## BNSF Railway Safety Vision

We believe every accident or injury is preventable. Our vision is that BNSF Railway will operate free of accidents and injuries. BNSF Railway will achieve this vision through:

A culture that makes safety our highest priority and provides continuous self-examination as to the effectiveness of our safety process and performance ...
A work environment, including the resources and tools, that is safe and accident-free where all known hazards will be eliminated or safeguarded ...

Work practices and training for all employees that make safety essential to the tasks we perform ...
An empowered work force, including all employees, that takes responsibility for personal safety, the safety of fellow employees, and the communities in which we serve. California Division


## California Division

Timetable No. 1

IN EFFECT AT 0800
Pacific Continental Time

Wednesday, February 9, 2011

Division General Manager
Mark J. Kirschinger
San Bernardino, California (909) 386-4150

General Director
Transportation
Leif Smith
San Bernardino, California (909) 386-4100

CALIFORNIA TIMETABLE—No. 1—February 9, 2011—Map


## Division Managers

| Bakersfield |  |
| :---: | :---: |
| M.A. Collins | .Terminal Manager .................. (661) 395-5121 |
| R. Gardea. | .Road Foreman ..................... (661) 395-5135 |
| R.J. Hutterer | . Supvr. Roadway Equipment.... (661) 395-5122 |
| C.K. Jenkins | . Manager of Safety................. (661) 395-5147 |
| S.B. Lewis... | . Claims Manager.................... (661) 395-5105 |
| G.M. Montgomer | Sr. Special Agent................... (661) 395-5127 |
| M.A. Neufeld... | Welding Supervisor ................ (661) 395-5162 |
| C.P. Newell | .Roadmaster ..........................(661) 395-5111 |
| M.W. Royce | . Rapid Responder .................. (661) 395-0653 |
| J.D. Schacher | .Road Foreman ..................... (661) 395-5104 |
| A. Sickler | . Trainmaster .......................... (661) 395-5160 |
| J.W. Siemon | . Rapid Responder .................. (661) 395-0653 |
| J.D. Silvia..... | . Trainmaster ......................... (661) 395-5126 |
| B.J. Simpson | .Rapid Responder .................. (661) 395-0653 |
| D.E. Stankavich | . Rapid Responder .................. (661) 395-0653 |
| B. Swink......... | . Trainmaster .......................... (661) 395-5126 |
| D. Watson ... | . Trainmaster ......................... (661) 395-5126 |
| B.N. Welte .. | . Supt. Operations ....................(661) 395-5117 |
| Barstow |  |
| B. Armstrong. | . Trainmaster .......................... (760) 255-0254 |
| F. Barrera III. | . Roadmaster ......................... (760) 255-7654 |
| J.A. Bonnar. | .Asst. Term. Superintendent..... (760) 255-7604 |
| B. Burnard | . Trainmaster .......................... (760) 255-0276 |
| C.S. Donnelly. | .Trainmaster .......................... (760) 255-7681 |
| S.A. Dunlap | .Roadmaster ......................... (760) 255-7933 |
| J.P. Florez | . Trainmaster .......................... (760) 255-7589 |
| D.A. Fransen | . Terminal Superintendent ......... (760)-255-7601 |
| J. Garrett. | .Trainmaster ......................... (760) 255-2039 |
| W.J. Greisen | . Supt. Locomotive ................... (760) 255-7801 |
| J.E. Haynes | .Trainmaster .......................... (760) 255-0200 |
| J.L. Hedlund | .Trainmaster ......................... (760) 255-7681 |
| M.T. Hill....... | .Terminal Manager .................. (760) 255-7699 |
| R. Jaime | .Trainmaster .......................... (760) 255-0277 |
| E. Johnson. | .Trainmaster .......................... (760) 255-0098 |
| K. Kemether. | .Terminal Manager ................. (760) 255-7699 |
| M.A. Lambert. | . Terminal Manager ................. (760) 255-7699 |
| R.P. Lanahan . | .Trainmaster .......................... (760) 255-0266 |
| D.A. Neal .... | .Trainmaster .......................... (760) 255-7585 |
| V.M. Price .. | . Division Trainmaster .............. (760) 255-7804 |
| P. Riley.. | .Trainmaster ......................... (760) 255-2072 |
| D.C. Rodriguez | .Gen. Mechanical Foreman...... (760) 255-7841 |
| N. Silva | .Trainmaster .......................... (760) 255-0294 |
| J.R. Smith. | .Trainmaster .......................... (760) 255-0255 |
| S. Speisser ... | .Terminal Manager ................. (760) 255-5912 |
| D. Walker.. | .Trainmaster ......................... (760) 255-5056 |
| M. Wardell | . Trainmaster .......................... (760) 255-0010 |
| Fresno |  |
| E.W. Appling . | .Supervisor Eng. Support......... (559) 457-7537 |
| J.J. Arias | .Trainmaster ......................... (559) 457-7548 |
| M.H. Bankson | .Mechanical Foreman ............. (559) 457-7533 |
| E. Campbell | .Trainmaster ......................... (559) 457-7548 |
| R.L. Cummings | .Trainmaster ......................... (559) 457-7503 |
| R.F. Drenon | .Road Foreman ..................... (559) 457-7642 |
| K.R. Duncan | . Construction Supvr. Signals .... (559) 457-7563 |
| A.L. Gallyer.. | . Trainmaster .......................... (559) 457-7548 |



## Richmond



## San Bernardino ROC

## Corridor Superintendents

R.E. Brendza
Corridor Superintendent
(909) 386-4200
J.M. Ryan .. Asst. Corridor Superintendent.
(909) 386-4488
J.A. Gold.
Division Crew Manager
(909) 386-4480
Managers of Corridor Operations
(909) 386-4254
A.M. Aguero
J.R. Clegg
C.M. Lindbeck
B.L. Seley
N. Silva
Chief Dispatchers ...... South (909) 386-4230 North (909) 3896-4231
J.J. Burns
S.J. Cereda
R.R. Hudson
J.A. (PA) Reitz
M.R. Rourke
J.D. Suarez
K.A. Williams

## San Diego

N.T. Freeman...............Trainmaster ............................. (909) 386-4800
D.R. Murphy ................Trainmaster ............................ (909) 386-4800

## Stockton



Tehachapi
J.D. Verne....................Sr. Trainmaster....................... (661) 330-8475

Victorville


Watson


California Division Safety Hotline
(909) 386-4444

| $\begin{gathered} W \\ E \\ S \\ T \\ W \\ A \\ D \end{gathered}$ | $\begin{aligned} & \text { Length } \\ & \text { of } \\ & \text { Siding } \\ & \text { (Feet) } \end{aligned}$ | $\begin{array}{\|c\|} \hline \text { Station } \\ \text { Nos. } \end{array}$ | $\begin{aligned} & \text { Mile } \\ & \text { Post } \\ & \hline \end{aligned}$ | Alameda Corridor Subdivision MAIN LINE STATIONS | $\begin{gathered} \text { Rule } \\ 4.3 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Type } \\ & \text { of } \\ & \text { Oper. } \end{aligned}$ | Line Segment | Miles <br> to <br> Next <br> Stn. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R | Adj. Sub: San Bernardino |  |  |  |  |  |  |  |
| $\downarrow$ |  | AC000 | 0.0 | CP EAST REDONDO | JX(2) | $\begin{aligned} & \text { 3MT } \\ & \text { CTC } \end{aligned}$ | 8930 | 0.1 |
|  |  | AC001 | 0.1 | CP WEST REDONDO | X(2) |  |  | 0.3 |
|  |  | AC004 | 0.4 | CP 25TH STREET | $\mathrm{X}(2)$ |  |  | 3.7 |
|  |  | AC041 | 4.1 | CP NADEAU | $\mathrm{X}(2)$ |  |  | 3.8 |
|  |  | AC079 | 7.9 | CP WEBER | X(2) |  |  | 2.7 |
|  |  | AC106 | 10.6 | CP COMPTON | $\mathrm{X}(2)$ |  |  | 1.1 |
|  |  | AC117 | 11.7 | CP ALAMEDA | $\mathrm{X}(2)$ |  |  | 0.4 |
|  |  | AC121 | 12.1 | CP DEL AMO | X(2) |  |  | 0.7 |
|  |  | AC128 | 12.8 | CP TYLER (Main 1 \& 2) | $\mathrm{X}(2)$ |  |  | 0.6 |
|  |  | AC134 | 13.4 | CP CARSON (Main 3) |  |  |  | 1.0 |
|  |  | AC144 | 14.4 | CP DOLORES | $\mathrm{X}(2)$ |  |  | 0.4 |
|  |  | AC148 | 14.8 | CP CHANNEL | X(2) |  |  | 0.7 |
|  |  | AC155 | 15.5 | Adj. Sub: Harbor, MP 15.3=28.3 | JX(2) |  |  | 0.6 |
|  |  | AC161 | 16.1 | CP WEST THENARD <br> Adj. RR: UP, MP 16.1 | J |  |  | 16.1 |
| Radio Call-In |  |  |  |  |  |  |  |  |
| Radio Channel 17 in Service for Trains |  |  |  |  |  |  |  |  |
| Radio Channel 57 in service for Maintenance of Way |  |  |  |  |  |  |  |  |
| Emergency 9 |  |  |  |  |  |  |  |  |
| DS $=1$, Cust. Support $=3$, Mechanical $=4$, Detector Desk $=5$ |  |  |  |  |  |  |  |  |

## Dispatcher Information

(909) 386-4422, Fax (909) 386-4466

UP Corridor Manager - (909) 386-4282
BNSF Chief Dispatcher - (909) 386-4230

## 1. Speed Regulations

1(A). Speed-Maximum
MP 0.0 to MP 16.1
Freight
.40 MPH
1(B). Speed-Permanent Restrictions MP 0.0 to MP 0.6 30 MPH.
MP 0.6 to MP 0.9 .35 MPH.
MP 15.9 to MP 16.1
.25 MPH.
1(C). Speed-Switches and Turnouts All Main Track to Main Track Crossovers $\qquad$ 40 MPH. Exceptions:
CP AC000 (CP East Redondo) ..... 30 MPH.
CP AC001 (CP West Redondo). ..... 30 MPH .
CP AC117 (CP Alameda) ..... 30 MPH
Trains 100 TOB and over ..... 25 MPH
CP AC001 (Connection to Wilmington Sub.) ..... 15 MPH .
CP AC001 (Connection BNSF Trk. 1 \& 2 to San Bernardino Sub25 MPH.
CP AC106 (Connection to Los Nietos Sub.) ..... 30 MPH .
CP AC106 (Connection to Dolores Industrial Lead).. ..... 15 MPH
CP AC117 (Connection to Wilmington Sub.) ..... 30 MPH .
CP AC155 (Connection Main 1 to BNSF Watson Lead) ..... 30 MPH
CP BNSF Xing, turnouts15 MPH
1(D). Speed-Other
CP AC155 (Main 1) Watson Lead to CP BNSF Xing ..... 20 MPH
CP BNSF Xing to Rolling Jct ..... 20 MPH .
Oil Can Spot. ..... 5 MPH
See Item 1 of the System Special Instructions for additional
speed restrictions.
2. Bridge and Equipment Weight Restrictions Maximum Gross Weight of Car
CP E. Redondo to CP W. Thenard.......... 143 tons, Restriction A
Alameda Industrial Lead .158 tons
3. Type of Operation

CTC-in effect:
MP 0.0 to MP 16.1
Watson Lead between CP AC155 to CP BNSF Crossing
Mains 1, 2 and 3 connect to Pacific Harbor Lines RR at CP West Thenard.

Multiple Main Tracks-in effect:
3 MT:
MP 0.0 to MP 16.1
4. General Code of Operating Rules Items

Rule 1.3.1-Union Pacific Operating Rules, Signals Rules and Maintenance of Way Rules in effect. UP General Orders and Special Instructions apply concerning the above rules and signals.
Rule 1.36-Trains handling excessive dimension loads must contact Corridor Dispatcher-10 before entering track between MP 0.4 and MP 10.6.

Rule 5.8.2-Sound the whistle approaching all crossings, public and private.
Rule 6.29.1-When inspecting a passing train, that part reading "The trainman's inspection must be made from the ground" does not apply between MP 0.4 and MP 10.6.
5. Trackside Warning Detectors (TWD)
A. Protecting Bridges, Tunnels or Other Structures MP 12.9-Hot Box, DED and Hi Wide-Recall Code \#6
B. Other TWD locations

MP 2.8-DED
MP 6.4-DED
MP 8.9—DED
6. FRA Excepted Track-None
7. Special Conditions

Alameda Industrial Lead-(Off Main 3-MP 0.1). 1.9 miles long between MP 485.4 ( J Yard) and MP 487.3 (BNSF Xing).
Dolores Industrial Lead-(Off Main 3, MP 10.6 CP
Compton) - MP 495.5, 5.5 miles long to connection with Pacific Harbor Line at West Thenard, MP 501.0.
Dolores Yard Instructions-All trains and engines must receive permission from the ICTF Terminal Trainmaster in the ICTF Tower before entering the limits of the Dolores Yard or to depart Dolores Yard. All Trains and engines destined to ICTF or the ICTF Support Yard must:

1. Receive permission and yarding instructions from the ICTF Tower to enter the ICTF Plant or Support Yard.
2. Monitor Channel - 8686 while in the ICTF Plant or Support Yard.
3. Determine from the ICTF Tower if other crews are working in the yard and assure an understanding is reached as to .. specific moves and activities to be made.
4. Advise and receive permission from the ICTF Tower when ready to depart the ICTF Plant and Support Yard.
Del Amo Industrial Lead-(Off of Dolores Industrial Lead, MP 496.1) MP 496.5-1.5 miles to End of Track.

Remote Control Area-Signs located at MP 0.4 (Alameda Corridor Subdivision) and MP 149.8 (San Bernardino
Subdivision), designate the Remote Control Area at Hobart.
Power Derails-Locations of power derails on track leading to main tracks:
Main 1-MP 0.0, BNSF 9th St. Yard Lead (LA Times Lead)
Main 1-MP 0.2, Amtrak Lead
Main 3-MP 0.2, UP J Yard
Main 3-MP 12.1, ACTA Storage 2
Main 1-MP 12.2, UP Industry Spur
Main 3-MP 13.4, Dolores R/H Lead Connection to ACTA 2
Emergency Ladders-There are 47 Emergency Ladders attached to the walls, on both sides, between CP West Redondo and CP Compton. In addition, there are 2 emergency telephones at each ladder, one near the ladder at the bottom and one at the top of the ladder.

Ladders are for emergency use only.
When necessary to use the ladders for any emergency, notify the train dispatcher if possible. Open the box (located just below the ladder) with a switch key, engage the hand crank and crank the ladder down. Always be aware of close clearances any time it is necessary to use emergency ladders or when getting on or off equipment.
Pacific Harbor Line Operations-Operations over the Pacific Harbor Line will be governed by the General Code of Operating Rules, the current Pacific Harbor Line Timetable and Pacific Harbor Line General Orders. BNSF Employees operating on the PHL must have the current PHL Timetable and Special Instructions in their possession. All movements entering the Pacific Harbor Line trackage at West Thenard MP 16.1 (Alameda Corridor Sub.) or MP 501.0 (connection with Dolores Industrial Lead) must be made by permission of, and with the proper authority acquired from, the Pacific Harbor Line Railway Dispatcher at Badger Bridge. See the PHL Timetable and Special Instructions for the appropriate contact information.
Train Crew Motor Vehicle License-California Vehicle Code 12953 states: any circumstances involving accidents or violations in which the Engineer or any other crew member of any train is detained by state or local police, neither the Engineer nor any other crewmember shall be required to furnish a motor vehicle operator's license, nor shall any citation involving the operation of a train be issued against the motor vehicle operator's license of the Engineer or any other crew member of the train.
Train Make-Up Restrictions-All BNSF trains operating on the Alameda Corridor Subdivision must comply with system train make-up rules along with the following added restriction: All eastward BNSF trains operating on the Alameda Corridor must not have more than 7,325 trailing tons behind any car weighing less than 45 tons.

Flash Flood Warnings-The following locations have been identified as "critical areas" subject to flash floods and washouts as outlined in System Special Instructions, Item 33:
None
8. Line Segments

Yard Line Segments
Line Segment Limits 8931 ............ CP AC155 to Long Beach Jct.

## Road Line Segments

Line Segment Limits
8930 ........... CP East Redondo to CP West Thenard
10. Grade Chart


ELEVATION IN FEET


## Dispatcher Information

(909) 386-4226, Fax (909) 386-4246

## 1. Speed Regulations

1(A). Speed-Maximum
MP 887.7 to MP 994.9, including trains 100
Passenger Freight
TOB and over................................................... 79 MPH. ........ 55 MPH
Unless otherwise restricted, the maximum speed for freight trains is 70
MPH provided:

1. Train does not contain empty car(s). Refer to SSI, 1(C) for determining speed for multi-platform, intermodal equipment.
2. Train does not exceed 8,500 feet. Exception: Trains operating with distributed power equipment with remote DP automatic brake valve cut in may operate at 70 MPH up to 10,000 feet in length.
3. Train does not average more than 80 TOB. Exceptions:
a) Trains consisting entirely of intermodal equipment (all equipment listed under BNSF Timetable, System Special Instruction 1C), including equipment designed to carry automobiles/trucks (auto racks), must not average more than 90 tons per operative brake.
b) Trains consisting entirely of double stack equipment (car kind codes beginning QU, QK, QV, QW, QT, QX, QY) must not average more than 105 tons per operative brake. In addition, the intermodal trains described above may also handle as many as 15 refrigerated box cars identified as "Super Reefers" - BNSF 793810 thru BNSF 794112 - provided train does not exceed TOB limits specified above.
4. Engineer can control speed to 70 MPH without use of air brakes.
(If unable to control speed to 70 MPH on long descending grades, two additional attempts are allowed to control speed with dynamic brake at slower speeds before speed must be reduced to 55 MPH while negotiating descending grade.)

Trains operating with solid double stack equipment only, may use a maximum of 32 axles of dynamic braking per engine consist.

1(B). Speed—Permanent Restrictions

| 961.2 |  |  |
| :---: | :---: | :---: |
| Westward |  |  |
| MP 888.0 to MP 889.3-Main 1 ............................................ 55 MPH. |  |  |
| MP 888.0 to MP 889.3-Main |  | . 40 MPH . |
| MP 889.3 to MP 889.6-Main 1 ......................... 60 MPH. ....... 55 MPH. |  |  |
| MP 889.3 to MP 889.6—Main 2 ......................... 40 MPH. ....... 30 MPH. |  |  |
| MP 889.8 to MP 890.1-Main 1......................... 60 MPH. ....... 55 MPH. |  |  |
| MP 889.8 to MP 890.1—Main 2 ......................... 60 MPH. ....... 50 MPH. |  |  |
| MP 892.9 to MP 893.3 ..................................... 70 MPH. ....... 65 MPH. |  |  |
| MP 965.6 to MP 967.2, Siding $\qquad$ 40 MPH. ........ 40 MPH. <br> MP 967.5 to MP 969.5 $\qquad$ 45 MPH. $\qquad$ .45 MPH |  |  |
|  |  |  |
| MP 967.7, SJVR RRX.......................................................... 30 MPH. |  |  |
| MP 973.7 to MP 975.8 .................................... $55 \mathrm{MPH} . . . . . . . .45 \mathrm{MPH}$. |  |  |
| MP 993.6 to MP 994.1 (HER) ............................ 45 MPH. ....... 45 MPH. |  |  |
| MP 994.1 to MP 994.3 ..................................... $30 \mathrm{MPH} . . . . . . . .30 \mathrm{MPH}$. |  |  |
| MP 994.3 to MP 994.9 ..................................... 40 MPH. ....... 40 MPH. |  |  |
| Eastward |  |  |
| MP 994.9 to MP 994.3 ..................................... 40 MPH. ....... 40 MPH. |  |  |
| MP 994.3 to MP 994.1 |  |  |
| MP 993.9 to MP 992.8 (H |  |  |
| MP 975.8 to MP 973.7 |  |  |
| MP 969.5 to MP 967.5 ..................................... 45 |  |  |
| MP 967.2 to MP 965.6, Siding ........................... 40 MPH. ....... 40 MPH. |  |  |
| MP 967.7, SJVR RRX. |  |  |
| MP 893.3 to MP 892.9 |  |  |
| MP 890.1 to MP 889.8-Main |  |  |
| MP 890.1 to MP 889.8-Main 2 |  |  |
| MP 889.6 to MP 889.3-Main 1 |  |  |
| MP 889.6 to MP 889.3-Main 2 ......................... 40 MPH. ....... 30 M |  |  |
| MP 889.2 to MP 888.0-Main 1................................................... 55 MPH. MP 889.3 to MP 888.0—Main 2 ........................... 40 MPH. ........ 40 MPH. |  |  |
|  |  |  |

1(C). Speed—Switches and Turnouts
Trains and engines using auxiliary tracks must not exceed
turnout speed for that track unless otherwise indicated.
MP 888.0, Crossover . 40 MPH .
MP 889.7, Crossover .............................................................................. 30 MPH.
MP 891.1, Crossover ................................................................... 40 MPH.
MP 892.5, turnout Main 2...................................... 60 MPH. ........ 50 MPH.
Una, Both ends siding.................................................................. 40 MPH .
Shafter, Both ends siding and crossover ...................................... 40 MPH .
Wasco, Both ends siding...................................................................... 40 MPH.
Elmo, Both ends siding ................................................................ 40 MPH
Sandrini, Both ends siding ........................................................... 40 MPH.
Allensworth, Both ends siding...................................................... 40 MPH.
Angiola, Both ends siding ............................................................. 40 MPH
Corcoran, Both ends east siding.................................................. 30 MPH .
Corcoran, Both ends west siding ................................................. 40 MPH.
Guernsey, EE Siding.................................................................... 40 MPH.
MP 961.2 Guernsey, Crossover................................................... 40 MPH.
MP 962.8, Calabrese ........................................... 50 MPH. ........ 50 MPH
MP 965.6, East Hanford, Crossover ............................................. 40 MPH
MP 967.2, Crossovers ................................................................ 40 MPH
MP 969.0, Crossovers ................................................................. 40 MPH
Shirley, Both ends siding............................................................... 40 MPH.
Shirley, East Main 2
Freight
Trains 100 TOB ..... 50 MPH
Trains over 100 TOB
40 MPH
Conejo, Both ends siding ..... 40 MPH
Floral ..... 50 MPH
Bowles, Both ends siding ..... 40 MPH
WE Bowles, crossovers ..... 50 MPH
MP 993.9, Calwa Crossing, crossovers 50 MPH
Calwa, EE Yard, Turnout to Main Track ..... 10 MPH
Calwa, crossover
30 MPH .
1(D). Speed-Other
MP 901.9 to end of track, Lone Star Spur ..... 10 MPH
MP 0.0, Lone Star Plant. ..... 5 MPH
Bridge 889.8, cars heavier than 143 tons ..... 25 MPH
Bakersfield—Mechanical Tracks 424, 425, 532, 533, and 534... ..... 5 MPH
See Item 1 of the System Special Instructions for additionalspeed restrictions.
2. Bridge and Equipment Weight Restrictions Maximum Gross Weight of Car
Bakersfield to Calwa $\qquad$ 143 tons, Restriction A
3. Type of Operation

CTC-in effect:
MP 887.7 to MP 888.0, Main 1
MP 994.2 to MP 994.4, Bruno Lead
MP 888.0 to MP 994.9
Multiple Main Tracks-in effect:
2 MT:
MP 887.7 to MP 892.5
MP 967.2 to MP 972.3
MP 986.3 to MP 994.9
ABS—in effect:
MP 887.7 to MP 888.0, Main 2
Restricted Limits-in effect:
MP 887.7 to MP 888.0—Main 2

## 4. General Code of Operating Rules Items

Rule 1.14—San Joaquin Valley trains and engines may use main track between Bakersfield and Jastro, joint with BNSF trains and engines.

