



SANTA FE SAFETY FIRST



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.

IT'S EVERYBODY'S JOB ON THE SANTA FE!

Every employe should promptly report any unsafe condition or practice to his Supervisor.

LOS ANGELES DIVISION

H. B. LAMPE, Assistant Superintendent San Bernardino, Calif.
 E. J. MULLIGAN, Trainmaster Needles, Calif.
 L. D. JONES, Trainmaster Needles, Calif.
 E. D. MAAG, Road Foreman of Engines Needles, Calif.
 V. V. ANDREAS, Rules Examiner Barstow, Calif.
 M. J. WOOD, Trainmaster Barstow, Calif.
 N. C. ORFALL, Asst. Trainmaster Barstow, Calif.
 G. SEFCIK, Asst. Trainmaster Barstow, Calif.
 M. E. CURTIS, Asst. Trainmaster Barstow, Calif.
 J. A. MC RAE, Asst. Trainmaster Barstow, Calif.
 R. J. STOECKLY, Asst. Trainmaster Barstow, Calif.
 H. C. HENRY, Road Foreman of Engines Barstow, Calif.
 C. E. TRESSLER, Safety Supervisor Barstow, Calif.
 J. L. SCHROEDER, Trainmaster San Bernardino, Calif.
 K. W. JURE, Trainmaster San Bernardino, Calif.
 S. F. CROOK, Asst. Trainmaster San Bernardino, Calif.
 W. N. LEAVERTON, Asst. Trainmaster San Bernardino, Calif.
 J. P. HERNDON, Road Foreman of Engines San Bernardino, Calif.
 E. R. CHAPMAN, Safety Supervisor San Bernardino, Calif.
 R. D. HARPER, Rules Examiner Fullerton, Calif.
 D. L. REYNOLDS, Trainmaster Fullerton, Calif.
 J. R. FRAIZER, Asst. Trainmaster Fullerton, Calif.
 W. L. TYLER, Asst. Trainmaster-Mgr. RFO San Diego, Calif.

LOS ANGELES TERMINAL DIVISION

W. E. ADAMS, Trainmaster Los Angeles, Calif.
 J. L. FIELDS, Trainmaster Los Angeles, Calif.
 J. D. LUSK, Trainmaster Los Angeles, Calif.
 R. D. MATHES, Trainmaster Los Angeles, Calif.
 H. S. DUKE, Asst. Trainmaster Los Angeles, Calif.
 W. H. WYSONG, Asst. Trainmaster Los Angeles, Calif.
 J. S. BLACK, Asst. Trainmaster Los Angeles, Calif.
 G. J. BUHLER, Asst. Trainmaster-Mgr. RFO Watson, Calif.
 R. R. MARTIN, Safety Supervisor Los Angeles, Calif.
 R.M. BLOOMER, Road Foreman of Engines Los Angeles, Calif.

COAST LINES

*J. E. THORNTON, Supervisor of Air Brakes and General Road Foreman of Engines Los Angeles, Calif.
 A. C. HENDERSON, Road Foreman of Engines (AMTRAK) Los Angeles, Calif.

CHIEF TRAIN DISPATCHER'S OFFICE SAN BERNARDINO

D. F. HODGES, Chief Dispatcher

ASST. CHIEF DISPATCHERS

G. A. WOLLERTON - E.M. BUTLER
T. H. ESHELMAN - D. R. MUNDAY

TRAIN DISPATCHERS

L. A. WRIGHT	T. A. HUGHES	D. C. HEDRICK
H. F. BROWN	R. N. BROWNING	J. X. JUSZCZYK
D. E. PRYOR	D. L. DAVIES	C. Q. PATTERSON
J. M. BIERD	G. W. BUXTON	G. W. DRIPPS
D. K. YOUNG	J. L. REDDICK	E. B. JACKSON JR.
J. M. TIDEMANN	S. G. HUMPHREYS	R. E. BRENDZA

The Atchison, Topeka and Santa Fe Railway Co.



COAST Santa Fe LINES

LOS ANGELES AND LOS ANGELES TERMINAL DIVISIONS

TIME TABLE No.

13

IN EFFECT

Sunday, April 25, 1982

At 12:01 A.M.

Pacific Standard Time

This Time Table is for the exclusive use and guidance of Employes.

H. D. FISH
General Manager
LOS ANGELES, CALIF.

Q. W. TORPIN W. W. TOLIVER R. T. DENNISON
Asst. General Managers
LOS ANGELES, CALIF.

D. D. DIDIER D. M. MILLER
Superintendent Superintendent
SAN BERNARDINO, CALIF. LOS ANGELES, CALIF.

H. D. ROBERTSON
Terminal Superintendent
BARSTOW, CALIF.

LOS ANGELES DIVISION

NEEDLES, CADIZ AND RIPLEY DISTRICTS 3

BARSTOW YARD

Maximum Speed Through Following Power Switches:

EE and WE Inspection Yard Tracks 1-2 and 1-3 (Interlocked)	50
Jct. of High and Low Leads on Yard Entry Track from Needles	30
Crossovers Between First and Mojave Dist. Yard Entry Tracks	30
EE and WE All Receiving Yard Tracks	30
EE Departure Yard Tracks D-1 through D-5	30
WE All Departure Yard Tracks	30
EE Departure Yard Tracks D-6 through D-10	15
Maximum Speed on Balloon Track	10

Spring Switches at West end North track sidings 15 MPH
 Java, Ibis, Bannock, Homer, Goffs, Danby, Cadiz, Amboy, Siberia, Ash Hill, Pisgah, Newberry, Daggett

Spring Switches at East end South track sidings 15 MPH
 Newberry, Pisgah, Ash Hill, Bagdad, Amboy, Cadiz, Danby, Essex, Goffs

Trains must get clearance card before leaving Needles.
 Santa Fe trains must get clearance card before leaving Barstow.

Rule 251 in effect between Needles and M.P. 737.3.

TCS in effect: On main tracks between M.P. 737.3 and Barstow.

Rule 6(B): Needles & Barstow C-R-Y, Cadiz & Ash Hill B-Y, other sidings B

Rule 93: Yard limits located at Needles.

Rule 311: At Barstow, a signal displaying a flashing yellow over lunar aspect is named "APPROACH-THIRTY" and the indication is, "Proceed; approach next signal not exceeding 30 MPH prepared to enter diverging route at prescribed speed; if exceeding medium speed, immediately reduce to medium speed."

Helper locomotives at or near rear of train may use dynamic brake as follows:

Goffs to Cadiz; Ash Hill to Bagdad; Pisgah to Hector; Goffs to Needles.

CADIZ DISTRICT

WESTWARD	TIME TABLE						EASTWARD	
↓	Ruling Grade Descending—Feet Per Mile	NO. 13		Mile Post	Ruling Grade Descending—Feet Per Mile	Communications Turn Tables and Wyes	Capacity of Sidings In Feet	↑
		April 25, 1982						
STATIONS								
		PARKER	YL	105.8		C-R-Y	Yard	
20.6	14.2	VIDAL		120.0	31.7	B	880	
21.1	20.4	RICE	YL	140.4	30.6	B-Y	2471	
25.3	3.6	FREDA		144.0	0.0		2100	
30.6	7.0	SABLON		151.0	0.0		2846	
31.7	18.2	FISHEL		169.2	29.6		4949	
31.7	21.3	CADIZ	YL	190.5	29.6	B-Y	Yard	
(84.7)								

Trains must get clearance card before leaving Parker.

Rule 93: Yard limits located at Cadiz (Cadiz District only), Rice and Earp to Parker, inclusive.

Rule 83(B): Train registers located in phone booth at Rice and Cadiz where trains will register as directed.

RIPLEY DISTRICT

WESTWARD	TIME TABLE						EASTWARD	
↓	Ruling Grade Descending—Feet Per Mile	NO. 13		Mile Post	Ruling Grade Descending—Feet Per Mile	Communications Turn Tables and Wyes	Capacity of Sidings In Feet	↑
		April 25, 1982						
STATIONS								
		RIPLEY	YL	49.4				
42.8	7.4	BLYTHE	YL	42.0	21.7	C-R-Y	Yard	
10.6	25.5	STYX		18.5	83.4		526	
83.4	16.5	RICE	YL	0.0	65.0	B-Y	2471	
(49.4)								

Rule 93: Yard limits Ripley to M.P. 41, inclusive, and at Rice.

TRACK SIDE WARNING DEVICES—SPECIAL RULE 7

Needles District

Location	Type	Locator & Signals Affected
Bridge 587.9	Highwater	Signals 5871 and 5892
M.P. 628.1	Hot Box	Rotating white lights at scanner, at M.P. 627 and at locator (M.P. 626.3)
South track		
M.P. 631.3	Hot Box	Rotating white lights at scanner and at locator (M.P. 633.5)
North track		
Bridge 642.9	Highwater	Signals 6421 and 6442
M.P. 644.5	Hot Box and Dragging Equip.	Rotating white lights at scanner, at M.P. 646.5 and at locator (M.P. 648.1)
North track		
M.P. 651.6	Hot Box and Dragging Equip.	Rotating white lights at scanner and at locator (M.P. 648.9)
South track		
M.P. 665	Hot Box and Dragging Equip.	Rotating white lights at scanner and at locator (M.P. 662.5)
South track		
M.P. 665	Hot Box	Rotating white lights at scanner and at locator (M.P. 667)
North track		
M.P. 690.4	Hot Box and Dragging Equip.	Rotating white lights and radio communications at scanner
(Both tracks)		
M.P. 709.1	Hot Box and Dragging Equip.	Rotating white lights at scanner and at locator (M.P. 711.8)
North track		
M.P. 716.4	Hot Box and Dragging Equip.	Rotating white lights at scanner and at locator (M.P. 714.3)
South track		

Cadiz District

Bridge 186.6	Highwater	Rotating red light on poles located 4 poles west of M.P. 187 and 2 poles west of M.P. 186
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Ripley District

Bridge 10.3	Highwater	Rotating red light on poles located 4 poles west of M.P. 10 and 19 poles east of M.P. 10
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STATIONS OR TRACKS NOT SHOWN IN SCHEDULE

Needles District

Location	Mile Post	Capacity in Feet	Switch Connection
Saltus	658.4	2590	East and West
Klondike	682.0	345	West
Ludlow	693.2	2320	East
Ludlow	693.6	1329	West
Lavic	702.7	235	East
Hector	712.8	480	East and West
Airport Spur	732.6	9048	East
Gale	735.3	492	East
Nebo	741.6	5488	East and West

Cadiz District

Earp	107.3	1236	West
Grommet	131.6	300	East
Milligan	164.0		
Metropolitan Water Dist.	163.9	1711	East and West
Pacific Salt Co.	163.7	212	East and West
Standard Chemical Co.	162.6	988	East and West
Chubuck	172.7		

Ripley District

Midland	17.8	308	West
Cox	20.4	933	East
Inca	22.6	1512	East and West
Mesaville	33.0	472	West
Riverview Farms Spur	36.3	Lgh. 3.9 m.	West
Miller Farms	44.7	1450	East and West

Normal position of junction switches

Rice for Cadiz District, Cadiz for Needles District siding.

