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SOMEONE CARES**

SUPERINTENDENT TRANSPORTATION

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TERMINAL TRAINMASTER

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J. M. STARR Oakland
R. R. AHERN Stockton
R. L. MEYER Stockton

TRAINMASTER

R. A. HENDERSON Milpitas-San Jose
R. M. VERHAEGE Milpitas-San Jose
R. P. McCARTHY Sacramento
K. B. SCHULTHIES Keddle
M. E. GRAHAM Portola
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TRAINMASTER-ROAD FOREMEN ENGINES

V. H. EDWARDS Oroville
R. K. HARRISON Winnemucca

ROAD FOREMEN ENGINES

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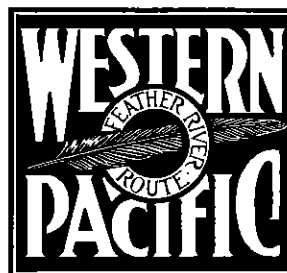
ASSISTANT TRAINMASTER

R. B. KENNEY Fremont
C. M. HAMMOND Sacramento
L. J. FISCHER, JR. Portola
F. M. RANKIN Wendover

CHIEF TRAIN DISPATCHER

A. KINICKI Sacramento

**THE
WESTERN PACIFIC
RAILROAD CO.**



**VALLEY DISTRICT
TIMETABLE**

1

EFFECTIVE SUNDAY, JULY 19, 1970

AT 12:01 A.M.

PACIFIC STANDARD TIME

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

D. H. MacLEOD,
Vice President and General Manager.

K. V. PLUMMER, JR.,
General Superintendent Transportation.

A. E. STENE,
District Superintendent.

FIRST SUBDIVISION — Eastward

Mile Post	Station Numbers	Miles from Oakland (Yard)	TIME TABLE NO. 1 JULY 19, 1970 STATIONS		52 CIX	62 GGM	58 SJP	68 MSL			
			↓ SIDING CAPACITY IN FEET	BKFTPO							
4.7	5	.0	Yd. Lmts. TO	OAKLAND (Yard)	AM 1.30	AM 7.00					
5.8	6	1.1	1.1	SP CROSSING	I						
5.9	6	1.2	0.1	CHESTNUT JCT. (SP Conn.)	I						
7.2	7	2.5	1.3	OAKLAND (SP X'ing.)							
7.7	8	3.0	0.5	CLINTON (SP X'ing.)	IP						
9.6	10	4.9	1.9	FRUITVALE							
10.6	11	5.9	1.0	MELROSE (SP X'ing.)	IP						
11.3	12	6.6	3470 0.7	KOHLER	P						
13.7	14	9.0	2.4	ELMHURST (SP X'ing.)	IP						
14.8	15	10.1	1.1	SAN LEANDRO	P						
20.1	20	15.4	7221 5.3	HAYWARD	P						
29.7	30	25.0	3947 9.6	FREMONT	P						
30.3	31	25.6	0.6	NILES TOWER (SP X'ing.)	IP						
30.5	31	25.8	0.2	NILES JUNCTION	YP		AM 8.30	PM 9.00			
38.1	38	33.4	4320 7.6	HEARST	P						
41.5	41	36.8	3.4	PLEASANTON	P						
42.7	43	38.0	1.2	RADUM (SP X'ing.)	AIP						
42.97	43	38.27	0.27	RADUM (SP X'ing.)	AI						
47.0	47	42.3	4032 4.03	LIVERMORE	P						
56.2	56	51.5	5444 9.2	ALTAMONT	P						
63.3	63	58.6	5663 7.1	MIDWAY	P						
72.8	73	68.1	10688 9.5	TRACY	YP						
74.05	74	69.35	1.25	SP CROSSING	AI						
82.1	82	77.4	5430 8.05	WYCHE	P						
84.45	84	79.75	2.35	SP CROSSING	I						
92.0	92	87.3	TO	STOCKTON (Yard)	BKFTPO	4.00 AM	10.00 AM	10.45 AM	11.15 PM		
						CIX 52	GGM 62	SJP 58	MSL 68		

FIRST SUBDIVISION — Westward

Mile Post	Station Numbers	Miles from Stockton (Yard)	TIME TABLE NO. 1 JULY 19, 1970 STATIONS		67 WMX	79 SSJ	61 AP	57 PBF	59 APF		
			↓ SIDING CAPACITY IN FEET	BKFTPO							
4.7	5	87.3	Yd. Lmts. TO	OAKLAND (Yard)	AM 8.00		PM 4.00	PM 10.30			
5.8	6	86.2		1.1 SP CROSSING							
5.9	6	86.1		0.1 CHESTNUT JCT. (SP Conn.)							
7.2	7	84.8		1.3 OAKLAND (SP X'ing.)							
7.7	8	84.3		0.5 CLINTON (SP X'ing.)							
9.6	10	82.4		1.9 FRUITVALE							
10.6	11	81.4		1.0 MELROSE (SP X'ing.)							
11.3	12	80.7	3470	0.7 KOHLER							
13.7	14	78.3		2.4 ELMHURST (SP X'ing.)							
14.8	15	77.2		1.1 SAN LEANDRO							
20.1	20	71.9	7221	5.3 HAYWARD							
29.7	30	62.3	3947	9.6 FREMONT							
30.3	31	61.7		0.6 NILES TOWER (SP X'ing.)							
30.5	31	61.5		0.2 NILES JUNCTION		AM 10.00			AM 1.30		
38.1	38	53.9	4320	7.6 HEARST							
41.5	41	50.5		3.4 PLEASANTON							
42.7	43	49.3		1.2 RADUM (SP X'ing.)							
42.97	43	49.03		0.27 RADUM (SP X'ing.)							
47.0	47	45.0	4032	4.03 LIVERMORE							
56.2	56	35.8	5444	9.2 ALTAMONT							
63.3	63	28.7	5663	7.1 MIDWAY							
72.8	73	19.2	10688	9.5 TRACY							
74.05	74	17.95		1.25 SP CROSSING							
82.1	82	9.9	5430	8.05 WYCHE							
84.45	84	7.55		2.35 SP CROSSING							
92.0	92	0.0	TO	7.55 STOCKTON (Yard)	5.00 AM	8.00 AM	1.00 PM	7.30 PM	11.30 PM		
					WMX 67	SSJ 79	AP 61	PBF 57	APF 59		

