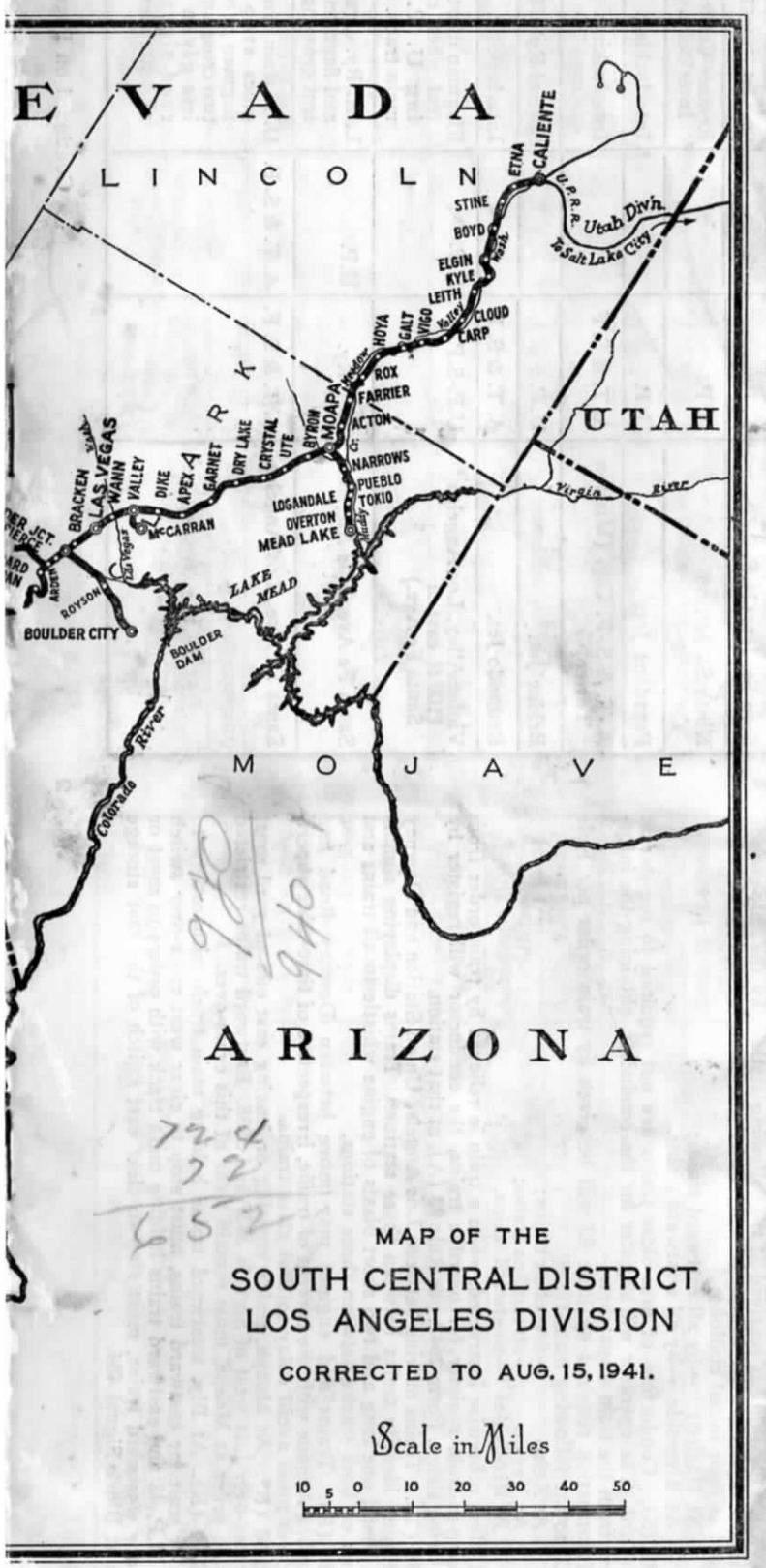


MAP OF THE
SOUTH CENTRAL DISTRICT
LOS ANGELES DIVISION
CORRECTED TO AUG. 15, 1941.

Scale in Miles

10 5 0 10 20 30 40 50

UNION PACIFIC RAILROAD COMPANY
South-Central District

Los Angeles Division

Special Rules No. 4

Effective Sunday, March 1, 1942

Superseding Special Rules No. 3

Employes whose duties are in any way affected thereby, must have a copy of these rules with them while on duty.

H. H. LARSON, Superintendent

J. W. MYERS, General Superintendent

R. E. TITUS
General Manager

P. J. LYNCH
General Supt. Transportation

Serial No. 241

3 (R). Referring to Rule 3(A). Watch comparison of conductors and engine foreman with their enginemen must be made on the ground.

5 (R). Unless otherwise directed, freight trains must enter and leave East Yard at Telegraph Road.

19 (R). Rules S-19, D-19 and 19(A) are modified to authorize the use of markers displaying red and yellow instead of red and green between Yermo and Daggett and between Riverside Jct. and Los Angeles.

26 (R). When a carman is accompanying equipment, or at points where work is of emergency character and Rule 26 cannot be complied with, protection must be arranged as follows: Before carman goes under or between cars, yard or trainman must give hand or lamp stop signal and receive whistle acknowledgment from engineman.

Train must not be moved, nor air brakes applied or released, until carman is out from under or from between cars and yard or trainman so indicates to engineman.

The yard or trainman must remain with the carman as long as carman works under or between cars, and the yard or trainman will be responsible for the carman's protection.

27 (R). Switch lights will not be used at night and trains must approach all facing point switches prepared to stop and must know that the switches are in proper position before passing over them at the following locations:

Pasadena Branch	Boulder City Branch	Crestmore Branch
Glendale Branch	St. Thomas Branch	Crestmore yard limits
Anaheim Branch		

30 (R). Within the corporate limits of towns and cities named below, the engine bell must be rung continuously while the train or engine is moving:

Riverside Ontario Pomona Los Angeles

83 (R). Clearance must be received as follows:

At Kelso —all trains;
At Daggett —all eastward trains;
At Riverside —all westward trains.

Trains are not required to receive a clearance per Rule 83 (D) at initial stations which are not train order offices.

When a clearance is received at the following stations by the only section of the trains designated below, it will confer the same authority as when received at their initial stations:

At Daggett —by all eastward trains;
At Riverside —by all westward trains.

83 (S). Conductors of first class trains are not required to register at East Yard. The operator will register for the conductor, obtaining the information from the train dispatcher.

Information required by Rule 83 will be given by train order per Rule 83 (C) to the following trains:

At Kelso —first class trains;
At Yermo —streamline trains;
At Riverside —westward trains.

Unless otherwise instructed, when a train is relieved by train order from checking a train register for overdue trains, the conductor will register by registering ticket, Form 2642, per Rule 83 (A), at that station.

83 (T). Trains moving between Los Angeles Union Station and Downey Road must identify trains between those stations. Trains displaying signals must sound one long and two short blasts of engine whistle to all trains and engines on both tracks between those stations.

86 (R). Trains and engines may move between Downey Road and Alhambra Avenue with the current of traffic, irrespective of time-table superiority, but must avoid delay to first class trains.

S-88 (R). At Moapa, trains entering or leaving east end of yard must use cross-over just west of Signals 3837 and 3838. Eastward trains restricted by train order at Moapa, must remain clear of this cross-over.

S-90 (R). At Bly, westward trains holding main track with orders to meet or wait for eastward trains, must stop to clear west cross-over switch near M.P. 48 and eastward trains holding main track with orders to meet or wait for westward trains, must stop to clear east switch of the east storage track at Block Signal 484.

93 (R). Yard limits are established, and defined by yard limit signs, at the following stations:

Caliente	Riverside	Hynes including	Crestmore
Las Vegas	Ontario	Clearwater and	Whittier Jct.
Boulder City	Pomona	Douglas Jct.	including
Cima	Pico	East San Pedro	Whittier
Kelso	Los Angeles	including	Anaheim
Yermo		Wilmington	

Los Angeles yard limits include Glendale and Pasadena Branches and to M.P. 8.27 on San Pedro Branch.

Crestmore yard limits include tracks to Ormand and Bly quarries and to Bly.

98 (R). JUNCTIONS AND RAILROAD CROSSINGS.

Location	Railroad Crossed or Junction with	Trains Which have precedence	How Governed
Riverside Jct. (M.P. 58.2)	S. P. A. T. & S. F.		Interlocking.
Magnolia Ave. (M.P. 55.2)	P. E.	U.P.	Automatic Interlocking.
Ontario. (M.P. 38.1)	S. P.	U.P.	S. P. trains and engines stop and operate electrically locked derail before crossing.
W. O. Tower. (M.P. 33)	S. P.		Interlocking.
Soto St. Jct. (M.P. 2.2)	U. P.		Special Rule 98(U).
Ninth St. Jct.	U. P.		Remote Control Interlocking.
Pasadena Jct.	U. P.		Interlocking.
A. T. & S. F. Csg. (Mission Tower)	A. T. & S. F.		Interlocking.
Bridge Jct.	U. P.		Special Rule 98(U).
Redondo Jct.	A. T. & S. F.		Interlocking.
Violet Alley, Los Angeles (100 ft. east of Santa Fe Ave.)	U.P.-S.P.	U.P.	Flagman must protect when crossing U. P. old main track.
Santa Fe Ave., Los Angeles	L. A. Ry.	U.P.	L. A. Ry. cars stop and flagman protect crossing.
Santa Fe Ave., Los Angeles	A. T. & S. F.	A. T. & S. F.	U. P. trains and engines stop and flagmen protect two crossings unless given proceed signal by switchtender.