LENGTHS OF STEMS OF WYES

Location	Feet
Needles	401
Cadiz	Cadiz District
Ash Hill	410
Barstow	Mojave District
Rice	Ripley District
Blythe	504

4 FIRST DISTRICT

LOS ANGELES DIVISION

MAXIMUM AUTHORIZED DISTRICT SPEED FOR TRAINS

First District Westward Movements Both Tracks	MPH	
	Psgr. and Light	Freight
Barstow to San Bernardino	79	60
SPEED RESTRICTIONS		
2 Curves M.P. 746.4 to 747.0	50	50
2 Curves M.P. 747.0 to 4.6	60	60
2 Curves M.P. 10.3 to 11.9	75	60
Curve M.P. 16.7 to 17.2	75	60
Curve M.P. 19.7 to 20.4	75	60
Curve M.P. 30.6 to 31.8	75	60
2 Curves M.P. 31.8 to 33.8	55	55
2 Curves M.P. 33.8 to 34.3	35*	35
3 Curves M.P. 34.3 to 36.6	50	50
Victorville M.P. 36.6 to 37.4	30	30
8 Curves { M.P. 37.4 to 39.1 (North Track)	45	45
{ M.P. 39.1 to 42.0 (South Track)		
2 Curves { M.P. 37.4 to 39.1 (South Track)	40	40
{ M.P. 39.1 to 39.3 (North Track)		
4 Curves M.P. 39.3 to 42.0 (North Track)	45	45
Curve M.P. 42.0 to 43.7	50	50
Curve M.P. 47.2 to 48.1	65	60
Curve M.P. 48.1 to 48.8	55	55
17 Curves M.P. 48.8 to 56.1	50	50
Grade M.P. 56.1 to 56.6	45	45
Grade M.P. 56.6 to 62.2 (South Track)	30*	20
Grade M.P. 56.6 to 64.2X (North Track)	30*	30
Grade M.P. 62.2 to 64.2	40	35
Grade M.P. 64.2 to 66.5	35	35
Grade M.P. 66.5 to 72.6	40	35
Grade M.P. 72.6 to 80.8	50	35
M.P. 80.8 to 81.5	20*	20

* Denotes restrictions protected by Inert ATS Inductors

Helper locomotives at or near rear of train may use dynamic brakes:
Summit to San Bernardino

WESTWARD		Rating Grade Descending—Feet Per Mile	TIME TABLE		Mile Post	Rating Grade Descending—Feet Per Mile	Capacity of Sidings In Feet	EASTWARD	
FIRST CLASS			NO. 13					FIRST CLASS	
35	3	April 25, 1982		36	4			36	4
Leave Daily	Leave Daily			Arrive Daily	Arrive Daily			Arrive Daily	Arrive Daily
PM 12:40	AM 3:30			PM 4:05	PM 11:15			PM 4:05	PM 11:15
		STATIONS							
			BARSTOW	746.4			Yard		
			LENWOOD	6.7	41.0				
			HODGE	6.9	37.0				
			EAST ORO GRANDE	15.8	37.0				
			ORO GRANDE	2.1	37.0		Yard		
			VICTORVILLE	5.2	37.0		Yard		
			FROST	1.3	15.8				
			HESPERIA	7.1	83.4		Yard		
			LUGO	5.0	81.8				
			SUMMIT	5.8	84.5				
			CAJON	6.6	0.0				
			KEENBROOK	4.5	0.0				
			VERDEMONT	7.4	0.0				
			SAN BERNARDINO	81.3			Yard	2:15 PM	9:17 PM
			South Track (81.3)					Leave Daily	Leave Daily
			North Track (83.3)						
			Average speed per hour					(45.4)	(42.4)

Santa Fe trains must get clearance card before leaving San Bernardino and Barstow.

TCS in effect on Main Tracks between Barstow and San Bernardino.
Rule 301: Between M.P. 749.8 and San Bernardino controlled and block signals located on field side of track.

Rule 311: At Barstow, a signal displaying a flashing yellow over lunar aspect is named "APPROACH-THIRTY" and the indication is, "Proceed; approach next signal not exceeding 30 MPH prepared to enter diverging route at prescribed speed; if exceeding medium speed, immediately reduce to medium speed."

At Summit, westward passenger trains will make air brake test as prescribed Rule 934-1, item 4.

At Summit all freight trains, where stop is not made, must make a running air brake test between MP 55 and MP 56.

If train is stopped at Summit for any reason, an automatic brake application of not less than 10 PSI will be made and not released until ready to proceed.

Rule 6(B) Barstow and San Bernardino C-R-Y Victorville C-R
Main tracks cross at grade separation M.P. 39.1 and are designated as prescribed by Rule 151 either side of crossing.

SWITCHES—MAXIMUM AUTHORIZED SPEED

Maximum speed permitted through turnout of other than main track switches—10 MPH; all main track turnouts and crossovers—15 MPH, except for interlocked switches and crossovers at following locations:

Station	Location	MPH
Barstow	See Needles District Page 2	
Lenwood	Two crossovers	50
Hodge	Two crossovers	50
East Oro Grande	Two crossovers	50
Frost	Two crossovers	50
Lugo	Two crossovers	50
Summit	Two crossovers	50
Cajon	Two crossovers	50
Keenbrook	Two crossovers	50
Verdemont	Two crossovers	50

RULE 956—Speed restrictions and special instructions governing the use of retainers for westward freight trains, Summit to San Bernardino.

- Trains with all locomotives on head end, must not exceed an average of 115 tons per car and trains with "RCE" in operation, or, with Helper Locomotives at or near rear of train must not exceed 135 tons per car. Train tonnage excludes weight of locomotives.
- Speed Restrictions:

	OPERATIVE DYNAMIC BRAKES	M P H	EXCEPTIONS:	M P H	WITHOUT OPERATIVE DYNAMIC BRAKES	M P H	"RCE" OR HELPER OPERATION WITH DYNAMIC BRAKES	M P H
SOUTH TRACK M.P. 56.6 TO CAJON	Average Tonnage Does Not Exceed 115 Tons Per Car	15	Average Tonnage Does Not Exceed 95 Tons Per Car and Train Tonnage Does Not Exceed 4500 Tons	20	Not To Exceed An Average of 85 Tons Per Car	15	Average Tonnage Does Not Exceed 135 Tons Per Car	15
							Average Tonnage Does Not Exceed 95 Tons Per Car and Train Tonnage Does Not Exceed 4500 Tons	20
NORTH TRACK M.P. 56.6 TO CAJON AND EITHER TRACK CAJON TO SAN BERNARDINO	Average Tonnage Does Not Exceed 115 Tons Per Car	20	Average Tonnage Does Not Exceed 95 Tons Per Car and Train Tonnage Does Not Exceed 6500 Tons	30	Not To Exceed An Average of 95 Tons Per Car	15	Average Tonnage Does Not Exceed 135 Tons Per Car	20
							Train Tonnage Between 6500 Tons and 12000 Tons	25
							Train Tonnage Does Not Exceed 6500 Tons	30

NOTE: Either Track Cajon to San Bernardino, when average tonnage does not exceed 95 tons per car and train tonnage does not exceed 4500 tons and speed controlled only with dynamic brakes 35 MPH, if air brakes used to control speed of train 30 MPH.

- When it is known before leaving Summit that locomotives do not have operative dynamic brakes, train must stop. Before releasing train brakes, starting behind lead locomotives, set 15 retainers in high pressure position, release train brakes. Then place head one-half of train's retainers in high pressure and remainder of retainers in low pressure position. Brake system must be fully charged before proceeding. Excessive use of engine brakes is prohibited. If retainers are positioned before reaching Cajon, a 10 minute cooling stop must be made at Verdemont.
If train averages over 85 tons per car on South track Summit to Cajon, or, over 95 tons per car on North track Summit to Cajon or either track Cajon to San Bernardino, before proceeding, locomotives must have 2 or more operative dynamic brakes.
- With operative dynamic brakes and brake pipe reduction exceeds 18 lbs. to maintain authorized speed, train must be stopped immediately. To control train speed, a sufficient number of retainers, starting behind lead locomotives, must be set in high pressure position, before releasing train brakes.
Before proceeding, brake system must be fully charged.
- At any time a train stops and it is necessary to hold train while the brake system is being recharged, starting behind lead locomotive, set a sufficient number of hand brakes. Before proceeding, hand brakes must be released.
- When retainers are used, not less than 20 retainers must be set in high pressure position. Trains operating with retainers, must stop East of control signal Fifth Street and turn down retainers before proceeding.
- Speed of trains must not be controlled exclusively with dynamic brakes and locomotive brakes, when train tonnage exceeds: 2500 Tons on South Track Summit to Cajon; 3500 Tons on North Track Summit to Cajon and 4500 Tons on Either Track Cajon to San Bernardino.

LOS ANGELES DIVISION

FIRST, LUCERNE VALLEY AND REDLANDS DISTRICTS 5

MAXIMUM AUTHORIZED DISTRICT SPEED FOR TRAINS First District Eastward Movements Both Tracks

LOCATION	Psg.	MPH Freight
San Bernardino to Barstow	79	60
SPEED RESTRICTIONS		
Curve M.P. 81.5 to 80.8		20
Curve M.P. 79.5 to 79.3		55
Curve M.P. 79.3 to 78.3		60
2 Curves M.P. 72.6 to 71.5		45
2 Curves M.P. 71.5 to 70.8		40
8 Curves M.P. 70.8 to 66.5		45
6 Curves M.P. 66.5 to 64.2		35
3 Curves M.P. 64.2 to 62.2		45
16 Curves M.P. 62.2 to 56.6 (South Track)		30
Curve M.P. 56.6 to 56.1 (South Track)		45
5 Curves M.P. 64.2X to 61.7X (North Track)		35
12 Curves M.P. 61.7X to 57.4X (North Track)		30
Curve M.P. 57.4X to 57.0X (North Track)		40
Curve M.P. 57.0X to 56.1 (North Track)		45
17 Curves M.P. 56.1 to 48.8		50
Curve M.P. 48.8 to 48.1		55
Curve M.P. 48.1 to 47.2		65
Curve M.P. 43.7 to 42.0		50
8 Curves { M.P. 42.0 to 39.1 (South Track) { M.P. 39.1 to 37.4 (North Track)		45
4 Curves { M.P. 42.0 to 39.3 (North Track) { M.P. 39.3 to 39.1 (North Track) { M.P. 39.1 to 37.4 (South Track)		45
2 Curves { M.P. 39.3 to 39.1 (North Track) { M.P. 39.1 to 37.4 (South Track)		40*
Victorville M.P. 37.4 to 36.6		30
3 Curves M.P. 36.6 to 34.3		50
2 Curves M.P. 34.3 to 33.8		35
2 Curves M.P. 33.8 to 31.8		55
Curve M.P. 31.8 to 30.6		75
Curve M.P. 20.4 to 19.7		75
Curve M.P. 17.2 to 16.7		75
2 Curves M.P. 11.9 to 10.3		75
2 Curves M.P. 4.6 to 747.0		60
2 Curves M.P. 747.0 to 746.4		50

*Denotes restrictions protected by Inert ATS Inductors

Helper locomotives at or near rear of train may use dynamic brake:
Summit to Victorville

REDLANDS DISTRICT	MPH
SPEED RESTRICTIONS	20
Crossings M.P. 0.0 to 0.7	5
Crossings M.P. 0.7 to 3.1	15
Redlands, St. Crossings M.P. 8.9 to 9.4	15
Mentone, St. Crossing and Track M.P. 12.0 to 13.4	10
LUCERNE VALLEY DISTRICT	
Hesperia to M.P. 25.2	35
M.P. 25.2 to 29.2	20

STATIONS OR TRACKS NOT SHOWN IN SCHEDULE

First District			
Location	Mile Post	Capacity In Feet	Switch Connection
Helendale	21.1	1051	East and West (North Track)
Helendale	21.1	1050	East and West (South Track)
Thorn	41.1	2995	East and West (North Track)
Summit	54.4	3500	East (North Track)
	55.7	192	East and West (North Track)
	55.7	201	East and West (South Track)
Alray	59.7X	920	East (North Track)
Devore	71.0	1600	East and West (South Track)
Ono	75.0	1960	East (North Track)
REDLANDS DISTRICT			
Nevada Street	6.7	750	East and West
Craf	11.4	188	East
LUCERNE VALLEY DISTRICT			
Pluess-Staufner, Inc.	23.5	884	East and West
Chas. Pfizer and Co. Inc.	26.2	1300	West

REDLANDS DISTRICT

WESTWARD	TIME TABLE					EASTWARD
↓	Ruling Grade Descending—Feet Per Mile	NO. 13		Mile Post	Ruling Grade Descending—Feet Per Mile	Capacity of Sidings In Feet
		April 25, 1982				
		STATIONS				
	0.0	END OF TRACK YL	13.4	84.5		
	116.2	MENTONE YL	12.0	0.0	790	
	116.2	REDLANDS YL	8.8	79.2		
		S. P. Crossing SAN BERNARDINO YL	0.0		C-R-Y Yard	
		(13.4)				

Rule 93: Yard limits M.P. 13.4 to San Bernardino, inclusive.

Normal position of junction switches San Bernardino for First District.

LUCERNE VALLEY DISTRICT

WESTWARD	TIME TABLE					EASTWARD
↓	Ruling Grade Descending—Feet Per Mile	NO. 13		Mile Post	Ruling Grade Descending—Feet Per Mile	Capacity of Sidings In Feet
		April 25, 1982				
		STATIONS				
	105.6	CUSHENBURY	29.2	0.0	B 2900	
	105.6	SPUR 5	26.1	0.0	700	
	75.0	BASS	15.6	0.0	760	
	75.0	SPUR 2	11.3	75.0	122	
	75.0	SPUR 1	7.0	0.0	114	
	75.0	HESPERIA YL	0.0	75.0	B	
		(29.0)				

Rule 93: Yard limits at Hesperia.