Rule 1.47—Passenger Trains Observe and Call SignalsWhen a signal requires a train to stop at or pass the next signal at restricted speed, the engineer must communicate that fact to a designated member of the crew, including track designation if on multiple tracks, and get an acknowledgment. If no acknowledgment is received, the engineer must ascertain at the next scheduled stop why the message is not being confirmed. If the engineer fails to control the train movement in accordance with either a wayside signal or other restrictions imposed upon the train, the designated crew member shall at once communicate with and caution the engineer regarding the restriction, and if necessary, take appropriate action to ensure the safety of the train, including stopping all movement if appropriate.

Rule 5.8.2—Sound the whistle approaching all crossings, public and private.

Rule 6.19-When flagging is required, the distance will be 2.0 miles.
Rule 8.12—The following crossovers at Bakersfield may be left lined and locked as last used:
MP 886.1, Main 1 to Main 2 (Tulare Street)
MP 887.3, Main 1 to Main 2 (Chester Street)
MP 887.5, Main 2 to Working Lead

Rule 9.1.8—For San Joaquin Amtrak operations only, the "Approach" signal indication is changed to read: Proceed prepared to stop at the next signal, trains exceeding 40 MPH immediately reduce to that speed.
Rule 9.1.12—For San Joaquin Amtrak operations only, the "Diverging Approach" signal indication is changed to read: Proceed on diverging route not exceeding prescribed speed through turnout; approach next signal preparing to stop, if exceeding 40 MPH immediately reduce to that speed.

Rule 9.9—All Trains Delayed Within a Block—In CTC, when any train stops or its speed is reduced below 10 MPH , the train must proceed at a speed not exceeding 40 MPH , prepared to stop at the next signal until the next signal is visible and that signal displays a proceed indication.

MWOR Rule 8.12—At signaled locations identified in the timetable/general orders as having independently controlled crossover switches (ICS), Maintenance of Way employees may ask the control operator for permission to operate one end of a crossover for maintenance or testing purposes only. Trains, engines, and on-track equipment must not be used or allowed within the defined working limits of the independently controlled switch involved during such operations. The independently controlled switch must be left lined and secured in the normal position prior to reporting clear of the working limits.
MWOR Rule 8.14—Crossover switches, other than independently controlled switches with control operator's permission, must not be unlocked or lined for crossover movement when another movement is approaching or passing over either switch.
5. Trackside Warning Detectors (TWD)
A. Protecting bridges, tunnels or other structures: None
B. Other TWD locations

MP 900.0—Exception Reporting—Recall Code 8
MP 921.0—Exception Reporting—Recall Code 8
MP 943.7—Exception Reporting—Recall Code 8
MP 962.0—Exception Reporting—Recall Code 8
MP 984.5—Exception Reporting—Recall Code 8

## 6. FRA Excepted Track-None

7. Special Conditions

Bakersfield—Amtrak trains operating between "D" Street, MP 887.8 and " $F$ " Street, MP 887.7 must display ditch lights, sound whistle signal 5.8.2 (1), and ring the bell continuously.
When Amtrak trains are shoved, a member of the crew must precede the movement on foot from "D" Street, MP 887.8, to "F" Street, MP 887.7, when not equipped with ditch lights on the leading end of the movement.
Remote Control Area—Signs located at MP 885.0 (Mojave Subdivision) and MP 903.0 (Bakersfield Subdivision), designate the Remote Control Area at Bakersfield.

Remote Control Zone (RCZ)—The RCZ at Bakersfield extends from the east clearance point of the $15 x$ short crossovers and the bamboo/work lead switch on the bamboo lead, extending from the bamboo/work lead switch to L Street on the Work Lead. The limits include the bamboo/work lead switch. The total length of the zone is 2392 feet.

Activation / Deactivation Procedure-The Remote Control Operator will request permission to activate the zone from the on-duty trainmaster then will notify the On-Duty Trainmaster when the RCZ has been activated or deactivated. The zone may be activated only after is it determined by visual inspection that trains, engines, men, or equipment are not occupying the

RCZ limits. Only the Remote Control Operator can activate or deactivate the RCZ with one exception to deactivation. The trainmaster may deactivate the zone only if it is determined the activating crew has gone off duty prior to deactivating the zone.
Before entering any RCZ from any location including auxiliary tracks or crossovers, crews must contact the On-Duty Trainmaster or the on-duty RCO crew to determine if an RCZ is activated. If an RCZ is not activated, the crew may proceed through the RCZ unless otherwise restricted. Once it is established that the RCZ is not activated, no communication is necessary for reentry into the zone unless notified otherwise by the on duty trainmaster.
SSI-Switch Control/Monitoring Systems
ICS-in effect:
Calabrese, MP 962.84
SSI Amendment-Item 9, Amtrak Instructions, under "Equipment", the line reading "Movement with locomotives between cars is prohibited" does not apply on the California Division.
The following will apply:
Movement with locomotive between cars is prohibited unless:
A. Locomotive is being used in "push-pull" service.
B. "MU" control cables are connected through the entire train.
C. Locomotive between cars is not isolated or dead-in-tow.

Sidings-Loaded coal trains or trains exceeding 100 TOB should hold the main track at all sidings when meeting or passing trains except they may use the siding to reduce delay to Amtrak and $Z$ trains. East Corcoran siding must not be used by trains exceeding 100 TOB.
When securing equipment in the following sidings, use the following chart in conjunction with ABTH Rule 104.14 to determine the appropriate number of handbrakes.

| Siding | Most Restrictive <br> Grade | Ascending or Descending Movement <br> E. Switch/Direction - W. Switch/Direction |  |
| :---: | :---: | :---: | :---: |
| Una | .32 | Ascending | Descending |
| Shafter, East | .04 | Descending | Flat |
| Shafter, West | .00 | Flat | Flat |
| Wasco | .16 | Ascending | Descending |
| Elmo | .39 | Ascending | Descending |
| Sandrini | .25 | Ascending | Descending |
| Allensworth | .10 | Ascending | Descending |
| Angiola | .08 | Descending | Ascending |
| Corcoran, East | .00 | Flat | Flat |
| Corcoran, West | .05 | Flat | Ascending |
| Guernsey | .11 | Descending | Ascending |
| Hanford, East | .20 | Descending | Ascending |
| Shirley | .20 | Descending | Ascending |
| Conejo | .20 | Descending | Ascending |
| Bowles | .20 | Descending | Ascending |

Locomotive Consists-When building locomotive consists, locomotives rated at less than 2000 horsepower and not equipped with a dynamic brake must be placed immediately behind the lead locomotive in the consist.
Train Crew Motor Vehicle License-California Vehicle Code 12953 states: any circumstances involving accidents or violations in which the Engineer or any other crew member of any train is detained by state or local police, neither the Engineer nor any other crewmember shall be required to furnish a motor vehicle operator's license, nor shall any citation involving the operation of a train be issued against the motor vehicle operator's license of the Engineer or any other crew member of the train.

Close Clearance- Do not ride the side of equipment at the following locations due to close clearance:

| Bakersfield | MP 889.4 | MT 1\&2 | bridge girder |
| :--- | :--- | :--- | :--- |
| Corcoran | MP 950.4 | 7524 | fence |
| Guernsey | Penny-Newman | 7601 | safety cable stanchion |
|  |  | 7602 | safety cable stanchion |
|  |  | 7604 | safety cable stanchion |
|  |  | 7606 | safety cable stanchion |
| Shirley | MP 974.3 | MT | bridge girder |
| Calwa CrossingMP 992.08 | MT | syphon |  |

Close Track Centers-Do not ride the side of equipment on the following tracks unless the adjacent track is known to be clear: Calwa Yard $\quad 5147$ thru 5162. Bakersfield 403 thru 419, 420-421, 415-616, 616-417

HLCS—Hy-Rail Limits Compliance System (HLCS) is in effect on the Bakersfield Subdivision.
Flash Flood Warnings-The following locations have been identified as "critical areas" subject to flash floods and washouts as outlined in System Special Instructions, Item 33: None
8. Other Line Segments Yard Line Segments Line Segment Limits
7254 ........... Bakersfield Yard

7255 ........... Calwa Yard
Road Line Segments
Line Segment Limits
7200 ........... Bakersfield to Calwa
9. Other Location Information

| Name | Mile Post <br> Location | Capacity <br> Feet | Switch <br> Opens |
| :--- | :---: | :---: | :---: |
| Crome | 899.5 | 1,700 | West |
| Lone Star Spur | 901.9 | 5.6 miles | East |
| Stoil | 936.0 | 4,693 | Both |
| Kings Park | 964.0 | 7,571 | Both |
| Laton | 976.0 | 3,515 | Both |
| Monmouth | 985.6 | 1,324 | Both |

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10. Grade Charts



## Dispatcher Information

Barstow to but not including Hodge-(909) 386-4213,
Fax (909) 386-4243
Hodge to San Bernardino-(909) 386-4214, Fax (909) 386-4294

## 1. Speed Regulations

## 1(A). Speed-Maximum

Passenger Freight
MP 0.0 to MP 81.3 .79 MPH. .55 MPH.

Unless otherwise restricted, the maximum speed for freight trains is 70 MPH provided:

1. Train does not contain empty car(s). Refer to SSI item 1 (C) for determining speed for multi-platform, intermodal equipment.
2. Train does not exceed 8,500 feet. Exception: Trains operating with distributed power equipment with remote DP automatic brake valve cut in may operate at 70 MPH up to 10,000 feet in length.
3. Train does not average more than 80 TOB. Exception: Trains consisting entirely of intermodal equipment, autoracks (equipment designed to carry automobiles/trucks) or a combination or both may operate at 70 MPH with tons per operative brake as great as 90 , and; Trains consisting entirely of loaded double-stack equipment may operate at 70 MPH with tons per operative brake as great as 105 .
4. Engineer can control speed to 70 MPH without use of air brakes.
(If unable to control speed to 70 MPH on long descending grades, two additional attempts are allowed to control speed with dynamic brake at slower speeds before speed must be reduced to 55 MPH while negotiating descending grade.)
MP 54.4 to MP 38.0, Eastward freight trains on descending grades, with dynamic brakes not in use between
... 30 MPH .
1(B). Speed-Permanent Restrictions
Westward:
Passenger Freight
Departure 4 through 10, East end . 10 MPH .
Departure Tracks 1201-1210.. .10 MPH.
Receiver Tracks 1501-1505....................................................... 10 MPH
Receiver Tracks 1506-1511....................................................... 25 MPH
MP 0.0 to MP 0.8 ................................................................................................. 50 MPH
MP 0.8 to MP 2.7, Insp. Yard 1101 through 1103.......................... 25 MPH.
MP 0.8 to MP 2.7 (Nos. 1, 2, and 4 Main).................................... 30 MPH .
MP 0.8 to MP 2.7 (No. 3 Main)....................................................... 50 MPH.
MP 2.7 to MP 4.6 .................................................. 65 MPH. ........ 60 MPH.
MP 31.9 to MP 33.9, curve..................................... 60 MPH ......... 55 MPH
MP 33.9 to MP 34.4, curve
Protected by Inert ATS Inductors ................. 40 MPH. ........ 35 MPH.
MP 34.4 to MP 36.2, curve (Main 1) ..................... 65 MPH. ........ 45 MPH.
MP 34.4 to MP 36.2, curve (Main 2) ..................... 60 MPH. ........ 45 MPH.
MP 36.2 to MP 37.2, curve.................................... $50 \mathrm{MPH} . . . . . . . . . ~ 45$ MPH.
MP 37.2 to MP 37.4, curve.................................... $35 \mathrm{MPH} . . \ldots \ldots . . . .35 \mathrm{MPH}$.
MP 37.4 to MP 39.1, curve (Main 1) ..................... 50 MPH. ........ 45 MPH.
MP 39.1 to MP 42.0, curve (Main 2) ..................... $50 \mathrm{MPH} . . . . . . . . .45 \mathrm{MPH}$.
MP 37.4 to MP 39.1, curve (Main 2) ..................... 45 MPH. ........ 40 MPH .
MP 39.1 to MP 42.0, curve (Main 1) ..................... 45 MPH. ........ 40 MPH.
MP 42.0 to MP 43.7, curve................................... $55 \mathrm{MPH} . . . . . . . . ~ 50 \mathrm{MPH}$.
MP 47.2 to MP 48.1, curve.................................... 75 MPH. ........ 65 MPH .
MP 48.1 to MP 48.8, curve.................................... 55 MPH. ........ 55 MPH.
MP 48.8 to MP 50.4, curve.................................... 55 MPH. ........ 50 MPH.
MP 50.4 to MP 52.2, curve.................................... 55 MPH. ........ 50 MPH
MP 52.2 to MP 56.1, curve...................................... 55 MPH. ........ 50 MPH
MP 56.1 to MP 56.6, grade (Main 3)..................... 40 MPH. ........ 40 MPH
MP 56.1 to MP 56.6, grade (Main 1 and Main 2) .. 50 MPH. ........ 45 MPH.
MP 56.6 to MP 61.5, grade (Main 3)
Protected by Inert ATS Inductors .................. 30 MPH. ........ 20 MPH
MP 56.6 to MP 62.4, grade (MT 1 \& 2)
Protected by Inert ATS Inductors ................. 30 MPH. ........ 30 MPH .
MP 56.6, Silverwood, Main 1 to UPRR ................. 30 MPH. ........ 30 MPH.

MP 62.4 to MP 64.2, grade ................................... 40 MPH. ........ 35 MPH.
MP 64.2 to MP 66.5, grade ................................... 35 MPH. ........ 35 MPH.
MP 66.5 to MP 72.6, grade ................................... 40 MPH. ........ 35 MPH.
MP 72.6 to MP 80.6, grade .................................... 50 MPH. ........ 35 MPH
MP 80.6 to MP 81.3, curve
Protected by Inert ATS Inductors ................. 30 MPH. ........ 30 MPH.
Eastward:
MP 81.3 to MP 80.6, curve..................................... 30 MPH. ........ 30 MPH.
MP 80.7 to MP 79.2, curve.................................... 60 MPH. ........ 55 MPH
MP 79.2 to MP 78.3, curve..................................... 70 MPH.
MP 72.6 to MP 72.0, curve.................................... 50 MPH. ........ 45 MPH.
MP 72.0 to MP 71.5, curve.................................... 45 MPH. ........ 45 MPH.
MP 71.5 to MP 70.8, curve.................................... 45 MPH. ........ 40 MPH.
MP 70.8 to MP 66.5, curve.................................... 50 MPH. ........ 45 MPH.
MP 66.5 to MP 64.2, curve..................................... 40 MPH. ........ 35 MPH.
MP 64.2 to MP 62.2, curve....................................... 50 MPH. ......... 45 MPH
MP 58.8 to MP 57.1, curve (Main 3) ..................... $30 \mathrm{MPH} . . . . . . . .30 \mathrm{MPH}$

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|  | Passenger | Freight |
| :---: | :---: | :---: |
| MP 57.1 to MP 56.5, curve (Main 3) | 40 MPH . | 30 MPH . |
| MP 56.5 to MP 56.1, curve (Main 3) | 50 MPH . | H. |
| MP 62.4 to MP 61.8, curve (MT 1\& 2) | 40 MPH . | 35 MPH . |
| MP 61.8 to MP 61.4, curve (MT 1\& 2) | 35 MPH . | 35 MPH . |
| MP 61.4 to MP 60.4, curve (MT 1\& 2) | 40 MPH . | 35 MPH . |
| MP 60.4 to MP 57.2, curve (MT 1\& 2) | 30 MPH . | 30 MPH . |
| MP 57.2 to MP 56.8, curve (MT 1\& 2) | 45 MPH . | 40 MPH . |
| MP 56.8 to MP 56.1, curve (MT 1\& 2). | 45 MPH . | 45 MPH . |
| MP 56.1 to MP 52.1, curve | 55 MPH . | 50 MPH . |
| MP 52.1 to MP 50.4, curve. | .50 MPH . | 50 MPH . |
| MP 50.4 to MP 48.8, curve | 55 MPH . | 50 MPH . |
| MP 48.8 to MP 48.1, curve | .55 MPH . | 55 MPH . |
| MP 48.1 to MP 47.2, curve | 75 MPH | 65 |
| MP 43.7 to MP 42.0, curve |  |  |
| Protected by Inert ATS Inducto | 55 MPH | 50 MPH . |
| MP 42.0 to MP 39.1, curve (Main 1) | 45 MPH . | 40 MPH . |
| MP 42.0 to MP 39.1, curve (Main 2) | 50 MPH | 45 MPH . |
| MP 39.1 to MP 37.4, curve (Main 1) | .50 MPH . | 45 MPH . |
| MP 39.1 to MP 37.4, curve (Main 2) | 45 MPH . | 40 MPH . |
| MP 37.4 to MP 37.2, cu | 35 MP | 35 MPH . |
| MP 37.2 to MP 36.2, curve. | 50 MPH | 45 MPH . |
| MP 36.2 to MP 34.4, curve (Main 1) | 65 MPH | 45 MPH . |
| MP 36.2 to MP 34.4, curve (Main 2) | 60 MPH | 45 MPH . |
| MP 34.4 to MP 33.9, curve. | 40 MPH . | 35 MPH |
| MP 33.9 to MP 31.8, curve. | . 60 MPH . | 55 MPH . |
| MP 4.6 to MP 2.7, curve. | 65 MPH | 60 MPH . |
| MP 2.7 to MP 0.8, (Main 3) |  | 50 MPH |
| MP 2.7 to MP 0.8, (Main 1, 2 and 4) |  | 30 MPH |
| MP 2.7 to MP 0.8, Insp. Yard 1101 thro |  | 25 MPH . |
| MP 0.8 to MP 0.0 |  | 50 MPH . |
| Departure Tracks 1201-1210 |  | 10 MPH . |
| Receiver Tracks 1501-1505, East |  | 10 MPH |
| Receiver Tracks 1506-1511 |  | 25 MPH . |
| Departure 4 through 10, East |  | 10 MPH . |

1(C). Speed—Switches and Turnouts
Trains and engines using auxiliary tracks must not exceed turnout speed for that track unless otherwise indicated.

| Barstow, 4 crossovers...................................... $50 \mathrm{MPH} . . . . . . . .50 \mathrm{MPH}$. |  |  |
| :---: | :---: | :---: |
| Barstow, yard entry | 50 | 50 MPH |
| Barstow Yard, EE and WE inspection yard tracks |  |  |
| 1101 |  |  |
| 1102, 1103 |  |  |
| Barstow, EE passenger siding |  |  |
| Barstow Yard: |  |  |
| Departure Tracks 1201-1210 ...................... 10 MPH. ....... 10 MPH |  |  |
| EE Receiver Tracks 1501-1505 .................. 10 MPH. ....... 10 MPH. |  |  |
| EE Receiver Tracks 1506-1511 ................... 25 MPH. ....... 25 MP |  |  |
| WE Receiver Tracks 1501-1511 .................. 25 MPH. ....... 25 MP |  |  |

Crossover between north departure lead and south departure lead, WE departure yard power switch
Jct., high and low leads on Needles Subdivision,
yard entry track.
.10 MPH .

Crossovers between Cajon and Mojave Subdivision yard entry tracks, power switches
. 25 MPH.

Crossover between WE inspection yard
track 1103 and WE departure yard track
1201, power switches.
.25 MPH
MP 0.1, passenger siding over
switch No. 0142................................................. 15 MPH. ........ 10 MPH
MP 0.1 Needles Subdivision yard entry
Between First St. Bridge and WJ Switch
High lead.
.25 MPH .
Low lead.................................................................................. 15 MPH
Balloon track........................................................................... 10 MPH
MP 0.02 Barstow, EE passenger siding................ 20 MPH. ........ 10 MPH.
MP 0.0 Barstow, 3 crossovers ..................................................... 50 MPH

MP 0.01 Barstow, yard entry ........................................................ 25 MPH.
MP 0.6 East D Yard, WE passenger siding........... 20 MPH. ........ 10 MPH
MP 0.7 East D Yard, crossover .................................................... 50 MPH.
MP 0.7 East D Yard, departure yard lead ..................................... 50 MPH
MP 0.8 East D Yard, turnout to No. 1 Main .................................. 30 MPH
MP 0.9 East D Yard, turnout to No. 2 Main ................................... 30 MPH.
MP 0.9 East D Yard crossover, inspection yard lead ................... 25 MPH.
MP 2.4 Crossover 1 switch WE inspection to
N Departure Lead
. 10 MPH .
MP 2.6 Pull Back track................................................................. 15 MPH
MP 2.6 West D Yard, turnout to No. 1 Main ................................. 50 MPH.
MP 2.7 Crossover ....................................................................... 50 MPH.
1(D). Speed-Other
Barstow, MP 0.4 Needles Subdivision yard entry between First St. and WJ Switch
High Lead .................................................... 25 MPH. ........ 25 MPH .
$\qquad$
Oro Grande, East Victorville, Victorville, Thorn, and Devore,
other than main tracks, locomotives more than four axles........... 5 MPH . Ono

Storage Tracks 8380, 8381, and 8391
. 10 MPH .
Storage Track 8392
20 MPH .
Redlands Industrial Spur, MP 0.0 to MP 6.0 ................................. 5 MPH.