Continued on Page 3.

98 (R). Continued.

Location	Railroad Crossed or Junction with	Trains which have precedence	How Governed
San Pedro Branch:			
Hobart (M.P. 3.1)	A. T. & S. F.		Interlocking.
L. A. Jct. Ry. Crossing (M.P. 3.6)	L. A. Jct. Ry.	U. P.	L. A. Jct. Ry. trains and engines stop and operate electrically locked derail before crossing.
P. E. Crossing. (M.P. 5.1)	P. E.	U. P.	Automatic Interlocking.
South Gate. (M.P. 7.4)	S. P.	S. P.	Automatic Interlocking.
P. E. Crossing. (M.P. 11.2)	P. E.	U. P.	Automatic Interlocking.
Cota. (M.P. 17.4)	P. E.	P. E.	Remote Controlled Interlocking. See Rule 663 (R).
Thenard. (M.P. 21.7)	S. P. P. E.	S. P. P. E.	Remote Controlled interlocking. See Rule 663 (R).
Henry Ford Boulevard. (M.P. 23.2)	Drawbridge		Interlocking. Westward home signal located on left side of track.
Pasadena Branch:			
Alhambra Ave. (M.P. 1.0)	S. P.		Interlocking.
Main St. (M.P. 1.4)	L. A. Ry.	U. P.	L. A. Ry. cars stop and flagman protect crossing.
Ave. 20. (M.P. 2.1)	L. A. Ry.	U. P.	
Ave. 33 (M.P. 2.7)	A. T. & S. F.	A. T. & S. F.	U. P. trains and engines stop and throw target.
Highland Park. (M.P. 5.4)	A. T. & S. F.	A. T. & S. F.	
Fair Oaks Ave. (M.P. 8.5)	P. E.	U. P.	U. P. trains and engines stop and flagman protect crossing.
Lincoln Ave. (M.P. 11.0)	P. E.	U. P.	P. E. trains stop. U. P. trains and engines approach prepared to stop unless crossing is clear.
Glendale Branch:			
Broadway, Glendale.	P. E.	U. P.	U. P. trains and engines stop and flagman protect crossing.

98 (R). Continued.

Location	Railroad Crossed or Junction with	Trains which have precedence	How Governed
Anaheim Branch:			
M.P. 6.86.	P. E.	U. P.	P. E. trains stop and flagman protect crossing. U. P. trains and engines approach prepared to stop unless crossing is clear.
P. E. Crossing. (M.P. 10.5)	P. E.	P. E.	U. P. trains and engines stop and flagman protect crossing.
On Sunny Hills Spur. (M.P. 13.8)	A. T. & S. F. P. E.	A. T. & S. F. P. E.	U. P. trains and engines stop and flagman protect both crossings.
A. T. & S. F. Crossing. (M.P. 15.5)	A. T. & S. F.		Interlocking.
On Anaheim Sugar Spur. (M.P. 19.0)	A. T. & S. F.	U. P.	A. T. & S. F. trains and engines stop and flagman protect crossing. U. P. trains and engines approach prepared to stop unless crossing is clear.

98 (S). Eastward trains and engines moving from Santa Fe Ave. to Ninth St. Jct. must be governed by hand signals from switchtender at Bridge Jct.

98 (T). At Glendale Jct., trainmen of trains moving from Pasadena Branch must communicate with signalman at Mission Tower, who will release electric lock on switch; after lock has been released, trainmen must operate switches, including cross-over switches, and be governed by indication of signals.

At Glendale Jct., trainmen of trains moving to Pasadena Branch must operate switch at east end of cross-over.

98 (U.) Trainmen of engines entering or leaving spur track at North Main Street or Golden State Creamery must communicate with signalman at Mission Tower, who will release electric lock on derails.

98 (W). For movement of U. P. trains or engines to and from Glendale Branch at Arroyo Jct., S. P. switchtender must be notified to handle switch.

99 (R). Referring to Rule 99 (K), trains may be relieved from protecting against following extra trains by the use of Example (7) of Form E on branch lines only.

99 (S). Except where protected by interlocking, trains and engines entering, leaving or occupying main track between Downey Road and Alhambra Avenue must be protected by flagman, and when such movements make it necessary to cross over on two or more tracks such movements must be protected in both directions. When stop is made, flagman must go back immediately a sufficient distance to insure full protection. Exception, at Downey Road, if signals indicate proceed, trains and engines may move through cross-over without flagging in either direction.

99 (T). Referring to Rule 99 (C), when a light engine or a motor train with only one trainman is stopped by a red flag or a red light under conditions requiring a flagman to precede the train, it may proceed at restricted speed without sending a flagman ahead, prepared to stop short of train, obstruction or switch not properly lined, keeping a close lookout for broken rail, flood-damaged track or bridge, or anything that may affect movement of train.

101 (R). Referring to Rules 101 and 101 (A). When a train is flagged by a track patrolman in case of storm or indication of storm or high water, patrolman must continue to patrol track ahead of train, if necessary, through the storm area.

102 (R). When a break-in-two occurs, after the train is coupled and ready to move, trainmen must make inspection as the train pulls by them, looking for draft rigging and coupler defects, and at next stop they must carefully inspect entire train.

104 (R). If a person is observed near a switch in violation of third paragraph of Rule 104 (A), the approaching train must be brought to a stop and wire report made to superintendent.

104 (S). Switches will be set normally,

At Riverside—spring switch at west end of two main tracks, for eastward trains.

104 (T). Spring switches are located as follows:

Caliente	—east end;
Kelso	—east end;
Kelso	—end of wye track;
Yermo	—west end;
Yermo	—east end of passenger siding;
Riverside	—west end of two main tracks;
East Yard	—east end (Telegraph Road);
Soto St. Jct.	—eastward main track;
Soto St. Jct.	—west end of Alameda freight terminal lead;
Glendale Jct.	—west end of cross-over.

Spring point derail, located as follows:

Boulder City	—M.P. 21.16.

104 (U). In order to provide derail protection, switch at west end of run-around track near highway crossing, airport gunnery school, Las Vegas, must be left lined for run-around track.

D-151 (R). At Riverside, trains and engines may move against current of traffic within yard limits without being preceded by a flagman, except when on the time of a first class train or when view is obscured by weather or other conditions.

152 (R). THE SPEED SHOWN BELOW MUST NOT BE EXCEEDED:

Note: The designation "Str." includes all streamline trains.

The designation "Psgr." includes all other passenger, mail and express trains.

The designation "Frt." includes freight trains, mixed trains and light engines with or without caboose.

When steam engines are used on streamline trains, unless otherwise provided, the speed specified under "Psgr." must not be exceeded.

When a freight engine is used in passenger service on branches, the speed specified under "Frt." must not be exceeded.

Location	Maximum Speed Miles Per Hour			Remarks
	Str.	Psgr.	Frt.	
At any point.	90	70	45	
At any point.		60		With 3900 class or Mikado type engines.
At any point.		45	45	With 5000, 5400, 5500 and 8800 class engines.
At any point.		35	35	With 3500 class engines.
At any point.		30	30	With Consolidation type engines.
At any point.		20	20	Engines running backward, with or without cars.
Within yard limits.	40	40	25	Speed must be as much slower as rules or conditions may require.
Over spring switches.	15	15	15	When using turn-outs.
Over spring switches. (Except east switch at Kelso and east switch passenger siding at Yermo.)	20	20	20	When not using turn-outs, but where switch points will be caused to oscillate under such movement or where movement is over facing point switch.
When using cross-overs or turn-outs.	15	15	15	
On curves.			25	With steam derricks and roadway machines including ditchers, draglines, spreaders, cranes, hoists, derricks, pile drivers, steam shovels and snow plows, moving on their own wheels. Commercial shipments of such machines to be handled in accordance with instructions on waybills and A. A. R. loading rules.
On straight track.			30	With steam derricks and roadway machines including ditchers, draglines, spreaders, cranes, hoists, derricks, pile drivers, steam shovels and snow plows, moving on their own wheels. Commercial shipments of such machines to be handled in accordance with instructions on waybills and A. A. R. loading rules.
At any point on main line.			30	Trains handling scale test cars.

Continued on Page 5.

152 (R). Continued.

Location	Maximum Speed Miles Per Hour			Remarks
	Str.	Pssr.	Frt.	
At any point on branches.			20	Trains handling scale test cars. Note: Scale test cars are not equipped with an air brake.
At any point on main line.			35	Trains handling wooden Hart convertible cars under load.
At any point on branches.			20	Trains handling wooden Hart convertible cars under load.
At any point on main line.			30	Trains handling rock from Bly.
At any point.	35	35	35	When necessary to pick up train orders or clearance.
Through interlocking.	30	30	30	Where no different speed is specified.
Railroad crossings where governed by automatic interlocking signals.	20	20	20	Between the two home signals governing movement over crossing.
Magnolia Ave. Eastward.	30	30	30	Between the two home signals governing movement over crossing.
At any point.			15	Jordan spreaders and other snow machines of spreader type, when in operation.
First Subdivision. Los Angeles.	15	15	15	Over steam and electric railroad crossings not protected by interlocking.
Los Angeles River Bridge.	15	15	15	Curve.
Between Pasadena Jct. and West M.P. 0.32.	15	15	15	
Between Mile Posts— 0.32 and First St.	25	25	20	
First Street 0.00 and 1.7.	25	25	20	
Ninth St. Jct. 1.7 and 2.2.	15	15	15	
Soto St. Jct. 2.2 and 2.87.	25	25	20	
Downey Road 8.75 and 8.96.	85	65	45	Curve.
Pico 13.62 and 13.93.	70	65	45	Curve.
Clayton 15.06 and 15.28.	55	50	45	Curve.
Rowland 20.48 and 21.03.	85	60	45	Curve.
23.56 and 23.80.	70	60	45	Curve.
Walnut 25.07 and 25.28.	70	60	45	Curve.