Normal position of junction switches Hesperia for First District Yard Track.

SWITCHES—MAXIMUM AUTHORIZED SPEED REDLANDS AND LUCERNE VALLEY DISTRICTS

Maximum speed permitted through turnout of other than main track switches—10 MPH; all main track turnouts and crossovers—15 MPH.

TRACK SIDE WARNING DEVICES—SPECIAL RULE 7

First District		
Location	Type	Locator & Signals Affected
M.P. 24.9 Westward Movements	Hot Box and Dragging Equip.	Rotating white lights at scanner, at M.P. 27.1 and at locator (M.P. 28.5)
M.P. 24.9 Eastward Movements	Hot Box and Dragging Equip.	Rotating white lights at scanner, at M.P. 23.5 and at locator (M.P. 21.4)

RAILROAD CROSSINGS AT GRADE (REDLANDS DIST.)

Location	Tracks Governed	Type
South "E" Street	S.P. Crossing	98-B, 98-C

6 SECOND DISTRICT

LOS ANGELES DIVISION

WESTWARD		Ruling Grade Descending— Feet Per Mile	TIME TABLE		Mile Post	Ruling Grade Descending— Feet Per Mile	Capacity of Sidings in Feet	EASTWARD	
FIRST CLASS			NO. 13 April 25, 1982	FIRST CLASS					
35	3			36				4	
Leave Daily	Leave Daily		STATIONS			Arrive Daily	Arrive Daily		
PM 2:20	AM 5:25	0.0	SAN BERNARDINO YL -3.6	81.3	64.9	Yard s 2:12	PM 9:14		
2:27	5:32	38.7	RIALTO YL -6.9	84.9	35.4	1935	1:56 8:59		
2:32	5:38	37.7	KAISER YL -1.9	91.8	14.3	Yard	1:51 8:54		
		32.0	ETIWANDA YL -4.0	93.7	14.3				
2:37	5:44	19.3	CUCAMONGA YL -3.2	97.7	56.4	3154	1:46 8:49		
2:40	5:48	42.2	UPLAND YL -3.9	100.9	30.6	2363	1:43 8:46		
2:44	5:53	59.1	CLAREMONT YL -1.9	104.8	0.0		1:39 8:42		
s 2:52	s 6:00	63.4	POMONA -3.5	108.7	0.0	3079 s	s 1:37 s 8:40		
		63.4	SAN DIMAS -4.2	110.2	0.0				
3:01	6:10	63.4	GLENDORA -2.5	114.4	0.0	2820	1:24 8:27		
3:04	6:13	75.0	AZUSA -1.3	118.9	39.6		1:21 8:25		
3:06	6:16	81.3	IRWINDALE -2.0	118.2	0.0		1:19 8:23		
		60.7	BUTLER -2.2	120.2	26.4	2740			
3:10	6:20	26.4	MONROVIA -1.8	122.4	75.0		1:15 8:19		
		0.0	ARCADIA -3.1	124.2	75.2				
3:15	6:27	95.0	OHAPMAN -4.4	127.3	78.1	1800	1:10 8:15		
s 3:23	s 6:45	114.6	PASADENA YL -2.0	131.7	0.0	1702 s	s 1:05 s 8:10		
		88.7	SOUTH PASADENA -0.5	133.7	0.0				
3:27	6:51	106.9	OLGA -3.5	134.2	31.7	1698	12:57 7:57		
		89.8	WATER STREET YL -0.7	138.7	0.0	735			
		37.0	BROADWAY -0.6	139.4	0.0		12:44 7:44		
		19.0	MISSION TOWER S.P. & U.P. Crossings -0.8	140.0	0.0				
4:05 PM	7:20 AM		LOS ANGELES Union Station		0.0	Yard	12:40 PM 7:40 PM		
Arrive Daily	Arrive Daily		(59.5)				Leave Daily Leave Daily		

Trains originating Los Angeles Union Station must get clearance card before leaving Los Angeles Union Station.

Trains originating Hobart or First Street must get clearance card before leaving Mission Tower.

At Los Angeles: Rules and Regulations of Union Station must be observed within terminal limits.

Regular trains must get clearance card before leaving San Bernardino.

Rule 97(A): Extras need not secure clearance card before leaving San Bernardino on Second District. Westward extras that are to operate west of Upland must secure clearance card before leaving Kaiser, or San Bernardino. Extra trains and engines must contact San Bernardino Operator, or Kaiser Operator, to determine that there are no conflicting movements before occupying Second District main track between San Bernardino and Kaiser. Extra trains and engines must, after using Second District main track between San Bernardino and Kaiser, notify San Bernardino Operator, or Kaiser Operator, as soon as main track has been cleared.

TCS in effect:

On Main tracks between Broadway and Mission Tower.

On main tracks at San Bernardino, between interlocked switches 5th St. and M.P. 82.2.

Rule 93: Yard limits located at: San Bernardino M.P. 82.2 to and including Upland, Claremont, Pasadena, and Water Street to Broadway.

Rule 6(B): San Bernardino, Azusa and Mission Tower C-R-Y; Kaiser C-R; Etiwanda B; Cucamonga Y.

(34.0) (31.0)

Average speed per hour

(38.8) (38.0)

MAXIMUM AUTHORIZED DISTRICT SPEED FOR TRAINS

Second District

LOCATION	Psg.	MPH	Frt.
San Bernardino to Los Angeles	65		60
Rialto, Cucamonga Foothill Spur, Muscat, Metropolitan and Pasadena Industrial Spurs	15		15
SPEED RESTRICTIONS			
M.P. 81.5 to 82.2	20		20
M.P. 82.2 to 85.2	30*		30
Fontana M.P. 88.5 to 88.9	50		50
Upland Euclid Ave. Crossing M.P. 101.0	40		40
Pomona M.P. 106.2 to 107.0	40		40
La Verne M.P. 107.0 to 108.0	45		45
6 Curves M.P. 111.8 to 116.9	55		55
2 Curves M.P. 118.8 to 119.7	55		55
2 Curves M.P. 122.2 to 124.8	60		60
M.P. 124.8 to 131.0	60		40
M.P. 131.0 to 131.8	20*		20
M.P. 131.8 to 135.5	30		30
7 Curves M.P. 135.5 to 138.3	25		25
4 Curves M.P. 138.3 to 140.0	20		20
Curve M.P. 140.0 to 140.2	15		15

* Denotes restrictions protected by Inert ATS Inductors

SWITCHES—MAXIMUM AUTHORIZED SPEED

Trailing movements, spring point derails: MPH
 Metropolitan Spur, 4068 ft, from main track 10
 Maximum speed permitted through turnout of other than main track switches
 —10 MPH; all main track turnouts and crossovers—15 MPH; except for spring
 and interlocked switches and crossovers at following locations:
 "I"—Interlocked Switch. "EE"—East End.
 "S"—Spring Switch. "WE"—West End.

Second District

San Bernardino	I	Crossover between main tracks east of Bridge 82.1	20
Broadway	I	Two track junction switch	20

RAILROAD CROSSINGS AT GRADE

Second District

Location	Tracks Governed	Type
Mission Tower	S.P. & U.P. Crossings	TCS

STATIONS OR TRACKS NOT SHOWN IN SCHEDULE

Second District

Location	Mile Post	Capacity in Feet	Switch Connection
Rialto Foothill Spur	85.8	2200	West
Fontana	88.8	700	East and West
Muscat Spur	90.4	4685	West
Gallo Spur	94.6	2200	East
Rochester	95.0	460	East
Cucamonga Foothill Spur	95.8	Lgh. 1.1 m.	East and West
La Verne	107.9	750	East
Metropolitan Spur	108.6	Lgh. 1.0 m.	West
Duarte	121.0	764	East and West
Pasadena Industrial Spur	127.5	Lgh. 2.1 m.	East
Lamanda Park		1772	East and West
Raymond	132.7	475	West
Highland Park	135.9	250	East

LENGTHS OF STEMS OF WYES

Location Feet

Second District

San Bernardino	3rd Dist. Main Track
San Bernardino	Precooler Lead
Cucamonga	Foothill Spur
Azusa	147
Mission Tower	L.A.U.P.T.

TRACK SIDE WARNING DEVICES

SPECIAL RULE 7

Second District

Location	Type	Signals Affected
Bridge 92.8	Highwater	Signals 921 and 932
Bridge 93.6	Highwater	Signals 923 and 932
Bridge 97.1	Highwater	Signals 971 and 972
M.P. 135	Slide	Signal 1331 & Rotating
Westward	Fence	Red Light at M.P. 135
Movements	Detector	
M.P. 135.3	Slide	Signal 1352 & Rotating
Eastward	Fence	Red Light at M.P. 135.3
Movements	Detector	

WESTWARD								Rating Grade Descending— Feet Per Mile	TIME TABLE NO. 13 April 25, 1982	STATIONS	Mile Post	Capacity of Sidings In Feet
FIRST CLASS												
83	85	81	79	77	75	73	71					
Leave Daily	Leave Sat. & *Hol. Only	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Except Sat. Sun. & *Hol.					
								52.8	SAN BERNARDINO	0.0	Yard	
								52.8	2.4 RANA	1.6		
								50.8	1.3 COLTON			
								52.8	S. P. Crossing	2.9	Yard	
								14.2	3.8 HIGHGROVE	6.7	Yard	
								52.8	2.5 RIVERSIDE JCT.	9.2		
								52.8	0.6 RIVERSIDE	9.8	Yard	
								52.8	2.4 CASA BLANCA	14.0	4905	
								52.8	2.4 ARLINGTON	16.4	3095	
								52.8	3.0 MAY	20.2	4692	
								30.1	2.6 PORPHYRY	22.8	8059	
								52.8	1.3 CORONA	24.1	8370	
								52.8	5.1 PRADO DAM	29.2	4735	
								52.8	7.2 ESPERANZA	36.4	6359	
								42.2	4.2 ATWOOD	40.6		
								42.2	2.4 PLACENTIA	43.0		
PM	PM	PM	PM	PM	AM	AM	AM		TCS			
9.45	8.15	6.25	5.05	2.15	10.55	9.00	7.15	33.3	FULLERTON	165.0		
								26.4	U. P. Crossing			
								17.4	4.7 BUENA PARK	160.3		
								26.9	2.6 LA MIRADA	157.7	Yard	
								0.0	4.7 LOS NIETOS	153.0		
								0.0	0.9 S. P. Crossing			
								0.0	D. T. JUNCTION	152.1		
								52.8	1.2 S. P. Crossing			
								0.0	1.2 PICO RIVERA	150.9	Yard	
								52.8	1.1 BANDINI	149.8		
								0.0	2.5 EASTERN AVE.	147.3		
								11.1	1.3 HOBART	146.0	Yard	
								0.0	1.5 HOBART TOWER	144.5		
								0.0	U. P. Crossing			
								0.0	1.3 REDONDO JCT.	143.2		
								10.6	U. P. Crossing			
									2.1 FIRST STREET	141.1	Yard	
									(70.7)			
									1.1 MISSION TOWER	140.0		
									S. P. & U. P. Crossings			
10.25 PM	8.55 PM	7.05 PM	5.45 PM	2.55 PM	11.35 AM	9.40 AM	7.55 AM		0.8 LOS ANGELES			
Arrive Daily	Arrive Sat. Sun. & *Hol. Only	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Except Sat/Sun & *Hol.		Union Station			
(38.7)	(38.7)	(38.7)	(38.7)	(38.7)	(38.7)	(38.7)	(38.7)		WEST (72.6) (71.6) EAST			

Average speed per hour

Trains originating Los Angeles Union Station must get clearance card before leaving Los Angeles Union Station.

Third District trains originating at First Street or Hobart must get clearance card before leaving Hobart. (Exception: Road Switchers which have arrived Hobart from Third District.)

Trains from Harbor District enroute Third District must get clearance card before leaving Hobart.

Santa Fe trains must get clearance card before leaving San Bernardino.

Rule 301: Eastward controlled signal north track at M.P. 0.1 and eastward controlled signal governing movement from U.P. main track (short way) located on left side of track.

Rule 6(B): San Bernardino & Mission Tower C-R-Y; Riverside, Fullerton & Hobart C-R; Pico Rivera R; Redondo Jct R-T-Y; Highgrove B; Casa Blanca, Porphyry & Atwood Y.