## Temperature Restrictions

When the air temperature exceeds threshold temperature, all trains will be governed by the following table on main tracks through these limits unless a more restrictive speed is in effect. Temperature degrees are shown in Fahrenheit.
MP 0.0 to MP 50.1:

| Temperature <br> Range | Passenger <br> Trains | Freight <br> Trains <br> under 80 <br> TOB | Freight <br> Trains with <br> 80 to100 <br> TOB | Freight <br> Trains over <br> 100 TOB |
| :--- | :--- | :--- | :--- | :--- |
| Exceeds 110 <br> degrees | No <br> Restriction | No <br> Restriction | 55 MPH | 45 MPH |
| Exceeds 115 <br> degrees | 70 MPH | No <br> Restriction | 50 MPH | 40 MPH |
| Exceeds 120 <br> degrees | 50 MPH | No <br> Restriction | 40 MPH | 30 MPH |


| MP 50.1 to MP 81.3 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Temperature <br> Range | Passenger <br> Trains | Freight <br> Trains <br> under 80 <br> TOB | Freight <br> Trains <br> with 80 <br> to 100 TOB | Freight <br> Trains <br> over 100 <br> TOB |
| Exceeds 100 <br> degrees | No <br> Restriction | No <br> Restriction | 55 MPH | 45 MPH |
| Exceeds 105 <br> degrees | 70 MPH | No <br> Restriction | 50 MPH | 40 MPH |
| Exceeds 110 <br> degrees | 50 MPH | No <br> Restriction | 40 MPH | 30 MPH |

Redland Industrial Spur-From 1100 to 1900 hours, if the air temperature is over 100 degrees $F$, the track is out of service unless the movement is preceded by the track supervisor

Train crews must notify the train dispatcher if their train is restricted by this instruction. If in doubt as to the temperature, contact the train dispatcher.
Speed restrictions, dynamic brake requirements, and special instructions governing the use of retainers for westward freight trains operating between MP 56.6 and MP 78.0.

Main 3 between MP 56.6 and MP 61.5, with or without helpers/distributed power:
A. 20 MPH if train does not exceed 4,500 tons or 95 TOB.
B. 15 MPH if train exceeds 4,500 tons or 95 TOB.
C. Cannot proceed if train exceeds 14,000 tons or 125 TOB.
Main 1 and Main 2 between MP 56.6 and MP 78.0, and Main 3 between MP 61.5 and MP 78.0:
A. 30 MPH if train does not exceed 6,500 tons or 95 TOB.
B. 20 MPH if train exceeds 6,500 tons or 95 TOB.
C. Cannot proceed if train exceeds 16,000 tons or 135 TOB.
D. 35 MPH for light engine consists.

Main 1 with helpers/distributed power between MP 56.6 and MP 78.0, Main 2 with helpers/distributed power between MP 56.6 and MP 78.0 and Main 3 with helpers/ distributed power between MP 61.5 and MP 78.0:
A. 30 MPH if train does not exceed 6,500 tons or 135 TOB.
B. 25 MPH if train is between 6,500 tons and 12,000 tons and does not exceed 135 TOB.
C. 20 MPH if train does not exceed 14,000 tons or 135 TOB.
D. 15 MPH if train does not exceed 18,000 tons or 145 TOB.
E. Cannot proceed if train exceeds 18,000 tons or 145 TOB.

Exception: Westward freight trains exceeding 16,000 tons or 135 TOB may operate through turnout to UPRR at Silverwood (MP 56.6). Westward freight trains destined for the Cajon Subdivision in excess of 16,000 tons or 125 TOB must notify the train dispatcher before departing Barstow.
Note: Westward freight trains operating between MP 56.6 and MP 78.0 must have a properly functioning speed indicator on the controlling locomotive of the head-end consist.
Locomotive weight will not be included in train tonnage except for those units on which dynamic brake is inoperative.
Dynamic Brake Requirements for Westward Freight Trains: Westward freight trains operating between Summit and Cajon must test their Dynamic Brakes between Lenwood and Frost to determine retarding force. Helper engineers must indicate to trains being helped the total operative dynamic brake axles in helper consist. Trains greater than 3,000 tons before leaving Summit, it must be known that the lead locomotive in the consist has an operative extended range dynamic brake and that the locomotive consist has the minimum number of operative axles of extended dynamic brake. If the train does not meet the minimum requirement, THE TRAIN MUST NOT PROCEED. A helper consist may be added to meet the
requirement. This requirement must be met using the axle count of locomotives having operative extended range type dynamic braking only.
After leaving Summit, if the dynamic brake on the lead locomotive in the consist becomes inoperative, or if the dynamic brake on a trailing locomotive becomes inoperative, and the loss of the dynamic brake causes the train to have less than the minimum required axles of dynamic brake, if in the judgement of the engineer the train is under control, the train may proceed without stopping.
Exception: Trains 3,000 tons or less and TOB is not greater than 40 are not required to have its locomotive consist equipped with extended range dynamic brake but must have the minimum number of (Basic or Extended range) operative axles of dynamic brake.
When operating with basic dynamic brakes (other than extended range) retarding force decreases as train speed reduces below 18 MPH. Additional brake pipe reduction and/or increased dynamic braking effort may be necessary to control train speed.
Tons Per Operative Brake (TOB)—The total minimum operative axles of dynamic brake for trains (including helpers) is in the body of the following tables. When using the table to determine TOB, round the figures up to the next whole number. For example 105.1 TOB becomes 106 TOB.
Minimum required operative axles of dynamic brake for Main 1 and Main 2, MP 56.6 to MP 78.0; and for Main 3, MP 61.5 to MP 78.0:

| Total Trailing <br> Train Tonnage | TOB <br> $\mathbf{8 5}$ or <br> less | TOB <br> $\mathbf{8 6}$ to <br> $\mathbf{9 5}$ | TOB <br> $\mathbf{9 6}$ to <br> $\mathbf{1 0 5}$ | TOB <br> $\mathbf{1 0 6}$ <br> to <br> $\mathbf{1 1 5}$ | TOB <br> $\mathbf{1 1 6}$ <br> to <br> $\mathbf{1 2 5}$ | TOB <br> $\mathbf{1 2 6}$ <br> to <br> $\mathbf{1 3 5}$ | TOB <br> $\mathbf{1 3 6}$ <br> to <br> $\mathbf{1 4 5}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,000 or less | 4 | 4 | 4 | 4 | 6 | 6 | 8 |
| 2,001 to 3,000 | 6 | 6 | 6 | 6 | 8 | 8 | 10 |
| 3,001 to 4,000 | 8 | 8 | 8 | 8 | 10 | 10 | 12 |
| 4,001 to 5,000 | 8 | 8 | 10 | 10 | 12 | 12 | 14 |
| 5,001 to 6,000 | 12 | 12 | 12 | 12 | 14 | 14 | 16 |
| 6,001 to 7,000 | 12 | 12 | 12 | 14 | 16 | 16 | 18 |
| 7,001 to 8,000 | 12 | 12 | 12 | 14 | 16 | 16 | 20 |
| 8,001 to 9,000 | 12 | 12 | 14 | 16 | 18 | 20 | 22 |
| 9,001 to 10,000 | 12 | 12 | 14 | 18 | 20 | 22 | 24 |
| 10,001 to 11,000 | 12 | 12 | 14 | 18 | 22 | 24 | 28 |
| 11,001 to 12,000 | 12 | 12 | 16 | 20 | 24 | 26 | 30 |
| 12,001 to 13,000 | 12 | 12 | 18 | 22 | 26 | 28 | 32 |
| 13,001 to 14,000 | 12 | 12 | 18 | 24 | 28 | 30 | 34 |
| 14,001 to 15,000 | 12 | 14 | 20 | 26 | 30 | 32 | 36 |
| 15,001 to 16,000 | 12 | 14 | 20 | 26 | 30 | 34 | 38 |
| 16,001 t 17,000 | 14 | 16 | 22 | 28 | 32 | 36 | 40 |
| 17,001 to 18,000 | 16 | 18 | 24 | 30 | 34 | 38 | 44 |

Minimum required operative axles of dynamic brake for Main 3 between MP 56.6 and MP 61.5:

| Total Trailing <br> Train Tonnage | TOB <br> $\mathbf{7 5}$ or <br> less | TOB <br> $\mathbf{7 6}$ to <br> $\mathbf{8 5}$ | TOB <br> $\mathbf{8 6}$ to <br> $\mathbf{9 5}$ | TOB <br> $\mathbf{9 6}$ to <br> $\mathbf{1 0 5}$ | TOB <br> $\mathbf{1 0 6}$ <br> to <br> $\mathbf{1 1 5}$ | TOB <br> $\mathbf{1 1 6}$ <br> to <br> $\mathbf{1 2 5}$ | TOB <br> $\mathbf{1 2 6}$ <br> to <br> $\mathbf{1 3 5}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,000 or less | 4 | 6 | 8 | 8 | 8 | 10 | 10 |
| 2,001 to 4,000 | 10 | 12 | 14 | 16 | 18 | 18 | 20 |
| 4,001 to 5,000 | 12 | 14 | 18 | 20 | 20 | 22 | 24 |
| 5,001 to 6,000 | 14 | 18 | 20 | 22 | 24 | 26 | 28 |
| 6,001 to 7,000 | 16 | 20 | 22 | 24 | 28 | 30 | 32 |
| 7,001 to 8,000 | 16 | 22 | 24 | 28 | 32 | 34 | 36 |
| 8,001 to 9,000 | 18 | 24 | 28 | 32 | 36 | 38 | 40 |
| 9,001 to 10,000 | 20 | 26 | 32 | 36 | 38 | 42 | 44 |
| 10,001 to 12,000 | 24 | 32 | 38 | 42 | 46 | 50 | 52 |
| 12,001 to 14,000 | 28 | 36 | 42 | 48 | 54 | 58 | 60 |

West of MP 56.6, under certain conditions such as undesired emergency, break-in-two, emergency stop, etc., where it is necessary to hold the train in place while the air brake system is being recharged, starting behind the lead
locomotives, apply a sufficient number of hand brakes to hold the train in place as outlined in ABTH Rules for the applicable railroad.

The brake system must be fully charged, after which a brake pipe reduction must be made that is sufficient to hold the train in place while the hand brakes are being released. Before proceeding, all hand brakes must be released.

Westward movement (excluding light engines) departing Summit routed MT 3 may not proceed with any Signal Aspect more restrictive than Flashing Yellow (or red over flashing yellow if routed through crossover from MT 2 or MT 1). This will provide two unoccupied blocks for Spacing while initially descending the grade. Train brake system recharging must begin at Signal Aspect changes to yellow or red over yellow prior to departing Summit following another train on MT 3.
Exception: If a signal more favorable than Yellow cannot be provided, train dispatcher or other supervisor may permit a train to proceed on a more restrictive signal aspect.

The total brake pipe reduction to control train's speed must not exceed 15 psi. If the total brake pipe reduction exceeds 15 psi, the train MUST BE STOPPED immediately. To control train speed, a sufficient number of retainers (not less than 20) starting behind the lead locomotives, must be set in High-Pressure position before releasing the train brakes. Before proceeding, the brake system must be fully recharged. Excessive use of the engine brake is prohibited. If retainers are positioned before reaching Cajon, a 10-minute stop to cool wheels must be made at Verdemont. Trains operating with retainers must stop east of the controlled signal at Baseline and place the retainers in Direct Exhaust position before proceeding.

The speed of trains must be controlled, at least in part, with the automatic air brake when the train tonnage exceeds: 2,500 tons on Main 3 between MP 56.6 and MP 61.5 or 3,500 tons on Main 1 and Main 2 between MP 56.6 and MP 78.0, and Main 3 between MP 61.5 and MP 78.0.

See Item 1 of the System Special instructions for additional speed restrictions.
2. Bridge and Equipment Weight Restrictions Maximum Gross Weight of Car
Barstow to San Bernardino $\qquad$ 143 tons, Restriction B

Locomotives with more than 4 axles are prohibited on tracks 8246 and 8247 at Oro Grande, Riverside Cement.
3. Type of Operation

CTC-in effect:
MP 0.0 to MP 81.3
MP 747.7X to MP 749.9X (Cajon Connection) MP 3.01 to MP 749.55 (Mojave Connection)

Multiple Main Tracks-in effect: 2 MT:
MP 2.6 to MP 52.8
3 MT:
MP 0.0 to MP 0.8
MP 52.8 to MP 81.3
4 MT:
MP 0.8 to MP 2.6
4. General Code of Operating Rules Items

Rule 5.8.2—Sound the whistle approaching all crossings, public and private.
Rule 6.19—When flagging is required, the distance will be 2.0 miles.
Rule 6.26-The main tracks cross at the grade separation at MP 39.1 and are designated as prescribed by Rule 6.26 on either side of the crossing.
The north track from WBCS Summit to Cajon is Main 1. The track to the left of Main 1 from WBCS Summit to Cajon is Main 2. The south track from WBCS Summit to Keenbrook is Main 3.

Rule 6.28—From San Bernardino, MP 81.35/MP 0.0, to End of Track, MP 6.0, is the Redlands Industrial Spur. Rule 6.28 is in effect. All switches must be left lined and locked for movement on the Redlands Industrial Spur.

Rule 8.20-Tracks 1310, 1311, and 1312 at Barstow have derails. After stopping 100 feet from the derails, the movement may continue to spot cars at the "spot" signs, but the movement must not pass the white marks on the rails.

Rule 9.1—Signals Not Conforming to Aspects and Indications Shown in the System Special Instructions

| Aspect | Name | Indication |
| :--- | :--- | :--- |
| Flashing Yellow <br> Over Lunar | Approach-- <br> Thirty | Proceed; approach next signal not <br> exceeding 30 MPH prepared to enter <br> diverging route at prescribed speed, <br> if exceeding 40 MPH, immediately <br> reduce to that speed. |

ABTH Rule 100.13-At Summit, westward passenger trains must make a running air brake test between MP 55 and MP 56 . Westward freight trains operating between Summit and Cajon must make a running air brake test between Lenwood and Lugo, and in doing so must determine the following:
A. Retarding force of air brake system.
B. That normal brake pipe pressure changes occur at the rear of the train.
ABTH Rule 103.3-If the train is stopped at Summit for any reason, an automatic brake application of not less than 15 psi must be made and not released until ready to proceed.
5. Trackside Warning Detectors (TWD)
A. Protecting bridges, tunnels or other structures: None
B. Other TWD locations MP 8.5—DED—Exception Reporting—Recall Code 8 Transmits on both Channel 65 and 72
MP 28.5—DED—Exception Reporting—Recall Code 8
MP 32.7—DED—Exception Reporting
MP 37.9—DED—Exception Reporting
MP 42.9—DED—Exception Reporting
MP 48.5—DED—Exception Reporting—Recall Code 8
MP 52.8—DED—Exception Reporting
MP 57.8—Main 1\&2—DED—Exception Reporting
MP 58.6—Main 3—DED—Exception Reporting
MP 64.7—Exception Reporting—Recall Code 8
MP 71.5—DED—Exception Reporting
MP 76.2—Main 3—DED—Exception Reporting
MP 76.5—DED—Exception Reporting
6. FRA Excepted Track-

Redlands Industrial Spur, MP 1.2 to MP 6.0
7. Special Conditions

Ono Sidings - Tracks 8380, 8381, 8391 and 8392—Cars left unattended at these locations must be secured with a sufficient number of handbrakes to prevent movement. Use the table in the ABTH Rule 104.14 to determine the number of handbrakes to be applied. Cars must be left a sufficient distance from the derail (approximately 150 feet) to allow locomotives to be attached to the cars and main track switch to be closed while performing an air test on the cars.
Note: The grade at these locations is $2.2 \%$ descending east to west.

Remote Control Area—Signs located at MP 5.0 (Cajon Subdivision), MP 751.0 (Mojave Subdivision) and MP 743.6 (Needles Subdivision), designate the Remote Control Area at Barstow.

Remote Control Zone (RCZ)—Receiving tracks 1-10 (15011510) including the leads to the hump crest are designated as the Remote Control Zone (RCZ) at Barstow yard. Before the RCZ can be fouled or occupied, the Route Selector must be contacted to determine if the RCZ has been activated. All tracks east of the hump crest are governed by GCOR Rule 6.28, Movement on Other Than Main Track, and are not included in the RCZ.

Activation/Deactivation Procedure at Barstow-The remote control operator will contact the Route Selector and request that RCZ protection be established after the remote control locomotive has cleared in the receiving track where protection is desired. All communication between the remote control operator and the Route Selector will be by radio. The following words will be used "(Employee Name) $\qquad$ would like to establish a zone in track (Track Number) ". The Route Selector will line the west receiving track switch away from the lead and provide switch blocking including the switches on the hump crest leads. After this process has been completed the Route Selector will notify the remote control operator that the RCZ has been activated. The RCZ will remain activated using the following words: "Zone is activated in (Track Number) $\qquad$ ". A zone is not active until verified by the Route Selector. The RCZ will remain activated until the remote control operator has requested that the RCZ be deactivated.
Helping Stalled DP Trains—Stalled Distributed Power Trains on the Cajon Subdivision that must add helpers to the head end of the train under the direction of the Cajon Operating Officer Responder and operate as outlined below. ABTH Rules 102.12.3, 102.12.4, and 102.12.5 are amended only for this specific move to read:
ABTH Rule 102.12.3—Manned Helper Added to Head End of Train-When a manned helper is coupled on the head end of the train, the helper engineer will transfer control of the air brakes (and the throttle with MU cable) to the road engineer as follows:

1. Before opening angle cocks between the road locomotive and the manned helper, the engineer on the helper locomotive will:
a. Communicate with the road engineer to determine the brake pipe reduction currently applied to the train.
b. The helper engineer must make a reduction 2 psi more than the current reduction applied to the train.
c. After brake pipe exhaust has ceased, cut out the automatic brake valve and place handle in the release position.
d. Notify the engineer on the road locomotive of the amount of the brake pipe pressure reduction.
e. The independent brake valve must be left cut in on the helper locomotive. Place the independent brake valve handle in the release position and actuate to fully release the brakes on the helper locomotive consist.
2. The engineer on the road locomotive will:
a. After opening the angle cocks between the helper and the road locomotive, increase brake pipe reduction to at least 20 psi and helper crew will observe that brakes apply on helper consist by visual inspection.
b. When train is ready to depart, perform DP train check to check brake pipe continuity as brakes are released as per ABTH Rule 105.4 Also observe by visual inspection that brakes release on helper consist.
ABTH Rule 102.12.4-Manned Helper Removed From Head End of Train- When a manned helper will be detached from the head end of the train do the following:
3. The engineer in control of the road locomotive will:
a. Make not less than a 6 psi brake pipe reduction.
b. Notify the helper engineer when ready to detach the manned helper after closing the angle cocks between the helper consist and the road locomotive and removing the MU cable.
4. The helper engineer will cut in the Automatic Brake Valve after the angle cocks are closed between the consists.
5. After the helper consist is detached, the Engineer on the road locomotive will increase the brake reduction on the train to not less than 15 psi before the train departs.

## ABTH Rule 102.12.5—Operating Responsibilities with

 Manned Helper-When adding helpers to the head end of a DP train, the control of all locomotives coupled together must be transferred to the DP road locomotive engineer by plugging in the MU cable, whenever practicable. When more than one locomotive is attached to a train, the engineer of the DP road locomotive must control the train's air brakes. The engineer in the lead locomotive consist is in charge of train movement. The engineer in charge will communicate with and direct the engineer on the DP road locomotive as follows:1. Identify speed restrictions and locations where a stop is to be made at least 2 miles in advance.
2. Communicate clearly the name or aspect of signals affecting the train's movement as soon as the signals become visible or audible.
Note: The helper engineer will be responsible to comply with whistle requirements and may utilize the ABV handle, even though cut out, to initiate an emergency application of the brakes should any emergency situation occur requiring this action. The speed limit for a train in this configuration must not exceed 20 MPH .
Freight trains that exceed the maximum authorized speed by 5 MPH, MUST stop by using an emergency application of the air brakes. Westward freight trains operating between MP 56.6 and MP 78.0 that are experiencing air brake problems MUST STOP immediately using an emergency air brake application, if necessary, and must secure the train. The train must not proceed until the air brake system is repaired. At Summit, freight trains required to stop before descending the grade must recharge the train brake system before proceeding.

Automatic Brake Valve Cutout Valve Position—When operating westward freight trains on the Cajon Subdivision, place the automatic brake valve cutout valve in FRT position. In the event of equalizing reservoir leakage while operating between MP 56.6 and MP 78.0, the train MUST BE STOPPED. After stopping, the train must be properly secured and the automatic brake valve cutout valve placed in PASS position. The
train brake system must be fully charged before proceeding. A radio report must be made promptly to the Mechanical Desk, Fort Worth, and Form 1226-B Std. "Locomotive Inspection Form" must be completed and turned in at conclusion of the trip.
Before departing Barstow, westward freight trains must notify the Cajon Subdivision dispatcher of the following information:

1. Work to be performed on the Cajon Subdivision and at San Bernardino.
2. If they will require helpers to meet the HPT as outlined above.
3. If the train qualifies for Main 3.