152 (R). Continued.

Location	Maximum Speed Miles Per Hour			Remarks
	Str.	Pssr.	Frt.	
First Subdivision. (Cont.) Between Mile Posts— Spadra 29.05 and 29.48.	70	60	45	Curve.
30.61 and 33.76.	30	30	25	Pomona city limits.
Ontario.	30	30	25	Over S. P. Chino Branch Crossing.
Collins 43.46 and 43.61.	85	65	45	Curve.
Mira Loma 47.91 and 48.75.	85	65	45	Curve.
Pedley 49.91 and 50.74.	70	60	45	Curve.
51.79 and 52.25.	65	60	45	Curve.
53.41 and 53.73.	60	50	45	Curve.
55.41 and 56.00.	55	45	45	Curves.
57.34 and 57.42.	50	30	25	Curve.
Riverside, west end of two main tracks.	10	10	10	Eastward, over spring switch.
Daggett 158.80 and 158.97.	15	15	15	Curve.
161.38 and 161.41.	70	55	45	Curve.
San Pedro Branch. At any point.		25	25	
M.P. 3.60.		10	10	Over L. A. Jct. Crossing.
M.P. 5.10.		20	20	Over P. E. Crossing.
M.P. 7.44.		20	20	Over S. P. Crossing.
M.P. 11.50.		20	20	Over P. E. Crossing.
Cota.		25	25	Over P. E. Crossing.
Thenard.		25	25	Over S. P. and P. E. Crossings.
Badger Ave. Drawbridge.		15	15	
Pasadena Branch. Alhambra Ave.		20	20	Over S. P. Crossing.
Between M.P. 0.70 and M.P. 11.87.		12	12	
Fair Oaks Ave.		8	8	Over P. E. Crossing.
Lincoln Ave. (M.P. 11.0)		8	8	Over P. E. Crossing.

Continued on Page 6.

Location	Maximum Speed Miles Per Hour			Remarks
	Str.	Psgr.	Frt.	
Glendale Branch. Between M.P. 0.70 and Ave. 18.		40	25	
Between Arroyo Jct. and M.P. 8.12.		12	12	
Anaheim Branch. At any point.		20	20	
Between M.P. 2 and 2.5.		15	15	
M.P. 6.86.		15	15	Over P. E. Crossing.
M.P. 10.5.		15	15	Over P. E. Crossing.
Between M.P. 12 and 13.		10	10	
M.P. 15.5.		15	15	Over A. T. & S. F. Crossing.
M.P. 17.3. (South Spadra Road)		5	5	Be prepared to stop in case of emergency.
Crestmore Branch. At any point.			25	
Between M.P. 0.0 and M.P. 0.59.			15	Yard limits.
Bridge 1.86.			20	Over Santa Ana River.
Bly to Crestmore.			15	
Second Subdivision. Between Mile Posts—				
Yermo	25			Passing station.
164.48 and 164.60.	85	60	40	Curve.
Toomey 168.84 and 169.38.	85	60	45	Curve.
Manix 179.12 and 179.77.	85	60	45	Curve.
180.84 and 181.66.	85	60	45	Curve.
Field 184.06 and 184.41.	85	60	45	Curve.
184.60 and 184.79.	85	60	45	Curve.
186.16 and 186.36.	70	60	45	Curve.
186.79 and 187.03.	70	60	45	Curve.
Dunn 188.43 and 188.99.	65	50	45	Curve.
189.08 and 189.44.	55	50	45	Curve.
189.51 and 190.07.	60	50	45	Curve.
190.58 and 190.85.	60	50	45	Curve.
191.18 and 191.55	80	50	45	Curve.

Location	Maximum Speed Miles Per Hour			Remarks
	Str.	Psgr.	Frt.	
Second Subdivision. (Cont.) Between Mile Posts—				
Afton 191.78 and 191.98.	60	50	45	Curve.
192.08 and 192.26.	45	40	30	Curve.
192.35.	40	30	30	Curve. Tunnel No. 1.
192.84 and 193.19.	45	40	30	Curve.
193.38 and 193.66.	55	50	45	Curve.
193.83 and 194.05.	60	50	45	Curve.
194.38 and 194.71.	70	50	45	Curve.
194.88 and 195.24.	60	50	45	Curve.
195.29 and 195.70.	65	50	45	Curve.
195.79 and 196.15.	60	50	45	Curve.
Balch 213.30 and 213.80.	85	65	45	Curve.
Sands 221.32 and 221.66.	85	65	45	Curve.
Glasgow 222.53 and 223.02.	85	65	45	Curve.
223.48 and 223.88.	75	65	45	Curve.
224.96 and 225.30.	85	65	45	Curve.
Kerens 226.24 and 226.51.	85	65	45	Curve.
227.69 and 227.96.	85	65	45	Curve.
229.07 and 229.19.	85	65	45	Curve.
229.81 and 230.14.	85	65	45	Curve.
Flynn 230.61 and 230.82.	85	65	45	Curve.
230.94 and 231.21.	70	60	45	Curve.
232.12 and 232.57.	85	65	45	Curve.
Kelso	25			Passing station.
Chase 252.04 and 252.47.	90	65	45	Eastward on curve.
252.68 and 253.03.	90	65	45	Eastward on curve.
Cima to Kelso.	60	40	20	Westward freight trains must consume three minutes for each mile run except that they must consume four minutes for each mile run when 75% of their lading is rock or other heavy material.

Continued on Page 7.

152 (R). Continued.

Location	Maximum Speed Miles Per Hour Str.	Psgr.	Frt.	Remarks
Second Subdivision. (Cont.) Between Mile Posts— Cima to Kelso		30		Any train handling four or more tourist cars.
Cima to Desert			35	2800 and 3100 class engines running light.
Cima 256.61 and 256.95.	85	65	45	Curve.
Joshua 258.98 and 259.18.	85	65	45	Curve.
260.34 and 260.74.	85	65	45	Curve.
260.98 and 261.41.	85	65	45	Curve.
262.52 and 263.51.	85	65	45	Curve.
Brant 265.30 and 265.56.	85	65	45	Curve.
266.08 and 266.60.	85	65	45	Curve.
267.05 and 267.47.	85	65	45	Curve.
Ivanpah 269.19 and 269.50.	85	65	45	Curve.
270.11 and 270.72.	85	65	45	Curve.
270.98 and 271.48.	85	65	45	Curve.
271.88 and 272.88.	85	65	45	Curve.
Moore 274.49 and 274.65.	85	65	45	Curve.
275.99 and 276.73.	85	65	45	Curve.
Nipton 278.53 and 278.67.	85	65	45	Curve.
279.88 and 280.68.	85	65	45	Curve.
281.76 and 282.23.	85	65	45	Curve.
Desert 284.67 and 284.81.	85	65	45	Curve.
286.30 and 286.95.	85	65	45	Curve.
Calada 287.94 and 288.23.	85	65	45	Curve.
Roach 295.82 and 296.21.	85	65	45	Curve.
Borax 297.53 and 297.93.	85	65	45	Curve.
298.35 and 298.81.	85	65	45	Curve.
Jean 301.98 and 302.25.	85	65	45	Curve.
302.55 and 303.00.	85	65	45	Curve.
303.43 and 303.83.	85	65	45	Curve.
305.04 and 305.34.	85	65	45	Curve.

152 (R). Continued.

Location	Maximum Speed Miles Per Hour Str.	Psgr.	Frt.	Remarks
Second Subdivision. (Cont.) Between Mile Posts— **Sutor** 308.23 and 308.71.	85	65	45	Curve.
Erie 309.31 and 309.83.	70	50	45	Curve.
310.06 and 310.56.	85	65	45	Curve.
310.88 and 311.01.	85	65	45	Curve.
311.66 and 311.89.	70	60	45	Curve.
312.10 and 312.50.	45	40	30	Curve.
312.63 and 313.14.	80	60	45	Curve.
313.31 and 313.61.	85	65	45	Curve.
314.55 and 315.00.	40	40	30	Curve.
Sloan 315.51 and 315.69.	40	40	30	Curve.
315.84 and 316.19.	40	30	30	Curve; Tunnel No. 2.
316.30 and 316.46.	45	40	30	Curve.
316.48 and 317.07.	60	40	30	Curve.
317.83 and 317.97.	60	40	30	Curve.
318.50 and 318.70.	45	40	30	Curve.
319.13 and 319.37.	40	40	30	Curve.
319.44 and 319.72.	40	40	30	Curve.
Bard 320.59 and 321.04.	65	60	45	Curve.
Pierce 326.57 and 327.09.	85	65	45	Curve.
Boulder Jct. 328.04 and 329.38.	85	65	45	Curve.
Boulder City Branch. At any point.		25	25	
Between M.P. 11.17 and 11.54.			20	
Between M.P. 17.78 and 19.04.			20	
Third Subdivision. Between Mile Posts— **Las Vegas**				
335.79 and 336.08.	70	60	45	Curve.
Wann 339.03 and 339.22.	85	65	45	Curve.
Valley Airport spur.		25	25	
342.97 and 343.31.	85	65	45	Curve.
345.37 and 345.90.	85	65	40	Curve.