At Los Angeles: And regulations of Union Station must be observed within terminal limits.

TCS in effect on main tracks between San Bernardino and Mission Tower.

Trains or engines must secure authority from Towerman at Redondo Junction to occupy Industry Lead (Old Eastward Main Track) between M.P. 143.1 and M.P. 140.2. Towerman at Mission Tower must confer with Towerman at Redondo Junction before allowing train or engine to enter track at west end through interlocked switch.

Before entering or fouling this track through hand thrown switch, authority must be obtained from Towerman at Redondo Junction. Towerman at Redondo Junction must be advised when train or engine is clear of track.

All trains and engines using Industry Lead between M.P. 143.1 and M.P. 140.2 must move at restricted speed.

* Day of Traditional Observance: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

LOS ANGELES DIVISION

THIRD DISTRICT 9

TIME TABLE NO. 13 April 25, 1982	STATIONS	Mile Post	Ruling Grade Descending— Feet Per Mile	Capacity of Sidings In Feet	EASTWARD								
					FIRST CLASS								
					72	74	76	78	80	82	88	84	
Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Except Sat. Sun. & *Hol.	Arrive Sat. Sun. & *Hol. Only	Arrive Daily						
3 TRKS.	SAN BERNARDINO	0.0		Yard									
	2.4 RANA	1.6	64.4										
	1.3 COLTON	2.9	0.0	Yard									
2 TRACKS	3.8 S. P. Crossing	2.9	34.8										
	2.5 HIGHGROVE	6.7	7.4	Yard									
	0.6 RIVERSIDE JCT.	9.2	0.0										
T C S	2.4 RIVERSIDE	9.8	63.4	Yard									
	2.4 CASA BLANCA	14.0	21.1	4905									
	3.8 ARLINGTON	16.4	0.0	3095									
	2.6 MAY	20.2	0.0	4692									
	1.3 PORPHYRY	22.8	0.0	8059									
	5.1 CORDNA	24.1	24.3	8370									
	7.2 PRADO DAM	29.2	21.1	4735									
	4.2 ESPERANZA	36.4	0.0	6359									
	2.4 ATWOOD	40.6	13.2										
	3.0 PLACENTIA	43.0	0.0		AM	AM	PM	PM	PM	PM	PM	PM	
2 TRACKS	4.7 FULLERTON	165.0	10.0		s 8.35	s 10.25	s 12.30	s 2.25	s 5.35	s 6.30	s 7.10	s 8.55	
	2.6 BUENA PARK	160.3	25.9										
	4.7 LA MIRADA	157.7	37.0	Yard									
	0.9 LDS NIETOS	153.0	17.4										
	1.2 D. T. JUNCTION	152.1	4.2										
	1.1 PICO RIVERA	150.9	22.7	Yard									
	2.5 BANDINI	149.8	22.7										
	1.3 EASTERN AVE.	147.3	19.0										
	1.5 HOBART	146.0	19.0	Yard									
	1.3 HOBART TOWER	144.5	52.8										
2 TRACKS	2.1 REDONDO JCT.	143.2	34.8										
	1.1 FIRST STREET	141.1	43.0	Yard									
	0.8 MISSION TOWER	140.0	43.8										
	LDS ANGELES Union Station				8.00 AM	9.50 AM	11.55 AM	1.50 PM	5.00 PM	5.55 PM	6.35 PM	8.20 PM	
	WEST (72.6) (71.6) EAST				Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Except Sat. Sun. & *Hol.	Leave Sat. Sun. & *Hol. Only	Leave Daily	

Average speed per hour (46.9) (46.9) (46.9) (46.9) (46.9) (46.9) (46.9) (46.9)

10 THIRD DISTRICT

LOS ANGELES DIVISION

MAXIMUM AUTHORIZED DISTRICT SPEED FOR TRAINS

LOCATION	Pggr.	MPH	Frnt.
San Bernardino to Fullerton	60	60	60
Fullerton to M.P. 158.7	79	60	60
M.P. 158.7 to Los Angeles	65	60	60
SPEED RESTRICTIONS			
2 Curves M.P. 0.0X to 0.4X		15	15
2 Curves and Bridge M.P. 0.0 to 0.9 (Short Way)		15	15
4 Curves M.P. 0.9 to 1.6 (Short Way)		20	20
7 Curves and Colton M.P. 0.4X to 3.2		30	30
2 Curves M.P. 3.2 to 4.0		40	40
Curve M.P. 6.6 to 6.8		40	40
2 Curves M.P. 6.8 to 9.6		50	50
Two Track Junction switch M.P. 10.1		30	30
2 Curves M.P. 11.8 to 12.5		40	40
4 Curves M.P. 15.4 to 17.1		50	50
Corona M.P. 22.5 to 25.6		45	45
Railroad Avenue Crossing M.P. 25.6		30	30
Corona M.P. 25.6 to 25.8		45	45
6 Curves M.P. 31.4 to 34.5		50	50
Curve M.P. 34.5 to 35.1		45	45
Two Track Junction Switch M.P. 39.2		40	40
Placentia M.P. 42.7 to 43.6		50	50
2 Curves M.P. 45.2 to 45.7		50	50
Fullerton M.P. 165.2 to 164.7		50	50
Curve M.P. 163.8 to 163.5		75	75
Curve M.P. 161.1 to 160.8		65	65
Curve M.P. 151.7 to 151.4		60	60
Crossing and Curve M.P. 144.5 to 143.4		30	30
2 Curves M.P. 143.4 to 142.9		15	15
3 Curves M.P. 141.1 to 140.2		30	30
Curve M.P. 140.2 to 140.0		15	15

SWITCHES—MAXIMUM AUTHORIZED SPEED

Station	Location	MPH
Trailing movements, spring point derails: MPH		
Rana	switching lead	10
Maximum speed permitted through turnout of other than main track switches —10 MPH; all main track turnouts and crossovers—15 MPH; except for interlocked switches and crossovers at following locations:		
Rana	Junction switch and crossover	20
Colton	Two crossovers	50
Riverside Junction	Union Pacific junction switch when not using crossover	30
Riverside	Two-track junction switch	30
Atwood	Two-track junction switch	40
	Olive District junction switch	40
Fullerton	Fourth District junction switch	40
	Two crossovers M.P. 45.5	50
	One crossover M.P. 163.0	50
Buena Park	One crossover	50
La Mirada	One crossover	50
D. T. Jct.	Two crossovers	50
Bandini	Two crossovers	50
Eastern Ave.	Main track crossovers and lead switch	40
Hobart	Main track crossover	30
	Crossover north main track to setout track	30
Hobart Tower	Two crossovers	30

STATIONS OR TRACKS NOT SHOWN IN SCHEDULE

Location	Mile Posts	Capacity in Feet	Switch Connection
Prenda Spur (Prenda)	14.3	300	East and West
La Sierra	18.5	440	West
Porphyry (3-M Spur)	22.7	Lgh 3.5m	Wye
Wilshire	156.8	2900	East and West
Stephens	155.5	7530	East and West
Santa Fe Springs	154.1	4250	East and West

RAILROAD CROSSINGS AT GRADE

Location	Tracks Governed	Type
Colton	S.P. Crossing	TCS
Fullerton	U.P. Crossing	TCS
Los Nietos	S.P. Crossing	TCS
D.T. Junction	S.P. Crossing	TCS
Hobart Tower	U.P. Crossing	TCS
Redondo Junction	U.P. Crossing	TCS
Mission Tower	S.P. and U.P. Crossings	TCS.

TRACK SIDE WARNING DEVICES

SPECIAL RULE 7

Location	Type	Locator and Signals Affected
Bridge 4.6	Highwater	Eastward Automatic Signals 52 and 54 Westward controlled signals east end Bridge.
Bridge 23.5	Highwater	Westward controlled signal at EE Porphyry Eastward controlled signal at WE Porphyry
Bridge 24.9	Highwater	Signal 241 westward movements on main track Controlled signal eastward movements at WE Corona Westward controlled signal governing movements into EE Corona siding.
M.P. 32 Westward	Hot Box	Rotating light at scanner, at M.P. 33.5 and at locator M.P. 35.1
M.P. 32 Eastward	Hot Box	Rotating light at scanner, at M.P. 30.7 and at locator M.P. 29.6

LENGTHS OF STEMS OF WYES

San Bernardino	3rd Dist. Main Track
San Bernardino	Precooler Lead
Casa Blanca	300 feet
Porphyry	3.5 m.
Atwood	600 feet
Redondo Junction	Harbor Dist. Main Track
Mission Tower	L.A.U.P.T.

No. 71, No. 73, No. 75 Daily, No. 77 Sat. & Sun. only, and extra trains originating must get clearance card before leaving San Diego or 22nd Street.

Rule 151: Between Old Town and crossover at west end of 22nd Street M.P. 268.7 trains will keep to left.

Rule 151 in effect between Old Town and San Diego.

TCS in effect Main tracks, end of double track Old Town to Fullerton and on sidings Ponto and Orange.

Rule 93: Yard limits located end of double track Old Town to and including National City.

Rule 94 in effect at San Diego passenger yard between crossover, Cedar Street and Broadway.

Rule 6(B): 22nd Street & Fullerton C-R; National City, San Diego, Miramar, Escondido Jct., Fallbrook Jct., Irvine & Orange Y, Oceanside B.

Normal position of junction switches: Fallbrook Jct. for Fourth District siding.

MAXIMUM AUTHORIZED DISTRICT SPEED FOR TRAINS

Fourth District			
LOCATION	Psg.	Fr.	MPH
National City to Sorrento	79	60	60
Sorrento to Santa Ana	90	60	60
South Main Track, M.P. 179.1 to 176.7	40	40	40
Santa Ana to Fullerton	79	60	60

SPEED RESTRICTIONS

San Diego M.P. 273.0 to 267.3	20	20
San Diego M.P. 269.4 (Crosby Street)	10	10
San Diego M.P. 267.3 to 264.1	30	30
Curve M.P. 262.7 to 262.4	70	60
2 Curves M.P. 260.3 to 259.9	60	60
Curve M.P. 259.1 to 258.5	65	60
3 Curves M.P. 258.5 to 257.9	35*	35
2 Curves M.P. 257.9 to 256.6	65	55
4 Curves M.P. 255.4 to 253.5	65	55
2 Curves M.P. 253.5 to 252.8	35	35
10 Curves & Grade M.P. 252.8 to 251.0	25*	25
2 Curves & Grade M.P. 251.0 to 250.6	40	40
2 Curves M.P. 250.6 to 250.0	50	50
Curve M.P. 245.8 to 245.6	55*	50
Curve M.P. 244.6 to 244.4	75	60
Curve M.P. 244.4 to 244.1	50*	45
Curve M.P. 244.1 to 243.5	65	60
Crossing M.P. 241.8 (Lomas Santa Fe Dr.)	70	60
2 Curves M.P. 238.8 to 237.4	80	60
4 Crossings M.P. 226.8 to 225.9	30	30
Curve M.P. 225.9 to 225.5	50	45
3 Curves M.P. 224.7 to 223.8	75	60
4 Curves M.P. 209.0 to 206.3	75	60
City San Clemente M.P. 206.3 to 202.7	40	40
Crossing M.P. 201.0 (Beach Rd.)	75	60
Curve M.P. 200.3 to 199.9	45*	40
Curve M.P. 199.9 to 198.6	60	60
3 Curves M.P. 198.6 to 197.9	35*	35
2 Curves M.P. 197.9 to 197.0	60	60
Santa Ana 2 Curves M.P. 176.1 to 175.3	40*	40
4 Crossings M.P. 175.3 to 173.8	60	60
6 Curves M.P. 173.8 to 172.2	40	40
Curve M.P. 172.2 to 172.0	35*	35
6 Crossings M.P. 172.0 to 169.2	45	45
2 Crossings M.P. 169.2 to 168.0	60	60
2 Crossings M.P. 168.0 to 167.7	40	40
Curve M.P. 165.9 to 165.4	40	40

* Denotes restrictions protected by Inert ATS Inductors

Escondido District		MPH
ESCONDIDO DISTRICT		30

SPEED RESTRICTIONS

Hill St. & 17 Curves & track M.P. 0.3 to 7.1	15
9 Curves & track M.P. 9.0 to 14.8	20
6 Curves M.P. 17.9 to 19.5	25
M.P. 19.5 to 21.1	20