SECOND SUBDIVISION — Eastward

Mile Post	Station Numbers	Miles from Stockton (Yard)	TIME TABLE NO. 1 JULY 19, 1970 STATIONS ↓ SIDING CAPACITY IN FEET	52	54	56	58	62	68	64
				CIX	SWG	WGN	SJP	GGM	MSL	WPE
92.0	92	0.0	TO STOCKTON (Yard) BKFTPO	AM 4.30	AM 5.00	AM 8.00	AM 11.00	PM 2.30	PM 11.30	PM 11.30
93.2	93	1.2	1.2 AT&SF CROSSING IP							
93.8	94	1.8	0.6 SP CROSSING IP							
94.3	94	2.3	2888 0.5 FLORA STREET P							
95.1	95	3.1	0.8 EL PINAL (SP X'ing.) IP							
97.9	98	5.9	5791 2.8 HAMMER LANE P							
104.6	104	12.6	3345 6.7 KINGDON P							
113.9	114	21.9	3542 9.3 THORNTON P							
121.9	122	29.9	6151 8.0 PHILLIPS P							
132.4	132	40.4	4817 10.5 POLLOCK P				PM		AM	AM
136.5	136	44.5	TO 4.1 SOUTH SACRAMENTO BKFPPO			9.00 9.30	12.01 12.30	3.30 3.45	12.30 1.00	3.15 4.15
138.0	138	46.0	1.5 "R" ST. (SP X'ing.) IYP							
139.5	140	47.5	1.5 HAGGIN (SN Conns.) P							
140.7	141	48.7	1.2 GLOBE (SN Conn.) P							
143.6	144	51.6	6146 2.9 DEL PASO P							
152.5	153	60.5	8.9 SANKEY (SN Conns.) P							
156.5	156	64.5	6145 4.0 PLEASANT GROVE P							
161.5	162	69.5	3884 5.0 TROWBRIDGE P							
172.5	173	80.5	3599 11.0 EAST ARBOGA P							
175.63	176	83.63	3.13 CLEVELAND (SN Conn.) P							
178.8	179	86.8	5092 3.17 MARYSVILLE P			10.30 11.00	1.30 2.00	4.45 5.15	2.15 2.45	5.30 6.00
180.2	180	88.2	1.4 BINNEY JCT. (SP X'ing.) IP							
180.42	180	88.42	0.22 SP CONNECTION P							
186.0	186	94.0	3620 5.58 TAMBO P							
193.0	193	101.0	6158 7.0 CRAIG P							
202.9	203	110.9	TO 9.9 OROVILLE (Yard) BKFPPO	7.00 AM	7.50 AM	12.01 PM	2.45 PM	6.20 PM	3.30 AM	6.45 AM
205.1	205	113.1	4687 2.2 OROVILLE (Siding) P							
				CIX 52	SWG 54	WGN 56	SJP 58	GGM 62	MSL 68	WPE 64

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

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.

SECOND SUBDIVISION — Westward

Mile Post	Station Numbers	Miles from Oroville (Siding)	TIME TABLE NO. 1 JULY 19, 1970 STATIONS ↓ SIDING CAPACITY IN FEET		67	55	61	57	53	63	
					WMX	GWP	AP	PBF	GWS	WPW	
92.0	92	113.1	TO	BKFTPO	AM	PM	PM	PM	PM	AM	
			STOCKTON (Yard)		4.15	12.15	12.15	6.30	7.30	3.00	
93.2	93	111.9	1.2	IP							
			AT&SF CROSSING								
93.8	94	111.3	0.6	IP							
			SP CROSSING								
94.3	94	110.8	2888	P							
			FLORA STREET								
95.1	95	110.0	0.8	IP							
			EL PINAL (SP X'ing.)								
97.9	98	107.2	5791	P							
			HAMMER LANE								
104.6	104	100.5	3345	P							
			KINGDON								
113.9	114	91.2	3542	P							
			THORNTON								
121.9	122	83.2	6151	P							
			PHILLIPS								
132.4	132	72.7	4817	P							
			POLLOCK								
136.5	136	68.6	TO	BKFPPO	3.15	11.15	11.15	5.30		1.30	
			Yard SOUTH SACRAMENTO			10.45	AM			12.30	
138.0	138	67.1	1.5	IYP		AM				AM	
			"R" ST. (SP X'ing.)								
139.5	140	65.6	1.5	P							
			HAGGIN (SN Conn's.)								
140.7	141	64.4	1.2	P							
			GLOBE (SN Conn.)								
143.6	144	61.5	6146	P							
			DEL PASO								
152.5	153	52.6	8.9	P							
			SANKEY (SN Conn's.)								
156.5	156	48.6	6145	P							
			PLEASANT GROVE								
161.5	162	43.6	3884	P							
			TROWBRIDGE								
172.5	173	32.6	3599	P							
			EAST ARBOGA								
175.63	176	29.47	3.13	P							
			CLEVELAND (SN Conn.)								
178.8	179	26.3	5092	P		9.45				11.00	
			MARYSVILLE			9.25				10.00	
180.2	180	24.9	1.4	IP							
			BINNEY JCT. (SP X'ing.)								
180.42	180	24.68	0.22	P							
			SP CONNECTION								
186.0	186	19.1	3620	P							
			TAMBO								
193.0	193	12.1	6158	P							
			CRAIG								
202.9	203	2.2	TO	BKFPPO							
			OROVILLE (Yard)								
205.1	205	0.0	4687	P	1.10	8.25	9.10	3.40	4.45	9.00	
			OROVILLE (Siding)		AM	AM	AM	PM	PM	PM	
					WMX	GWP	AP	PBF	GWS	WPW	
					67	55	61	57	53	63	