Continued on Page 8.

Location	Maximum Speed Miles Per Hour			Remarks
	Str.	Psgr.	Frt.	
Third Subdivision. (Cont.) Between Mile Posts—				
Dike				
347.39 and 347.63.	85	65	40	Curve.
348.39 and 348.54.	40	40	30	Curve.
348.63 and 348.73.	40	40	30	Curve.
349.58 and 349.84.	40	40	30	Curve.
349.93 and 350.29.	40	40	30	Curve.
350.34 and 350.72.	40	40	30	Curve.
350.94 and 351.08.	60	50	40	Curve.
351.25 and 351.34.	80	60	40	Curve.
Apex				
352.09 and 352.30.	85	60	40	Curve.
355.21 and 355.39.	85	60	40	Curve.
356.11 and 356.39.	45	40	30	Curve.
356.61 and 356.76.	45	40	30	Curve.
357.34 and 357.75.	75	60	40	Curve.
Garnett				
358.18 and 358.44.	45	40	30	Curve.
358.82 and 359.42.	50	40	30	Curve.
360.15 and 360.26.	80	65	40	Curve.
362.25 and 362.48.	50	50	40	Curve.
Dry Lake				
363.88 and 364.25.	65	60	40	Curve.
365.12 and 365.33.	80	65	40	Curve.
Crystal				
369.10 and 369.39.	65	60	40	Curve.
Ute				
376.72 and 377.24.	80	65	40	Curve.
Byron				
379.17 and 379.58.	50	50	40	Curve.
380.38 and 380.86.	65	60	40	Curve.
381.13 and 381.28.	80	65	40	Curve.
382.65 and 383.73.	60	40	25	Curve.
Moapa	50			Between depot and 200 feet east of stand pipe.
387.55 and 387.65.	85	65	40	Curve.
Acton				
391.67 and 391.83.	55	40	30	Curve.
391.97 and 392.09.	50	40	30	Curve.
Farrier				
393.4 and 459.5.				Streamline trains must not exceed schedule speed.
393.4 and 459.5.		50		
394.67 and 394.81.	30	30	24	Curve.
394.85 and 395.34.	40	30	24	Three curves.
395.34 and 395.85.	65	30	24	Curves.

152 (R). Continued.

Location	Maximum Speed Miles Per Hour			Remarks
	Str.	Psgr.	Frt.	
Third Subdivision. (Cont.) Between Mile Posts—				
Farrier (Cont.)				
396.25 and 396.42.	80	50	40	Curves.
397.12 and 397.29.	65	50	40	Curve.
397.56 and 397.76.	50	30	24	Curve.
Rox				
398.08 and 398.24.	35	30	24	Curve.
398.38 and 398.56.	35	30	24	Curve.
399.89 and 400.19.	65	50	40	Curve.
400.35 and 400.54.	65	50	40	Curve.
401.67 and 402.09.	80	50	40	Curve.
Hoya				
403.80 and 419.64.	36	36	24	Series of curves.
Carp				
420.40 and 420.53.	65	50	40	Curve.
421.08 and 421.25.	65	50	40	Curve.
422.03 and 422.19.	65	50	40	Curve.
422.60 and 422.80.	80	50	40	Curve.
423.22 and 423.33.	65	50	40	Curve.
423.55 and 423.65.	65	50	40	Curve.
423.97 and 424.11.	70	50	40	Curve.
Cloud				
424.28 and 424.55.	85	50	40	Curve.
424.96 and 425.11.	70	50	40	Curve.
425.46 and 425.63.	60	50	40	Curve.
425.93 and 426.18.	55	45	40	Curve.
426.44 and 426.77.	75	50	40	Curve.
427.35 and 427.57.	70	50	40	Curve.
427.96 and 428.17.	55	40	30	Curve.
428.33 and 428.40.	85	50	40	Curve.
429.07 and 429.18.	70	50	40	Curve.
Leith				
430.11 and 455.13.	36	36	24	Series of curves.
430.40.	40	30	30	Curve. Tunnel No. 3.
Etna				
455.80 and 455.90.	85	50	40	Curve.
457.11 and 457.23.	85	50	40	Curve.
St. Thomas Branch. At any point.		12	12	
Between M.P. 5.4 and 6.1.		10	10	

300 (R). Staff system is in effect between Santa Fe Avenue and Bridge Jct. Possession of staff is authority for a train or engine to proceed to the next staff station, complying with Rule 93 and the indications of interlocking signals at Redondo Tower.

If staff cannot be removed from machine, train or engine must communicate with switchtenders at Bridge Jct. and Santa Fe Avenue; after which a flagman must be sent ahead and after a wait of five minutes after departure of flagman, train or engine may follow at a safe distance through the block.

Between Bridge Jct. and east derail at Redondo Tower and between Santa Fe Avenue and west derail at Redondo Tower movements may be made without possession of staff, complying with Rule 93.

506 (B). On a color light permissive signal, if the lights are not burning, trains may proceed at restricted speed without stopping for it, prepared to stop short of train, obstruction, or switch not properly lined, and be on lookout for broken rail, or anything that may affect movement of train. See Rule 509 (D).

S-508 (R). Block signal overlaps are located at King, Bard, Pierce, and Bracken. Train holding main track whose superiority has been restricted must not pass the overlap sign at these stations until the opposing train has arrived or waiting time has expired.

509 (R). Home signal at east end Los Angeles River Bridge governs movements over A. T. & S. F. spur track crossing at west end of bridge.

Color light dwarf signal at west end of Los Angeles River Bridge governs movements over A. T. & S. F. crossing at Redondo Tower.

509 (S). When a train is stopped by a home block signal or dwarf signal governing movement over remote controlled switches at Moapa, Cima, Kelso or Crucero, it may proceed in accordance with Rule 509, but when proceeding from a stop signal, after stop has been made, movement must not begin until the person in charge of the train or engine has verbal understanding with the operator at the remote control station that it is proper for the train to proceed and that the switch will not be changed by the operator until the train has passed over the switch.

When necessary to perform switching over a remote controlled switch, verbal understanding must be had with the operator and the switch must be operated by a member of the crew performing such switching, being governed by instructions posted at the switch.

When an operator is not on duty, posted instructions for performing switching over remote controlled switches under such circumstances will govern.

509 (T). At Whittier Jct., electric remote controlled switch lock is in use for movement of trains and engines from Anaheim Branch, and instructions for operation of switch are posted at the switch.

509 (U). At Soto St. Jct., when a train or engine is stopped by Signals 20, 22 or B-23, a flagman must be sent ahead and train must follow flagman at restricted speed to the next signal.

605 (R). To indicate the route to be used through interlocking limits, the following engine whistle signals will be used: (The signals prescribed are illustrated by "o" for short sounds; "———" for longer sounds.)

W. O. Tower:
- For siding ..... ———o

Riverside Jct.:
- From A. T. & S. F. westward main track to U. P. eastward main track..... ——— ———o
- From U. P. westward main track to A. T. & S. F. eastward main track..... ——— ———o
- From U. P. westward main track to A. T. & S. F. westward main track..... ———o o o o
- To transfer track..... o o o———

Downey Road:
- For main track..... ———
- For San Pedro Branch..... ———o
- For Bridge Jct..... o———o
- For middle track..... o o———

Hobart:
- For siding ..... ———o
- For east wye..... ———o———
- From San Pedro main track to A. T. & S. F. siding ———o
- From A. T. & S. F. siding to San Pedro main track o———
- From U. P. transfer to A. T. & S. F. siding..... o o o———
- From A. T. & S. F. siding to U. P. transfer..... o o o———

Pasadena Jct., passing microphone at First St.:
- For Union Station..... o———
- To and from Glendale Jct..... ———
- For Alhambra S. P. coach yard or to turn equipment or engine..... o o———o
- For S. P. coach yard..... o o o o———

Ninth St. Jct., passing microphone between 4th and 6th Streets:
- For main track..... ———
- For Bridge Jct..... ———o

Mission Tower:

One long blast of emergency air whistle is a signal for all trains or engines moving within interlocking limits to stop at once and not move until proper signal or definite information is received from signalman.

663 (R). At Thenard and Cota, when a train or engine is stopped by an interlocking signal displaying a stop indication, a trainman must communicate with the signalman and be governed by instructions posted in box.

663 (S). When a train or an engine is stopped by a stop indication of an interlocking signal at Signal Bridges 3, 4 or 6, and signal does not change to proceed indication, a member of the crew must communicate with the signalman at Dayton Avenue or Mission Tower.

663 (T). When a train or engine is stopped by a stop indication of an interlocking signal at Ninth St. Jct., and signal does not change to proceed indication, a member of the crew must communicate with the switchtender who may authorize movement. If movement is authorized by switchtender, switches must be operated by hand and a member of the crew must precede to the crossing to signal the train over the crossing if no conflicting movement is evident.