Olive District		MPH
OLIVE DISTRICT		40
1 Curve M.P. 0.0 to 0.8		25

SWITCHES—MAXIMUM AUTHORIZED SPEED

Maximum speed permitted through turnout of other than main track switches—10 MPH; all main track turnouts and crossovers—15 MPH; except interlocked switches and crossovers at following locations:

Station	Location	MPH	
Fullerton	Fourth Dist. junction switch—M.P. 165.4	40	
	Orange	WE siding	30
	EE siding (main track)	40	
Irvine	EE two tracks—M.P. 179.1	40	
	Ponto	EE and WE of siding	40
Miramar	WE two main tracks—M.P. 252.9	30	
Elvira	EE two main tracks—M.P. 257.9	40	
Old Town	Two-track junction switch	30	
Olive District			
Atwood	Junction switch	40	

RAILROAD CROSSINGS AT GRADE

Fourth District		
Location	Tracks Governed	Type
Anaheim (2.0 Mi. East)	S.P. Crossing	TCS
Anaheim Sugar Factory Spur	U.P. Crossing	98-B, 98-C

Olive District

Location	Tracks Governed	Type
Olive (1.7 mile west)	S.P. Crossing	TCS

STATIONS OR TRACKS NOT SHOWN IN SCHEDULE

Fourth District			
Location	Mile Posts	Capacity In Feet	Switch Connection
Irvine Spur	178.7	Lgh. 5.3 m.	East
Browning		1080	East
Tustin	179.5	1800	East and West
Stuart	221.7	1210	East and West
Carlsbad	229.3	2500	West
San Diego G. & E. Co. Spur	231.3	1005	East
Solana Beach	241.9	436	East

Escondido District

Talica	3.7	1347	East and West
Buena	12.9	927	West

LENGTHS OF STEMS OF WYES

Location	Feet
Orange	Olive Dist. Main Track
Irvine	1000
Fallbrook Jct.	5044
Escondido Jct.	Escondido Dist. Main Track
Escondido	300
Miramar	3719
San Diego	Harasthy Street Marine Base Spur
National City	1219

TRACK SIDE WARNING DEVICES—SPECIAL RULE 7

Fourth District		
Location	Type	Signals Affected
Bridge 194.6	Highwater	Westward, signal 1951 and control signal east end of siding Galivan
Bridge 197.9	Highwater	Signal 1952 and controlled signal west end of siding Serra
Bridge 207.6	Highwater	Eastward Signal 2062 and westward Control Signal located M.P. 209.2
Bridge 246.9	Highwater	Eastward Signal 2462 and westward Control Signal M.P. 248.8
Olive District		
Bridge 1.6	Highwater	Westward Control Signal Atwood governing movement from Third District to Olive District and Signal 22 for eastward movement.

WESTWARD								Ruling Grade Descending— Feet Per Mile	TIME TABLE NO. 13 April 25, 1982	Mile Post	Capacity of Sidings In Feet
FIRST CLASS											
83	85	81	79	77	75	73	71				
Leave Daily	Leave Sat. Sun. & *Hol. Only	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Except Sat. Sun. & *Hol.		STATIONS		
								26.4	NATIONAL CITY YL	273.1	Yard
								0.0	22ND STREET YL	269.3	
PM	PM	PM	PM	PM	AM	AM	AM	31.0	SAN DIEGO YL	267.5	Yard
7.40	6.10	4.20	3.00	12.10	8.50	7.00	5.15	51.7	OLD TOWN YL	264.2	
7.47	6.17	4.27	3.07	12.17	8.57	7.07	5.22	0.0	ELVIRA	257.9	
								116.2	MIRAMAR	253.0	
								58.1	SORRENTO	249.1	4877
s 8.13	s 6.40	s 4.50	s 3.30	s 12.40	s 9.20	s 7.30	s 5.45	63.4	DEL MAR	244.0	
								63.4	ENCINITAS	238.1	
								64.4	PONTO	233.8	5333
								15.8	ESCONDIDO JCT.	227.2	
s 8.33	s 7.03	s 5.10	s 3.53	s 1.00	s 9.40	s 7.49	s 6.04	65.5	OCEANSIDE	226.2	6096
								69.0	FALLBROOK JCT.	224.1	4569
								58.1	SAN ONOFRE	209.2	4927
		s 5.30	s 4.13					26.6	SAN CLEMENTE	204.8	
								0.0	SERRA	199.8	4956
s 9.03	s 7.33			s 1.32	s 10.12	s 8.18	s 6.33	0.0	SAN JUAN CAPISTRANO	197.2	
								73.9	GALIVAN	192.6	4972
								70.2	EL TORO	188.1	
								63.4	VALENCIA	182.9	5982
								0.0	IRVINE	178.5	
s 9.25	s 7.55	s 6.03	s 4.45	s 1.53	s 10.32	s 8.40	s 6.55	14.3	SANTA ANA	175.5	6048
								39.2	ORANGE	172.6	6250
								16.9	S. P. Crossing ANAHEIM	167.8	3044
s 9.45 PM	s 8.15 PM	s 6.25 PM	s 5.05 PM	s 2.15 PM	s 10.55 AM	s 9.00 AM	s 7.15 AM		FULLERTON	165.0	
Arrive Daily	Arrive Sat. Sun. & *Hol. Only	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Except Sat. Sun. & *Hol.		(107.8)		
(49.1)	(49.1)	(49.1)	(49.1)	(49.1)	(49.1)	(51.1)	(51.1)		Average speed per hour		

OLIVE DISTRICT

WESTWARD	TIME TABLE NO. 13 April 25, 1982	Mile Post	Ruling Grade Descending— Feet Per Mile	Communications Turn Tables and Wyes	Capacity of Sidings In Feet	EASTWARD
	STATIONS					
	ATWOOD	0.0	0.0	Y-B	Yard	
	OLIVE	2.4	0.0			
	S. P. Crossing	2.4	0.0			
	ORANGE	5.8		Y	3280	
	(5.8)					

ESCONDIDO DISTRICT

Westward	TIME TABLE NO. 13 April 25, 1982	Mile Post	Ruling Grade Descending— Feet Per Mile	Communications Turn Tables and Wyes	Capacity of Sidings In Feet	Eastward
	STATIONS					
	ESCONDIDO	21.1	91.3	Y	1376	
	SAN MARCOS	16.2	116.2		866	
	VISTA	9.2	116.2		1811	
	ESCONDIDO JOT. YL	0.0		Y		
	(21.1)					

TCS in effect on main track between Atwood and Orange.

Rule 93: Yard limits at Escondido Jct.

TIME TABLE NO. 13 April 25, 1982		Mile Post	Ruling Grade Descending— Feet Per Mile	Capacity of Sidings to Feet	EASTWARD							
					FIRST CLASS							
					72	74	76	78	80	82	88	84
STATIONS					Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily	Arrive Daily Except Sat. Sun. & *Hol.	Arrive Sat. Sun. & *Hol. Only	Arrive Daily
NATIONAL CITY YL 3.8		273.1	24.3	Yard								
22ND STREET YL 1.8		269.3	22.7		AM	PM	PM	PM	PM	PM	PM	PM
ABS	SAN DIEGO YL 3.3	267.5	52.8	Yard	s 10.45	s 12.35	s 2.40	s 4.35	s 7.45	s 8.40	s 9.20	s 11.05
	OLD TOWN YL 6.3	264.2	65.5		10.27	12.16 PM	2.21	4.16	7.26	8.21	9.01	10.44
ABS	ELVIRA 4.9	257.9	113.5	2 TRKS.								
	MIRAMAR 3.9	253.0	0.0									
	SORRENTO 5.0	249.1	56.0	4877								
	DEL MAR 6.0	244.0	52.8		s 10.06	s 11.53	s 2.00	s 3.55	s 7.05	s 8.00	s 8.41	s 10.23
	ENCINITAS 4.2	238.1	63.4									
	PONTO 6.5	233.8	69.7	5333								
	ESCONDIDO JCT. 1.0	227.2	7.4									
	OCEANSIDE 2.1	226.2	64.9	6096	s 9.46	s 11.33	s 1.40	s 3.32	s 6.45	s 7.40	s 8.18	s 10.03
	FALLBROOK JCT. 14.9	224.1	64.9	4569								
TCS ATS	SAN ONOFRE 4.4	209.2	26.4	4927								
	SAN CLEMENTE 5.0	204.8	26.4			s 11.12	s 1.17					
	SERRA 2.6	199.8	60.5	4956								
	SAN JUAN CAPISTRANO 4.6	197.2	65.6		s 9.12			s 3.02	s 6.11	s 7.06	s 7.48	s 9.33
	GALIVAN 4.5	192.6	67.3	4972								
	EL TORO 5.2	188.1	0.0									
	VALENCIA 4.4	182.9	22.0	5982								
	IRVINE 2.9	178.5	38.5									
	SANTA ANA 2.9	175.5	32.6	6048	s 8.52	s 10.44	s 12.47	s 2.42	s 5.52	s 6.47	s 7.27	s 9.12
	ORANGE 4.6	172.6	29.6	6250								
	S. P. Crossing ANAHEIM 2.8	167.8	22.7	3044								
	FULLERTON	165.0			8.35 AM	10.25 AM	12.30 PM	2.25 PM	5.35 PM	6.30 PM	7.10 PM	8.55 PM
	(107.8)				Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily	Leave Daily Except Sat. Sun. & *Hol.	Leave Sat. Sun. & *Hol. Only	Leave Daily
Average speed per hour					(46.5)	(46.5)	(46.5)	(46.5)	(46.5)	(46.5)	(46.5)	(46.5)

* Day of Traditional Observance: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

HARBOR DISTRICT

WESTWARD	TIME TABLE NO. 13 April 25, 1982				EASTWARD	
Rating Grade Descending—Feet Per Mile	STATIONS		Mile Post	Rating Grade Descending—Feet Per Mile	Communications Turn Tables and Wyes	Capacity of Sidings In Feet
	REDONDO JCT. YL	0.0			R-Y	
61.4	1.5 MALABAR YL	1.5	19.1			Yard
37.0	1.0 S. P. Crossing NADEAU YL	2.5	22.7			
	1.0 S. P. Crossing					
24.7	WINGFOOT YL	3.5	0.0		B	Yard
43.4	2.5 WILDASIN YL	6.0	10.6			Yard
19.4	1.3 VAN NESS YL	7.3	19.4			Yard
0.0	0.7 HYDE PARK YL	8.0	52.8			Yard
52.8	1.9 INGLEWOOD YL	9.9	52.8			Yard
79.2	3.7 LAIRPORT YL	13.6	79.2		B	4962
79.2	1.2 S. P. Crossing EL SEGUNDO YL	14.8			Y	
52.6	1.8 LAWNDALE YL	16.6	51.1			Yard
52.3	3.5 ALCOA YL	20.1	58.4			Yard
79.2	1.6 TORRANCE YL	21.7	79.2			Yard
24.3	1.6 IRONSIDES YL	23.3	0.0			Yard
79.2	3.3 WATSON YL	26.6	52.8		C-R-Y	Yard
	1.4 WILMINGTON YL	28.0			B	Yard
	2.0 PIER A YARD YL				C	Yard
	1.1 WEST THENARD S. P. Crossing YL					
	2.5 LONG BEACH YL					
	(28.0)					

REDONDO DISTRICT

WESTWARD	TIME TABLE NO. 13 April 25, 1982				EASTWARD	
Rating Grade Descending—Feet Per Mile	STATIONS		Mile Post	Rating Grade Descending—Feet Per Mile	Communications Turn Tables and Wyes	Capacity of Sidings In Feet
	REDONDO BEACH YL	20.2				Yard
0.0	1.5 HERMOSA BEACH YL	18.7	42.2			Yard
0.0	1.7 MANHATTAN BEACH YL	17.0	42.2			
52.8	2.2 EL SEGUNDO YL	14.8	49.6		Y	Yard
	(5.4)					

Rule 93: Yard limits Redondo Beach to El Segundo, inclusive. Movement must be "Programmed" by operator, Redondo Jct.

