodity name, are subject to violent rupture when exposed to fire conditions. When such materials are involved in fires, persons should be evacuated for a distance of **1/2 mile** from the scene. Examples of polymerizeable Flammable Liquids: Methyl Methacrylate Monomer, Inhibited or Uninhibited, Vinyl Fluoride, Inhibited; Ethylene Imine, Inhibited.

COMBUSTIBLE LIQUIDS are materials which are less dangerous than flammable liquids due to their higher flash points; however, leaks, spills and fires should be treated in the same manner as flammable liquids. Examples of Combustible Liquids: Fuel Oil; certain Naphthas and Petroleum Distillates.



FS

FLAMMABLE SOLIDS are materials that can cause fires by self-ignition or spontaneous combustion if exposed to proper conditions, such as becoming wet, being exposed to air, being crushed, or coming in contact with corrosive materials or outside heat sources. They are easily ignited and burn readily. They should be isolated from other hazardous materials. (NOTE—The "Flammable" placard may be used in place of the "Flammable Solid" placard.) Examples of Flammable Solids: Railway Fusees; Phosphorus, White or Yellow, Dry or In Water.



FW

FLAMMABLE SOLID W are materials which are strongly reactive with water. If these materials themselves are involved in a fire, **the use of water must be avoided**. Individual packages of these materials will bear the "Dangerous When Wet" label. Examples of Flammable Solids (Dangerous When Wet): Calcium Carbide; Potassium Metal; Phosphorus Pentasulfide.



OX

OXYGEN (PRESSURIZED LIQUID) (VRP) in contact with fuels, oils and other combustible materials can cause violent, rapid combustion or explosion. Sources of ignition, sparks, impacts, friction or sudden shocks should be prevented in areas exposed to liquid oxygen spills or leakages.

Cryogenics are extremely low temperature (about -150 degrees F. and below) gaseous materials transported in a liquid state. When leaks occur, a fog or mist is caused due to the freezing or the moisture in the air. If a container is breached, the material may warm, expand and rupture the container. If liquid leaks occur and contact is made with adjacent metal containers, they will become brittle, crack and release their contents. Persons and sources of ignition should be kept out of the gas cloud area. Cryogenics may or may not be placarded, depending on the pressure within the container or tank car. When placarded, leakage should be treated the same as a Flammable Gas or Non-flammable Gas, depending on the hazard class. Examples of Cryogenics: Nitrogen, Pressurized Liquid; Hydrogen, Liquefied; Ethylene, Liquefied.



OM

OXIDIZING MATERIALS are materials which readily yield oxygen to greatly stimulate the burning of fuels. If mixed with fuels and ignited, rapid combustion will result. If spilled, they should be kept from coming in contact with flammable or combustible materials. Examples of Oxidizing Materials: Ammonium Nitrates; Hydrogen Peroxide Solutions; Chromic Acid, Solid; Nitric Acid (over 40% concentration).



CM

CORROSIVE MATERIALS (Acid and Caustics) are materials, either liquid or solid, which upon contact with other materials, such as flammables, oxidizers or explosives, etc., may produce violent reactions or fires. Spills of these materials may liberate large volumes of fumes that may be toxic, and can cause eye, skin and respiratory injury. Personnel should evacuate areas of fumes and avoid contact with the materials. Most of these materials will generate heat when contacted by water, and may erupt violently endangering nearby persons. Spills should be confined, if possible, to prevent mixing with other materials or the contamination of streams and property. Persons coming in contact with corrosive materials should wash with water for at least 15 minutes, remove contaminated clothing and obtain medical attention. Examples of Corrosive Materials: Sulfuric Acid; Nitric Acid (Concentrations of 40% or less); Caustic Soda, Liquid or Dry; Hydrochloric Acid; Acetic Acid.



RA

RADIOACTIVE MATERIALS are materials which emit various degrees of radiation that consists on energy such as gamma rays or x-rays. These emissions cannot be felt or detected without proper instruments. When these materials are involved in accidents severe enough that they may be spilled or leak from their containers, all personnel should evacuate the immediate area for several hundred yards until the area is surveyed by specialists. When the material, or its containers, are involved in fire, all persons should be evacuated from the smoke cloud areas and downwind a distance beyond the visible smoke cloud. Danger of exposure must be assumed until the area is surveyed by properly equipped specialists. There are three groups of radioactive materials, designated as "One", "Two" and "Three". Group "Three" materials are the most hazardous, and consequently are specifically packaged to prevent spills. Examples of Radioactive Materials: Radioactive Material, Fissile; Uranyl Nitrate, Solid.