The switches at Ninth St. Jct. are equipped with two levers and switch locks. To operate the switches by hand, both levers must be unlocked and small lever marked "Power" must be moved to reverse position. Levers must be returned to normal position when movement is completed.

663 (U). Trains moving to Chamberlin spur must communicate with switchtender at Bridge Jct. and be governed by the indication of signals.

Trains moving from Chamberlin spur or from Griffith spur to Soto St. Jct., must communicate with switchtender at Bridge Jct. and movement must be made through cross-over between Ninth St. Viaduct and Ninth St. Jct.

663 (V). At Bell, in performing switching between the home and the approach signals, cars must not be left standing on clearing section of track located between a point 330 feet west of the eastward home signal and a point 330 feet east of the westward home signal. Switching movements may be made between these points and the approach signals without interfering with operation of the P. E. Ry.

When making movements from siding or Bethlehem Steel Corporation spur to main track, trainmen must be governed by switch indicator at the switch. If switch indicator displays proceed indication, switch may be thrown, at which time dwarf signal will indicate proceed at restricted speed. When performing switching at these points, flag protection must be afforded for cars left on main track between the home signals, since indicators or dwarf signals will not give proceed indication when cars are in such locations.

When making movements to and from Bethlehem Steel Corporation spur to siding, the switch nearest to train must be thrown first to afford contact for the governing signal.

725 (R). When using water standpipe at Desert, leave spout pointing east.

746 (R). Jordan spreaders or other spreaders of that class, when handled in freight trains, must be headed in the direction the train is moving. When handled in work train, the wings must be properly secured.

746 (S). The standard guard rail on turnout side of switches is about ¾ inches higher than the running rail, and in operating snow clearing equipment such as wedge plows, Fuller plows, etc., there is a hazard of the shoe casting on these machines catching on these high guard rails.

To guard against damage to snow plows by shoe casting striking the end of high guard rails, extreme caution must be used by trainmen and enginemen when they enter or leave sidings with this equipment.

802 (R). At Lincoln Avenue highway crossing Pasadena, at Colorado Street, Pasadena, and at Philadelphia Avenue, Whittier, trains and engines must stop and follow flagman over crossings.

At Ontario, when eastward freight trains stop west of Euclid Avenue, they must be preceded by a flagman over crossing.

804 (R). At Caliente, if engine is cut off from passenger train for the purpose of changing engines or otherwise, sufficient hand brakes must be set on head end of westward trains and on rear end of eastward trains, to secure cars until engine is again attached.

804 (S). In Caliente yard, whenever switching is being done, any cars switched into tracks must have hand brakes set to secure them. This applies in all cases, whether cars are cut off in a switching movement, or shoved into any track.

807 (R). When possible, freight conductor must notify engineman leaving terminals makeup of train, including location of loads and empties.

807 (S). Steel underframe outfit cars may be handled on head end of train when cars are to be set out or picked up between terminals.

808 (R). In helper districts, engine must not be backed down hill where wye tracks or turn-tables are available for turning engine, except in emergency. When such back-up movement is necessary, engineman must first secure authority from train dispatcher.

809 (R). When handling cars placarded "Explosives" in yards or on sidings, such cars must be coupled to engine, electric locomotive, or motor car, protected by a car between. (BE 678-a.)

809 (S). Cars placarded "Explosives" must not be cut off while in motion, and must be coupled carefully and all unnecessary shocks must be avoided. Other cars must not be cut off and allowed to strike a car containing explosives. Cars placarded "Explosives" must be so placed in yards or on sidings that they will be subject to as little handling as possible and be removed from all danger of fire. Such cars must not be placed on tracks under bridges and should not be placed in or alongside passenger sheds or stations; and, when avoidable, engines on parallel tracks must not be allowed to stand opposite or near them.

809 (T). U. P. flat cars 55519, 56000, 56052 and 56228, equipped with gas cylinders (high pressured flasks), to transport compressed gas, have been assigned and operate between Wilmington and Pocatello-Council Bluffs.

This gas is highly inflammable and extreme care must be exercised switching in yards and handling in trains. In case of leakage, no open flame should be permitted in the vicinity of the cars, and cars handled in accordance with Bureau of Explosives.

814 (R). Referring to Rule **814** (A):

Enginemen must familiarize themselves with the handling of valves of fire fighting equipment on different classes of engines and must know where these valves are located before departure from terminals.

Engines equipped with feed water pumps: Fire fighting pipe line from right injector to steam heat pipe on left side under cab.

Engines equipped with injectors of the non-lifting type on left side of engine: Fire fighting pipe line located just ahead of injector going into steam heat pipe under cab, left side of engine.

Engines equipped with injector ahead of cab over running board: Fire fighting pipe line from branch pipe just ahead of injector.

Engines equipped with steam heat: Fire fighting pipe line enters steam heat line just under left side of cab.

820 (R). Allowance for empty and underloaded cars as indicated below must be reported as required by Instruction 8 on Form 1216 "Conductor's Car and Tonnage Report."

	For each empty or loaded car weighing less than 40,000 pounds (including light weight of car)	For each empty or loaded car weighing between 40,000 and 50,000 pounds (including light weight of car)
Between Caliente and Los Angeles	6000 lbs.	3000 lbs.

824 (R). In addition to making inspection of train as often as practicable, as per Rule 824, freight trains must stop and be inspected at the following points:

Kelso —Eastward and westward, remain 10 minutes;
Cima —Westward;
Chase —Westward, remain 10 minutes;
Dawes —Westward, remain 10 minutes;
Desert —Eastward and westward;
M.P. 6 Blue Diamond Spur (Arden) —Eastward, remain 10 minutes;
Rox —Westward;
Rox or Carp —Eastward.

825 (R). Cars must not be set on sidings on which remote control switches are installed. If, on account of accident or other emergency, the setting out of cars on such sidings cannot be avoided, before doing so, written authority must be received from the train dispatcher.

825 (S). Scale test cars are equipped with brake pipe and hose but are not equipped with an air brake.

837 (R). Streamline trains must not be moved at any time until all coach, Pullman and dining car doors have been closed.

When picking up train orders from the side door of engine rooms on streamline trains, safety bar must be placed in down position as soon as door is opened.

837 (S). When coupling tite-lock couplers to either a conventional coupler or tite-lock coupler, it must be seen that knuckle is securely locked in closed position. When knuckle is locked, a tell-tale hole in the rotary lock lifter link is visible just below the bottom of coupler head and when cars are coupled, tite-lock couplers must be inspected to see that this tell-tale hole is visible and knuckle locked.

Where conventional couplers are coupled to tite-lock couplers, the knuckle on the tite-lock coupler must be closed and conventional couplers be closed by impact of moving car.

837 (T). The vestibule curtains must be drawn across the diaphragms on dead-head or occupied passenger equipment while being handled in passenger, mail and express trains.

877 (R). Use of locomotive boiler running board when going between cab and front end of locomotive to put up or take down signals or indicators is prohibited.

887 (R). Westward passenger trains must make running air test as per Rules 1051 and 1051 (A) between "S" post east of Cima and east switch.

Air test as required by Special Rule 887 (S) must be made by all eastward and westward freight trains at Cima.

All engines operating from Cima to Kelso must maintain brake pipe pressure of not less than ninety pounds.

Retaining valves must be used on all trains as required by Air Brake Rule 1077 (A) as follows:

Cima to Kelso;
On Blue Diamond Spur (Arden) from end of track to Arden.

On other grades, conductor and engineman must have understanding as to number of retaining valves to be used.

On passenger trains, retainers must not be turned down until train passes east mile board at Kelso.

When possible, the use of retainers on live poultry cars must be avoided.

887 (S). Before descending heavy grades designated in Special Rule 887 (R), train must be brought to a stop and while standing engineman will apply brakes with a ten-pound brake pipe reduction, then sound one blast of engine whistle. Rear trainman must observe that brake on rear car applies, then make a further brake pipe reduction by gradually opening rear angle cock on rear car sufficiently to register on brake pipe gauge on engine. When engineman observes the reduction in pressure on the brake pipe gauge, he must sound two long blasts of engine whistle. Rear trainman must then close angle cock and give signal to release brakes; observing that brake on rear car releases.

Failure of brake on rear car to release promptly indicates there is an obstruction in the brake pipe, which must be promptly corrected.

After this test has been properly made and maximum pressure is again restored, the train may proceed.

If the train does not depart within 30 minutes after this test is completed, the test must be repeated before proceeding.

887 (T). Maximum tonnage per operative brake in freight service, Cima to Kelso, is sixty-five tons.

888 (R). All trains and engines must approach and pass over Santa Fe Ave., Los Angeles, very carefully and enginemen must keep sharp lookout for street traffic.

896 (R). 2200, 2700, 3500, 3900, 5000, 5400, 5500, 7000, 7800 and 8800 class engines must not go on the following tracks, except as shown:

Caliente	—Dike track, except 2200 and 2700 class;
Dike	—Set-out track, except 2200 and 2700 class;
Garnett	—Set-out track, except 2200 and 2700 class;
Pierce	—Set-out spur, except 2200 and 2700 class;
Arden	—Blue Diamond spur;
Bard	—Set-out spur, except 2200 and 2700 class;
Jean	—Yellow Pine Mining Co. warehouse spur, except 2200 and 2700 class;
Crucero	—Beyond ice house on interchange track;
Harvey & Brown spur (M.P. 39)	—Spur track, beyond a point 75 feet east of point of frog, except 2200, 2700 and 6000 class;
St. Thomas Branch	—All tracks west of M.P. 0.23.