RAILROAD CROSSINGS AT GRADE
Harbor District

Location	Tracks Governed	Type
Redondo Junction Nadeau	U.P. Crossing S.P. Crossing	TCS Automatic interlocking, 321(C), 10 MPH
Nadeau (0.3 Mi. East)	S.P. Crossing	Automatic interlocking, 321(C), 15 MPH
El Segundo (0.2 Mi. East)	S.P. Crossing	Rule 98(A)—10 MPH while head end is passing over crossing
West Thenard	S.P. Crossing	Automatic interlocking, 321(C)

MAXIMUM AUTHORIZED DISTRICT SPEED FOR TRAINS

LOCATION	MPH
HARBOR DIST.	20
Alcoa Spur	15

SPEED RESTRICTIONS

M.P. 0.0 to St. Crossing M.P. 1.6	12
M.P. 1.6 to 10.1	15
St. Crossing M.P. 13.1	15
M.P. 20.0 to 23.0	15
All movements Harbor Belt Line.	10
Between West Thenard and Long Beach	10

REDONDO DIST. 15

Trains and engines will reduce speed to 5 MPH 250 feet in advance and until engine occupies the following crossings:

- Rosecrans Avenue—M.P. 15.5
- Pacific Avenue—M.P. 16.2
- Fifteenth Street—M.P. 16.8
- Manhattan Beach Boulevard—M.P. 17.1
- Pier Avenue—M.P. 18.7

Rule 93: Yard limits entire Harbor District, Harbor Belt Line, and West Thenard to Long Beach.

Through movements will be programmed to prevent conflict between Redondo Jct. and Watson. Whenever the term "programmed" appears it requires that train and engine crews be provided necessary information to prevent conflict.

Redondo Junction-Watson: Conductor or Engineer on through movements must contact Redondo Junction before leaving Watson or Redondo Junction to determine whether or not there are other conflicting through moves. "Program movement". Movement must be programmed by Operator, Redondo Junction.

Spring point derail located at 2414 feet west of M.P. 27, west end Watson Yard. Normal position set to derail for westward movements.

Light indicators are located between Malabar and Wingfoot:

For westward movement at M.P. 1.7 with 1000 foot approach circuit.

For eastward movement at M.P. 2.3 with 1000 foot approach circuit.

Indicators are lighted continuously displaying Red aspect, except when engines or cars foul approach circuit, indicator will display a Green aspect if limits are unoccupied.

If indicator does not change to a Green aspect when engines or cars foul approach circuit, Stop must be made and movement must be protected.

When clearing the main track within the above limits, main track switch must not be returned to normal until engine and cars are clear of main track. Main track must not again be fouled without providing proper protection and in addition main track switch must be opened and wait five minutes.

Before making movements in either direction over Harbor Belt Line tracks between Anaheim St. and Pier A Yard or San Pedro, authority must be secured from Harbor Belt Line Yardmaster. All movements will be made as prescribed by Rule 93, Santa Fe rules apply.

Normal position of switches of crossover located 100 feet west of Avalon Blvd. is lined for crossover movement.

Before making movements over Southern Pacific joint track between West Thenard and Long Beach, authority must be secured from Southern Pacific Trainmasters officer, Long Beach. All movements will be made as prescribed by Rule 93, Santa Fe rules apply.

SWITCHES—MAXIMUM AUTHORIZED SPEED

Maximum speed permitted through turnout of other than main track switches—10 MPH; All main track turnouts and crossovers—15 MPH.

LENGTHS OF STEMS OF WYES

Location	Feet
Redondo Junction	Harbor Dist. Main Track
El Segundo	Redondo Dist. Main Track
Watson	3800

Normal position of junction switches
El Segundo for Harbor District.

SAN JACINTO DISTRICT

WESTWARD	TIME TABLE				EASTWARD
Rating Grade Descending—Feet Per Mile	NO. 13		Mile Post	Rating Grade Descending—Feet Per Mile	Capacity of Sidings In Feet
	April 25, 1982				
	STATIONS				
	HIGHGROVE YL	0.0		1018	
	S. P. Crossing				
0.0	7.2		116.2		
	BOX SPRINGS YL	7.2		1555	
52.8	2.4		31.4		
	MARCH FIELD	9.6		B	
17.6	1.0		0.0		
	ALESSANDRO	10.8		2046	
47.5	2.9		0.0		
	VAL VERDE	13.5		1105	
28.6	4.8		9.5		
	PERRIS	18.3		Yard	
63.4	4.4		21.6		
	ETHANAC	22.7		1030	
42.2	6.2		49.3		
	WINCHESTER	28.9		1570	
0.0	7.1		52.8		
	HEMET YL	38.0		B Yard	
63.4	2.3		4.3		
	SAN JACINTO YL	38.3		Y Yard	
	(38.3)				

Rule 93: Yard limits Highgrove to Box Springs, and Hemet to San Jacinto, inclusive.

Normal position of junction switches: Highgrove for Third District.

MAXIMUM AUTHORIZED DISTRICT SPEED FOR TRAINS

Location	MPH
San Jacinto District	40

SPEED RESTRICTIONS

Highgrove to Box Springs	20
Curve M.P. 18 to 19.2	15
M.P. 34.8 to 35.7	15
M.P. 35.7 to San Jacinto	10

SWITCHES—MAXIMUM AUTHORIZED SPEED

Maximum speed permitted through turnout of other than main track switches—10 MPH; all main track turnouts and crossovers—15 MPH.

RAILROAD CROSSING AT GRADE

Location	Tracks Governed	Type
Highgrove (1.5 Mi. West)	S.P. Crossing	Automatic interlocking Rule 321(C)

STATION OR TRACKS NOT SHOWN IN SCHEDULE

Location	Mile Post	Capacity in Feet	Switch Connection
Lily Cup	0.6	545	East and West
Mayer Farms	15.9	920	East and West
Granite Spur	14.5	Lgh. 0.9 m.	Wye
Ellis	19.9	800	East
Egan	33.1	760	East and West

LENGTHS OF STEMS OF WYES

Location	Feet
Val Verde	Granite Spur
San Jacinto	640

1. Rule 1: Standard clocks are located at on duty points at Needles, Parker, Blythe, Barstow, San Bernardino, Redondo Jct. roundhouse, Hobart yard office, Fullerton, San Diego and 22nd St. yard office.

2. Union Pacific trains using joint tracks between Riverside Jct. and Daggett, and Southern Pacific trains using Santa Fe main track M.P. 104.5 and M.P. 105.5, will be governed by AT&SF Time Table and Rules, Operating Department, and having complied with their company's time regulations may proceed over joint tracks.

3. Within TCS limits, where maximum speed exceeds 20 MPH a train or engine must not clear the main track through a hand-thrown switch, not electrically locked, for the purpose of meeting or passing or being passed by another train or engine.

Following is a list of such switches on Los Angeles and Los Angeles Terminal Divisions not electrically locked:

NEEDLES DISTRICT:

M.P. 737.7 - South Track

FIRST DISTRICT:

M.P. 59.3x - North Track
 M.P. 66.3 - North Track
 M.P. 75.0 - South Track
 M.P. 76.7 - South Track
 M.P. 79.9 - North Track

THIRD DISTRICT:

M.P. 7.3 - North Track
 M.P. 7.4 - North Track
 M.P. 7.5 - South Track
 M.P. 7.7 South Track
 M.P. 8.6 - South Track
 M.P. 8.9 - South Track
 M.P. 8.91 - South Track
 M.P. 16.7 - Arlington
 M.P. 38.7 - Main Track
 M.P. 39.3 - South Track
 M.P. 39.8 - South Track
 M.P. 43.8 - South Track
 M.P. 44.1 - North Track
 M.P. 44.4 - North Track
 M.P. 151.2 - South Track, Reeves Co, CLIC 5694
 M.P. 152.4 - South Track, Sunshine Biscuit, CLIC 5703
 M.P. 152.9 - South Track, Los Nietos Team, CLIC 5710
 M.P. 153.3 - South Track, Los Nietos Team, CLIC 5710
 M.P. 153.2 - North Track, Fluid P.K. Pumps Armco, CLIC 5711
 M.P. 153.5 - South Track, Pacific Clay, CLIC 5713
 M.P. 154.1 - South Track, Pryor Giggey, CLIC 5742
 M.P. 154.9 - South Track, Getty Oil, CLIC 5755
 M.P. 155.1 - South Track, Powerine Oil, CLIC 5756
 M.P. 155.5 - South Track, Kelly Pipe, CLIC 5765
 M.P. 156.0 - South Track, Halliburton, CLIC 5777
 M.P. 156.9 - South Track, Federal envelope, CLIC 5811
 M.P. 157.4 - South Track, Coast Hide Lead, CLIC 5815
 M.P. 157.7 - North Track, Plywood Products, CLIC 5870
 M.P. 158.3 - North Track, Pacific Pump, CLIC 6199
 M.P. 160.8 - South Track, Nutrilite Spur, CLIC 6811
 M.P. 161.1 - South Track, H&L Spur, CLIC 7095
 M.P. 161.6 - South Track
 M.P. 162.2 - South Track

FOURTH DISTRICT:

M.P. 168.9 - Anaheim
 M.P. 169.2 - Anaheim
 M.P. 171.4 - Orange
 M.P. 221.4 - Stuart
 M.P. 221.7 - Stuart
 M.P. 234.2 - Ponto Siding
 M.P. 237.9 - Encinitas
 M.P. 238.3 - Encinitas
 M.P. 241.8 - Solana Beach
 M.P. 242.1 - Solana Beach
 M.P. 243.3 - Del Mar
 M.P. 248.3 - Sorrento
 M.P. 258.6 - Main Track
 M.P. 258.8 - Main Track
 M.P. 260.2 - Pacific Beach
 M.P. 260.4 - Pacific Beach
 M.P. 263.2 - Main Track

OLIVE DISTRICT:

M.P. 0.6 - Atwood
 M.P. 0.8 - Atwood
 M.P. 0.9 - Atwood
 M.P. 1.3 - Main Track
 M.P. 3.3 - Main Track
 M.P. 3.5 - Main Track
 M.P. 3.6 - Main Track
 M.P. 4.1 - Main Track
 M.P. 5.0 - Orange

4. Rule 80: Bulletin books are located at Needles, Parker, Blythe, Barstow, Victorville, San Bernardino, Kaiser, Riverside, Fullerton, Pico Rivera, Union Station, Redondo Junction, Hobart, Watson, San Diego, and 22nd Street.

5. Rule 125: All sidings having hand-thrown derails will have derail locked off rail, except when engines or cars are left unattended on siding.

6. Rule 759. Following is a list of structures:
 Barstow, First St. viaduct;
 San Bernardino, Mt. Vernon Ave. viaduct;
 Colton, East end track E Griffin Wheel Co.;
 First Street, viaduct over old passenger tracks; and
 Los Angeles, Union Station, train sheds.

7. Rule 105(A) Track side Warning Devices:

When rock slide indicated, trains must proceed at restricted speed until track at this location is known to be clear.

When trains stopped at signals in connection with high water indicator, bridge and track must be inspected before proceeding over bridge.

HOT BOX AND DRAGGING EQUIPMENT DETECTORS

Abnormal heat from hot wheels (sticking brakes), overheated journals, traction motor suspension bearings will actuate detectors, and dragging equipment will also actuate detectors at locations so equipped. When a train is stopped by detector, Form 1572 standard must be filed at first office of communication.

LOCATOR TYPE

When actuated, a rotating white light will illuminate at detector (scanner) and locator locations, and the train must stop with head end at locator, if possible, observe readout and comply with instructions in locator cabinet.

If lamp or counters fail to show location of overheated equipment, the entire train must be thoroughly inspected for hot journals, wheels, bearings, or dragging equipment.

When track side indicator is illuminated before the train reaches scanner, stop must be made and locator observed, unless otherwise instructed by train dispatcher. If any lamps in locator cabinet are lighted, be governed by above instructions. If no lamps are lighted, the train may proceed at prescribed speed and must be observed closely en route.

Radio Readout (Reporter Type)

Preceding any voice transmission, the following identification will be heard: "SANTA FE RAILROAD (Station and State) NORTH OR SOUTH TRACK"

As train approaches scanner, this transmission will indicate the system is operational. After the train passes scanner, if no defects, reporter will announce "NO DEFECTS". When actuated, a rotating white light will be displayed at detector. In addition, if train is on the North track, a fast beeping tone will be heard on the radio and, if train is on the South track, a slow beeping tone will be heard. If two trains are passing detector at same time and both have defects, the beeping tone will revert to a continuous unmodulated tone. When any of these warnings are observed, crew must immediately prepare to stop for inspection with rear of train beyond detector.

After passing detector and the tone stops, the following will be heard twice if train has two hot boxes and one dragging equipment defect.