Coupler capacity for trains (non-DP or helpers) on ascending grades-
Eastward trains (MT 1 and MT2 Baseline to Summit, and MT3
Baseline to Cajon):
Solid intermodal \& loaded coal trains - 8,500 tons All other trains $-6,500$ tons
Eastward trains (MT 3) - Cajon to Summit: Solid intermodal \& loaded coal trains - 6,300 tons All other trains - 4,600 tons
Westward (all tracks) - Frost to Summit: Solid intermodal \& loaded coal trains - 11,500 tons All other trains - 8,500 tons
Minimum horsepower per ton (HPT) requirementsEastward trains must notify the Cajon Subdivision Dispatcher as soon as possible if helpers are needed to meet the HPT as required below:
Eastward trains (all main tracks Baseline to Cajon, MT 1 and MT 2 Cajon to Summit) Trains (non-DP or helper equipped) - 2.5 hpt DP or helper equipped - 2.3 hpt
Eastward trains (MT 3) - Cajon to Summit Trains (non-DP or helper equipped) - 3.0 hpt DP or helper equipped - 2.8 hpt
Westward (all main tracks) - Frost and Summit Trains (non-DP or helper equipped) - 2.0 hpt DP or helper equipped - 1.8 hpt
Conditions for Handling Low Battery Messages-Before departing Barstow or Yermo, westward freight trains operating on to the Cajon Subdivision must verify that there are no ETD messages indicating "Low Battery" displayed on the head end device. If any of these messages are received prior to departing Barstow, a fully charged battery must be installed before departing.
Before passing Summit, westward freight trains must verify that there are no ETD messages indicating "Low Battery" displayed on the head end device. If any of these messages are received, a fully charged battery must be installed before departing Summit.
After departing Summit, if an ETD message indicating "Low Battery" is displayed on the head end device, crew must bring train safely to a stop in accordance with good train handling practices and the battery MUST be changed.
NOTE: Some classes of locomotives will display an "EOT BATT" box on the locomotive engineer's control screen. If this box is illuminated in YELLOW with Black letters, this indicates "Low Battery". If EOT battery is OK, box is not shown.
If it becomes necessary to change a battery en route, this fact MUST be reported to the train dispatcher who will notify the appropriate responders in order that an accurate record be maintained.
Coiled Steel Trains-Westward loaded coiled steel trains are restricted to Main 1 and Main 2 from Summit, MP 56.6 to Cajon, MP 62.8.

Train Make-Up Instructions-System Special Instructions, Item 47 will govern and it applies to trains in both directions.
Train Crew Motor Vehicle License- California Vehicle Code 12953 states: any circumstances involving accidents or violations in which the Engineer or any other crew member of any train is detained by state or local police, neither the Engineer nor any other crewmember shall be required to furnish a motor vehicle operator's license, nor shall any citation involving the operation of a train be issued against the motor vehicle operator's license of the Engineer or any other crew member of the train.
Work Train Instructions-These instructions apply to all work trains operating on the Cajon Subdivision.
All work train crews will conduct a job briefing with a BNSF Operating Officer (Representative can be from the Operating, Mechanical or Engineering Department(s)) at the beginning of their tour of duty and at intervals that do not exceed four (4) hours until the end of the tour of duty. Movements must not be made unless these briefings occur.
All work trains operating must be operated with the ability to initiate an emergency application from the rear of train.
All mountain grade train handling rules outlined under ABTH Rule 102.6, 103.7 apply to work trains.
All movements, including switching movements, must be made with the air brakes on all cars being handled cut in and charged. All cars left standing on the main track (in addition to securing with hand brakes) will be left in emergency when the locomotive is detached.

Close Clearances-Do not ride the side of equipment at the following locations due to close clearance:

| Barstow Yard | Rip 3 | 1303 | loading dock |
| :--- | :--- | :--- | :--- |
|  | Rip 4 | 1304 | loading dock |
|  | Valley Lumber | 1323 | loading dock |
| Redlands Loop | Greenbrier | 318 | equipment** |
| Thorn | Nutro Dog Food | 8319 | gate |
| Hesperia | Team Track | 8322 | gate |
|  | Wholesale Lumber | 8323 | gate |
|  | 84 Components | 8401 | gate |

**Spot cars only to the fenced track next to the main
Close Track Centers-Do not ride the side of equipment on the following tracks unless the adjacent track is known to be clear: Barstow Yard 1809 thru 1815 Oro Grande 8253-MT2, 8254-MT2 Victorville CEMEX Co. "A" \& B 8274-8275

## Long/Short Mile Locations-

Between MP 0.0 to MP 3.0, each mile is 6495 feet.
Between MP 3.0 to MP 4.0, each mile is 4775 feet. Each tenth of a mile should be calculated using 478 feet.

On Main Tracks 1 \& 2, between MP 57.0 and MP 61.0, each mile is 7368 feet and between MP 61.0 and MP 62.0 each mile is 7370 feet. Between MP 57 and MP 62 on Main Tracks $1 \& 2$, each tenth of a mile should be calculated using 737 feet.

HLCS—Hy-Rail Limits Compliance System (HLCS) is in effect on the Cajon Subdivision.
Flash Flood Warnings-The following locations have been identified as "critical areas" subject to flash floods and washouts as outlined in System Special Instructions, Item 33:

None
8. Line Segments

Yard Line Segments Line Segment Limits 7253 ........... Barstow Yard
Road Line Segments
Line Segment Limits
7600 ............MP 0.0 to San Bernardino
9. Other Location Information

| Name | Mile Post <br> Location | Feet | Switch <br> Opens |
| :--- | :---: | :---: | :---: |
| Redland Industrial Spur | 0.0 to 6.0 | Yard |  |
| E Street | 1.0 | 950 | Both |
| Victoria | 4.6 | 1,030 | Both |
| Helendale - Main 1 | 21.1 | 640 | Both |
| Helendale - Main 2 | 21.1 | 937 | East |
| Oro Grande - Main 1 | 31.5 | 2,591 | West |
| Oro Grande - Main 2 | 31.5 | 2,145 | Both |
| Victorville - Main 1 | 36.7 | 4,700 | Both |
| Victorville - Main 2 | 36.7 | 4,250 | Both |
| Thorn - Main 1 | 41.1 | 3,635 | Both |
| Hesperia - Main 2 | 45.1 | 6,760 | Both |
| Mountain Man Spur - M1 | 54.3 | 3,000 | East |
| Walker - Main 2 | 59.4 | 580 | West |
| Cajon - Main 1 | 62.3 | 1,025 | East |
| Old Keenbrook - Main 1 | 67.3 | 100 | West |
| Devore - Main 1 | 71.0 | 700 | West |
| Cargill - Main 1 | 72.5 | 3,301 | Both |
| Cargill - Main 3 | 73.4 | 1,000 | West |
| Ono - Main 1 | 75.2 | 6,573 | Both |
| Ono - Main 1 | 76.7 | 7,562 | Both |

10. Grade Chart


## 18 CALIFORNIA DIVISION—No. 1—February 9, 2011—Harbor Subdivision

| W <br>  <br> S <br> T <br> W <br> A | $\begin{aligned} & \text { Length } \\ & \text { of } \\ & \text { Siding } \\ & \text { (Feet) } \end{aligned}$ | Station Nos. | $\begin{aligned} & \text { Mile } \\ & \text { Post } \end{aligned}$ | Harbor Subdivision MAIN LINE STATIONS | $\begin{gathered} \text { Rule } \\ 4 . \end{gathered}$ | $\begin{aligned} & \text { Type } \\ & \text { of } \\ & \text { Oper. } \end{aligned}$ | Line Segment | $\begin{array}{\|c\|} \hline \text { Miles } \\ \text { to } \\ \text { Next } \\ \text { Stn. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | Adj. Sub: San Bernardino |  |  |  |  |  |  |  |
|  |  | 23550 | 0.0 | HARBOR JCT. | JR |  | 7604 | 1.5 |
|  |  |  | 1.5 | MALABAR | R |  |  | 1.3 |
|  |  |  | 2.8 | UP RRX | MR |  |  | 0.7 |
|  |  | 21650 | 3.5 | WINGFOOT | R |  |  | 2.5 |
|  |  | 21660 | 6.0 | WILDASIN | R |  |  | 1.3 |
|  |  | 21670 | 7.3 | VAN NESS | R |  |  | 0.7 |
|  |  | 21680 | 8.0 | HYDE PARK | R |  |  | 0.24 |
|  |  |  | 8.2 | ORTIZ | R |  |  | 1.66 |
|  |  | 21690 | 9.9 | INGLEWOOD | R |  |  | 2.1 |
|  |  |  | 12.0 | WILLIAMS | R |  |  | 1.6 |
|  |  | 21710 | 13.6 | LAIRPORT | R |  |  | 1.0 |
|  |  |  | 14.6 | UP RRX | RU |  |  | 0.2 |
|  |  | 21720 | 14.8 | EL SEGUNDO | RT |  |  | 1.8 |
|  |  | 21770 | 16.6 | LAWNDALE | R |  |  | 3.5 |
|  | 7,900 | 21780 | 20.1 | ALCOA | R |  |  | 1.6 |
|  |  | 21830 | 21.7 | TORRANCE | R |  |  | 1.6 |
|  |  | 21820 | 23.3 | IRONSIDES | R |  |  | 3.3 |
|  |  | 22100 | 26.6 | WATSON <br> Adj. RR: PHL, MP 266 | JBR |  |  | 0.5 |
|  |  |  | 27.1 | ROLLING JCT. <br> Adi. RR: UP, MP 27.4 | JR |  |  | 28.3 |
|  | Adj. Sub: Alameda Corridor |  |  |  |  |  |  |  |
|  | Radio Call-In |  |  |  |  |  |  |  |
|  | Radio Channel 78 in service Harbor Jct. to MP 28.3 |  |  |  |  |  |  |  |
|  | Hobart |  |  | El Segundo |  | Watson |  |  |
|  | Radio Channel 32 in service at Watson Yard No Call-in available |  |  |  |  |  |  |  |
|  | Emergency 9 |  |  |  |  |  |  |  |
|  | DS $=1$, Cust. Support $=3$, Mechanical $=4$, Detector Desk $=5$ |  |  |  |  |  |  |  |

## Dispatcher Information

(909) 386-4215, Fax (909) 386-4245

1. Speed Regulations

1(A). Speed-Maximum
Freight
Harbor Subdivision.................................................................. 20 MPH.
Alcoa Spur 10 MPH .

1(B). Speed—Permanent Restrictions
MP 0.1 to MP 1.6 12 MPH.
MP 1.6 to MP 10.1 15 MPH .
MP 14.6 RRX (HER) - Restricted speed not to exceed .............. 10 MPH

1(C). Speed-Switches and Turnouts
Harbor Subdivision..
10 MPH .
1(D). Speed-Other
Watson Freight Locomotive cranes/pile drivers, AT-199454 through AT-199468 and Jordan spreaders. 20 MPH 20 MPH .

When the ambient temperature reaches 100 degrees $F$ after 1400 hours, train speed is restricted to 10 MPH with continuous patrols.

See Item 1 of the System Special Instructions for additional speed restrictions.
2. Bridge and Equipment Weight Restrictions Maximum Gross Weight of Car
Harbor Jct. to Long Beach. $\qquad$ 143 tons, Restriction A
3. Type of Operation

Restricted Limits-in effect:
MP 0.1 to MP 27.6
When approaching the UPRRX Manual Interlocking at MP 2.8, contact the UPRR Train Dispatcher by radio (Channel 1414, Tone * 50 ) with information regarding your expected arrival at the interlocking. This requirement is to avoid blocking road crossings.
4. General Code of Operating Rules Items

Rule 5.8.2-Sound the whistle approaching all crossings, public and private.
Rule 6.19-When flagging is required, distance will be 1.0 mile.
5. Trackside Warning Detectors (TWD)—None
6. FRA Excepted Track-None
7. Special Conditions

Remote Control Area-Signs located at MP 26.0, MP 27.4 and MP 27.8X designate the Remote Control Area at Watson Yard.
Pacific Harbor Line-BNSF Employees operating on the PHL must have the current PHL Timetable and Special Instructions in their possession. All movements between West Thernard and G Street in either direction must be made by permission of, and with the proper authority acquired from, the Pacific Harbor Line Railway Dispatcher at Badger Bridge. See the PHL Timetable and Special Instructions for the appropriate contact information.

Train Crew Motor Vehicle License- California Vehicle Code 12953 states: any circumstances involving accidents or violations in which the Engineer or any other crew member of any train is detained by state or local police, neither the Engineer nor any other crewmember shall be required to furnish a motor vehicle operator's license, nor shall any citation involving the operation of a train be issued against the motor vehicle operator's license of the Engineer or any other crew member of the train.

Flash Flood Warnings-The following locations have been identified as "critical areas" subject to flash floods and washouts as outlined in System Special Instructions, Item 33: None
8. Line Segments

Yard Line Segments
Line Segment Limits
7653 ...........Wilmington Yard
Road Line Segments
Line Segment Limits
7604 ........... Harbor Jct. to Rolling Jct.
9. Other Location Information

| Name | Mile Post <br> Location | Capacity <br> Feet | Switch <br> Opens |
| :--- | :---: | :---: | :---: |
| Lairport - Main 1 | 13.6 | 4,962 |  |

10. Grade Chart
elevation in feet

elevation in feet

## 20 CALIFORNIA DIVISION—No. 1—February 9, 2011—Lucerne Valley Subdivision



## Dispatcher Information

(909) 386-4214, Fax (909) 386-4294

## 1. Speed Regulations

1(A). Speed-Maximum
$\qquad$
1(B). Speed-Permanent Restrictions—None
1(C). Speed—Switches and Turnouts-None
1(D). Speed-Other-None
See Item 1 of the System Special Instructions for additional speed restrictions.
2. Bridge and Equipment Weight Restrictions

Maximum Gross Weight of Car
Cushenbury to MP 0.0. $\qquad$ 143 tons, Restriction D
3. Type of Operation

TWC-in effect:
MP 28.0 to MP 0.9
Restricted Limits-in effect:
MP 29.2 to MP 28.0
MP 0.9 to MP 0.0
4. General Code of Operating Rules Items

Rule 5.8.2—Sound the whistle approaching all crossings, public and private.

Rule 6.19—When flagging is required, distance will be 1.0 mile.
5. Trackside Warning Detectors (TWD)—None
6. FRA Excepted Track

Lucerne Valley Subdivision, MP 29.2 to MP 0.0
7. Special Conditions

Cushenbury-Employees are prohibited from switching cars other than gondolas and hoppers on tracks 8441 and 8442.
Train Crew Motor Vehicle License- California Vehicle Code 12953 states: any circumstances involving accidents or violations in which the Engineer or any other crew member of any train is detained by state or local police, neither the Engineer nor any other crewmember shall be required to furnish a motor vehicle operator's license, nor shall any citation involving the operation of a train be issued against the motor vehicle operator's license of the Engineer or any other crew member of the train.

Close Clearances-Do not ride the side of equipment at the following locations due to close clearance:

| Spur 4 | Omya | 8417 | loading dock |
| :--- | :--- | :--- | :--- |
| Spur 5 | Specialty Minerals | 8421 | loading dock |
|  |  | 8422 | loading dock |

Close Track Centers-Do not ride the side of equipment on the following tracks unless the adjacent track is known to be clear: Mitsubishi Cement 8441-8442, 8446-8447

8450-8451
Flash Flood Warnings-The following locations have been identified as "critical areas" subject to flash floods and washouts as outlined in System Special Instructions, Item 33:

## None

8. Line Segments

Road Line Segments
Line Segment Limits 7601 ........... Cushenbury to MP 0.0
9. Other Location Information

| Name | Mile Post <br> Location | Capacity <br> Feet | Switch <br> Opens |
| :--- | :---: | :---: | :---: |
| Bass | 15.5 | 700 | Both |
| Omya | 23.5 | 884 | West |
| Specialty Minerals | 26.2 | 1,300 | East |

10. Grade Chart



Between Mojave and Kern Jct. the UP RR uses Northward and Southward directions. Mojave to Kern Jct. is Northward.

## Radio Call-In

Radio Channel 32 in service at Barstow Yard
Radio Channel 65 in service MP 749.4A to Kern Jct
Jewell (Flash II) Marcel (Oak Creek) Bena

Radio Channel 84 in service Kern Jct. to MP 887.7
Bakersfield Yard
Emergency 9

## DS $=1$, Cust. Support $=3$, Mechanical $=4$, Detector Desk $=5$

 UP Radio Channel 14 in service Mojave to Kern Jct.Dispatcher Information
Valley Jct. to Mojave-(909) 386-4213, Fax (909) 386-4243
Kern Jct. to Bakersfield-(909) 386-4226, Fax (909) 386-4246
UPRR DS - (402) 636-1606, Fax (402) 997-3323

## 1. Speed Regulations

1(A). Speed-Maximum
MP 749A.0 to MP 887.7, including trains
100 TOB and over........................................ 70 MPH. ........ 55 MPH.

Unless otherwise restricted, the maximum speed for freight trains is 70 MPH provided:

1. Train does not contain empty car(s). Refer to SSI, 1(C) for determining speed for multi-platform, intermodal equipment.
2. Train does not exceed 8,500 feet. Exception: Trains operating with distributed power equipment with remote DP automatic brake valve cut in may operate at 70 MPH up to 10,000 feet in length.
3. Train does not average more than 80 TOB. Exceptions:
a) Trains consisting entirely of intermodal equipment (all equipment listed under BNSF Timetable, System Special Instruction 1C), including equipment designed to carry automobiles/trucks (auto racks), must not average more than 90 tons per operative brake.
b) Trains consisting entirely of double stack equipment (car kind codes beginning QU, QK, QV, QW, QT, QX, QY) must not average more than 105 tons per operative brake. In addition, the intermodal trains described above may also handle as many as 15 refrigerated box cars identified as "Super Reefers" - BNSF 793810 thru BNSF 794112 - provided train does not exceed TOB limits specified above.
4. Engineer can control speed to 70 MPH without use of air brakes.
(If unable to control speed to 70 MPH on long descending grades, two additional attempts are allowed to control speed with dynamic brake at slower speeds before speed must be reduced to 55 MPH while negotiating descending grade.)
Trains operating with solid double stack equipment only, may use a maximum of 32 axles of dynamic braking per engine consist.

MP 886.9 to MP 887.5 (Amtrak Lead)
. 20 MPH . . 20 MPH.

1(B). Speed-Permanent Restrictions
Eastward and Westward
MP 747.7X to MP 749.9X, Jewell to Hutt Cajon Connection Track $\qquad$ utt
MP 747.9 to MP 749.6, West D Yard to Hutt
Mojave Connection Track. .30 MPH
MP 749A. 0 to MP 749A. 8 ......................................................... 45 MPH
MP 749A. 8 to MP 750.5............................................................ 50 MPH.
MP 750.5 to MP 751.3 ........................................................... 60 MPH
MP 784.7 Spur.......................................................................... 20 MPH
MP 785.0 Spur ....................................................................... 10 MPH
MP 797.1 Spur..................................................................... 10 MPH.
MP 813.5 to MP 814.5 ................................................................... 40 MPH.
Kern Jct. to Bakersfield (Eastward trains may increase speed when head end passes Kern Jct.) .20 MPH.

## 1(C). Speed-Switches and Turnouts

Trains and engines using auxiliary tracks must not exceed turnout speed for that track unless otherwise indicated.
Valley Jct., Cajon Subdivision Jct. ................................................. 40 MPH
Hutt, Cajon Connection Track ....................................................... 25 MPH.
Desert, Cajon Connection Track.................................................. 25 MPH.
CTC Siding (excluding exceptions)............................................... 40 MPH.
Boron Siding ................................................................................ 30 MPH.
Edwards Siding, between MP 797.0 and MP 797.3..................... 30 MPH.
Kern Jct. to UP............................................................................. 30 MPH.
Mojave Jct.
North crossover to UP
.15 MPH
South crossover 10 MPH .
Chester, MP 887.3, crossover main to main 10 MPH .

1(D). Speed-Other
Mojave Yard entry ........................................................................ 25 MPH
Trains 143 TOB and greater on descending grades: Northbound, MP 360.0 to MP 331.3 $\qquad$ 15 MPH .
Southbound, MP 371.3 to MP 381.3 .15 MPH
Note: See UP Timetable for all other speed restrictions between Mojave (BNSF) and Kern Jct.

## Temperature Restrictions

When air temperature exceeds threshold temperature, all trains will be governed by the following table on Main Tracks through these limits unless a more restrictive speed is in effect.
Notify the train dispatcher when your train is restricted by this instruction. If in doubt as to the temperature, contact the train dispatcher.
Temperature degrees are shown in Fahrenheit. MP 749.0 to MP 814.7:

| Temperature Range | Passenger Trains | Freight Trains under 80 TOB | Freight Trains with 80 to100 TOB | Freight Trains over 100 TOB |
| :---: | :---: | :---: | :---: | :---: |
| degrees | No Restrictions | No Restrictions | Maximum 55 MPH . | $45 \text { MPH. }$ |
| Exceeds 115 degrees | $70 \mathrm{MPH} .$ | No Restrictions | Maximum 50 MPH . | $40 \text { MPH. }$ |
| Exceeds 120 degrees | Maximum 50 MPH . | No Restrictions | Maximum 40 MPH . | Maximum 30 MPH . |

See Item 1 of the System Special Instructions for additional speed restrictions.
2. Bridge and Equipment Weight Restrictions Maximum Gross Weight of Car
MP 749.4A to MP 887.7. $\qquad$ 143 tons, Restriction A
3. Type of Operation

CTC-in effect:
MP 747.7X to MP 749.9X, Cajon Connection Track
MP 747.9 to MP 749.55, Mojave Connection Track
MP 749A. 0 to MP 814.5
MP 887.5 to MP 887.7, Main 1
MP 886.9 to MP 887.5, Amtrak Lead
Multiple Main Track—in effect:
2 MT:
MP 887.5 to MP 887.7
ABS—in effect:
MP 885.2 to MP 887.5, Main 1
MP 885.2 to MP 887.7, Main 2
Double Track—in effect:
MP 885.2 to MP 887.5
Restricted Limits-in effect:
MP 885.2 to MP 887.5—Main 1
MP 885.2 to MP 887.7—Main 2
Manual Interlockings Not Controlled by BNSF
Location Controlling Railroad

Mojave (BNSF), MP 814.7 UPRR
4. General Code of Operating Rules and Air Brake Items

Rule 1.14—BNSF trains may use Union Pacific joint track between Mojave and Kern Jct. San Joaquin Valley trains and engines may use BNSF track between Kern Jct. and Bakersfield.