SAN JOSE BRANCH

EASTWARD		Miles from Niles Jct.	TIME TABLE NO. 1 JULY 19, 1970 STATIONS SIDING CAPACITIES AND FACILITIES		Station Numbers	WESTWARD	
79 SSJ	59 APF		58 SJP	68 MSL			
AM 10.00	AM 1.30	0.0	NILES JUNCTION	YP	31	AM 8.30	PM 9.00
		3.3	Spur 1 E 12	3.3 IRVINGTON	P	3031	
		4.9	Both ends 5	1.6 INLAND STEEL	P	5031	
		6.8	Spur 1 E 10	1.9 WARM SPRINGS	P	7031	
		8.0	Spur 1 E 18	1.2 CURTNER	P	8031	
10.30 11.30	2.00 3.00	11.5	E 71 W 77	3.5 MILPITAS	YP	8.00 6.00	8.30 7.00
		14.1	Spur 1 E 10	2.6 BERRYESSA	P	14031	
12.01 PM	3.30 AM	17.5	Yard TO	3.4 SAN JOSE (Yard)	BKFTPO	5.30 AM	6.30 PM
		19.6		2.1 VALBRICK (SP X'ing.)		19031	
		20.4		0.8 WILLOW GLENN (SP X'ing.)	I	20031	
		22.3		1.9 WEST SAN JOSE (SP X'ing.)		22031	
		23.0	Yard	.07 SAN JOSE (End of branch)		23031	
SSJ 79	APF 59					SJP 58	MSL 68

RULE 540. Traffic Control System extends from absolute signals located just west of tail of wye switch at Niles Jct. to west yard limit San Jose (MP BR-15.25).

Yard limits San Jose MP BR-15.25 to MP BR-23.0.

TRACY BRANCH

0.0	216	TRACY	YP	73
1.7	63	1.7 KERLINGER	PO	2073
1.92	Spur 1 W 18	0.22 TEEKAY		2073
2.0		0.08 END OF BRANCH		2073

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

Special Instructions

ALL SUBDIVISIONS

All times as shown for trains at Stations on schedule pages current timetable are Pacific Standard Time.

GENERAL RULE M. Add. Employes are prohibited from riding or walking on roof of any moving car.

DEFINITIONS

Division — Delete.

Add:

District — That portion of a railroad assigned to the supervision of a superintendent.

Subdivision — Change: A portion of a district designated by timetable.

RULE 3. Add. Within T.C.S. limits recording on prescribed form of time comparison, any variation, or "set" will not be required.

RULE 4-B. Last paragraph. Conductors, engineers, and engine foremen must record the number of the last bulletin in Remarks column of Time Return and Delay report to indicate they have read and understand the latest and all previous bulletins.

RULE 6-A. Symbols described in second paragraph will be placed at right instead of left side of station name.

Symbols for Double Track, Automatic Block Signal System, and Traffic Control System will not be indicated by brackets in Time Table, and the following will govern.

Double Track extends from:
Chestnut Jct. to Clinton.

Traffic Control System extends from:
Clinton to Oroville.

From absolute signals located just west of tail of wye switch at Niles Jct. to west yard limit San Jose MP BR-15.25.

RULE 10-I. Add. After stopping, train may proceed when proceed signal is given with a green flag, but must not exceed restricted speed through the restricted area unless otherwise instructed by the foreman in charge.

When a form W train order has expired and "PROCEED PREPARED TO STOP" and "CONDITIONAL STOP" signs have not been removed, and it is evident that the foreman and gang is not working in the designated limits and have left such limits, contact the train dispatcher and be governed by his instructions. If unable to contact the train dispatcher at that point, a flagman will precede the train through the limits of restriction who must carefully examine track and structures. The train dispatcher must be advised of circumstances at first point of communication.

Form W orders, unless annulled, must be retained and observed during a continuous trip or tour of duty.

RULES 10-H and 10-I. Add. When green banner is not encountered at the point the restriction ends train will proceed at restricted speed to the first point of communication and be governed by instructions received from the train dispatcher.