2800, 3100 and 6000 class engines must not go on the following tracks, except as shown:

St. Thomas Branch	—All tracks, except 6000 class;
Boulder City	—Machine Shop Track 7;
Arden	—Blue Diamond spur, except 6000 class, not exceeding 12 miles per hour.

2200, 2700, 2800, 3100, 3500, 3900, 5000, 5400, 5500, 7000, 7800 and 8800 class engines must not go on the following tracks except as shown:

Crestmore tracks	—All tracks, except 2200 and 2700 class engines may operate between Bly and Ormand quarry;
Bly Quarry	—All tracks;
Crestmore Branch	—All tracks;
Glendale Branch	—All tracks;
Pomona	—250 feet eastwardly of Pomona Fruit Growers' Exchange spur track located east side of Exchange Growers' Building;
Anaheim Branch	—All tracks, except light Pacific type engines;
Pasadena Branch	—All tracks, except light Pacific type engines;
South Gate	—F. W. Braun Co.;
Workman	—2 L. A. Co. Flood Control spurs;
Clearwater	—Macco Lumber Co.;
Hynes	—Southern California Edison Co.;
Rioco	—2 Richfield Oil Co. spurs;
Long Beach	—Tank spur.

896 (R). Continued.

3500, 3900, 5000, 5400, 5500, 7000, 7800 and 8800 class engines must not go on the following tracks:

Bell	—Storage track;
Bartolo	—Spur;
Clayton	—Spur;
Hudson	—Spur;
Fallon	—Spur;
Ontario	—Spur, Packing House at Cypress Ave.;
Ontario	—United Canneries;
Ontario	—Cutler-Lobinger Packing Co.;
Ontario	—Edison Appliance Co.;
Magnolia Ave.	—Spur;
Riverside	—City oil spur.

3500, 3900, 5000, 5400, 5500, 7000, 7800 and 8800 class engines must not go beyond west switch at North Long Beach.

All classes of engines and Diesel locomotives must not go on the following tracks:

Whittier	—Whittier Ass'n lemon spur;
South Gate	—3 Fibreboard Products Co. spurs;
Riverside	—Mission spur serving A. F. G. Co., engines must not go beyond east end of packing house;
Baxter	—Trestle bridge on lime quarry spur;
Chase Water Track	—Over unloading flume;
Carp	—Over oil sump on oil spur.

900 (R). There are close clearances above and at the side of main tracks as shown below, and in addition thereto, at platforms and other structures above and at the side of industry, stock and other tracks:

Location	Structure or Obstruction	Clearance of engine or car is close at—
At all stations	Mail cranes	Side.
First Subdivision.		
Los Angeles River	Bridge	Side.
M.P. 1.89 (Butte St.)	Bridge	Side.
Soto St.	Semaphore Signal 24	Side.
M.P. 8.90	Highway bridge	Top.
M.P. 9.04	Hand rail of water barrel platform	Side.
M.P. 10.80	Bridge	Top and side.
M.P. 11.1	Highway bridge	Top.
M.P. 15.05	Bridge	Top and side.
M.P. 15.39	Bridge	Top and side.
M.P. 15.72	Bridge	Top and side.
M.P. 30.65	Telegraph poles	Side.
M.P. 31.95 (Thomas St.)	Iron post barricade	Side.
Pomona	Signal 319	Side.
Pomona	Signal 320	Side.
Pomona	Signal 320 (Case)	Side.
W. O. Tower	Lever rod for train order signal	Side.
M.P. 33.0 to 34.2	Telegraph pole line	Side.
Ontario	Water column	Side.
M.P. 39.1	Relay post and box	Side.
Bly—West Crossover Switch	Switch indicator	Side.
M.P. 50.7	Relay box and post	Side.
M.P. 52.3	Relay box and post	Side.
M.P. 52.40	Bridge	Side.
M.P. 55.74	Canal syphon wall	Side.
M.P. 55.90	Highway bridge	Side.

Continued on Page 12.

900 (R). Continued.

Location	Structure or Obstruction	Clearance of engine or car is close at—
First Subdivision (Cont'd).		
M.P. 56.2	Relay post and box	Side.
M.P. 56.23	Fence	Side.
M.P. 56.49	Fence	Side.
M.P. 56.9	Fence	Side.
M.P. 57.1	Relay post and box	Side.
Second Subdivision.		
Harvard	Water tank spout	Side and top.
M.P. 179.6	Color light signal	Side.
M.P. 182.09	Bridge	Side.
M.P. 186.95	Bridge	Side.
M.P. 187.0	Color light signal	Side.
M.P. 189.2	Signal case	Side.
M.P. 192.34	Tunnel No. 1	Top.
M.P. 195.8	Color light signal	Side.
Sands	Water tank spout	Side.
Kelso	Water tank spout	Side and top.
M.P. 243.8	Color light signal	Side.
M.P. 243.9	Color light signal	Side.
M.P. 243.96	Bridge	Side.
Chase	Water tank spout	Top and side.
M.P. 250.8	Color light signal	Side.
M.P. 250.69	Bridge	Side.
M.P. 262.4	Color light signal	Side.
M.P. 267.25	Bridge	Side.
Ivanpah	Water column	Side.
M.P. 270.3	Color light signal	Side.
M.P. 272.9	Color light signal	Side.
M.P. 282.1	Color light signal	Side.
Desert	Water tank spout	Top and side.
Desert	Water column	Side.
M.P. 295.9	Color light signal	Side.
M.P. 296.0	Color light signal	Side.
M.P. 298.6	Color light signal	Side.
M.P. 315.88	Tunnel No. 2	Top.
M.P. 316.1	Color light signal	Side.
Arden	Water tank spout	Top and side.
Blue Diamond	Loading tipple	Top.
M.P. 328.7	Color light signal	Side.
Third Subdivision.		
M.P. 382.6	Color light signal No. 2 RA	Side.
Moapa	Water column	Side when on siding.
M.P. 395.2	Color light signal	Side.
M.P. 395.42	Bridge	Side.
M.P. 397.04	Bridge	Side.
M.P. 397.32	Bridge	Side.
M.P. 397.85	Rock cut	Side.
M.P. 406.55	Bridge	Side.
M.P. 407.09	Bridge	Side.
M.P. 408.24	Bridge	Side.
M.P. 408.97	Bridge	Side.
M.P. 409.10-409.15	Rock cuts	Side.
M.P. 409.16	Bridge	Side.
M.P. 409.25	Signal poles slide fence	Side.
M.P. 419.30	Bridge	Side.
M.P. 422.6	Relay post and box	Side.

900 (R). Continued.

Location	Structure or Obstruction	Clearance of engine or car is close at—
Third Subdivision (Cont'd).		
M.P. 430.20	Cross arm guy wire	Side.
M.P. 430.51	Tunnel No. 3	Top.
M.P. 430.68	Bridge	Side.
M.P. 437.21	Rock cut	Side.
M.P. 431.82	Bridge	Side.
M.P. 433.47	Bridge	Side.
M.P. 437.22	Rock point, west end bridge	Side.
M.P. 437.22	Bridge	Side.
M.P. 440.20	Guy pole for horizontal slide fence	Side.
M.P. 444.49	Rock point	Side.
M.P. 444.56	Bridge	Side.
M.P. 447.89	Bridge	Side.
M.P. 452.03	Bridge	Side.
M.P. 452.3-452.4	Rock point	Side.
M.P. 454.1	Rock point	Side.
M.P. 458.56	Bridge	Side.
St. Thomas Branch.		
M.P. 5.49	Rock cut	Side.
M.P. 5.52	Rock cut	Side.
M.P. 5.61	Rock cut	Side.
M.P. 5.73	Rock cut	Side.
M.P. 6.05	Dirt cut	Side.
M.P. 6.34	Earth cut	Side.
M.P. 6.61	Earth cut	Side.
M.P. 7.09 to 7.13	Earth cut	Side.
M.P. 7.40	Earth cut	Side.
M.P. 7.75	Rock cut	Side.
M.P. 9.67	Cattle guard posts	Side.
Pasadena Branch.		
Ave. 21 to Ave. 22	Brick building, pipe & eaves	Side.
6130-44 Pasadena Ave.	Retaining wall	Side.
M.P. 6.10	Fence, concrete railing, lights at bridge	Side.
M.P. 6.2	Guy wire	Side.
M.P. 8.7	Brick retaining wall	Side.
M.P. 8.09	Highway bridge	Top.
M.P. 8.09	2 Western Union crossarms	Side.
M.P. 8.16	Highway bridge	Top.
Glendale Branch.		
Forest Lawn Cemetery M.P. 6.3	Gates	Side.
San Pedro Branch.		
M.P. 5.10 Randolph St.	Trolley wires	Top.
M.P. 8.52	Bridge	Side.
Hollydale-Dayton Waldrip Co.	Overhead crane	Top.
Clearwater-PE Crossing	Trolley wire	Top.
Thenard	Trolley wire	Top.
Crestmore Branch.		
M.P. 1.01	Concrete girders on bridge	Side.
M.P. 5.17—M.P. 5.40	Wire fence	Side.