- A. "First hot box, right side, one seven eight"
- B. "Second hot box, left side, one four three"
- C. "First dragging equipment, near axle zero six eight"

If two trains are involved, reports will alternate until each have been reported twice. The detector will store up to three hot boxes and dragging equipment defects. If three of either type are reported, the remainder of train must be inspected for additional defects.

The left or right mentioned is determined by facing direction train is moving. Reference to location of defective equipment will be from the rear of the train.

If, when approaching, detector "Integrity Failure" is heard and rotating white light is illuminated before train reaches scanner, it will indicate that system is not operational; however, the audible tone and message could still be transmitted. If no additional alarm is heard, train must be stopped and inspected unless otherwise instructed by the train dispatcher.

If, after head end of train passes detector the white rotating light becomes illuminated and no audible tone or message transmitted, train must be stopped and entire train inspected for defects.

INSTRUCTIONS FOR ALL TYPES DETECTORS

If defect is not found on equipment indicated, close inspection must be made on three cars (or units) on either side of indicated equipment.

On inspections required, give particular attention to heat of journals and hub of wheels. If nothing found wrong, train may proceed at prescribed speed, but must make two stops within next 60 miles at approximately 30 mile intervals for thorough inspection of train, unless train passes an intervening hot box detector or train is delivered to terminal where mechanical inspection is made. At crew change points where mechanical inspections are not made, inbound crew will inform relieving crew of existing condition.

When suspected journal on freight equipment indicated by locator is a roller bearing journal, the car must be set out unless cause found to be sticking brakes and condition corrected.

Trains must not exceed speed of 30 MPH while moving over hot box detectors (scanners) when:

- (a) it is snowing or sleeting; or
- (b) there is snow on ground which can be agitated by a moving train.

SPEED REGULATIONS

8. (A) Maximum authorized speed for freight trains handling one or more empty cars 55 MPH.

(Cabooses and cars loaded with empty trailers or empty containers, and flat cars containing generator sets are considered loads.)

(Cars loaded with 20-ft. bogies (empty chassis) are not considered as cars loaded with empty trailers and are restricted to 55 MPH.)

(B) Freight trains averaging 90 tons or more per car or having more than 5000 tons, must not exceed 45 MPH.

9. Between Needles and Summit, freight trains may observe passenger train speed but not to exceed 70 MPH, except Needles District eastward M.P. 701.5 to M.P. 696.2 and from M.P. 686.2 to M.P. 671.4 and westward from M.P. 689.5 to M.P. 693.7, provided:

- (1) Maximum district speed is 60 MPH for freight trains.
- (2) Train does not exceed 5000 tons.
- (3) Train does not exceed 90 cars.
- (4) Train does not average more than 75 tons per car.
- (5) Locomotive can control speed to 70 MPH without use of air brakes.

10. In freight service with dynamic brake not in use maximum speed on descending grades as follows:

1.0 to 1.5% (52.8 to 79.2 feet per mile)	30 MPH
1.5 to 2.0% (79.2 to 105.6 feet per mile)	25 MPH
2.0% (105.6 feet per mile)	15 MPH

11. Where street or highway crossings are shown, speed limit applies only while head end of train is passing.

12. Trains or engines using other than main track must not exceed turnout speed for that track, unless maximum speed otherwise indicated.

13. MAXIMUM SPEED OF ENGINES

Engines	Forward or dead in train MPH	When not controlled from leading unit MPH
AMTRAK 100-761, 764-799		
5940-5948, 5990-5998	90*	45
** 1215-1245, 1453, 1460	45	45
ALL OTHER CLASSES	70	45

Forward speed applies when lead unit of train is controlling and is in backing position.

EXCEPTION: When such unit is car body type, maximum authorized speed 45 MPH.

*Engine without cars must not exceed 70 MPH.

**When used as controlling unit must not exceed 20 MPH.

LOS ANGELES DIVISION

SPECIAL RULES 17

Speed limit 50 MPH on following curves boarded in excess of 50 MPH for trains having Amtrak 500 and 600 class units in consist:

First District

M.P. 79.2 to M.P. 79.5
Between Verdemon and San Bernardino on both tracks.

Second District

M.P. 111.8 to M.P. 115.5
M.P. 118.8 to M.P. 119.7
M.P. 123.5 to M.P. 123.8
M.P. 127.3 to M.P. 128.3
Between San Dimas and Pasadena.

Third District

M.P. 152.6 to M.P. 154.2
M.P. 160.8 to M.P. 161.1
M.P. 165.3 to M.P. 165.4
Between D. T. Junction and Fullerton.

Fourth District

M.P. 165.4 to M.P. 166.0
Between Fullerton and Anaheim.
M.P. 250.0 to M.P. 250.5
M.P. 254.2 to M.P. 255.4
M.P. 256.7 to M.P. 260.3
M.P. 262.4 to M.P. 262.7
Between Sorrento and Old Town.

Light Forward

Diesels without dynamic brakes in use	Ash Hill-Bagdad	24
	Goffs-Needles	24
	Summit to Victorville . .	30
	Summit-Cajon	15
	Cajon-San Bernardino . .	20

14. Rule 108: Equipment listed below must not be moved through water above top of rail greater than the depths and not in excess of the speeds shown:

MAXIMUM DEPTH OF WATER THROUGH WHICH ENGINE MAY BE OPERATED AND MAXIMUM SPEEDS IN SUCH OPERATION

	Maximum depth above top of rail (inches)	Maximum speed (MPH)
All Classes, except Amtrak	4	5
Amtrak	2	2

15. Derricks, cranes, pile drivers, spreaders and similar machinery moving on their own running gear must not be moved in trains except on authority of trainmaster, and trains handling such equipment must not exceed speeds indicated below:

District	Wrecking Derricks		Pile Drivers	
	M.P.H.	M.P.H.	M.P.H.	M.P.H.
Needles, Cadiz, First, Second, Third and Fourth Districts	40	45	45	30
Olive District	40	40	40	30
All other Districts	15	15	15	15

Derrick AT 199787 locomotive crane AT-199720 and pile drivers must be handled in trains next to engine.

Trains or engines handling wrecking derricks, cranes, pile drivers, Jordan spreaders, and similar machinery moving on their own running gear, through a turnout must not exceed one-half the maximum authorized speed for that turnout.

All foreign line scale test cars must be handled in trains immediately ahead of caboose at speed not exceeding 50 MPH.

When helper engine is placed behind a caboose, not more than two six-axle operating units totaling not more than 179,400 pounds tractive effort or not more than two four-axle operating units totaling not more than 135,600 pounds tractive effort, or a combination of one six-axle and one four-axle unit totaling not more than 157,600 pounds tractive effort will be used. Below is list showing the weight, tractive effort and horsepower rating of units by class:

CLASS	MAKE	TYPE	WEIGHT	TRACTIVE EFFORT	HORSE-POWER
1215	EMD	SSB1200	246,000	36,000	1200
1300	ALCO	CRSD20	380,000	69,800	2050
1310	EMD	GP7	249,000	41,300	1500
1450	EMD	SW	248,000	28,000	900
1460	EMD	SW7	262,500	41,300	1500
2000	EMD	GP7	249,000	41,300	1500
2244	EMD	GP9	249,000	45,200	1750
2417	EMD	GF7	249,000	41,300	1500
2700	EMD	GP30	262,900	50,064	2250
2800	EMD	GP35	266,000	43,850	2500
3000	EMD	GP20	265,000	44,800	2000
3200	EMD	GP30	262,900	50,064	2250
3300	EMD	GP35	266,000	43,850	2500
3500	EMD	GP38	262,500	46,720	2000
3600	EMD	GP39-2	264,400	55,400	2300
3669	EMD	GP39-2	264,000	55,400	2300
3800	EMD	GP40X	264,400	62,500	3500
3810	EMD	GP50	264,400	64,200	3500
4000	EMD	SD39	391,500	82,284	2300
4600	EMD	SD26	387,000	74,152	2625
5000	EMD	SD40	391,500	70,067	3000
5020	EMD	SD40-2	391,500	70,970	3000
5071	EMD	SD40-2	391,500	83,100	3000
5170	EMD	SD40-2	391,500	83,100	3000
5200	EMD	SD40-2	391,500	90,475	3000
5300	EMD	SD45	391,500	72,286	3600
5426	EMD	SD45	389,500	72,286	3600
5490	EMD	SD45	391,886	72,286	3600
5500	EMD	SD45	391,500	72,286	3600
5590	EMD	SD45	391,500	72,290	3600
5615	EMD	SD45	391,500	68,440	3600
5625	EMD	SD45-2	395,500	73,650	3600
5662	EMD	SD45-2	391,500	73,650	3600
5705	EMD	SD45-2	391,500	68,440	3600
5900	EMD	F45	395,000	72,290	3600
5940	EMD	FP45	399,000	68,006	3600
5950	EMD	SDFP45	395,500	72,290	3600
5990	EMD	SDFP45	399,000	68,006	3600
6300	GE	U23B	262,500	60,400	2250
6350	GE	B23-7	268,000	61,000	2250
6364	GE	B23-7	265,000	60,400	2250
6390	GE	B23-7	264,000	61,000	2250
7484	GE	B36-7	264,000	64,600	3600
7500	GE	U23C	395,000	85,800	2250
8010	GE	C30-7	398,800	90,600	3000
8064	GE	C30-7	392,500	91,500	3000
8099	GE	C30-7	395,000	91,500	3000
8500	GE	U33C	391,500	90,600	3300
8700	GE	U36C	391,500	90,600	3600

HAZARDOUS MATERIAL

- I. It is the conductor's responsibility to determine the identity and location of hazardous material shipments in the train. The conductor will communicate the information to members of the train and engine crew. Hazardous material shipments can be identified by checking:

Waybill The train crew is required to have a shipping paper (waybill) for each hazardous material shipment in the train. A shipping paper is also required for certain empty tank cars last containing hazardous materials. Essential information included on the shipping paper is the proper shipping name, hazard class, quantity, identification number and -RQ- notation when applicable, and placards applied.

Wheel Reports The train crew is required to have a wheel report, consist, switch list or other document indicating the position in the train of each loaded placarded car.

Placards Certain cars, trailers, and containers loaded with hazardous materials are required to be placarded. Certain empty tank cars which last contained a hazardous material are required to be placarded.

Commodity Codes The commodity code will be shown on the waybill and the wheel report. Commodity codes starting with "49" indicate a hazardous material.

- II. In the event of an incident involving hazardous materials, your safety is the first consideration. The following will apply, IF IT IS SAFE TO DO SO:

- A. Notify the Chief Dispatcher by the quickest means possible. If Railroad communications fail or are not available, call long distance to the telephone number listed below:

(714) 884-2111 Extension 241 or 359

- B. Determine the location in the trains of cars involved in the incident. Approach from the upwind (wind at your back) side and go no nearer than absolutely necessary to assess the condition of the cars. Use your eyes, ears and nose to detect any vapor or gas clouds, fire, smoke, unusual smells or noises, leaking material, etc. If any are present, DO NOT GO NEAR THE CARS. Smoking is prohibited in the vicinity of a hazardous material incident.

- C. Assist injured. Call for medical assistance if needed.

- D. The Chief Dispatcher will be furnished as much of the following information as possible:

(1) Train identification, symbol, employe name and position.

(2) Specific location of the incident (station, milepost location, nearest street or highway crossing).

(3) Nature of the incident - number of cars involved, if upright or turned over, if ruptured or leaking, on fire or near fire, vapor or gas cloud, unusual odor or noise, etc.

(4) Waybill Information

(a) Car number

(b) Proper shipping name of contents

(c) Hazard class of material

(d) Shipper and consignee

(e) Standard Transportation Commodity Code (49 Series Number)

(5) Weather conditions (wind direction and intensity, temperature, if raining, snowing, foggy, etc.).

(6) Location of roads, buildings, people or property subject to harm or damage from the emergency.

(7) Location of access roads.

(8) Location of nearby stream, rivers, ponds, lakes or other bodies of water.

(9) Any other information that will help the dispatcher understand the situation.

- E. Warn people to stay away from the emergency area.

- F. Contact emergency response personnel upon their arrival (police, sheriff, fire department, etc.) and provide the person in charge with information off shipping papers. DO NOT SURRENDER DOCUMENTS TO ANYONE OTHER THAN AUTHORIZED RAILROAD PERSONNEL.