Rule 5.8.2—Sound the whistle approaching all crossings, public and private.
Rule 5.8.4, Whistle Quiet Zone—Whistle signal 5.8.2 (7) is not required at the following crossing locations. All other whistle requirements remain in effect.

| Location | Milepost | Crossing Name |
| :---: | :--- | :--- |
| Kern Jct. to | 885.4 | Sumner/Miller |
| East Bakersfield | 885.88 | E. Truxton |
|  | 885.98 | Baker |
|  | 886.17 | Tulare St. |
|  | 886.37 | Sonora St. |
|  | 887.11 | N St. |
|  | 887.24 | L St. |

Rule 6.19-When flagging is required, distance will be 2.0 miles.

Rule 8.12—The following crossovers at Bakersfield may be left lined and locked as last used:
MP 886.1, Main 1 to Main 2 (Tulare Street)
MP 887.3, Main 1 to Main 2 (Chester Avenue)
MP 887.5, Main 2 to Working Lead
Rule 9.1—Signals Not Conforming to Aspects and Indications Shown in the System Special Instructions

| Aspect | Name | Indication |
| :--- | :--- | :--- |
| Flashing Yellow | Approach-- |  |
| Over Lunar | Thirty | Proceed; approach next signal not <br> exceeding 30 MPH prepared to enter <br> diverging route at prescribed speed, <br> if exceeding 40 MPH, immediately <br> reduce to that speed. |

Rule 9.13.1—Instructions governing manual operation of the Kern Junction dual control interlocking switches:
In the event that employees are required to operate the dual control switches at Kern Junction, they must receive permission from the Bakersfield Subdivision Dispatcher. Employees must be governed by the instructions outlined below, a copy of which is posted in the switch toolbox located at the signal house at Kern Junction:
(a) Secure hand crank from tool box located at the signal house at Kern Junction.
(b) Remove switch padlock from small cover on top of switch mechanism and raise lid. Use hand crank to slide retaining ring inside housing to one side, which will permit hand crank to be lowered into gear mechanism. Crank switch points to desired position, leaving in hand position.
(c) After movement is complete, return switch to former position, move retaining ring to off-center position, replace padlock and tools to proper place, notify Bakersfield Subdivision Dispatcher of return to former position.
ABTH Rule 100.13-Westward and Eastward trains must make a Running Air Brake Test at Summit Switch as prescribed by Rule 100.13.
Exceptions: Cutting out helpers or light engine consists, the rule does not apply.
5. Trackside Warning Detectors (TWD)
A. Protecting bridges, tunnels or other structures: None
B. Other TWD locations MP 765.0—Exception Reporting—Recall Code 7 MP 788.0—Exception Reporting—Recall Code 8 MP 813.0—Exception Reporting—Recall Code 8
6. FRA Excepted Track-None
7. Special Conditions

Kern Jct. to Bakersfield-Between Kern Junction and Bakersfield, street crossing protection circuits are so designed that following movements must not be nearer than 1,000 feet to preceding movements, in order for the crossing protection devices to operate in the proper sequence.
System Special Instructions Amendment—Item 9, Amtrak Instructions, under "Equipment", the line reading "Movement with locomotives between cars is prohibited" does not apply on the California Division. The following will apply:
Movement with locomotive between cars is prohibited unless:
A. Locomotive is being used in "push-pull" service.
B. "MU" control cables are connected through the entire train.
C. Locomotive between cars is not isolated or dead-in-tow.

MP 331.3 to MP 381.3-The speed of trains must be controlled, at least in part, with automatic air brake when train tonnage exceeds 3,500 tons when operating on descending grades, MP 331.3 to MP 381.3.

Freight trains operating between these mileposts that exceed the maximum authorized speed by 5 MPH must stop by using an emergency application of the air brakes.

Sidings-When securing equipment in the following sidings, use the following chart in conjunction with ABTH Rule 104.14 to determine the appropriate number of handbrakes.

| Siding | Most Restrictive <br> Grade | Ascending or Descending Movement <br> E. Switch/Direction - W. Switch/Direction |  |
| :---: | :---: | :---: | :---: |
| Hinkley | .58 | Ascending | Ascending |
| Jim Grey | .59 | Descending | Ascending |
| Boron | .55 | Ascending | Descending |
| Silt | .19 | Ascending | Descending |
| Edwards | .50 | Descending | Ascending |
| Bissell | .50 | Descending | Ascending |
| Sanborn | .54 | Descending | Ascending |
| Summit Switch | .63 | Descending | Descending |
| Marcel | 2.22 | Ascending | Descending |
| Walong | 2.20 | Ascending | Descending |
| Woodford | 2.20 | Ascending | Descending |
| Rowen | 2.25 | Ascending | Descending |
| Cliff | 2.20 | Ascending | Descending |
| Bealville | 2.20 | Ascending | Descending |

Mountain Grade Operations-The maximum number of rated powered axles in the head end consist ascending mountain grade is 36 .
Locomotive Consists-When building locomotive consists, locomotives rated at less than 2000 horsepower and not equipped with a dynamic brake must be placed immediately behind the lead locomotive in the consist.

Minimum Dynamic Brake Requirements-Between Mojave and Ilmon when operating on descending grades, it must be known that locomotive consist(s) has the minimum number of operative axles of dynamic brake. If train does not meet the minimum requirements as outlined below, train must not proceed. Helper consist may be added to meet this requirement. For the purpose of this rule, the weight of locomotives with inoperative dynamic brakes is to be included in train's total trailing tonnage.

The total minimum operative axles of dynamic brake for trains (including helpers) is in the body of the table above. When using the table to determine TOB, round the figures up to the next whole number. For example: 105.1 TOB becomes 106 TOB.
Note: Air Brake and Train Handling Rule 103.2.1, item 1, dynamic brake limitation is 28 axles cut in per consist. Information concerning dynamic brake axle rating is located in the BNSF System Special Instructions, item 2(B).
ABTH Rule 103.2.1 is amended for the Mojave Subdivision as follows: Trains with 60 TOB or more and consisting of greater than $50 \%$ loaded coiled steel cars in number series below may utilize a maximum of 32 axles of dynamic braking provided first 30 cars in train all weigh a minimum of 100 tons each. In addition, these trains must be operated with helpers or DP positioned at the rear of the train.
BN 686000-686864
BNSF 529000-533999
BNSF 534080-538999

As part of the job safety briefing process, "Mojave Subdivision Train Make-Up and Locomotive Placement Worksheet" must be completed and reviewed by train and when applicable, helper crews along with the Trainmaster or Assistant Trainmaster on duty at either Bakersfield or Barstow. A computer generated train list will be used to determine train make up and locomotive placement. It must be agreed that train makeup and helper/ distributed power placement are correct before train departs. Form will be filed at the initial terminal. If helpers/distributed power are to be placed in train after departing originating terminal, the Trainmaster or Assistant Trainmaster at that terminal must review the placement of the helpers/distributed power with the crew before the train departs. If the train consist is changed enroute, the train and, when applicable, helper crew will complete a new form and agree to changes. The new form will then be filed at destination terminal at tie-up. Forms are available at on-duty points Bakersfield and Barstow.
Coupler Capacity and Train Length Limitations-(Trains with Head End Power Only)

|  | Grade C <br> (Standard Coupler) | Grade E <br> (Hi-Strength Coupler) |
| :---: | :---: | :---: |
| Ilmon - Summit | 4,925 tons | 7,600 tons |
| Mojave - Summit | 5,100 tons | 7,875 tons |

Note: Trains with a combination of Grade C and Grade E couplers may operate at Grade E limits provided the first Grade C car is positioned so that trailing tonnage behind that car does not exceed coupler capacities for Grade C above.

Minimum Required Operative Axles of Dynamic Brake for BNSF freight trains, between Mojave and Ilmon.

| Total Trailing <br> Train Tonnage | TOB <br> $\mathbf{8 5}$ or <br> less | TOB <br> $\mathbf{8 6}$ to <br> $\mathbf{9 5}$ | TOB <br> $\mathbf{9 6}$ to <br> $\mathbf{1 0 5}$ | TOB <br> $\mathbf{1 0 6}$ <br> to <br> $\mathbf{1 1 5}$ | TOB <br> $\mathbf{1 1 6}$ <br> to <br> $\mathbf{1 2 5}$ | TOB <br> $\mathbf{1 2 6}$ <br> to <br> $\mathbf{1 3 5}$ | TOB <br> $\mathbf{1 3 6}$ <br> to <br> $\mathbf{1 4 5}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,000 or less | 4 | 4 | 4 | 4 | 6 | 6 | 8 |
| 2,001 to 3,000 | 6 | 6 | 6 | 6 | 8 | 8 | 10 |
| 3,001 to 4,000 | 8 | 8 | 8 | 8 | 10 | 10 | 12 |
| 4,001 to 5,000 | 8 | 8 | 10 | 10 | 12 | 12 | 14 |
| 5,001 to 6,000 | 12 | 12 | 12 | 12 | 14 | 14 | 16 |
| 6,001 to 7,000 | 12 | 12 | 12 | 14 | 16 | 16 | 18 |
| 7,001 to 8,000 | 12 | 12 | 12 | 14 | 16 | 16 | 20 |
| 8,001 to 9,000 | 12 | 12 | 14 | 16 | 18 | 20 | 22 |
| 9,001 to 10,000 | 12 | 12 | 14 | 18 | 20 | 22 | 24 |
| 10,001 to 11,000 | 12 | 12 | 14 | 18 | 22 | 24 | 28 |
| 11,001 to 12,000 | 12 | 12 | 16 | 20 | 24 | 26 | 30 |
| 12,001 to 13,000 | 12 | 12 | 18 | 22 | 26 | 28 | 32 |
| 13,001 to 14,000 | 12 | 12 | 18 | 24 | 28 | 30 | 34 |
| 14,001 to 15,000 | 12 | 14 | 20 | 26 | 30 | 32 | 36 |
| 15,001 to 16,000 | 12 | 14 | 20 | 26 | 30 | 34 | 38 |
| 16,001 to 17,000 | 14 | 16 | 22 | 28 | 32 | 36 | 40 |
| 17,001 to 18,000 | 16 | 18 | 24 | 30 | 34 | 38 | 44 |

Helpers-All trains with helpers and/or distributed power, other than loaded bulk commodity trains, must not exceed 11,000 tons.

## Train Make-up Restrictions-RoadRailer Equipment

A. Total Trailing tonnage must not exceed 3000 tons. Additional Restrictions;
TRAIN TONNAGE......................... RESTRICTION
0-1500 Tons............................... No Restrictions Over 1500 Tons ............... No more than 1500 trailing tons behind any RoadRailer unit weighing less than 28 tons.
NOTE: A RoadRailer unit is defined as one trailer and its accompanying coupler mate or intermediate bogie.
B. Additional RoadRailer Power and Dynamic Brake Restrictions:
On the Mojave Subdivision, no more than 24 rated axles of power may be used.

Between Ilmon and Mojave, if necessary to start train on ascending grade, throttle must not be advanced above Run 3 until brakes on train have been released. Throttle position 5 must not be exceeded to start the train. When starting train, exercise EXTREME caution while advancing the throttle, as outlined in ABTH Rule 103.4. In addition, do not increase throttle until at least 10 seconds after the amperage or tractive effort decreases.
No more than 16 rated axles of dynamic brake may be used at any time on RoadRailer trains.
Continuous Welded Rail-Loaded continuous welded rail (CWR) trains must be handled separately from other trains. Short ribbon rails 700 feet or less in length may be moved in mixed trains providing tonnage behind loaded ribbon rail cars does not exceed 2,000 tons. A box car or high-side gondola car must be positioned on each end of CWR train as a buffer car during all movements except preparatory to and during unloading or loading.

Conditions for Handling Low Battery Messages-Eastward freight trains operating on the Mojave Subdivision destined for the Cajon Subdivision via the Cajon Connection that will not enter the yard at Barstow must verify there are no ETD messages indicating "Low Battery" displayed on the head end device before arriving Barstow. If any of these messages are received prior to arriving, Barstow Mechanical must be notified. If it becomes necessary to change a battery enroute, this fact MUST be reported to the train dispatcher who will notify the appropriate responders in order that an accurate record can be maintained.

NOTE: Some classes of locomotives will display an "EOT BATT" box on the locomotive engineer's control screen. If this box is illuminated in YELLOW with black letters this indicates a "Low Battery". If the EOT battery is OK, this box is not shown.
Train Crew Motor Vehicle License-California Vehicle Code 12953 states: any circumstances involving accidents or violations in which the Engineer or any other crew member of any train is detained by state or local police, neither the Engineer nor any other crewmember shall be required to furnish a motor vehicle operator's license, nor shall any citation involving the operation of a train be issued against the motor vehicle operator's license of the Engineer or any other crew member of the train.
Close Clearances-Do not ride the side of equipment at the following locations due to close clearance: Monolith Lehigh Cement 807 structures $W$ side
HLCS-Hy-Rail Limits Compliance System (HLCS) is in effect on the Mojave Subdivision.
Flash Flood Warnings-The following locations have been identified as "critical areas" subject to flash floods and washouts as outlined in System Special Instructions, Item 33:
Bridge MP 775.7
Bridge MP 775.9
8. Line Segments

Road Line Segments
Line Segment Limits
7200 ........... Valley Jct. to Mojave
8107 ............ Mojave to Kern Jct. (UP Railroad)
7200 ........... Kern Jct. to MP887.7
9. Other Location Information

| Name | Mile Post <br> Location | Capacity <br> Feet | Switch <br> Opens |
| :--- | :---: | :---: | :---: |
| P.C. Borax Co. Spur | 784.7 | 3.5 miles | East |
| Government Spur | 785.0 | 3.7 miles | East |
| Government Spur | 797.1 | 6.5 miles | Both |

10. Grade Charts


 elevation in feet


## Dispatcher Information

WBCS East Needles to but not including Minneola
0700-1500 PT-(909) 386-4212, Fax (909) 386-4242
1500-0700 PT-(909) 386-4213, Fax (909) 386-4243
Minneola to Barstow-(909) 386-4213, Fax (909) 386-4243

1. Speed Regulations

1(A). Speed-Maximum

|  | Passenger | ght |
| :---: | :---: | :---: |
| Main 1 |  |  |
| MP 578.4 to MP 609.1, including trains 100 |  |  |
| MP 609.1 to MP 669.3, including trains 100 TOB and over................................... | ... 90 MPH. . | 55 MPH . |
| MP 669.3 to MP 706.6, including trains 100 |  |  |
| MP 706.6 to MP 737.3, including trains 100 |  |  |
| MP 737.3 to MP 745.8 , including trains 100 |  |  |
| Main 2 |  |  |
| MP 745.8 to MP 737.3, including trains 100 |  |  |
| MP 737.3 to MP 706.6, including trains 100 |  |  |
| MP 706.6 to MP 685.8, including trains 100 |  |  |
| TOB and over............................................. 79 MPH. ....... 55 MPH. |  |  |
| MP 685.8 to MP 671.4 |  |  |
| MP 671.4 to MP 669.3, including trains 100 |  |  |
| TOB and over............................................. 79 MPH. ....... 55 MPH. |  |  |
| MP 669.3 to MP 646.1, including trains 100 |  |  |
| TOB and over............................................. 90 MPH. ....... 55 MPH. |  |  |
| MP 646.1 to MP 578.4, including trains 100 |  |  |
| TOB and over ............................................. 79 MPH. ....... 55 MPH. |  |  |
| Main 3 |  |  |
| MP 578.4 to MP 580.2, including trains 100 |  |  |
| TOB and over ............................................. 79 MPH. ....... 55 MPH. |  |  |
| MP 737.4 to MP 745.8 , including trains 100 |  |  |
|  |  |  |

TOB and over.................................................. 79 MPH. ........ 55 MPH Unless otherwise restricted, the maximum speed for freight trains is 70 MPH (except MP 685.8 to MP 671.4) provided:

1. Train does not contain empty car(s). Refer to SSI, 1(C) for determining speed for multi-platform, intermodal equipment.
2. Train does not exceed 8,500 feet. Exception: Trains operating with distributed power equipment with remote DP automatic brake valve cut in may operate at 70 MPH up to 10,000 feet in length.
3. Train does not average more than 80 TOB. Exceptions:
a) Trains consisting entirely of intermodal equipment (all equipment listed under BNSF Timetable, System Special Instruction 1C), including equipment designed to carry automobiles/trucks (auto racks), must not average more than 90 tons per operative brake.
b) Trains consisting entirely of double stack equipment (car kind codes beginning QU, QK, QV, QW, QT, QX, QY) must not average more than 105 tons per operative brake. In addition the intermodal trains described above may also handle as many as 15 refrigerated box cars identified as "Super Reefers" - BNSF 793810 thru BNSF 794112 - provided train does not exceed TOB limits specified above.
4. Engineer can control speed to 70 MPH without use of air brakes.
(If unable to control speed to 70 MPH on long descending grades, two additional attempts are allowed to control speed with dynamic brake at slower speeds before speed must be reduced to 55 MPH while negotiating descending grade.)
Exceptions:
Light engines without dynamic brakes in use: 24 MPH on descending grades-Eastward Ash Hill to Bagdad and Goffs to Needles.
Note: Eastward freight trains must not exceed 60 MPH between Goffs and Needles, and are further restricted to 45 MPH if any of the following apply:

- Train averages more than 80 TOB.
- Train exceeds 5,500 tons.
- Tonnage (including locomotives without operative dynamic brake) exceeds 300 tons per axle of operative dynamic brake, using the table in System Special Instructions Item 2(C).

Trains operating with solid double-stack equipment only, may use a maximum of 32 axles of dynamic braking per engine consist.

1(B). Speed-Permanent Restrictions Main 1

| MP 578.4 to MP 579.4 | H. ........ 40 MPH . |
| :---: | :---: |
| MP 579.4 to MP 582.7 | . 45 MPH. ........ 40 MPH . |
| MP 582.7 to MP 587.0 | . $55 \mathrm{MPH} . . . . . . . .50 \mathrm{MPH}$. |
| MP 587.0 to MP 587.8 | . $50 \mathrm{MPH} . . . . . . . .45 \mathrm{MPH}$. |
| MP 587.8 to MP 589.3 | . $50 \mathrm{MPH} . . . . . . . .50 \mathrm{MPH}$. |
| P 589.3 to MP 593.3 | $65 \mathrm{MPH} . . . . . . . . .55 \mathrm{MP}$ |


|  | Passenger | Freight |
| :---: | :---: | :---: |
| MP 593.3 to MP 593.8 |  |  |
| Protected by Inert ATS Inductors. | 30 MPH . | 30 MPH . |
| MP 593.8 to MP 599.1 | .65 MPH . | 55 MPH . |
| MP 671.5 to MP 678.1 | 60 MPH. | 50 MPH . |
| MP 678.1 to MP 680.3 | 40 MPH . | 35 MPH . |
| MP 680.3 to MP 682.7 | 55 MPH . | 50 MPH . |
| MP 682.7 to MP 683.5 | 40 MPH . | 40 MPH . |
| MP 683.5 to MP 686.2 | 55 MPH . | 50 MPH . |
| MP 688.4 to MP 689.5 | . 60 MPH . | 55 MPH . |
| MP 692.9 to MP 693.7 | 70 MPH . | 65 MPH . |
| MP 693.7 to MP 695.0 |  |  |
| Protected by Inert ATS Inductors | 45 MPH . | 45 MPH. |
| MP 695.0 to MP 696.1 | . 60 MPH . | 55 MPH . |
| MP 696.1 to MP 700.4 | .65 MPH . | 55 MPH . |
| MP 700.4 to MP 702.0 | . 55 MPH . | 55 MPH . |
| MP 707.8 to MP 710.6 | 70 MPH. | 65 MPH . |
| MP 710.6 to MP 711.6...................................... 80 MP |  |  |
| MP 745.0 to MP 745.8 | 50 MPH. | 50 MPH . |
| Main 2 |  |  |
| MP 745.8 to MP 745.0 | . 50 MPH. | 50 MPH . |
| MP 711.6 to MP 710.6...................................... 80 MPH. |  |  |
| MP 710.6 to MP 707.8 | 70 MPH . | 65 MPH. |
| MP 702.0 to MP 701.5 ..................................... 60 MPH. |  |  |
| MP 701.5 to MP 700.4 ..................................... 70 MPH. ....... 65 MPH. |  |  |
| MP 699.2 to MP 696.2 ..................................... 70 MPH |  |  |
| MP 696.2 to MP 694.9 $\qquad$ .60 MPH . $\qquad$ 55 MPH . |  |  |
| MP 694.9 to MP 693.6 |  |  |
| Protected by Inert ATS Inductors | . 50 MPH . | 45 MPH . |
| MP 693.6 to MP 692.8 | 70 MPH . | 65 MPH . |
| MP 689.5 to MP 688.4 | . 60 MPH . | 55 MPH . |
| MP 688.4 to MP 685.8 | . 70 MPH . | 65 MPH . |
| MP 685.8 to MP 683.4 | 75 MPH . |  |
| MP 683.4 to MP 680.7X |  |  |
| Protected by Inert ATS Inductors | . 50 MPH. |  |
| MP 680.7X to MP 678.3X | . 75 MPH. |  |
| MP 678.3X to MP 677.8 | . 65 MPH . |  |
| MP 677.8 to MP 676.9 | .75 MPH. |  |
| MP 676.9 to MP 671.4 | . 70 MPH . |  |
| MP 609.2 to MP 608.3 | . 70 MPH . |  |
| MP 601.5 to MP 597.7 | . 70 MPH . |  |
| MP 591.4 to MP 589.3 | . 70 MPH . |  |
| MP 589.3 to MP 587.8 | 55 MPH . | 50 MPH . |
| MP 587.8 to MP 587.0 | . 45 MPH . | 45 MPH. |
| MP 587.0 to MP 585.2 | . 65 MPH . | 50 MPH . |
| MP 585.2 to MP 582.3 | . 55 MPH . | 50 MPH . |
| MP 582.3 to MP 580.2 | . 60 MPH . | 50 MPH . |
| MP 580.2 to MP 579.4 | 45 MPH . | 40 MPH . |
| MP 579.4 to MP 578.4 | . 50 MPH . | 40 MPH . |
| Main 3 |  |  |
| MP 580.2 to MP 578.4 | ... 60 MPH . | 50 MPH. |
| MP 745.0 to MP 745.8 | . 50 MPH . | 50 MPH . |

## 1(C). Speed-Switches and Turnouts

Trains and engines using auxiliary tracks must not exceed turnout speed for that track unless otherwise indicated


| Temperature Range | Passenger Trains | Freight <br> Trains under 80 TOB | Freight <br> Trains with 80 to100 TOB | Freight <br> Trains over 100 TOB |
| :---: | :---: | :---: | :---: | :---: |
| Exceeds 115 degrees | No <br> Restriction | No Restriction | 55 MPH | 45 MPH |
| Exceeds 120 degrees | 70 MPH | No Restriction | 50 MPH | 40 MPH |
| Exceeds 125 degrees | 50 MPH | No Restriction | 40 MPH | 30 MPH |
| MP 650.5 to MP 745.8: |  |  |  |  |
| Temperature Range | Passenger Trains | Freight <br> Trains under 80 TOB | Freight <br> Trains with 80 to100 TOB | Freight Trains over 100 TOB |
| Exceeds 110 degrees | No <br> Restriction | No <br> Restriction | 55 MPH | 45 MPH |
| Exceeds 115 degrees | 70 MPH | No Restriction | 50 MPH | 40 MPH |
| Exceeds 120 degrees | 50 MPH | No Restriction | 40 MPH | 30 MPH |

See Item 1 of the System Special Instructions for additional speed restrictions.
2. Bridge and Equipment Weight Restrictions Maximum Gross Weight of Car
MP 578.4 to Barstow 143 tons, Restriction A

Saltus-Six-axle locomotives must not operate on West Salt Spur, track 6491.
3. Type of Operation

CTC—in effect:
MP 578.4 to MP 745.8
Multiple Main Tracks-in effect:
2 MT:
MP 580.2 to MP 737.4
3 MT:
MP 578.4 to MP 580.2
MP 737.4 to MP 745.8
4. General Code of Operating Rules Items

Rule 1.14—Union Pacific trains may use joint track between Daggett and Barstow. BNSF trains may use A\&C RR tracks between MP 189.0 and MP 190.4, under the provisions of Rule 6.28. A\&C RR trains may use BNSF Main 2 auxiliary and yard tracks 6476 and 6478 at Cadiz.