RULE 10-J. Delete third and fourth paragraphs.

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

Outside of T.C.S. territory care must be taken to see that flag protection is furnished ahead when taking siding to meet trains unless it is definitely known that train is clear of the main track. After train comes to rest in the siding, the head end must receive a stop signal from the rear end indicating that train is clear of the main track. Until such signal has been

received by head end, headlight will be displayed and flag protection provided. This does not in any way relieve the approaching train from complying with provisions of Rule S-90.

RULE 34. When seats are available, all working brakemen riding head end of train will ride in lead unit.

RULES 71, 72 and 92. Schedules not designated as first, second or third class have no timetable superiority, and are for information only.

RULE S-72. OUTSIDE OF T.C.S. TERRITORY WESTWARD TRAINS ARE SUPERIOR TO EASTWARD TRAINS OF THE SAME CLASS.

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

RULE 103-B. Add. **TRAIN MOVEMENTS** — Trains moving under conditions that may require them to stop must, where possible, stop to clear public grade crossings. When not possible to stop clear of such crossings and train cannot proceed immediately, crews on other than passenger trains must cut these crossings within 10 minutes unless no vehicles are waiting at or closely approaching the crossing. Public crossings must be left open until it is known that trains are ready to depart. Crews required to pick up, set out, or perform switching operations must, when track room exists, stop their trains back a sufficient distance to avoid blocking public crossings when coupling trains and while charging train lines. When recoupling at public crossings, trains shall be moved promptly consistent with safety.

SWITCHING MOVEMENTS — Switching movements over public grade crossings should be avoided whenever possible. If not possible, such crossings must be cleared frequently to allow vehicles to pass and must not be occupied continuously for longer than 10 minutes unless it can be seen that no vehicles are waiting at or closely approaching the crossing.

GRADE CROSSING PROTECTION CIRCUITS — Cars or locomotives must not be left standing nor switches left open within the controlling circuits of automatic gate protection devices unless timeout features are provided to allow the gate arms to rise.

RULE 104. All switches connecting sidings with other tracks, except main track, after being used, must be left lined for siding.

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

Where stops are made for other reasons, inspection of train must be made as often as practicable.

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

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

When crew members on head end of trains observe personnel giving their train an inspection and radio communication is available between engine and caboose, they will alert crew members on caboose of such inspections and all crew members be alert for either hand signals or radio communication from personnel making such inspections.

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

RULE 540. Add. Except as otherwise provided, within T.C.S. limits, Rules Nos. 82, 82-A, 83, 83-A, 83-B, 83-C, 92, 95, 96 and 97 will not apply.

RULE 541. Add. Instructions relating to track or other conditions within T.C.S. limits may be issued by train order.

bulletin, other written notice, or may be issued orally to member of crew. Member of crew of a train entering T.C.S. at an intermediate point must ascertain from train dispatcher what instructions are in effect on that portion of T.C.S. over which movement is to be made.

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

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

RULE 550. When a train or engine is to clear the main track at an electrically-locked switch, after it has entered the block in which the switch is located, the train dispatcher must hold all signals governing movement into that block at STOP and apply red tags to the levers controlling such signals. When movement is clear of main track and switch again normal, crew member will then report to train dispatcher that train or engine is clear. Until crew member so reports train dispatcher must not remove red tags from levers controlling the signals involved.

RULE 550-A. Trains and engines must not clear the main track at hand-operated switches not equipped with electric locks in territory where maximum speed is greater than 20 MPH.

RULE 825. Modified to extent that engines not exceeding two units or 3500 H.P. may be used behind 400 and 600 series cabooses.

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

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

AUTOMATIC BLOCK, TRAFFIC CONTROL AND INTER-LOCKING SIGNAL INDICATIONS
ADD

RULE	ASPECT	NAME	INDICATION
282-A	FY	HIGH APPROACH	Proceed approaching next signal not exceeding 50 miles per hour.
	FY		

INTERLOCKING PLANTS AND SIGNALS AND RAILROAD CROSSINGS NOT INTERLOCKED

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

RULE 281. A single semaphore arm 60 degrees below horizontal position.
NAME. CLEAR.
INDICATION. PROCEED.

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

AIR BRAKE RULE 22

Retainers will not be used on freight trains unless in the judgment of the engineer their use is necessary. If retainers are necessary, a sufficient number will be used to control the speed of the train while brake pipe pressure is being restored. When used, they will be applied to cars on head end in a block of not less than fifteen cars and in a low-pressure position (horizontal). Should wheels show a tendency to heat, retainers must be alternated.

VALLEY DISTRICT — FIRST SUBDIVISION

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

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

OAKLAND.

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

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

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

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

(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.

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

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

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

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

When signal displays aspect per Rule 288, trains and engines may proceed at restricted speed prepared to stop until the next signal in advance can be determined.

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

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

Train dispatcher's telephones are located in booth adjacent to marker light mast and in baggage room.

(d) 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.

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

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

Train dispatcher's telephone located in baggage room.

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

HEARST RULE 827. Permasco car skates have been placed in the phone booth at West Hearst. When setting cars out on this siding these 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 booth at West Hearst.

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

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.

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

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 east end 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.

(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.

(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) 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 West Diner Siding MP 91.75 without contacting Train Dispatcher. All movements so authorized must be made at yard speed. It will not be necessary to wait three minutes before entering main track after opening non-locked switches in this block when flashing red aspect is displayed on the indicator.