900 (S). In moving cars on tracks under overhead trolley wires, employes are warned that overhead clearances to such wires and side clearances to supporting trolley poles are close. Trolley wires must not be touched and careful lookout must be kept for low and broken wires.

900 (T). Ore dock at Lovell is equipped with apron that cannot be raised nor lowered to normal position alongside of dock when high cars are spotted at dock. It is necessary that apron be lifted before high cars are spotted under it, and if no one is there to lift apron, cars should be left clear of apron. When there are cars to be set in or taken out of dock, it must be known that apron will clear cars. Apron in raised position over track will not clear high cars or locomotive.

1014 (A). When a streamline train is helped or towed by a steam engine, the feed valve on the steam engine must be adjusted to 110 pounds pressure.

1040 (A). When electrical portion of straight air brake on a streamline train fails to function, change over to automatic brake operation must immediately be made by operating the change-over lever. A running test of brakes must then be made to determine that brakes apply and release properly.

1051 (B). On streamline trains, when running air test is made as required by Air Brake Rules 1051 and 1051 (A), the rear brakeman must know that the brakes apply and release properly, and after it is known that the brakes on the rear car have been released, he must signal the engineman with one sound of the communicating signal.

If the engineman does not receive this signal, a second test must be made, and if signal is not received after second test, the train must be stopped, cause ascertained and corrected.

1056 (R). Referring to Rule 1056 (A):

Following for information and government in connection with use of communicating signal on passenger trains:

1st—Car discharge valve must be held fully open, or if electric pneumatic, push button must be held in contact, two seconds for each intended sound of the signal whistle.

2nd—At least one second per car time interval must be allowed from time of closing discharge valve, or releasing push button, before operating again for the next intended sound of the signal whistle.

The signal system must be allowed sufficient time to fully charge at terminal before attempting to operate.

1057 (R). In backing equipment or trains into Los Angeles Union Station, standing air test and running air test as prescribed in fourth paragraph of Air Brake Rule 1057 (A) must be made in all cases.

1063 (B). Air Brake Rule 1063 (A) is modified as follows: If the train has not more than 12 cars and stop is being made with slack completely stretched, except on a downward grade of one per cent or more, the brakes should be released so that they will be about off when the stop is completed.

With longer trains, and when the slack is controlled by being bunched, the brakes should be held applied on the second application until the train is stopped.

1085 (B). Steam actuated or carrier system air-conditioned cars will not operate with less than 70 pounds steam pressure. In complying with Air Brake Rule 1085 (A), steam heat must not be shut off or valve opened on rear of train until engine is closely approaching, and it is known that the train will not be delayed getting into, station grounds.

SIDINGS AND SPURS NOT ON TIME-TABLE

Location	Miles from Los Angeles	Car Capacity	Switch Connections	Flag Stops for Trains
First Subdivision:				
St. Helens Spur	11.1	17	West	Freight only.
Bartolo	12.6	12	West	Freight only.
Hudson	17.9	6	East	Freight only.
Fallon	21.7	9	West	Freight only.
Industrial Spur	27.1		East	Freight only.
San Antonio Meat Co.	34.1	22	East	Freight only.
Harvey & Brown Spur	39.1	12	West	Freight only.
Champagne	43.5	36	East	Freight only.
Guasti Spur	43.6	71	East	Freight only.
Winery Spur, Mira Loma	45.8	267	East	Freight only.
Magnolia Ave.	55.2	15	East	Freight only.
Second Subdivision:				
Dunn	188.4	31	Both	
Water Track	251.2	15	Both	
Blue Diamond	321.8		West	
Third Subdivision:				
Lovell	344.5	18	Both	
Hoya Gravel Pit	401.5	73	Both	
Quarry Spur	432.6	10	East	Freight only.
Boulder City Branch:	Miles from Boulder Jct.			
Magnesium	12.1	14	Both	
McNeil Construction Co.	12.1	16	East	
McNeil Construction Co.	12.7	34	Both	
Engineers Limited	13.4	12	Both	
St. Thomas Branch:	Miles from Moapa			
Doty Spur	3.1	1	West	
Amber	9.5	4	East	
Glassand	13.7	9	West	
San Pedro Branch:	Miles from Los Angeles			
Vernon Spur	3.7		West	Freight only.
Los Angeles Syndicate	3.7		Both	Un. Stk. Yds.
Fruitland Industrial Spur	4.6		West	
Fairchild-Gilmore Spur	5.9		West	Freight only.
F. W. Braun Co.	6.8		East	Freight only.
Calif. Clay Products Co.	6.9	6	East	
Calif. Cyanide Co.	7.0	25	East	
A. R. Maas Chemical Co.	7.3	4	West	
Team Track	7.3	9	East	
Blue & Mason Indus. Spur	7.6		West	
Purex Spur	8.0	12	East	
Grassi Co. Spur	8.2	12	East	
Rock Spur	8.5	18	East	
Vernon Foundry Co.	10.2	6	West	
Hollydale Spur	10.4	18	West	
Macco Lumber Co.	11.5	15	West	
Artesia Street Spur	13.3	12	East	
Export Petroleum Spur	13.5	20	West	
Richfield Oil Co.	13.8	36	East	Freight only.
Exter Refining Co.	14.1	20	East	
Brown Process Co.	14.3	12	East	
Champion Gasoline Co.	14.4	19	West	Freight only.

SIDINGS AND SPURS NOT ON TIME-TABLE

Location	Miles from Los Angeles	Car Capacity	Switch Connections	Flag Stops For Trains
North Long Beach:				
Siding, Industrial Spur and Wye	16.5		Both	
Montana Ranch Spur	17.1	98	West	
C. N. White	17.1	8	East	
Hancock Refining Co.	17.2	26	East	
Calif. National Supply Co.	17.3	11	East	
Pasadena Branch:				
Baker Spur	5.3	5	West	Freight only.
Team Track	5.4	1	East	Freight only.
Standard Bakeries Corp.	9.4	5	East	
Glendale Branch:				
Taylor Milling Co.	3.9	6	East	
Interchange Track	5.1	13	Both	
Dohrmann-Walker Spur	5.4	2	East	Freight only.
Clifford Spur	5.5	9	East	
Anaheim Branch:	Miles from Whittier Jct.			
Gladding McBean Spur	0.1	6	West	Freight only.
Fertil Spur	10.9	8	East	Freight only.
Seviers Spur	11.2	3	East	Freight only.
Sunny Hills Spur	13.8	118	East	Freight only.
Fullerton Industrial Lead No. 7	15.4		East	Freight only.
Newton Process Mfg. Co. Spur	15.4	7	West	Freight only.
Fullerton Industrial Lead No. 13	15.4		East	Freight only.
Rollo	15.4	18	East	Freight only.
Crestmore Tracks:	Miles from Bly			
Setout Track	0.2	25	Both	
Hamilton Spur	1.9	3	West	
Ennis	3.1	15	Both	
Ormand	3.9	14	West	
Ormand Quarry Track	3.9			
Forage	6.1	2	West	
Crestmore	6.5	Yard		
Bly Tracks:				
Burkett Spur	2.5	5	East	
Bly Quarry	3.1	18		

SET OUT TRACKS

Location	MILE POST	CAR CAPACITY	SWITCH CONNECTIONS	GRADE DESCENDING
Second Subdivision:				
Toomey	168.6	5	East	East
Harvard	173.3	16	Both	East
Manix	177.6	19	East	East
Field	182.4	16	Both	Level
Afton	191.6	10	West	East
King	201.7	13	West	East
Crucero	204.6	7	Both	East
Cork	207.1	13	East	Level
Balch	212.0	16	Both	West
Sands	217.4	12	Both	Level
Glasgow	222.0	16	Both	West
Kerens	225.8	18	Both	West
Flynn	230.8	16	Both	West
Hayden	238.9	12	Both	West
Dawes	243.4	16	Both	West
Elora	246.8	12	Both	West
Chase	250.3	12	Both	West
Cima	254.2	20	Both	East
Joshua	258.0	12	Both	East
Brant	262.8	12	Both	East
Ivanpah	267.2	12	Both	East
Nipton	277.7	12	Both	East
Desert	282.2	13	Both	East
Calada	287.2	16	Both	Level
Roach	291.5	11	Both	East
Borax	296.8	16	Both	West
Jean	300.8	10	East	West
Sutor	305.4	10	East	West
Erie	309.1	12	Both	West
Sloan	315.3	10	West	East
Bard	320.4	9	West	East
Arden	322.6	9	East	East
Pierce	324.8	10	West	East
Bracken	328.2	12	Both	East
Third Subdivision:				
Wann	338.8	16	Both	Level
Valley	342.7	13	East	West
Dike	347.3	8	East	West
Apex	352.0	8	Both	East
Garnet	357.3	6	West	East
Dry Lake	362.8	13	East	East
Crystal	368.3	24	Both	Level
Byron	377.9	13	West	East
Rox	397.5	13	West	West
Hoya	402.7	7	East	West
Galt	408.8	13	East	West
Vigo	413.6	12	Both	West
Carp	418.9	16	East	Level
Cloud	423.7	13	East	West
Leith	428.9	13	West	West
Elgin	438.5	17	West	West
Boyd	445.0	12	Both	West
Stine	449.5	13	East	West
Etna	454.3	18	East	West

RATING OF ENGINES IN FREIGHT SERVICE IN TONS OF 2,000 POUNDS

Total weight of trains, exclusive of engine and tender, which the different classes of engines will haul in each direction between stations named, under favorable weather conditions. A deduction of ten per cent may be made for fast trains.