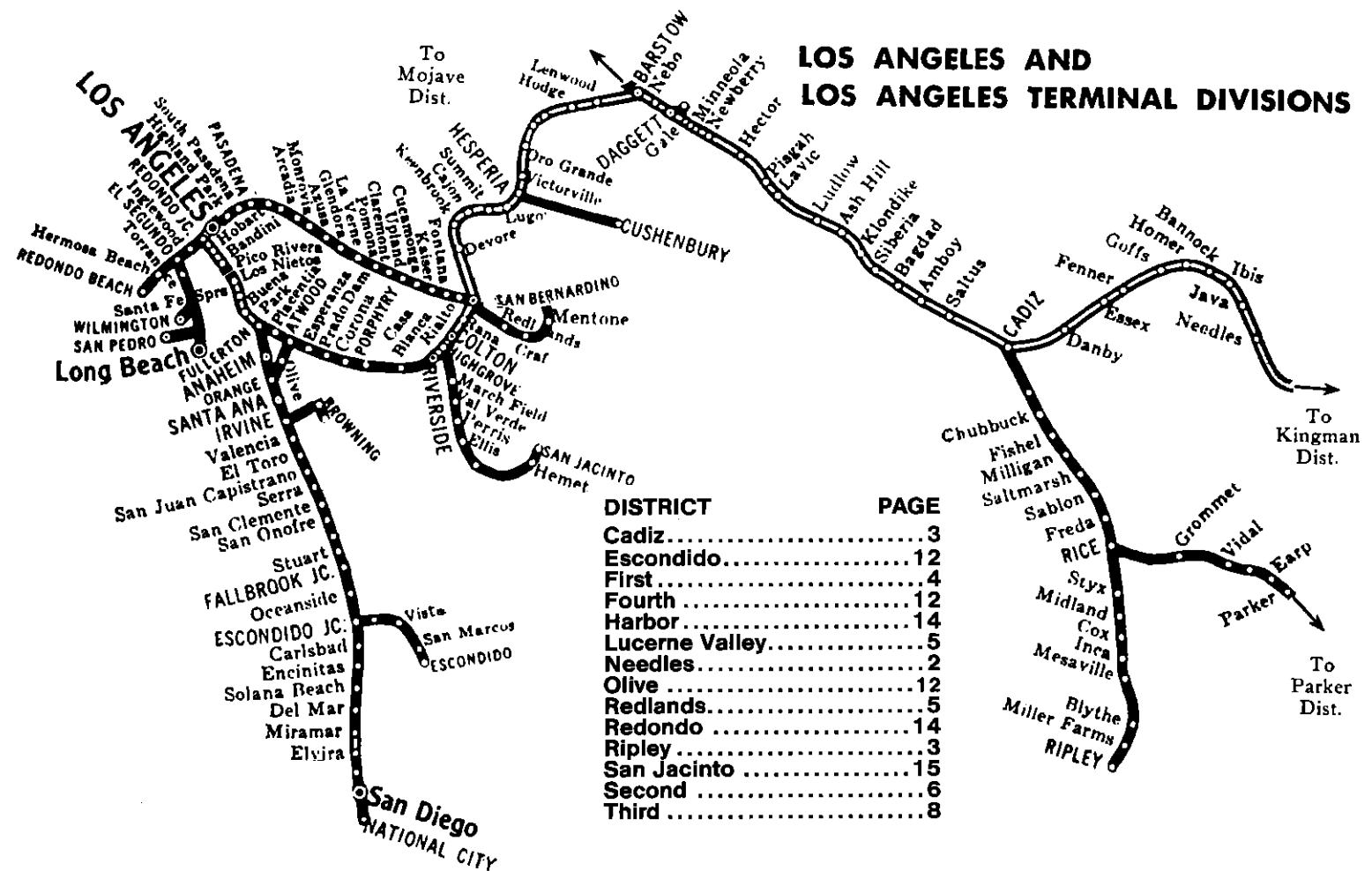
- G. Remain at the scene at a safe distance until relieved by a railroad Operating Department officer.

1 PLACARD APPLIED ON CAR		POSITION IN TRAIN OF PLACARDED CARS CONTAINING HAZARDOUS MATERIALS							
		ANY CARS (except tank cars and flatcars)	TANK CAR	OTHER THAN TANK CAR	ANY CAR	TANK CAR	OTHER THAN TANK CAR	TANK CAR	TANK CAR
2 TYPE OF CAR		EXPLOSIVES-A	POISON GAS	POISON GAS	RADIOACTIVE	ANY PLACARDED LOAD OTHER THAN COMBUSTIBLE OR POISON GAS	OTHER THAN PLACARDED EXPLOSIVES-A, POISON GAS OR COMBUSTIBLE	PLACARDED EMPTY EXCEPT COMBUSTIBLE	COMBUSTIBLE
3 RESTRICTIONS									
4	WHEN TRAIN LENGTH PERMITS	MUST NOT BE NEARER THAN 6IN FROM ENGINE OCCUPIED CABOOSE OR PASSENGER CAR	✓	✓		✓			
5	WHEN TRAIN LENGTH DOES NOT PERMIT	MUST BE NEAR MIDDLE OF TRAIN BUT NOT NEARER THAN 2ND FROM ENGINE, OCCUPIED CABOOSE.	✓	✓		✓			
6	MUST NOT BE PLACED NEXT TO CAR PLACARDED	LOADED FLAT CAR, A FLATCAR EQUIPPED WITH PERMANENTLY ATTACHED ENDS OF RIGID CONSTRUCTION IS CONSIDERED TO BE AN OPEN-TOP CAR.	✓ ¹	✓	✓		✓ ²		
7		AN OPEN-TOP CAR WHEN ANY OF THE LADING PROTRUDES BEYOND THE CAR ENDS OR WHEN ANY OF THE LADING EXTENDING ABOVE THE CAR ENDS IS LIABLE TO SHIFT SO AS TO PROTRUDE BEYOND THE CAR ENDS.	✓	✓	✓		✓		
8		ENGINE	✓	✓	✓	✓	✓		✓
9		EXCEPT AS PROVIDED IN LINES 10 AND 11, A CAR OCCUPIED BY ANY PERSON OR A PASSENGER CAR OR COMBINATION CAR THAT MAY BE OCCUPIED	✓ ³	✓ ³	✓ ³	✓	✓	✓ ⁴	✓
10		OCCUPIED CABOOSE	✓ ³	✓ ³	✓ ³	✓	✓		✓
11		OCCUPIED GUARD CAR	✓ ³	✓ ³	✓ ³		✓		
12		UNDEVELOPED FILM				✓			
13		A CAR WITH AUTOMATIC REFRIGERATION OR HEATING APPARATUS IN OPERATION, OR A CAR WITH OPEN-FLAME APPARATUS IN SERVICE, OR WITH AN INTERNAL COMBUSTION ENGINE IN OPERATION.	✓	✓	✓		✓		
14		A CAR CONTAINING LIGHTED HEATERS, STOVES, OR LANTERNS.	✓	✓	✓				
15		EXPLOSIVES A		✓	✓	✓	✓	✓	
16	POISON GAS	✓			✓	✓	✓		
17	LOADED PLACARDED CAR, OTHER THAN A CAR PLACARDED WITH THE SAME PLACARD OR THE "COMBUSTIBLE" PLACARD.	✓	✓	✓	✓				
18	RADIOACTIVE	✓	✓	✓		✓	✓		

FOOTNOTES.

1. Loaded cars placarded "EXPLOSIVES A" may be placed next to each other.
2. A specially equipped car in trailer-on-flatcar or container-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 loaded tank cars subject to the following: this exception for cars in trailer-on-flatcar service does not apply to 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.

LOS ANGELES AND LOS ANGELES TERMINAL DIVISIONS



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San Jacinto.....	15
Second.....	6
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FREIGHT TRAIN SCHEDULE (For Information Only)

WESTWARD

Trains	Needles		Barstow		San Bernardino		Hobart	
	Lv.	Arr.	Lv.	Arr.	Lv.	Arr.	Lv.	Arr.
168	9:35A	1:15P	2:00P	4:45P	5:00P	8:00P		
*178	8:35P	12:15A	1:00A	3:45A	4:00A	6:00A		
188	2:35P	6:15P	7:00P	9:45P	10:00P	11:59P		
189	12:45P	4:05P	5:05P					
199	4:10A	7:20A	8:20A					
288	12:50P	4:50P	6:10P	9:20P	9:30P	11:30P		
308	9:55P	1:55A	3:15A	6:25A	6:40A	9:10A		
348	4:25A	8:45A						
408	5:10A	9:40A						
508	6:15A	11:25A						
568	8:45A	2:30P						
309	6:35P	10:35P	8:45A					
588	6:10P	10:10P	11:30P	2:10A	2:20A	4:30A		
668	3:10P	6:50P	7:35P	10:05P	10:15P	11:59P		
678	11:45A	4:45P						
818			12:01A	3:30A	3:45A	6:00A		
838			9:00P	2:00A	3:00A	7:00A		
858			12:01A	3:30A	3:45A	7:00A		
898			12:01P	3:45P	4:15P	6:00P		

*One Hour Later on Fri., Sat., Sun. & Mon.

708	Lv. Parker	5:30A	3254	Lv. Los Angeles	7:30P
	Ar. Barstow	12:01P		Ar. San Diego	12:40A
807	Lv. Barstow	10:00A	3253	Lv. San Diego	12:40A
	Ar. Parker	4:00P		Ar. Los Angeles	5:50A
5798	YK Coal		3251	Lv. San Bernardino	5:30P
5788	Coal Mfys			Ar. San Diego	10:30P
			3252	Lv. San Diego	11:30P
				Ar. San Bernardino	4:30A

FREIGHT TRAIN SCHEDULE (For Information Only)

EASTWARD

Trains	Hobart		San Bernardino		Barstow		Needles	
	Lv.	Arr.	Lv.	Arr.	Lv.	Arr.	Lv.	Arr.
803					12:01A	3:40A		
804					4:00A	8:00A		
805					6:00P	9:55P		
808	12:01A	3:30A	4:00A	7:00A				
811	9:00P	11:40P	12:10A	3:05A	4:05A	8:10A		
826					8:00A	12:01P		
828	12:01A	3:30A	4:00A	7:00A				
861	8:30P	10:30P	10:45P	1:15A	2:00A	6:00A		
865					4:00P	7:55P		
868	12:01A	3:30A	4:00A	7:00A				
876					8:30A	11:55A		
878	1:30A	4:00A	4:30A	7:30A				
881	4:00A	5:50A	6:05A	8:30A	9:10A	12:40P		
883	5:30A	7:25A	7:45A	10:15A	11:00A	2:30P		
885	11:00A	12:45P	1:00P	4:00P	5:15P	8:55P		
886	8:00A	9:55A	10:05A	12:25P	1:05P	4:50P		
888	4:00P	7:30P	8:00P	11:00P				
901					8:15P	1:05A		
971					9:40A	11:00A	2:50P	
973					11:45P	2:15A	7:45A	
975					9:30P	12:01P	4:20P	
981					11:40A	1:00P	4:50P	
991					3:45P	4:15P	7:15P	

SPEED TABLE—FOR INFORMATION ONLY

Time Per Mile	Miles Per Hour	Time Per Mile	Miles Per Hour	Time Per Mile	Miles Per Hour
Min. Sec.		Min. Sec.		Min. Sec.	
36	100	58	62.1	1	40
37	97.3	59	61.0	1	42
38	94.7	1	60.0	1	44
39	92.3	1	58.0	1	46
40	90.0	1	56.2	1	48
41	87.8	1	54.5	1	50
42	85.7	1	52.9	1	52
43	83.7	1	51.4	1	54
44	81.8	1	50.0	1	56
45	80.0	1	48.6	1	58
46	78.3	1	47.4	2	30.0
47	76.6	1	46.1	2	05
48	75.0	1	45.0	2	10
49	73.5	1	43.9	2	15
50	72.0	1	42.9	2	30
51	70.6	1	41.9	2	45
52	69.2	1	40.9	3	00
53	67.9	1	40.0	3	30
54	66.6	1	39.1	4	00
55	65.5	1	38.3	5	00
56	64.2	1	37.5	6	00
57	63.2	1	36.8	12	00

THE SANTA FE EMPLOYEES COAST LINES HOSPITAL ASSOCIATION
 DR. R. R. HARE, MEDICAL DIRECTOR-CHIEF EXECUTIVE OFFICER
 Los Angeles, Calif.

R. N. CROW, GENERAL WATCH INSPECTOR
 Topeka, Kansas

For name and address of local surgeons and local watch inspector, refer to bulletin book.