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

FIRST AND SECOND SUBDIVISIONS

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

East switch Kohler and west switch Stockton Yard (MP 90).

East switch Flora St. and west switch Oroville Yard, except electrically locked switches between switches of sidings and North Channel line switch.

SAN JOSE BRANCH

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

Niles Jct. and MP BR-15.25.

NILES JUNCTION.

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

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

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

(c) A lunar white marker light on 11 foot mast is located at MP BR-0.8 just east of Morrison Canyon Road governing movement of westward trains to the east leg of the wye.

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

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

MILPITAS.

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

(b) Absolute signals installed at crossovers, MP BR-11.65, just east of office building.

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

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

Crossover movement from either east or west siding to main track may be made by signal indication after train dispatcher has authorized lining of crossover switches by display of illuminated "S" indicator per Rule 292-A.

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

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

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

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

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

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

San Jose Yard.

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

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

INTERLOCKING PLANTS AND SIGNALS AND RAILROAD CROSSINGS NOT INTERLOCKED

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.

VALLEY DISTRICT — SECOND SUBDIVISION

STOCKTON YARD.

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

When either of the dual-control switches in this block is placed in hand-throw position the other switch is disconnected from power operation and it is not necessary to place it in hand-throw position when switching over it unless it is used.

STOCKTON.

North Channel Line. Governed by absolute signals and electric lock. Eastward signal is a two-unit signal with "S" unit. When the "S" unit is illuminated electric lock is released and must be unlocked before switch is changed by hand operation.

Engines and cars must be brought to a stop at Country Club Highway crossing and must be preceded by flagman over crossing.

Bridge over Smith Canal will not clear man on top of car.

THORNTON.

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

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

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

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

SACRAMENTO.

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

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

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

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

MARYSVILLE.

(a) 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 346 B.

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

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 operating 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.

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

When initially entering a block at a switch where there is no signal or electric lock, permission must be obtained from the train dispatcher and three minutes must elapse after switch is opened 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 three minutes elapse after opening switch not protected by signal or electric lock to enter the block provided train to be switched can be seen stopped in the block. If it becomes necessary to switch such train from both ends or for a second engine to enter the same block on end of train opposite the end on which train is to be worked, to perform other work, both engines may be granted authority to work in the same block. Under such arrangements a portion of the train must be left at all times in the block originally occupied and after switching is completed, the work authority will be considered cancelled.

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

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

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

OAKLAND

(a) Block limits are as follows:
Clinton MP 7.7 to absolute signal MP 8.8
Absolute signals MP 8.8 to MP 9.9
Absolute signal MP 9.9 to west switch Kohler
West switch Kohler to east switch Kohler
East switch Kohler to absolute signal MP 13.7

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

STOCKTON

(a) Block limits are as follows:
East switch Wyche to MP 90
MP 90 to MP 90.85
MP 90.85 to west switch Diner Siding
West switch Diner Siding to east switch Diner Siding
East switch Diner Siding to AT&SF Crossing
AT&SF Crossing to Weber Avenue Crossing
Weber Avenue Crossing to west switch Flora Street
West switch Flora Street to east switch Flora Street
East switch Flora Street to North Channel Line
North Channel Line to west switch Hammer Lane.

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

(c) 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 un-necessary to place it in hand-throw position.

Dwarf signals governing movement on No. 1 lead track over inside switch of power-operated crossover MP 90.85, are absolute signals controlled by the train dispatcher. When these signals display aspect per Rule 288, movement may be made over this switch without placing it in hand-throw position.

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

SACRAMENTO

(a) Block limits are as follows:
East switch Pollock to west switch South Sacramento
West switch South Sacramento to east switch South Sacramento
East switch South Sacramento to absolute signal SP Crossing R Street
Absolute signal SP Crossing R Street to absolute signal west switch Haggin
Absolute signal west switch Haggin to absolute signal east switch Haggin
Absolute signal east switch Haggin to absolute signal Globe.

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

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

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

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

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

(d) In connection with the power-operated derail at east end of No. 1 track, South Sacramento, it is permissible for 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 switches at east end in hand-throw position will carry with it authority to switch in the block between east switch South Sacramento and eastward absolute signal at R Street and at west end authority to switch in the block between west switch South Sacramento and Pollock, as well as between east and west switches South Sacramento. This means that two yard engines may be granted authority to switch over power switches at each end of South Sacramento at the same time but, only the yard engine which has specific authority from the train dispatcher to do so may use the main track block between east and west switches. The foregoing not in conflict with instructions in paragraphs (b) and (c).

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

(f) An engine foreman may permit road crews to use his switching authority for moves, such as engine to or from train, etc., or other switch crews crossing over, but must insure that there is no hazard by reason of his own switching operations. Train dispatcher may not issue switching authority (including operation of power switches in hand-throw position) to more than one person at a time (except to switch both ends of a train).

OROVILLE

(a) **RULE 547.** Train dispatcher may grant permission to different engines in different parts of the same block to operate a dual-control switch by hand or use the main track for switching and will not be required to protect work limits by absolute signals in each direction or apply red tags to the signal levers. However, he must not grant such permission if a train or engine is moving by signal indication in the block toward point where work is to be done or is closely approaching such block.

(b) Switch to house track Oroville, operates derails on east end of house track and east end of team track simultaneously.