Rule 5.8.2—Sound the whistle approaching all crossings, public and private.

Rule 6.19-When flagging is required, distance will be 2.0 miles.

Rule 6.32.2 (C)—Highway Crossing Warning Devices at MP 595.1 are Solar Powered at this location and are not equipped with a Power Off indicator. GCOR Rule 6.32.2C does not apply.
Rule 12.1—ATS in effect on Main 1, Goffs to Bagdad and Pisgah to Daggett in Westward direction only; and on Main 2, Daggett to Pisgah, and Bagdad to MP 646.1 in Eastward direction only.
Rule 9.1—Signals Not Conforming to Aspects and Indications Shown in the System Special Instructions

| Aspect | Name | Indication |
| :--- | :--- | :--- |
| Flashing Yellow <br> Over Lunar | Approach-- <br> Thirty | Proceed; approach next signal not <br> exceeding 30 MPH prepared to enter <br> diverging route at prescribed speed, <br> if exceeding 40 MPH, immediately <br> reduce to that speed. |

5. Trackside Warning Detectors (TWD)
A. Protecting bridges, tunnels or other structures: None
B. Other TWD locations

MP 584.6—Exception Reporting—Recall Code 8
MP 589.6-Main 1, DED—Exception Reporting
MP 590.8—Main 2, DED—Exception Reporting MP 594.6—Main 1, DED—Exception Reporting MP 600.7—Exception Reporting—Recall Code 7 MP 614.9—Exception Reporting—Recall Code 7 MP 628.1—Exception Reporting—Recall Code 8 MP 644.5—Exception Reporting—Recall Code 7 MP 654.0—Exception Reporting—Recall Code 8 MP 665.2—Exception Reporting—Recall Code 7 MP 670.0—DED—Exception Reporting MP 674.5—DED—Exception Reporting MP 679.3-Main 2, DED—Exception Reporting MP 680.0—Main 1, DED—Exception Reporting MP 683.6—Exception Reporting—Recall Code 7 MP 691.8—Exception Reporting—Recall Code 8 MP 696.4—DED—Exception Reporting MP 702.7—DED—Exception Reporting MP 709.2—DED—Exception Reporting MP 711.1—Exception Reporting—Recall Code 7 MP 732.9—Exception Reporting—Recall Code 8 MP 739.7—Exception Reporting—Recall Code 7
C. Other detectors

At High Water Detectors listed below be governed by SSI Item 8
(I) when a Flashing Red Aspect is displayed.

MP 587.9—High Water
Signal Main 1—5861
Signal Main 1—5892
Signal Main 2-5863
Signal Main 2—5894
MP 642.9—High Water Signal Main 1-6411
Signal Main 1-6442
Signal Main 2-6413
Signal Main 2-6444
6. FRA Excepted Track-None
7. Special Conditions

Newberry-Do not leave cars, locomotives, or any other equipment on tracks 7276 and 7277 at Newberry unless permission is obtained from the train dispatcher.

Conditions for Handling Low Battery Messages—Westward freight trains operating on the Needles Subdivision must verify that there are no ETD messages indicating "Low Battery" displayed on the head end device before arriving Barstow. If any of these messages are received prior to arriving, Barstow Mechanical must be notified. If it becomes necessary to change a battery enroute, this fact MUST be reported to the train dispatcher who will notify the appropriate responders in order that an accurate record can be maintained.

NOTE: Some classes of locomotives will display an "EOT BATT" box on the locomotive engineer's control screen. If this box is illuminated in YELLOW with Black letters, this indicates "Low Battery". If EOT battery is OK, box is not shown.
Switches-All safety hub (flop-over) switches on the Needles Subdivision are considered "rigid" and must not be run through.
Train Crew Motor Vehicle License- California Vehicle Code 12953 states: any circumstances involving accidents or violations in which the Engineer or any other crew member of any train is detained by state or local police, neither the Engineer nor any other crewmember shall be required to furnish a motor vehicle operator's license, nor shall any citation involving the operation of a train be issued against the motor vehicle operator's license of the Engineer or any other crew member of the train.

Close Clearances-Do not ride the side of equipment at the following locations due to close clearance:
Newberry RHEOX 7279 structure

## Long/Short Mile Locations-

MT 2, MP 594.0 to MP 595.0 is 594 feet.
HLCS—Hy-Rail Limits Compliance System (HLCS) is in effect on the Needles Subdivision.
Flash Flood Warnings-The following locations have been identified as "critical areas" subject to flash floods and washouts as outlined in System Special Instructions, Item 33:

MP 592.4 to MP 592.8, Main 1
8. Line Segments

Road Line Segments
Line Segment Limits
7200 ........... MP 578.4 to MP 745.8
9. Other Location Information

| Name | Mile Post Location | Capacity Feet | Switch Opens |
| :---: | :---: | :---: | :---: |
| Klinefelter (Main 1 \& 2) | 589.1 | 917 | West |
| Ibis (Main 1) | 592.3 | 1,621 | West |
| Bannock (Main 1) | 597.4 | 957 | East |
| Bannock (Main 2) | 597.4 | 1,102 | East |
| Homer (Main 1) | 601.5 | 6,710 | Both |
| Homer (Main 2) | 602.5 | 1,345 | West |
| Goffs (Main 2) | 607.5 | 6,610 | East |
| Goffs (Off Siding) | 609.3 | 950 | Both |
| Set out tracks Old Fenner (Main 1) | 618.7 | 682 | West |
| Set out tracks Old Fenner (Main 2) | 618.7 | 790 | West |
| Essex (Main 1) | 626.2 | 1,500 | East |
| Essex (Main 2) | 626.2 | 5,203 | Both |
| Danby (Main 1) | 634.7 | 672 | Both |
| Danby (Main 2) | 634.7 | 5,520 | Both |
| Cadiz (Main 1) | 648.1 | 9,384 | Both |
| Cadiz (Main 2) | 648.5 | 9,188 | Both |
| Saltus (Main 1) | 658.4 | 800 | West |
| Saltus (Main 2) | 658.4 | 2,480 | Both |
| West Amboy (Main 2) | 661.8 | 4,687 | Both |
| Bagdad (Main 2) | 669.3 | 4,961 | Both |
| Bagdad (Main 1) | 669.9 | 2,040 | Both |
| East Siberia (Main 1) | 674.6 | 4,598 | Both |
| Siberia (Main 2) | 677.2 | 747 | West |
| West Ash Hill (Main 2) | 688.2 | 7,392 | Both |
| Ludlow (Main 2) | 693.6 | 2,460 | Both |
| Ludlow (Main 1) | 693.7 | 900 | West |
| East Pisgah (Main 1) | 705.4 | 5,700 | Both |
| West Pisgah (Main 2) | 707.3 | 9,592 | Both |
| Hector (Main 2) | 712.8 | 750 | Both |
| Hector (Main 1) | 713.3 | 500 | West |
| Newberry (Main 2) | 727.5 | 5,363 | Both |
| Coolwater (Main 1) | 736.2 | 750 | West |
| Daggett (Main 2) | 738.0 | 750 | East |
| Nebo (Main 2) | 741.6 | 5,488 | Both |

10. Grade Charts

ELEVATION IN FEET


30 CALIFORNIA DIVISION—No. 1—February 9, 2011—Needles Subdivision


| W <br> E <br> S <br> T <br> W <br> A <br> A | Length of Siding (Feet) | Station Nos. | $\begin{aligned} & \text { Mile } \\ & \text { Post } \end{aligned}$ | San Bernardino Subdivision MAIN LINE STATIONS | $\begin{gathered} \text { Rule } \\ 4.3 \end{gathered}$ | $\begin{aligned} & \text { Type } \\ & \text { of } \\ & \text { Oper. } \end{aligned}$ | Line Segment | Miles <br> to <br> Next <br> Stn. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | Adj. Sub: Cajon |  |  |  |  |  |  |  |
| $\downarrow$ |  | 19100 | 0.0X | SAN BERNARDINO | $\begin{gathered} \hline \text { BCJMPT } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { 3MT } \\ & \text { CTC } \end{aligned}$ | 7602 | 1.1 |
|  |  |  | 1.1x | EAST B YARD | X(2) |  |  | 1.2 |
|  |  | 19140 | 2.2 | RANA | $\mathrm{X}(2)$ |  |  | 0.7 |
|  |  |  | 2.9 | GONZALES Adj. RR: UP, MP 2.9 | JX |  |  | 0.3 |
|  |  | 25045 | 3.2 | COLTON (UP RRX) | M | $\begin{aligned} & \text { 2MT } \\ & \text { CTC } \end{aligned}$ |  | 1.0 |
|  |  |  | 4.2 | $\begin{gathered} \text { WEST COLTON } \\ \text { Adj. RR: UP, MP } 4.3 \\ \hline \end{gathered}$ | JX |  |  | 1.9 |
|  |  | 25065 | 6.1 | HIGHGROVE | X | $\begin{aligned} & \text { 3MT } \\ & \text { CTC } \end{aligned}$ |  | $\begin{array}{\|l\|} \hline \mathrm{M} 1-3.3 .8 \\ \mathrm{M} 2-4.4 \\ \mathrm{M} 3-3.7 \\ \hline \end{array}$ |
|  |  | 25200 | 9.8 | RIVERSIDE |  |  |  | 0.8 |
|  |  |  | 9.9 | TENTH STREET |  |  |  | 0.7 |
|  |  |  | 10.6 | WEST RIVERSIDE Adj. RR: UP, MP 10.6 | JX(2) | $\begin{aligned} & \text { 2MT } \\ & \text { CTC } \end{aligned}$ |  | 3.4 |
|  |  | 25210 | 14.0 | CASA BLANCA |  |  |  | 1.1 |
|  |  |  | 15.1 | ARLINGTON | X(2) |  |  | 3.4 |
|  |  |  | 18.5 | LA SIERRA |  |  |  | 2.9 |
|  |  | 25250 | 21.4 | MAY | X (2) |  |  | 1.4 |
|  | 9,618 | 25255 | 22.8 | PORPHYRY |  |  |  | 1.3 |
|  |  | 25260 | 24.1 | NORTH MAIN CORONA |  |  |  | 3.1 |
|  |  |  | 27.2 | WEST CORONA |  |  |  | 2.2 |
|  |  | 25265 | 29.4 | PRADO DAM | $\mathrm{X}(2)$ | $\begin{aligned} & \text { 3MT } \\ & \text { CTC } \\ & \hline \end{aligned}$ |  | 6.4 |
|  |  | 25270 | 35.8 | ESPERANZA | X(2) |  |  | 4.8 |
|  |  | 25274 | 40.6 | ATWOOD Adj. Sub: San Diego, MP 40.6 | JX(2) | $\begin{aligned} & \text { 2MT } \\ & \text { CTC } \end{aligned}$ |  | 4.9 |
|  |  | 23200 | $\begin{array}{r} 45.5 \\ 165.5 \\ \hline \end{array}$ | FULLERTON JCT. Adj. Sub: San Diego, MP 165.4 | $\begin{aligned} & \hline \text { BCJP } \\ & \times(2) \\ & \hline \end{aligned}$ |  | 7600 | $\begin{array}{\|r} \hline \text { M1-5.2. } \\ \text { M2,3-2.5 } \end{array}$ |
|  |  | 23160 | 163.0 | BASTA | X(2) | $\begin{aligned} & \text { 3MT } \\ & \text { CTC } \end{aligned}$ |  | 2.7 |
|  |  | 23148 | 160.3 | BUENA PARK | X(2) |  |  | ( |
|  |  |  | 158.7 | VALLEY VIEW <br> (Main 1) |  |  |  | 1.0 |
|  |  | 21340 | 157.7 | LA MIRADA | TX(2) | $\begin{aligned} & \text { 2MT } \\ & \text { CTC } \end{aligned}$ |  | 1.6 |
|  | $\begin{aligned} & \substack{4,150(M) \\ 3,432(M 2)} \end{aligned}$ |  | 156.1 | NORWALK |  |  |  | 1.1 |
|  |  |  | 155.0 | SANTA FE SPRINGS | $\mathrm{X}(2)$ |  |  | 2.0 |
|  |  | 23120 | 153.0 | LOS NIETOS (UP RRX) | M |  |  | 0.9 |
|  |  | 23110 | 152.1 | DT JCT. (UP RRX) | MX(2) |  |  | $\begin{aligned} & \mathrm{M} 1-1.12 \\ & \mathrm{M} 2,3-1.0 \end{aligned}$ |
|  |  |  | 151.1 | SERAPIS (Main 2\&3) |  |  |  | 0.2 |
|  |  | 23100 | 150.9 | PICO RIVERA | BCPT | 3MTCTC |  | 1.1 |
|  |  | 23039 | 149.8 | BANDINI | $\mathrm{X}(2)$ |  |  | 1.3 |
|  |  |  | 148.5 | COMMERCE | $\mathrm{X}(2)$ |  |  | 1.2 |
|  |  |  | 147.3 | EASTERN AVE. | $\mathrm{X}(2)$ |  |  | 1.3 |
|  |  |  | 146.0 | EAST HOBART | $\mathrm{X}(2)$ |  |  | 0.9 |
|  |  | 23000 | 145.1 | HOBART | $\mathrm{X}(2)$ |  |  | 0.4 |
|  |  |  | 144.7 | WEST HOBART | $\mathrm{X}(2)$ |  |  | 0.2 |
|  |  |  | 144.5 | SAN PEDRO JCT. Adj. RR: UP, MP 144.5 | CJMX | $\begin{aligned} & \text { 4MT } \\ & \text { CTC } \end{aligned}$ |  | 0.1 |
|  |  |  | 144.4 | $\begin{gathered} \text { SOTO } \\ \text { Sdj. RR: SCRRA, MP } 144.0 \end{gathered}$ | X (2) |  |  | 1.0 |
|  |  | 23550 | 143.4 | HARBOR JCT. Adj. Sub: Harbor, MP 143.4 | J | 2MT |  | 0.3 |
|  |  |  | 143.2 | CP EAST REDONDO | J |  |  | 68.0 |
|  | Adj. Sub: Alameda Corridor |  |  |  |  |  |  |  |

X mileposts from MP 0.0X to MP 1.73X. MP 1.73X=MP 1.64

## Dispatcher Information

San Bernardino to and including West Riverside-(909) 386-4214, Fax (909) 386-4294
West Riverside to Harbor Jct-(909) 386-4215, Fax (909) 386-4245

| Radio Call-In |  |  |
| :---: | :---: | :---: |
| Radio Channel 72 in service MP 0.0X to West Riverside |  |  |
| San Bernardino |  |  |
| Radio Channel $\mathbf{3 6}$ in service West Riverside to East Redondo |  |  |
| Casa Blanca | Corona |  |
| Pico Rivera |  |  |
| Radio Channel 32 and 72 in service at Hobart Yard |  |  |
| No Call-in Available |  |  |
| Emergency 9 |  |  |
| DS = 1, Cust. Support = 3, Mechanical = 4, Detector Desk =5 |  |  |

1. Speed Regulations

1(A). Speed-Maximum


1(B). Speed-Permanent Restrictions
MP 0.0X to MP 2.9, Main 1, 2 and 3 ..................... 30 MPH ......... 30 MPH . MP 2.2 to MP 3.2, Main 1 and 2 .......................... 30 MPH. ........ 30 MPH .
MP 3.2 to MP 4.0 ............................................... 40 MPH . ........ 40 MPH .

MP 6.6 to MP 6.8 .............................................. 50 MPH. ........ 40 MPH . MP 9.3 to MP 9.6 ............................................. 55 MPH. MP 11.8 to MP 12.5............................................. 45 MPH. MP 15.4 to MP 16.7 ........................................... 55 MPH. MP 31.4 to MP 31.6 ........................................... 55 MPH. MP 32.8 to MP 34.4 ............................................ 50 MPH . MP 34.4 to MP 35.1 ............................................. 50 MPH .
MP 36.1 to MP 36.4, Main 2 ............................... 55 MPH.
MP 42.7 to MP 43.6 (HER) .................................. 50 MPH.
MP 45.2 to MP 45.5 .......................................... 50 MPH .
MP 45.4 to MP 165.4, Main 2 .............................. 60 MPH.
MP 165.5 to MP 165.3 ........................................ 50 MPH .
MP 163.8 to MP 163.5 ...................................... 75 MPH.
MP 161.1 to MP 160.8 ......................................... 70 MPH.
MP 156.6 to MP 155.9 ........................................ 75 MPH.
MP 154.2 to MP 153.8 ....................................... 70 MPH.
MP 153.0 RRX................................................. 50 MPH.
MP 152.9 to MP 152.5 ....................................... 70 MPH.
MP 152.1 RRX................................................ 50 MPH.
MP 151.7 to MP 151.4 ....................................... 65 MPH.
MP 144.5 to MP 145.0, Mains 1, 2, and 3............ 40 MPH.
MP 1445 to MP 144.8, Main 4 ,
MP 144.5, RRX ................................................. 40 MPH. ........ 40 MPH
MP 143.5 to MP 143.1, Main 1 and $2 \ldots \ldots \ldots \ldots \ldots . .25$ MPH. .............. 25 MPH.
1(C). Speed-Switches and Turnouts
Trains and engines using auxiliary tracks must not exceed turnout speed for that track unless otherwise indicated.
MP 0.3X, 4 crossovers ........................................................... 30 MPH.
MP 0.3X, turnout to A Yard Lead........................................................................................... MPH.
MP 0.3X, turnout to Auto Facility Lead......................................... 10 MPH.
MP 1.1X, East B crossovers Yard Lead to Main 1 ........................ 15 MPH.
MP 1.1X, East B crossovers Main 1 to Main 2............................. 30 MPH
MP 2.2 Rana, turnout to B Yard Lead .......................................... 15 MPH
(Westward trains departing San Bernardino at Rana (B Yard Lead) may
increase their speed to 15 MPH once the head end has passed the signal at Rana.)
MP 2.2 Rana, 4 crossovers........................................................... 30 MPH.
MP 2.2 Rana, turnout to Main 4 .................................................... 30 MPH.
MP 2.2 Rana, turnout from Main 3 to Auto Facility Lead ............. 15 MPH. MP 2.9 Gonzales, turnouts Main 1 to Main 1.............................. 30 MPH MP 2.9 Gonzales, turnouts Main 1 to UP Connection Track........ 10 MPH. MP 3.3 Colton, EE Main 2 siding ................................................. 10 MPH. MP 4.2 West Colton, WE Main 2 siding, UP Connecting Track ... 25 MPH. MP 4.3 West Colton, 2 crossovers............................................... 50 MPH
MP 6.1 Highgrove, crossover and turnout to Main 1.................... 50 MPH. MP 6.4, turnout Main 2 to San Jacinto Ind. Spur ......................... 20 MPH. MP 9.9 Tenth Street, turnout Main 1 to Metrolink Station ............ 40 MPH. MP 9.8 Riverside, Main 3 to Metrolink Station ............................. 30 MPH. MP 10.3, Main 3 to Metrolink Station ............................................ 30 MPH .

| MP 10.4, West Riverside, 2 crossovers and turnout |
| :--- |
| Main 1 to UPRR and turnout Main 2 to Main $3 . \ldots \ldots . . . . . . . . . . . . . . . . . . . . . ~$ | $\mathrm{MPH}^{\mathrm{MPH}}$.

## 1(D). Speed-Other

San Bernardino Diesel Service Tracks 130, 131, 132, 133, 134.5 MPH. MP 0.0 to MP 3.6, San Jacinto Industrial Spur ............................. 20 MPH MP 3.6 to MP 7.0 15 MPH . MP 7.0 to MP 14.2 ........................................................................ 20 MPH. MP 14.2 to MP 38.3 ..................................................................... 10 MPH Porphry, 3M Spur....................................................................... 10 MPH Downey Lead, San Pedro to Soto................................................. 25 MPH Hobart to Commerce Diesel, on the Industry Lead and
setout track, lite engines when controlled from the engine
nearest the direction of movement..
15 MPH .
San Pedro Jct., junction wye ........................................................ 5 MPH.
Loaded Slab Trains...................................................................... 45 MPH

## Temperature Restrictions

San Jacinto Industrial Spur-From 1100 to 1900 hours, if the air temperature is over 100 degrees $F$, the track is out of service unless the movement is preceded by the track supervisor; then the train can proceed at 10 MPH .