OP

ORGANIC PEROXIDES (VRP) are materials which contain an excess of oxygen.

In addition to the normal oxidizing material hazard, when heated or subjected to strong shocks Organic Peroxides can decompose rapidly with explosive force. If these materials are involved in fires, persons should be evacuated for a distance of $\frac{1}{2}$ mile from the scene. Examples of Organic Peroxides: Peracetic Acid Solution; Benzoyl Peroxide.



ML

IRRITATING MATERIALS are less dangerous materials which upon exposure to air or heat give off dangerous and intensely irritating fumes which cause temporary irritation and discomfort to persons coming in contact with them. Irritating materials should be kept away from fires and avoided by personnel. Examples of Irritating Materials: Tear Gas Grenades or Candles.

DANGEROUS placards may also be applied to motor vehicles or rail cars containing two or more classes of hazardous materials; except Class A and Class B Explosives, Poisons A, Flammable Solid W, and Radioactive Material which require separate placards for each hazard class. A rail car utilized in TOFC or COFC service containing less than 1,000 pounds (aggregate gross weight) of hazardous materials, other than those mentioned above, need not be placarded.

HAZARDOUS MATERIALS received from Canadian railroads may carry placard marked "DANGEROUS" applying to the various following commodities: explosives B, flammable liquid, flammable solid, oxidizer, corrosive liquid, non-flammable gas, flammable gas, poison B, organic peroxide, combustible, chlorine and oxygen, pressurized liquid. Each "DANGEROUS" placard should have commodity written on placard.

HOW TO USE THIS CHART:

To determine where a placarded car can be placed in a train follow these steps:

- Determine the type of placard that is applied to the car. From Line 1.
- Determine the type of car to which the placard is applied. From Line 2.

• Follow vertically down the chart and note which lines apply.
 • The symbol "X" indicates wording at the side that applies. See footnotes for explanation.

POSITION IN TRAIN OF PLACARDED CARS CONTAINING HAZARDOUS MATERIALS

1 PLACARD APPLIED ON CAR		2 TYPE OF CAR		3 RESTRICTIONS		4 EXPLOSIVES A		5 POISON GAS		6 POISON GAS		7 RADIOACTIVE		8 COMBUSTIBLE	
2		ANY CARS (incl. flat cars or container-trailers)		TANK CAR		OTHER THAN TANK CAR		ANY CAR		TANK CAR		OTHER THAN TANK CAR		TANK CAR	
3		4		5		6		7		8		9		10	
4		5		6		7		8		9		10		11	
5		6		7		8		9		10		11		12	
6		7		8		9		10		11		12		13	
7		8		9		10		11		12		13		14	
8		9		10		11		12		13		14		15	
9		10		11		12		13		14		15		16	
10		11		12		13		14		15		16		17	
11		12		13		14		15		16		17		18	
12		13		14		15		16		17		18		19	
13		14		15		16		17		18		19		20	
14		15		16		17		18		19		20		21	
15		16		17		18		19		20		21		22	
16		17		18		19		20		21		22		23	
17		18		19		20		21		22		23		24	
18		19		20		21		22		23		24		25	

MUST NOT BE PLACED NEXT TO

CAR PLACARDED

1. Loaded cars placarded "EXPLOSIVES A" may be placed next to each other.

2. A specially equipped car in trailer-on-flatcar service or a flatcar loaded with vehicles secured by means of a device designed for that purpose and permanently installed on the flatcar, and of a type generally accepted for handling in interchange between railroads may be placed next to these placarded tank cars subject to the following: this exception for cars in trailer-on-flatcar service does not apply to loaded flatbed trucks, loaded flatbed trailers, loaded open-top trailers, or loaded trucks or trailers without securely closed doors.

3. A rail car placarded "EXPLOSIVES A" or "POISON GAS" in a moving or standing train must be next to and ahead of any car occupied by the guards or technical escorts accompanying this car. However, if a car occupied by guards or technical escorts is equipped with a lighted heater or stove, it must be the fourth car behind any car requiring "EXPLOSIVES A" placards.

4. Applies only in mixed train service, see section 174.87.

FOOTNOTES:

AVOID DAMAGE—SWITCH CUSTOMERS' CARS CAREFULLY

Damage to freight or car can be avoided by always keeping coupling speed within the safe range—NOT OVER 4 MILES PER HOUR—A BRISK WALK.

Handle freight carefully and keep our customers.

SPEED TABLE

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