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

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

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

Signals governing movement over inside dual-control switch are controlled by the train dispatcher. When these signals display 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.

SACRAMENTO NORTHERN CREWS

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

When westward SN trains or engines at Marysville have contacted train dispatcher for instructions to move Marysville to SN-WP connection at MP 175.63 or Sankey, it will not be necessary

to obtain similar instructions at Globe for movement beyond, except to obtain permission to operate electric lock.

SANKEY

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

MARYSVILLE

(a) All switches for entrance to WP main track are governed by absolute signals or electric locks. Movements of SN trains or yard engines will be made by signal indication or by permission of the WP train dispatcher. WP Rules will apply.

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

Absolute signal at SN Connection MP 175.63 to west siding switch Marysville.

West siding switch Marysville to east siding switch Marysville.

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

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

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

(c) Instructions for operating electric locks are posted in 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.

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

INTERLOCKING PLANTS AND SIGNALS AND RAILROAD CROSSINGS NOT INTERLOCKED

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

Eastward whistle signals:

Old yard to eastward main track, — .

to westward main track, — o — .

No. 1 track, old 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 movements on WP in either direction. Trains must approach under control and not proceed over this Crossing unless it is known to be clear.

MP 7.7 Clinton, SP Crossing. Interlocking. Remote-Controlled.

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

Home signal east of crossing 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 through this interlocking 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

home signal and receive proper signal indication for reverse movement. If authorized to pass this signal in STOP position, in addition to observing Rule 663, spring switch must be examined and points found to fit properly for movement desired. That part of paragraph (D) Rule 663, referring to waiting time, is modified to three minutes instead of ten minutes at this Crossing.

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

That part of paragraph (D) 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 paragraph (D) 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 Crossings. Interlocking. Automatic.

That part of paragraph (D) 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 only on instructions from SP train dispatcher. If unable to contact SP train dispatcher and no trains can be seen or heard approaching, operate emergency release and observe Rules 663 (B), (C), (D) and 509.

When switching is done on main track at West Lathrop or crossover 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. Remote-Controlled.

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

Westward interlocking signal is also absolute signal. **RULE 509** also 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 No. 2 have been extended to include that portion of main track and siding on the AT&SF to Commerce 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 Commerce 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 and Commerce 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 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.

Next 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 0 0 0 — .

From WP to AT&SF enroute Commerce Street — 0 .

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 paragraph (D) 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 only on instructions from SP train dispatcher. If unable to contact SP train dispatcher and no trains can be seen or heard approaching, operate emergency release and observe Rules 663 (B), (C), (D) and 509.

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, paragraph (D) 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 paragraph (D) 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 only on instructions from SP train dispatcher. If unable to contact SP train dispatcher and no trains can be seen or heard approaching, operate emergency release and observe Rules 663 (B), (C), (D) and 509.

SWITCHING LIMITS

WEST MP		EAST MP
7.7	Oakland	13.78
28.5	Fremont	31.38
	Niles Junction (San Jose Branch)	BR-0.82
70.14	Tracy	73.05
89.34	Stockton	96.59
133.4	Sacramento	140.69
177.62	Marysville	180.24
201.44	Oroville	210.04

YARD LIMITS

WEST MP		EAST MP
WP Mole	Oakland	7.7
BR-15.25	San Jose	BR-23.0

SPURS AND COMMERCIAL TRACKS

STATIONS	MILE POST	CONNECTED	Capacity	Station No.
ESTUDILLO	16.5	1 E	11	16
CARPENTER	24.9	Both Ends	39	25
UNION CITY	25.9	Both Ends	..	26
DECOTO	26.6	1 W	2	27
PABRICO				28
Pacific States Steel	27.8	Both Ends	75	
EBERLY	28.9	Both Ends	20	29
RADUM	43.4	Both Ends	33	43
RHODES and JAMIESON	44.6	1 E	50	45
TREVARNO				
Interchange	49.0	1 W	24	49
Drill Track	49.16	1 W	..	1049
LOX	50.3	1 W	30	50
LYOTH				74
U.S.Q.M. & SP Conn	73.8	1 W	..	
(Spur leads from east end Tracy siding)				
COCHRAN	75.6	Both Ends	26	76
ARMY SUPPLY DEPOT (LATHROP)	85.76	Both Ends	130	86
FRENCH CAMP	88.35	Both Ends	29	88
TERMINOUS JCT	105.3			105
Track 1		1 W	25	
Track 2		1 W	70	
VILLINGER	107.8	1 W	13	108
LAS VINAS	109.5	1 W	24	109
GLANVALE	118.5	1 W	13	118
BOMBAY	146.6	1 E	13	147
VISTA ROBLES	198.8	1 E	33	198

TRACKS ON WHICH ENGINE MOVEMENTS RESTRICTED

Location and Description of Track	Class of Engine	Prohibited
RADUM	All	Beyond frog on all tracks except 1 and 2
MARYSVILLE Old SN freight Connections	All	Beyond frog.
CRAIG, Outfit Spur	All	Beyond restricting sign.
OROVILLE Ehman Spur	All, except one unit	Beyond restricting sign.
Tracy Branch Spur MP 0.5	All	Beyond frog.