Type of Engine		Numbers (Inclusive)	Los Angeles to Riverside	Riverside to San Bernardino	San Bernardino to Summit	Sands to Kelso	Kelso to Cima	Cima to Leith	Leith to Caliente	Moapa to Las Vegas	Las Vegas to Yermo	Yermo to Victorville	Victorville to Summit	San Bernardino to Los Angeles
P 77 $\frac{22}{28}$	150	3160	1080	1030	360	1030	360	1030	640	1030	1030	1030	580	1210
P 77 $\frac{25}{28}$	165	2885, 2886, 2887 3128 to 3133 3176 to 3181	1220	1170	500	1170	500	1170	780	1170	1170	1170	720	1350
C 57 $\frac{22}{30}$	198	6010 to 6085	1700	1450	575	1350	575	1450	900	1450	1450	1780	925	2000
MK 63 $\frac{26}{28}$	212 214 218	2700 to 2715 2726 to 2735	2000	1800	700	1600	700	1720	1150	1720	1720	2000	1075	2300
MK 63 $\frac{26}{28}$	212 214	2208, 2253, 2261, 2264 2293	2000	1800	735	1650	735	1800	1210	1800	1800	2050	1130	2400
MT 73 $\frac{29}{28}$	230	7018 to 7024 7850 to 7869	2050	1850	800	1690	800	1850	1240	1850	1850	2050	1160	2450
TTT 63 $\frac{29\frac{1}{2}}{30}$	287 290 291 298	5000 to 5026 5070, 5400 to 5408 5410, 5414 5500 to 5529	2520	2520	1000	2520	1000	2520	1600	2520	2450	2520	1625	2800
FTT 63 $\frac{25}{28\text{-}30}$	302	8800 to 8809	2800	2800	1200	2800	1200	2800	1900	2800	2750	3000	1825	3100
SA-C-59 $\frac{23\text{-}23}{30}$	471	3529 to 3554	3600	3500	1650	3500	1650	3460	2450	3460	3500	3500	2250	4200
CSA-69 $\frac{22\text{-}22}{32}$	400	3935, 3938, 3939	3490	3350	1500	3070	1500	3350	2380	3350	3350	3350	2120	3880

Note: Rating, Caliente to Moapa, Summit to San Bernardino, Summit to Sands, and Los Angeles to East San Pedro, car limit.

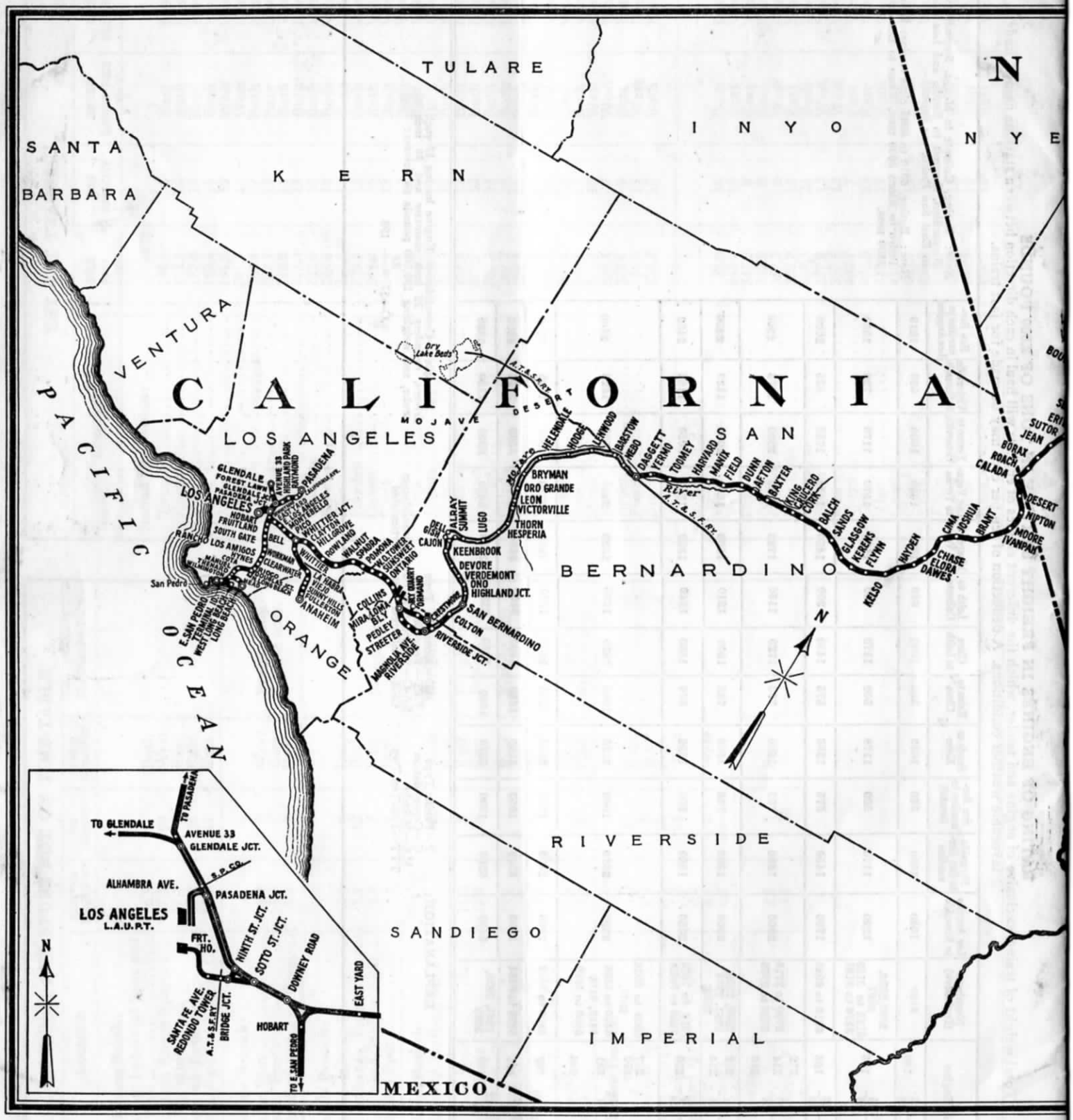
Note: Rating, 6010 to 6085 class engines East San Pedro to Rioco 3000 tons, Rioco to Los Angeles 3500 tons.

EXPLANATION:

P—Pacific Type
C—Consolidation
MK—Mikado
TTT—Two-Ten-Two
MT—Mountain Type
FTT—Four-Ten-Two
SA-C—Simple Articulated-Consolidation
CSA—Challenger Simple Articulated

Example:—Consolidation Engine having 57 inch drivers, cylinders 22 inch diameter and 30 inch stroke, and weighing 198,000 pounds on drivers:

C—57 $\frac{22}{30}$ 198


TULARE
INYO
SANTA BARBARA
KERN
VENTURA
CALIFORNIA
MOJAVE DESERT
LOS ANGELES
SAN BERNARDINO
ORANGE
RIVERSIDE
SAN DIEGO
IMPERIAL
PACIFIC OCEAN
MEXICO
Dry Lake Beds
A.T.&S.F.Ry
Mojave River
LOS ANGELES
GLENDALE
FOREST LAWN
PASADENA
AVENUE 33
HOBART
FRUITLAND
SOUTH GATE
RANCHO LOS AMIGOS
BELL
CLEARWATER
WHITTIER
WHITTIER JCT.
CLAYTON
HILLGROVE
ROWLAND
WALNUT
SPADRA
POMONA
PHILLIPS
SUNKIST
ONTARIO
CAJON
KEENBROOK
DEVORE
VERDEMONT
ONO
HIGHLAND JCT.
SAN BERNARDINO
COLTON
RIVERSIDE JCT.
ALBAY
SUMMIT
LUGO
BRYMAN
ORO GRANDE
LEOM
VICTORVILLE
THORN
HESPERIA
HELENDALE
HODGE
LANWOOD
BARSTOW
HEBO
DAGGETT
YERMO
TOOMEY
HARVARD
MANIX
FIELD
DUNN
AETON
BAXTER
KING
CRUCERO
COWK
BALCH
SANDS
GLASSGOW
KEERENS
FLYNN
HAYDEN
CINA
JOSHUA
BRANT
CHASE
FLORA
DAWES
KELSO
BORAX
ROACH
CALADA
DESERT
MIPTON
MOORE
IVANPAH
SUTOR
JEAN
E. SAN PEDRO TERMINAL TO LOS ANGELES HARBOR
San Pedro
LONG BEACH
ANAHEIM
COLLINS
MIRA LOMA
BLY
PEDLEY
STREETER
MAGNOLIA AVE. RIVERSIDE
TO GLENDALE
TO PASADENA
AVENUE 33
GLENDALE JCT.
S.P.CO.
ALHAMBRA AVE.
PASADENA JCT.
LOS ANGELES
L.A.U.P.T.
FRT. HO.
NINTH ST. JCT.
SOTO ST. JCT.
DOWNEY ROAD
EAST YARD
SANTA FE AVE.
REDONDO TOWER
A.T.&S.F.RY
BRIDGE JCT.
HOBART
TO E. SAN PEDRO
N