When the air temperature exceeds threshold temperature, all trains will be governed by the following table on main tracks through these limits unless a more restrictive speed is in effect. Temperature degrees are shown in Fahrenheit.
From MP 0.0X to MP 143.1

| Temperature <br> Range | Passenger <br> Trains | Freight <br> Trains <br> under 80 <br> TOB | Freight <br> Trains with <br> 80 to100 <br> TOB | Freight <br> Trains over <br> 100 TOB |
| :--- | :--- | :--- | :--- | :--- |
| Exceeds 100 <br> degrees | No <br> Restriction | No <br> Restriction | 55 MPH | 45 MPH |
| Exceeds 105 <br> degrees | 70 MPH | No <br> Restriction | 50 MPH | 40 MPH |
| Exceeds 110 <br> degrees | 50 MPH | No <br> Restriction | 40 MPH | 30 MPH |

Train crews must notify the Train Dispatcher if their train is restricted by this instruction. If in doubt about the temperature, contact the Train Dispatcher.

## See Item 1 of the System Special Instructions for additional

 speed restrictions.
## 2. Bridge and Equipment Weight Restrictions Maximum Gross Weight of Car

San Bernardino to CP East Redondo...... 143 tons, Restriction B Highgrove to San Jacinto ....................... 143 tons, Restriction D
3. Type of Operation

CTC-in effect:
MP 0.0X to MP 143.1
MP 0.0X to MP 143.8, Main 1
MP 144.5 to MP 144.4 (Downey Lead)
MP 144.7 to MP 144.9 (Downey Lead)
Multiple Main Tracks-in effect:
2 MT:
MP 3.0 to MP 6.1
MP 10.6 to MP 29.4
MP 35.8 to MP 45.5
MP 158.7 to MP 151.0
MP 144.4 to MP 143.1
3 MT:
MP 0.0X to MP 3.0
MP 6.1 to MP 10.6
MP 29.4 to MP 35.8
MP 45.5 to MP 158.7
MP 151.0 to MP 144.7
4 MT:
MP 144.7 to MP 144.4
4. General Code of Operating Rules Items

Rule 1.14—Union Pacific trains may use joint track between San Bernardino and West Riverside. BNSF trains and engines may use Metrolink tracks between CP Rancho and Arcadia. The speed limit on all auxiliary tracks is not specifically governed by the Metrolink Timetable and other instructions; it is 10 MPH, unless further restricted. The special instructions for ALL SUBDIVISIONS and all general orders and general notices remain in effect unless specific instructions to the contrary are issued by Metrolink.
Rule 1.47—Passenger Trains—Observe and Call Signals: When a signal requires the train to stop at or pass the next signal at restricted speed, the engineer must communicate that fact to a designated member of the crew, including the track designation if on multiple tracks, and get an acknowledgment. If no acknowledgment is received, the engineer must ascertain at the next scheduled stop why the message is not being
confirmed. If the engineer fails to control the train movement in accordance with either a wayside signal or other restrictions imposed upon the train, the designated crew member shall at once communicate with and caution the engineer regarding the restriction, and if necessary, take appropriate action to ensure the safety of the train, including stopping all movement if appropriate.
Rule 5.8.2-Sound the whistle approaching all crossings, public and private.
Rule 5.8.4, Whistle Quiet Zone—Whistle signal 5.8.2 (7) is not required at the following crossing locations. All other whistle requirements remain in effect.

| Location | Milepost | Crossing Name |
| :--- | :--- | :--- |
| Anaheim | MP 39.00 | Kellogg Drive |
| Placentia | MP 39.02 | Lakeview Ave |
|  | MP 40.44 | Richfield Rd |
|  | MP 40.69 | Van Buren St |
|  | MP 41.02 | Jefferson St |
| Anaheim | MP 41.43 | Tustin Ave (Rose Dr) |
|  | MP 41.69 | Orangethorpe Ave |
|  | MP 42.49 | Kraemer Blvd |

Rule 6.19-When flagging is required, distance will be 2.0 miles.

Rule 6.26- Between the EBCS CP 29 and the WBCS Colton, the north track is main track 1. Between the EBCS Rana and the WBCS Colton, the south track is main track 3. There is no main track 2 between the EBCS CP 29 and the WBCS Colton.

Rule 6.28—From Highgrove, MP 0.0, to San Jacinto, MP 38.3, is the San Jacinto Industrial Spur. Rule 6.28 is in effect. Rule 9.12.3, Automatic Interlocking, is in effect at UP RRX, MP 1.5. Turning facility is located at Val Verde, MP 13.5. All switches must be left lined and locked for movement on the San Jacinto Industrial Spur track.

Rule 9.9-All Trains—Train Delayed Within a Block: In CTC, when any train stops or its speed is reduced below 10 MPH , the train must proceed at a speed not exceeding 40 MPH , prepared to stop at the next signal until the next signal is visible and that signal displays a proceed indication.

Rule 9.12.1—Permission must be secured from the BNSF train dispatcher to pass controlled signals indicating Stop at Fullerton Jct. and Atwood.

Before operating beyond controlled signals indicating Stop onto the Metrolink San Gabriel, Olive and Orange subdivisions, permission must be obtained from the BNSF train dispatcher to pass the Stop signal and from the Metrolink train dispatcher to occupy the Main Track beyond the control point.

Rule 9.13-At San Bernardino, the A1 switch in the A-yard adjacent to MT 1 at MP 0.41 on the San Bernardino Subdivision is a dual control switch but does not have a signal governing movement over it. When instructed or permitted to hand-operate this dual control switch only, and not in conjunction with the MT 1 dual control switch, movement may proceed to the switch without authority to pass a stop indication, as none will govern. Eastward movements attempting to depart the A1 lead through the San Bernardino control point must not foul the A1 switch until signal indication is received, or the Cajon Subdivision Dispatcher authorizes movement past the stop indication (with instruction to hand operate the switch(es) if needed.)

Rule 9.13.1-When permitted or instructed to hand-operate the A1 dual control switch, be governed by the instructions found in the plastic tube mounted directly on the switch labeled "INSTRUCTIONS".

Rule 10.3-When Track and Time is granted to trains or engines on the Metrolink San Gabriel, Olive and Orange subdivisions between the BNSF-controlled signal and points beyond on the Metrolink Subdivision, permission must be obtained from the BNSF train dispatcher to pass the controlled signal.

ABTH Rule 101.14-In the application of Air Brake and Train Handling Rule 101.14, first bullet reading, "Distance to be traveled exceeds 2 miles": at Hobart Yard only, movements on other than Main Track may be made from other than the cab nearest the direction traveled when the distance to be traveled does not exceed 5 miles."
5. Trackside Warning Detectors (TWD)
A. Protecting bridges, tunnels or other structures: MP 144.45-Recall Code 8
B. Other TWD locations

MP 6.0-DED-Exception Reporting—Recall Code 8
MP 22.4-DED-Exception Reporting
MP 26.4-DED-Exception Reporting
MP 32.0—DED—Exception Reporting—Recall Code 8
MP 38.3-DED-Exception Reporting
MP 42.5-DED-Exception Reporting
MP 154.3-Exception Reporting-Recall Code 8
C. Other detectors

MP 4.6-High Water
EWD controlled signals Highgrove
WWD controlled signals W. Colton

## 6. FRA Excepted Track

San Jacinto Industrial Spur, all tracks MP 13.0 to MP 38.3.
7. Special Conditions

San Bernardino-BNSF crew must get permission from the San Gabriel Subdivision dispatcher to operate through Metrolink Yard Limits at Berdoo.
Trains departing CP Kaiser-Trains departing CP Kaiser to San Bernardino B Yard must contact the assistant trainmaster (909-386-4384) for permission to enter the B Yard.

Remote Control Area-Signs located at MP 73.9 (Cajon Subdivision) and MP 3.2 (San Bernardino Subdivision), designate the Remote Control Area at San Bernardino.
Signs located at MP 0.4 (Alameda Corridor Subdivision) and MP 149.8 (San Bernardino Subdivision), designate the Remote Control Area at Hobart.

Train Crew Motor Vehicle License- California Vehicle Code 12953 states: any circumstances involving accidents or violations in which the Engineer or any other crew member of any train is detained by state or local police, neither the Engineer nor any other crewmember shall be required to furnish a motor vehicle operator's license, nor shall any citation involving the operation of a train be issued against the motor vehicle operator's license of the Engineer or any other crew member of the train.

BNSF System Special Instructions Amendment-Item 9 Amtrak Instructions, under the heading "Equipment," the line reading, "Movement with locomotive between cars is prohibited" does not apply on the California Division. Be governed by the following instructions:
Movement with locomotives between cars is prohibited unless:
A. Locomotive is being used in "push-pull service."
B. "MU" cables are connected through the entire train.
C. Locomotive between cars is not isolated or dead-in-tow.

San Pedro Subdivision-BNSF trains operating on the San Pedro Subdivision (0972) between San Pedro Junction and MP 5.1 must ascertain from the UPRR Dispatcher \#30 if any track bulletins are in effect within yard limits. Crews will contact the UPRR Dispatcher \#30 on AAR Road Channel 14 or by telephone (909) 685-2316. Westward BNSF trains traveling to UP Colton and Eastward BNSF trains traveling from UP Colton to the BNSF should use UPRR Dispatcher \#50 (909) 685-2126. If track bulletins are in effect, trains must receive copies of the bulletins before operating on the subdivision. If no track bulletins are in effect, trains may operate on verbal instructions from the dispatcher.
Close Clearances-Do not ride the side of equipment at the following locations due to close clearance:

| San Bernardino Metrolink Short Way | MT4 | bridge (MP 0.8) |  |
| :--- | :--- | :--- | :--- |
| Norwalk | South Track | 5897 | loading platform S side |
| Hobart | West Bank Yd. | 1802 | viaduct $^{* *}$ |
|  | MP 142.0 | 1803 | viaduct $^{* *}$ |
|  |  | 1804 | viaduct $^{* *}$ |
|  |  | 1805 | viaduct $^{* *}$ |
| LaMirada | Kimberly Clark | 6321 | loading dock |
|  | Weber Distrib. | 6344 | loading dock |

**The movement must stop before shoving cars under the viaduct. Each movement under the viaduct will be handled by an employee on the ground who will control the continued movement beyond the point where the movement originally stopped.

HLCS—Hy-Rail Limits Compliance System (HLCS) is in effect on the San Bernardino Subdivision.

Flash Flood Warnings-The following locations have been identified as "critical areas" subject to flash floods and washouts as outlined in System Special Instructions, Item 33:

None
8. Line Segments

Yard Line Segments
Line Segment Limits
7650 ............ San Bernardino Yard
7652 ........... Fobart Yard
7651 ......... First Street Yard (LA)

## Road Line Segments

## Line Segment Limits

7602 $\qquad$ MP 0.0X to Fullerton Jct.
7600 $\qquad$ Fullerton Jct. to Harbor Jct.
9. Other Location Information

| Name | Mile Post <br> Location | Capacity <br> Feet | Switch <br> Opens |
| :--- | :---: | :---: | :---: |
| San Bernardino Subdivision |  |  |  |
| San Jacinto Industrial Spur | 6.7 | 38.3 miles | East |
| Casa Blanca | 14.2 | 1,300 | East |
| Arlington | 15.9 | 2,000 | West |
| Porphyry (3M Spur) | 22.7 | 18,480 | West |
| West Corona | 36.8 | 5,812 | Both |
| Esperanza | 164.7 MT 1 | 7,995 | Both |
| Fullerton | 164.7 MT 2 | 4,350 | Both |
| Fullerton |  |  | Both |

San Jacinto Industrial Spur

| Highgrove | 0.0 | 1,018 | Both |
| :--- | :---: | :---: | :---: |
| Lily Cup | 0.6 | 545 | Both |
| Box Springs | 7.2 | 1,555 | Both |
| Alessandro | 10.6 | 2,046 | Both |
| Val Verde | 13.5 | 1,105 | Both |
| Granite Spur | 14.5 | 4,752 | Both |
| Mayer Farms | 15.9 | 920 | Both |
| Ellis | 19.9 | 800 | East |

10. Grade Chart


| $\begin{gathered} \hline \text { W } \\ \text { E } \\ \text { S } \\ \text { W } \\ \text { A } \end{gathered}$ | Length <br> of <br> Siding <br> (Feet) | Station Nos. | Mile <br> Post | San Diego Subdivision MAIN LINE STATIONS | $\begin{gathered} \text { Rule } \\ 4.3 \end{gathered}$ | $\begin{aligned} & \text { Type } \\ & \text { of } \\ & \text { Oper. } \end{aligned}$ | Line Segment | $\begin{gathered} \text { Miles } \\ \text { to } \\ \text { Next } \\ \text { Stn. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | End of Subdivision |  |  |  |  |  |  |  |
|  |  | 25710 | 273.1 | NATIONAL CITY | R |  | 7600 | 3.8 |
|  |  |  | 269.3 | 22ND STREET | BCPRX |  |  | 1.8 |
|  |  | 25700 | 267.5 | SAN DIEGO | RTX |  |  | 103.3 |
|  |  | 23200 | 165.4 | FULLERTON JCT. | BCJPX |  |  | 107.7 |
|  | Adj. Sub: San Bernardino |  |  |  |  |  |  |  |


| Radio Call-In |
| :---: |
| Radio Channel 32 in service National City to MP 267.7 |
| San Diego |
| Emergency 9 |
| DS = 1, Cust. Support = 3, Mechanical = 4, Detector Desk =5 |

## Dispatcher Information

National City to San Diego-(909) 386-4215, Fax (909) 386-4245
San Diego to Fullerton Jct/Atwood-(888) 446-9716,
Fax (909) 392-8709

## 1. Speed Regulations

1(A). Speed-Maximum
MP 273.1 to MP 267.5 ........................................... 10 MPH M ........ 10 MPH Mreight
1(B). Speed-Permanent Restrictions-None
1(C). Speed—Switches and Turnouts
San Diego Subdivision..
10 MPH .
1(D). Speed-Other-None
See Item 1 of the System Special Instructions for additional speed restrictions.
2. Bridge and Equipment Weight Restrictions
Maximum Gross Weight of Car
National City to San Diego $\qquad$ 143 tons, Restriction C
3. Type of Operation
Restricted Limits-in effect:
MP 273.1 to MP 267.7
4. General Code of Operating Rules Items
Rule 1.14—BNSF trains and engines may use Metrolink tracks between Fullerton Jct. or Atwood and County Line, and may use San Diego Northern Railway tracks between County Line and San Diego, MP 267.7. San Diego Northern Railway trains and engines may use Main Track between MP 267.6 and MP 268.8. The speed limit on all auxiliary tracks is not specifically governed by the Metrolink and San Diego Northern Railway timetables and other instructions; it is 10 MPH, unless further restricted. The special instructions for ALL SUBDIVISIONS and all general orders and general notices remain in effect unless specific instructions to the contrary are issued by Metrolink or San Diego Northern Railway.
Rule 5.8.2—Sound the whistle approaching all crossings, public and private.
Rule 6.19—When flagging is required, distance will be 1.0 mile.
5. Trackside Warning Detectors (TWD)—None
6. FRA Excepted Track-None
7. Special Conditions

Remote Control Area-Signs located at MP 267.7 and MP 273.1 designate the Remote Control Area at San Diego yard.

Train Crew Motor Vehicle License- California Vehicle Code 12953 states: any circumstances involving accidents or violations in which the Engineer or any other crew member of any train is detained by state or local police, neither the Engineer nor any other crewmember shall be required to furnish a motor vehicle operator's license, nor shall any citation involving the operation of a train be issued against the motor vehicle operator's license of the Engineer or any other crew member of the train.

Close Clearances-Do not ride the side of equipment at the following locations due to close clearance:

| National City | Team Track | 7860 | loading dock |
| :--- | :--- | ---: | :--- |
|  | Blue Linx | 7865 | loading dock |
| San Diego | 10th Ave. Marine Term. 9872 | bulk unloading tipple |  |

Close Track Centers-Do not ride the side of equipment on the following tracks unless the adjacent track is known to be clear: San Diego 9801 thru 9805

Flash Flood Warnings-The following locations have been identified as "critical areas" subject to flash floods and washouts as outlined in System Special Instructions, Item 33:

None
8. Line Segments

Yard Line Segments
Line Segment Limits
7654 ........... Bay Yard
Road Line Segments
Line Segment Limits
7600 ........... Fullerton Jct. and National City
9. Other Location Information-None
10. Grade Chart



| Radio Call-In |  |  |  |
| :---: | :---: | :---: | :---: |
| Radio Channel 55 in service MP 994.9 to MP 1008.0 |  |  |  |
| Bowles (Calwa) |  | Madera |  |
| Radio Channel 68 in service MP 1008.0 to MP 1064.0 |  |  |  |
| Calwa |  | Kismet (Madera) | Sharon |
| Planada |  | Fluhr (Winton) |  |
| Radio Channel 49 in service at Riverbank Yard No Call-in Available |  |  |  |
| Radio Channel 36 in service MP 1064.0 to Bixler |  |  |  |
| Ballico (Winton) |  | Riverbank | Mariposa |
| Mormon (Stockton) |  | Bixler (Knightsen) |  |
| Radio Channels 55 and 84 in service at Stockton Yard No Call-in Available |  |  |  |
| Radio Channel 55 and 84 in service at Pittsburg |  |  |  |
| Radio Channel 30 in service Bixler to MP 1189.0 |  |  |  |
| Bixler (Knightsen) |  | Pittsburg | Port Chicago |
| Tunnel 3 | Malt | (Glen Frazer) | Collier |
| Richmond |  |  |  |
| Emergency 9 |  |  |  |

## Dispatcher Information

Calwa to and including WE Fluhr-(909) 386-4226,
Fax (909) 386-4246
WE Fluhr to Richmond-(909) 386-4227, Fax (909) 386-4237

1. Speed Regulations

1(A). Speed-Maximum
MP 994.9 to MP 1164.0, including trains 100 TOB and over...

Passenger Freight
. 79 MPH. ........ 55 MPH
Unless otherwise restricted, the maximum speed for freight trains is 70 MPH provided:

1. Train does not contain empty car(s). Refer to System Special Instructions 1(C) for determining speed for multi-platform, intermodal equipment.
2. Train does not exceed 8,500 feet. Exception: Trains operating with distributed power equipment with remote DP automatic brake valve cut in may operate at 70 MPH up to 10,000 feet in length.
3. Train does not average more than 80 TOB. Exception: Trains consisting entirely of intermodal equipment, autoracks (equipment designed to carry automobiles/trucks) or a combination or both may operate at 70 MPH with tons per operative brake as great as 90 , and; Trains consisting entirely of double-stack equipment may operate at 70 MPH with tons per operative brake as great as 105.
4. Engineer can control speed to 70 MPH without use of air brakes.
(If unable to control speed to 70 MPH on long descending grades, two additional attempts are allowed to control speed with dynamic brake at slower speeds before speed must be reduced to 55 MPH while negotiating descending grade.)

Trains operating with solid double stack equipment only, may use a maximum of 32 axles of dynamic braking per engine consist.