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

TONNAGE RATING

ENGINE NUMBER	1st SUBDIVISION	2nd SUBDIVISION	SAN JOSE BRANCH
EASTWARD			
Ruling Grade	0.8%	0.4%	0.6%
913-926	2275	3060	2275
501-511	1050	2645	1800
551-564	1450	3340	2000
581-585			
601-608	2275	3060	2275
701-713			
725-732	2570	4350	3200
751-769	2400	4000	2800
2001-2010	2450	4125	3075
3001-3022	2570	4350	3200
3501-3526			
WESTWARD			
Ruling Grade	1.0%	0.0%	0.6%
913-926	1710	3800	2275
501-511	880	2645	1800
551-564	1150	3340	2000
581-585			
601-608	1710	3800	2275
701-713			
725-732	2130	4500	3200
751-769	2000	3800	2800
2001-2010	2100	4300	3075
3001-3022	2130	4500	3200
3501-3526			

Ratings shown above are for one unit engine, and for actual tonnage, and based on maximum grade each subdivision.

Between points where grades are less than maximum, greater tonnage can be handled.

TUNNEL LOCATIONS

Tunnel Number	West Portal Mile Post	East Portal Mile Post	Length Feet
1	32.12	32.94	4320.9
2	33.39	33.47	407.3
3	57.67	57.75	414.7

WATCH INSPECTORS

Location	Name	Title
San Francisco	K.I. Dunlap	Manager of Time Service
San Francisco	A. Solari	Watch Inspector
Oakland	Alphin Jewelers	Watch Inspector
Oakland	Leslies Jewelry	Watch Inspector
San Jose	Frank Scholes	Watch Inspector
Stockton	W.K. Bank & Son	Watch Inspector
San Lorenzo	San Lorenzo Jeweler	Watch Inspector
Fremont	Easley Jewelry	Watch Inspector
Walnut Creek	Evan J. Sawyer	Watch Inspector
Sacramento	Grebitus & Son	Watch Inspector
Roseville	Martin's Jewelers	Watch Inspector
Marysville	Young's Jewelers	Watch Inspector
Oroville	Chuck's Time Shop	Watch Inspector

RAILROAD SURGEONS

Location	Name	Title
San Francisco	Dr. M.E. Childress	Chief Surgeon
San Francisco	Dr. C. E. Smith	Ass't Chief Surgeon
San Francisco	Dr. Ruth Fleming	Local Surgeon
San Francisco	Dr. R. H. Bacon	Local Surgeon
San Francisco	Dr. B. Weber	Local Surgeon
San Francisco	Dr. C. Doherty	Local Surgeon
San Francisco	Dr. F. D. Fellows	Aurist
San Francisco	Dr. Wm. H. Spencer	Oculist
San Francisco	Dr. W. J. Ferguson	Oculist
Oakland	Dr. J. P. Evans	Local Surgeon
Oakland	Dr. R. F. Westerfield	Local Surgeon
Oakland	Dr. M. O. Kling	Local Surgeon
Oakland	Dr. L. L. Coleman	Local Surgeon
Oakland	Dr. G. W. Eliassen	Local Surgeon
Oakland	Dr. Joseph R. Carlisle	Oculist
Hayward	Dr. Bruce Fisher	Local Surgeon
Hayward	Dr. N. Luebke	Local Surgeon
Fremont	Dr. E. C. Grau	Local Surgeon
Pleasanton	Dr. Harold J. Shanks	Local Surgeon
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
Tracy	Dr. John C. Kimball	Local Surgeon
Tracy	Dr. John V. Hume	Local Surgeon
Stockton	Dr. E. G. Hermosillo	Local Surgeon
Stockton	Dr. H. F. Quinn	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. Wm. H. Plageman	Oculist
Stockton	Dr. J. E. Roberts	Oculist
Stockton	Dr. H. J. Zeiter	Oculist
Lodi	Dr. W. G. Fessler	Local Surgeon
Lodi	Dr. S. W. Leiske	Local Surgeon
Sacramento	Dr. D. O. Kilroy	Local Surgeon
Sacramento	Dr. P. W. Frame, Jr.	Local Surgeon
Sacramento	Dr. A. Calkin	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. John A. Berg	Oculist
Sacramento	Dr. R. L. Alexander	Oculist
Sacramento	Dr. J. J. Fisher	Oculist
Sacramento	Dr. D. Depp	Oculist
Marysville	Dr. L. D. Bugni	Local Surgeon
Oroville	Dr. Charles Benninger, Jr.	Local Surgeon
Oroville	Dr. C. Craviotto	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. R. D. Bethel	Oculist

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
D-239 (913-926)	1500	65	S-62 (601-608)	1200	30
S-50 (501-503)	600	45	RS-62 (701-713)	1500	65
S-50 (504-511)	660	35	RS-62 (725-732)	1750	65
S-57 (551-564)	1000	35	RS-64 (2001-2010)	2000	71
S-57 (559-564)			RS-65 (3001-3022)	2500	71
in multiple	1000	30	RS-68 (3501-3526)	3000	71
S-60 (581-585)	1000	65	RS-70 (751-769)	3000	75

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

MAXIMUM SPEEDS IN MILES PER HOUR Between

MAXIMUM SPEEDS

	MAXIMUM SPEEDS	
	1 Trains Not Exceeding 5500 Tons	2 Trains Exceeding 100 Cars or 5500 Tons
First Subdivision		
Chestnut Jct. and SP Crossing MP 7.2	15	15
Over SP Crossing MP 7.2	10	10
SP Crossing MP 7.2 to SP Crossing MP 7.7 Clinton	15	15
SP Crossing MP 7.7 Clinton, and SP Crossing MP 10.6	20	20
SP Crossing MP 10.6 and MP 15.2 William Street, San Leandro	35	25
MP 15.2 Williams Street, San Leandro and MP 23.93	60	50
MP 23.93 and MP 24.8	45	35
MP 24.8 and MP 29.25	60	50
MP 29.25 (Curve) and MP 34.4 on curves and through Tunnel 2	40	30
MP 34.4 and MP 38.8 curve at SP Underpass	45	35
MP 38.8 and MP 41.0	55	45
MP 41.0 and MP 41.9 - City Limits Pleasanton	45	35
MP 41.9 and MP 42.97 SP Crossings	50	40
MP 42.97 SP Crossings and MP 46.75	55	45
MP 46.75 and MP 48.2 - City Limits Livermore	45	45
MP 48.2 and MP 49.88 SP Underpass	50	40
MP 49.88 SP Underpass and MP 52.3	60	50
MP 52.3 and MP 58.2	40	30
MP 58.2 and MP 67.0	45	35
MP 67 and MP 74.05 SP Crossing	60	50
Over SP Crossing MP 74.05	50	40
MP 74.05 SP Crossing and MP 79.8	60	50
MP 79.8 and East End Bridge 80.28	40	30
East End Bridge 80.28 and MP 84.45 SP Crossing	60	50
Over SP Crossing MP 84.45	50	40
MP 84.45 SP Crossing and MP 90.4	60	50
MP 90.4 and MP 90.85	45	35
MP 90.85 and MP 94.2	20	20
Other Tracks	10	10

MAXIMUM SPEEDS IN MILES PER HOUR Between	MAXIMUM SPEEDS	
	1 Trains Not Exceeding 5500 Tons	2 Trains Exceeding 100 Cars or 5500 Tons
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.....	40	30
MP 95.2 and MP 97.3.....	50	45
MP 97.3 and MP 116.07 Mokelumne River Bridge.....	60	55
MP 116.07 Mokelumne River Bridge and 116.7.....	40	35
MP 116.7 and MP 125.....	60	55
MP 125 and MP 135.95.....	40	40
MP 135.95 and "C" Street, Sacramento.....	20	20
"C" Street, Sacramento and MP 140.6.....	30	25
MP 140.6 and MP 177.5.....	60	55
MP 177.5 and MP 179.....	40	30
MP 179 and MP 180.2 over SP Crossing.....	45	30
MP 180.2 and MP 201.7.....	60	50
MP 201.7 and MP 201.9 on curve.....	40	30
MP 201.9 and MP 205.47.....	45	35

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.

**MAXIMUM SPEEDS
IN MILES PER HOUR
Between**

San Jose Branch	
MP 0.0 and MP 0.3.....	15
MP 0.3 and MP 7.5.....	35
MP 7.5 and MP 10.5.....	25
MP 10.5 and City Limits	
San Jose MP 15.7.....	20
MP 15.7 and MP 23 within City Limits, San Jose.....	12
Tracy Branch	12

**OTHER MAXIMUM SPEEDS
All Subdivisions and Branches**

Maximum MPH

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 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 east leg of wye switch, Niles Junction.

Westward trains leaving Stockton Yard, after receiving signal from rear to indicate rear end has passed Tidewater Southern Jct.

Hammer Lane, Phillips, Del Paso to Craig, Inclusive and through sidings at the stations and within the limits listed above..... 20

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

Maximum MPH

Trains handling WP derrick No. 37 - straight track..... 35

On curves 5 MPH less than speed prescribed but not exceeding..... 30

Trains handling derricks (other than WP derrick No. 37)..... 30

San Jose Branch (To east switch Milpitas)..... 20

East switch Milpitas to end of Branch..... 10

Tracy Branch..... 10

Trains handling steam shovels, cranes, rotary plows, or pile drivers on own wheels..... 25

Trains handling WP Car Series 10301 to 10400..... 45

Trains handling loaded air dump cars..... 25

Scale test cars on own wheels must be handled next to caboose and trains handling such cars will not exceed

Between Oakland and Oroville..... 30

Branches..... 20

North Channel Line, Stockton..... 10

Hot Box detectors, when stop is required by continuing flashing "H" to designated stop point..... 15

MISCELLANEOUS

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

Engines dead in train must be handled next behind engine handling train.

Locomotives dead in train must have automatic brake valves cut out in cab and brake valve handle locked in "running" position on 24 RL equipment or handles removed in "handle off" position on 26 L equipment; independent brake valve handles removed in "running" position; dead engine feature cut in; distributing valve pops set to 15 PSI pressure; and rotair valve set to "passenger" position on units equipped with 24 RL brake equipment. The isolation switch must be placed in "start" position; main battery switch pulled; the selector lever in "off" and the reverser handle removed from control stand in the "neutral" position; all switches at engineers control stand in "off" position; and all reversers locked in "neutral" position on 501, 504, 551, 581, 601, 701, 725 and 913 class units. Also on locomotives equipped with an alertor, break the seal and close the alertor cut out cock.

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

When the plow end of Jordan Spreaders 6, 7 or 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.

RULE 10-1

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 Response

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.

If radio communications are not available, Rule 10-I must be complied with.

SPEED TABLE

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