MP 1098.5 to MP 1102.9. Main 2.......................... 40 MPH. ........ 40 MPH. MP 1164.0 to MP 1167.3,
including trains 100 TOB and over ........................................... 55 MPH
MP 1167.3 to MP 1188.4,
including trains 100 TOB and over ........................................... 45 MPH.
Freight trains on descending grades, with dynamic brakes
not in use, must not exceed:
MP 1175.0 to MP 1181.0, WWD.............................................. 30 MPH
MP 1174.0 to MP 1167.0, EWD................................................ 30 MPH

1(B). Speed—Permanent Restrictions
Westward



1(C). Speed-Switches and Turnouts
Trains and engines using auxiliary tracks must not exceed turnout speed for that track unless otherwise indicated.

| MP 996.8 Sunmaid Cros | 30 N |  |
| :---: | :---: | :---: |
| MP 996.8 Calwa, Turnout, | . 15 MPH | 15 MPH . |
| Fresno-End of two track | 30 MPH | 30 MPH . |
| Figarden-Both ends sidin | 40 MPH | 40 MPH . |
| Gregg-Both ends siding. | 40 MPH | 40 MPH . |
| Madera-Both ends siding | 40 MPH . | 40 MPH . |
| Kismet-Both ends siding | 40 MP | 40 MPH . |
| Sharon-Both ends siding | 40 MPH . | 40 MPH . |
| Legrand-Both ends sidin | 40 MP | 40 MPH . |
| Planada-Both ends sidin | 40 MPH . | 40 MPH . |
| Merced-EE siding | 40 MPH | 40 MPH . |
| Merced, crossover | 40 MPH . | 40 MPH . |
| Merced-WE siding | 30 MPH . | 30 MPH . |
| Fluhr-Both ends siding. | 40 MPH . | 40 MPH . |
| Ballico-Both ends siding | 40 MP | 40 MPH . |
| Denair-Both ends siding | 40 MPH . | 40 MPH . |


| Modesto Empire Jct.-Turnouts | Passenger .60 MPH. | Freight 50 MPH |
| :---: | :---: | :---: |
| Riverbank-Both ends siding | 25 MPH . | 25 MPH . |
| East Escalon | 40 MPH . | 40 MPH . |
| Escalon, crossovers | 40 MPH . | 40 MPH . |
| West Escalon | 40 MPH . | 40 MPH . |
| MP 1101.8, turnout to track 7992 | 10 MPH . | 10 MPH . |
| Duffy-Both ends siding | 40 MPH . | 40 MPH . |
| East Mariposa, turnout | 40 MPH . | . 40 MPH . |
| West Mariposa, crossover | 40 MPH . | 40 MPH . |
| Almond (Lead) Tracks |  |  |
| 201, 304, 305, 306 WWD | 20 MPH . | 20 MPH . |
| 201, 304, 305, 306 EWD | . 40 MPH . | .. 40 MPH . |
| Wheat | 50 MPH . | . 50 MPH . |
| Hanshaw | 50 MPH . | . 50 MPH . |
| Keddie Jct., all switch | 10 MPH . | 10 MPH . |
| UP Crossing, Crossove | . 15 MPH . | .. 15 MPH . |
| West Stockton. | 30 MPH . | . 30 MPH . |
| West Stockton-Crossover to Port Lead | . 15 MPH . | .. 15 MPH . |
| Holt-MP 1128.9 End of two tracks | 50 MPH . | . 50 MPH . |
| Trull-MP 1133.6 End of two tracks | . 50 MPH . | . 50 MPH . |
| Orwood-Both ends siding | . 10 MPH . | .. 10 MPH . |
| Bixler-Main 1 | . 50 MPH. | .. 50 MPH . |
| Oakley-Main 1 | 50 MPH . | .. 50 MPH . |
| Sando-EE siding | . 10 MPH . | .. 10 MPH . |
| Sando-WE siding | . 10 MPH . | .. 10 MPH . |
| Pittsburg-Both ends sid | . 50 MPH . | .. 50 MPH . |
| MP 1155.8 | 50 MPH . | .. 50 MPH . |
| Port Chicago-Both ends siding | . 10 MPH . | 10 MPH . |
| Port Chicago-UP connection | 50 MPH . | .. 50 MPH . |
| Maltby-Both ends siding | . 30 MPH . | . 30 MPH . |
| Christie-Both ends siding | 10 MPH . | .. 10 MPH . |
| Collier-Both ends siding.. | . 10 MPH . | 10 MPH . |
| Gateley-Both ends siding | . 10 MPH . | 10 MPH . |
| heem-Both ends sidin | 10 MPH . | 10 MPH |

## 1(D). Speed-Other

Riverbank
East leg of wye Track 7958 over Patterson Road .................... 5 MPH. All locomotive cranes/pile drivers, and Jordan spreaders ....... 10 MPH.
Stockton Intermodal Tracks-201, 203-206, 304-306 ................. 20 MPH.
Exception: Tracks 304-306 - EWD trains departing ............... 40 MPH.
MP 1167.4, departing siding, WWD (HER) .................................. 15 MPH
MP 1173.56 to MP 1174.62, Tunnel No. 3, car kind M3F............. 13 MPH. Richmond Pacific Railroad Tracks:

| Harbor Lead - MP 0.8 to MP 2.2 | 5 MP |
| :---: | :---: |
| L.R.T. Lead - MP 1.9 to MP 2.8 . | 5 MPH |
| Cutting Lead - MP 2.4 to MP 2.7 | 5 MPH |

See Item 1 of the System Special Instructions for additional speed restrictions.
2. Bridge and Equipment Weight Restrictions Maximum Gross Weight of Car
MP 994.9 to Richmond ............................ 143 tons, Restriction B
3. Type of Operation

CTC-in effect:
MP 994.9 to MP 1163.7
MP 1111.9 to MP 1112.2, Almond, East Lead, Mariposa MP 1114.84 to MP 1116.1, West Lead, Mariposa

Multiple Main Tracks-in effect:
2 MT:
MP 994.9 to MP 998.1
MP 1087.1 to MP 1090.8
MP 1098.6 to MP 1102.9
MP 1116.1 to MP 1122.2
MP 1129.0 to MP 1133.6
MP 1139.4 to MP 1146.4
ABS-in effect:
MP 1163.7 to MP 1188.3
TWC-in effect:
MP 1163.7 to MP 1188.3

Rule 6.13-Yard Limits
MP 1187.3 to MP 1189.0
Restricted Limits-in effect:
MP 1.0 to MP 0.0 at Riverbank
4. General Code of Operating Rules Items

Rule 1.14-UPRR Trains may use joint track between Keddie Jct. and Riverbank and between Keddie Jct. and Port Chicago. BNSF trains may use Union Pacific joint track between Stege and Oakland, Stege and Warm Springs and Stockton and Keddie. SJVR trains may use joint track between Calwa and Hammond.

Rule 1.47-Passenger Trains—Observe and Call Signals: When a signal requires a train to stop at or pass the next signal at Restricted Speed, the engineer must communicate that fact to a designated member of the crew, including track designation if on multiple tracks, and get an acknowledgment. If no acknowledgment is received, the engineer must ascertain at the next scheduled stop why the message is not being confirmed. If the engineer fails to control the train movement in accordance with either a wayside signal or other restrictions imposed upon the train, the designated crew member shall at once communicate with and caution the engineer regarding the restriction and, if necessary, take appropriate action to ensure the safety of the train, including stopping all movement if appropriate.

Rule 5.8.1—Ring the engine bell continuously between MP 1119.0 and MP 1119.5 on MT 2.

Rule 5.8.2-Sound the whistle approaching all crossings, public and private.
Rule 5.8.4, Whistle Quiet Zone—Whistle signal 5.8 .2 (7) is not required at the following crossing locations. All other whistle requirements remain in effect.

| Location | Milepost | Crossing Name |
| :--- | :--- | :--- |
| Fresno | 997.79 | Ventura Ave. |
|  | 998.1 | Tulare St. |
|  | 998.2 | Ped. Gr. Xing |
|  | 998.3 | Fresno St. |
|  | 998.53 | Divisadero St. |
|  | 998.77 | McKenzie St. |
|  | 999.02 | Belmont Ave. |
|  | 999.49 | Olive Ave. |
|  | 999.59 | Hammond Ave. |
| Richmond | 0.08 | Richmond Pkwy. |
|  | 0.09 | W. Ohio Ave. |
|  | 0.19 | Richmond Pkwy. |
|  | 1184.8 | Atlas Rd. |
|  | 1185.9 | Giant Hwy. |
|  | 1190.3 to |  |
|  | 1190.8 | Richmond Ave. 400 Lead |
|  | 1190.4 | Garrard Blvd. 300 Lead |
|  | 1190.5 | Cutting Blvd. |
|  | 1190.6 | Canal Blvd. |
|  | 1191.5 | Marina Bay Pkwy. |

Rule 5.8.2(7)—An Automated Horn System (AHS) is in service at Escalon at the following locations:

| Location: | Milepost: |
| :--- | :--- |
| SR 120 (aka Yosemite) | 1101.88 |
| McHenry (aka Escalon Ave) | 1101.71 |
| 1st Street | 1101.51 |
| St. Johns Rd | 1100.98 |

The AHS is activated by the approaching train which sounds a warning in conjunction with the automatic crossing devices. When the crossing signals are activated the AHS will automatically sound the horn at the crossing. To confirm AHS is functioning, an indicator flashes at the crossing. After the indicator is observed to be flashing, whistle signal Rule 5.8.2 (7) is no longer required.
The train horn must be sounded if the wayside horn indicator is not visible approaching the crossing or if the wayside horn indicator, or an equivalent system, indicates that the system is not operating as intended.
Rule 6.19-When flagging is required, the distance will be 2.0 miles.
Rule 8.9—Both ends of the sidings at Maltby, Christie, Collier, Gateley and Rheem have spring switches.
Rule 9.1-Signals Not Conforming to Aspects and Indications Shown in the System Special Instructions

| Aspect | Name | Indication |
| :--- | :--- | :--- |
| Red Over <br> Flashing Yellow | Diverging Approach <br> (Rule 9.1.11 does not <br> apply) | Proceed per BNSF Rule 9.1.12 |

Rule 9.9—All Trains—Train Delayed Within a Block:
In CTC, when any train stops or its speed is reduced below 10 MPH, the train must proceed at a speed not exceeding 40 MPH , prepared to stop at the next signal until the next signal is visible and that signal displays a proceed indication.
Rule 9.10-is amended on the Stockton Subdivision as follows: Paragraph under the heading "Exception" is amended to read: Within ABS limits, a train having authority to enter the Main Track at a switch where there is no governing signal will:

- be governed by Main Track signal provided it can be determined by signal indication that no train is approaching from the rear; or,
- be governed by Main Track signal after meeting a train while that train is still in the block to the rear.

Rule 9.21—On sidings with overlap circuits at Maltby, Christie, Collier, Gateley and Rheem, when authorized to leave the siding, the train must occupy the overlap section for a minimum of 30 seconds before proceeding past the leave siding signal.
5. Trackside Warning Detectors (TWD)
A. Protecting bridges, tunnels or other structures

MP 1130.9—DED—WWD only—Recall Code 8
MP 1139.4-DED-EWD only (Transmits on both channels 30 and 36)-Recall Code 8
MP 1144.5—Recall Code 8
Protects Bridge MP 1136.5 and Tunnel MP 1170.2
MP 1180.5-EWD only—Protects Tunnel MP 1175.4
B. Other TWD locations

MP 1010.0-Exception Reporting-Recall Code 8
MP 1029.3-Exception Reporting—Recall Code 8
MP 1051.1—Exception Reporting—Recall Code 8
MP 1076.2-Exception Reporting-Recall Code 8
MP 1097.5-Exception Reporting—Recall Code 8
MP 1123.0-Exception Reporting-Recall Code 8
MP 1127.4—DED, Exception Reporting
MP 1130.9—DED-EWD only
MP 1134.6—DED, Exception Reporting
MP 1139.4—DED—WWD only
MP 1148.2—DED, Exception Reporting
MP 1153.3—DED, Exception Reporting
MP 1168.9-Exception Reporting—Recall Code 8
MP 1180.5-WWD only
C. Other detectors

MP 1171.3, 1171.5—Slide Detector
MP 1170.1 \& EWD, rotating red light MP 1171.5
6. FRA Excepted Track-None
7. Special Conditions

Fluhr-GCOR Rule 6.32.2 applies at the Santa Fe Way crossing on track 7868 at MP 1062.59.
Stockton—Trains operating to the central corridor on the Union Pacific via Roseville may not contain loaded doublestack cars, regardless of their height. All train lists must be reviewed to ensure none are entrained.

Orwood-Excess dimension cars must not operate through the siding.
Pittsburg-The west end of track 0611 must be left lined for track 0611. NOTE: Failure to do so will cause a track light on the Pittsburg siding.

Movement from Richmond Yard to Stege Wye-The Richmond Pacific Railroad will use the tracks between Stege Wye and BK Junction. BNSF RR trains or engines may use the tracks between Stege Wye and $23^{\text {rd }}$ Street Yard after contacting the UPRR West Oakland Yard via radio on Road Channel 46 and the Richmond Pacific railroad via radio on Road Channel 55. If contact with the Richmond Pacific Railroad cannot be made, BNSF RR crews may proceed using GCOR Rule 6.28 , Movement on Other than Main Track. Richmond Pacific Railroad crews must contact the ATM/TM at Richmond Yard on Road Channel 36 before entering or occupying the Siberia Lead between Siberia Junction and BK Junction.

Remote Control Area—Signs located at MP 993.0 (Bakersfield Subdivision) and MP 998.1 (Stockton Subdivision), designate the Remote Control Area at Fresno.

Signs located at MP 1116.1 and MP 1121.0, (Stockton Subdivision) designate the Remote Control Area at Mormon.

The Remote Control Area at Oakland is MP 2.2 on the Martinez Subdivision to the end of the main switching lead at the west end of the OIG Yard, and includes all tracks between these two points.
The Remote Control Area at Richmond is MP 1187.3 (Stockton Subdivision) to MP 9.4 (Martinez Subdivision) and includes all tracks between these two points.

## Remote Control Zone (RCZ)—

Stockton RCZ—Between the derail on the East Long Lead (track 113) to the clearance point on the east end of 132 and east of the east switch 149 track (locations marked by signs and on the lead only) the East Long Lead has been designated an RCZ at Mormon Yard in Stockton.

Richmond (OIG) RCZs-Two RCZs are established at the east end of Richmond Yard; the "Working Zone" located on the "Working Lead" and the "City Zone" located on the "City Lead".
The "Working Zone" extends from the 9119 switch to a point 450 feet west of the clearance point of the "Top of the Hill" Switch. RCZ signs are posted at both ends of the "Working RCZ". The "Working Zone" is approximately 3,461 feet in length.
The "City Zone" extends from the solar switch that divides Tracks 9 and 10 to a point 450 feet west of the clearance point of the "Top of the Hill" Switch. RCZ signs are posted at both ends of the "City RCZ". The "City Zone" is approximately 2,871 feet in length.

Oakland International Gateway (OIG) RCZ-There will be one RCZ established at the west end of OIG. This zone will encompass all tracks within the limits of that zone.

The RCZ at OIG extends from the west side of Maritime Crossing to a point approximately 295 feet east of the bumper that designates the end of the main switching lead track. The RCZ is approximately 2,945 feet in length.

Stockton Activation/Deactivation Procedure-The Remote Control Operator will notify the trainmaster or assistant trainmaster when the Remote Control Zone has been activated. The Remote Control Operator will also notify the trainmaster or assistant trainmaster when the Remote Control Zone has been deactivated. Only the Remote Control Operator can activate or deactivate the Remote Control Zone.

Before the Remote Control Zone can be fouled or occupied the trainmaster or assistant trainmaster must be contacted to determine if the Remote Control Zone has been activated.

Richmond/Oakland (OIG) Activation / Deactivation
Procedure-The Remote Control Operator will notify the onduty trainmaster or the on-duty coordinator when the Remote Control Zone has been activated or deactivated. Only the Remote Control Operator can activate or deactivate the Remote Control Zone.
Before entering any Remote Control Zone (RCZ) from any location, including auxiliary tracks or crossovers, crews must contact the RCO Crew, the Richmond On-Duty Trainmaster, or the On-Duty Coordinator to determine if an RCZ is activated. If an RCZ is not activated, the crew may proceed through RCZ unless otherwise restricted.

System Special Instructions Amendment—ltem 9, Amtrak Instructions, under "Equipment", the line reading "Movement with locomotives between cars is prohibited" does not apply on the California Division.

The following will apply: Movement with locomotive between cars is prohibited unless:
A. Locomotive is being used in "push-pull" service.
B. "MU" control cables are connected through the entire train.
C. Locomotive between cars is not isolated or dead-in-tow.

Locomotive Consists-When building locomotive consists, locomotives rated at less than 2000 horsepower and not equipped with a dynamic brake must be placed immediately behind the lead locomotive in the consist.

Train Crew Motor Vehicle License- California Vehicle Code 12953 states: any circumstances involving accidents or violations in which the Engineer or any other crew member of any train is detained by state or local police, neither the Engineer nor any other crewmember shall be required to furnish a motor vehicle operator's license, nor shall any citation involving the operation of a train be issued against the motor vehicle operator's license of the Engineer or any other crew member of the train.

Sidings—Orwood, Sando and Christie sidings must not be used for trains that exceed 100 TOB.

When securing equipment in the following sidings, use the following chart in conjunction with ABTH Rule 104.14 to determine the appropriate number of handbrakes.

| Siding | Most Restrictive Grade | Ascending or Descending Movement <br> E. Switch/Direction - W. Switch/Direction |  |
| :---: | :---: | :---: | :---: |
| Figarden | . 10 | Descending | Descending |
| Gregg | . 20 | Ascending | Descending |
| Madera | . 30 | Ascending | Ascending |
| Kismet | . 30 | Ascending | Ascending |
| Sharon | . 10 | Descending | Descending |
| Legrand | . 20 | Ascending | Descending |
| Planada | . 20 | Ascending | Descending |
| Merced | . 15 | Ascending | Descending |
| Merced Crossover | . 15 | Ascending | Descending |
| Fluhr | . 31 | Descending | Ascending |
| Ballico | . 30 | Descending | Descending |
| Denair | . 11 | Ascending | Flat |
| Riverbank | . 24 | Descending | Descending |
| Escalon | . 30 | Ascending | Descending |
| Duffy | . 09 | Ascending | Descending |
| Orwood | . 20 | Ascending | Descending |
| Sando | . 33 | Ascending | Descending |
| Pittsburg | . 20 | Ascending | Ascending |
| Port Chicago | . 00 | Flat | Flat |
| Maltby | . 21 | Descending | Ascending |
| Christie | 1.52 | Ascending | Descending |
| Collier | 1.00 | Ascending | Descending |
| Gately | 1.00 | Descending | Descending |
| Rheem | 1.00 | Ascending | Ascending |

Close Clearances-Do not ride the side of equipment at the following locations due to close clearance:

| Trigo | MP 1014.7 | 7742 | support structure |
| :---: | :---: | :---: | :---: |
| Planada | MP 1047.3 | 7785 | structure |
| Tuttle | MP 1050.7 | 7826 | loading dock |
| Merced | MP 1055.6 | 7845 | loading dock |
| Merced | Quebecor | 7851 | structure |
|  |  | 7852 | structure |
| Swanson | MP 1083.0 | 7920 | unloading shed S side |
|  |  | 7921 | unloading shed |
|  | MP 1088.6 | MT | syphon N \& S headwall |
|  | MP 1091.4 | MT | syphon N headwall |
| Glen Frazer | MP 1170.0-MP 1175.0 | MT | Tunnel No. 1, 2, 3 |
| East Antioch | MP 1150.1 | 528 | fence $S$ side |
| MP 1165.8 | Monsanto Chemical | 1371 | structures** |
|  |  | 1372 | structures** |
| Richmond Yard | 400 Lead | 400 | tunnel |
| Richmond Ind. | Nat'I Gypsum | 317 | loading dock |
| Zone |  | 318 | loading dock |
|  | Kinder Morgan |  |  |
|  | Ethanol | 158 | gate |
|  |  | 159 | gate |

**This is an overhead and side clearance issue. Cars should not be placed, nor an engine operated along side or West of these structures.
Close Track Centers-Do not ride the side of equipment on the following tracks unless the adjacent track is known to be clear:

| Calwa Yard |  |  |
| :--- | :--- | :--- |
| Tuttle | MP 1050.7 | $7825-7826$ |
| Merced | MP 1055.6 | 7844 thru 7846 |
| Merced | Quebecor | 7851 thru 7855 |
| Fluhr | MP 1062.9 | $7871-7872$ |
| Hughson |  | $7907-7909$ |
| Mormon Yard |  | $152-153$ |
| Richmond Yard |  | 9113 thru 9115, 9122 thru 9126, |
|  |  | 9129 thru 9134 |

HLCS—Hy-Rail Limits Compliance System (HLCS) is in effect on the Stockton Subdivision.

Flash Flood Warnings-The following locations have been identified as "critical areas" subject to flash floods and washouts as outlined in System Special Instructions, Item 33:

None
8. Line Segments

Yard Line Segments Line Segment Limits

725 $\qquad$ Calwa
7256 ........... Riverbank Yard
7257 ...........Stockton Yard Limits
7258 ............Richmond
7273 ............Mariposa Intermodal Facility, MP 0.00 to MP 9998.0
Road Line Segments
Line Segment Limits
7200 ........... Calwa to Richmond MP 994.9 to MP 1189.0
9. Other Location Information

| Name | Mile Post <br> Location | Capacity <br> Feet | Switch <br> Opens |
| :--- | :---: | :---: | :---: |
| Trigo | 1014.7 | 6,650 | Both |
| Tuttle | 1050.7 | 2,339 | Both |
| Kadota | 1052.1 | 851 | West |
| Quebecor | 1058.0 | 890 | West |
| Swanson | 1083.0 | 6,850 | Both |
| Hughson | 1085.8 | 2,047 | Both |
| Claus | 1092.8 | 2,228 | West |
| Woodsbro | 1125.0 | 4,250 | Both |
| Knightsen | 1142.4 | 1,100 | Both |
| DuPont | 1149.2 | 6,350 | Both |
| East Antioch | 1149.8 | 3,163 | Both |
| Zee | 1165.8 | 2,304 | Both |
| Monsanto | 1187.7 | 584 | East |
| San Pablo |  |  | Both |

10. Grade Charts


Speed Tables

| SPEED TABLE |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Per Mile |  | Miles Per Hour | Time Per Mile |  | Miles Per Hour | Time Per Mile |  | Miles <br> Per Hour |
| Min. | Sec. |  | Min. | Sec. |  | Min. | Sec. |  |
| - | 36 | 100 | - | 58 | 62.1 | 1 | 40 | 36.0 |
| - | 37 | 97.3 | - | 59 | 61.0 | 1 | 42 | 35.3 |
| - | 38 | 94.7 | 1 | - | 60.0 | 1 | 44 | 34.6 |
| - | 39 | 92.3 | 1 | 02 | 58.0 | 1 | 46 | 34.0 |
| - | 40 | 90.0 | 1 | 04 | 56.2 | 1 | 48 | 33.3 |
| - | 41 | 87.8 | 1 | 06 | 54.5 | 1 | 50 | 32.7 |
| - | 42 | 85.7 | 1 | 08 | 52.9 | 1 | 52 | 32.1 |
| - | 43 | 83.7 | 1 | 10 | 51.4 | 1 | 54 | 31.6 |
| - | 44 | 81.8 | 1 | 12 | 50.0 | 1 | 56 | 31.0 |
| - | 45 | 80.0 | 1 | 14 | 48.6 | 1 | 58 | 30.5 |
| - | 46 | 78.3 | 1 | 16 | 47.4 | 2 | - | 30.0 |
| - | 47 | 76.6 | 1 | 18 | 46.1 | 2 | 05 | 28.8 |
| - | 48 | 75.0 | 1 | 20 | 45.0 | 2 | 10 | 27.7 |
| - | 49 | 73.5 | 1 | 22 | 43.9 | 2 | 15 | 26.7 |
| - | 50 | 72.0 | 1 | 24 | 42.9 | 2 | 30 | 24.0 |
| - | 51 | 70.6 | 1 | 26 | 41.9 | 2 | 45 | 21.8 |
| - | 52 | 69.2 | 1 | 28 | 40.9 | 3 | - | 20.0 |
| - | 53 | 67.9 | 1 | 30 | 40.0 | 3 | 30 | 17.1 |
| - | 54 | 66.6 | 1 | 32 | 39.1 | 4 | - | 15.0 |
| - | 55 | 65.5 | 1 | 34 | 38.3 | 5 | - | 12.0 |
| - | 56 | 64.2 | 1 | 36 | 37.5 | 6 | - | 10.0 |
| - | 57 | 63.2 | 1 | 38 | 36.8 | 12 | - | 5.0 |


| FEET | TENTHS OF A <br> MILE |
| :---: | :---: |
| 528 | .1 |
| 1,056 | .2 |
| 1,584 | .3 |
| 2,112 | .4 |
| 2,640 | .5 |
| 3,168 | .6 |
| 3,696 | .7 |
| 4,224 | .8 |
| 4,752 | .9 |

## TERMSDXO

T-Trains
E-Engines
R - Railroad cars
M - Men \& equipment fouling track
S - Stop signal
D - Derail or switch lined improperly
X - Crossings at grade
O - Other crew movements

## Remember "TERMSDXO" when shoving cars

To assist in determinig where to start sounding the whistle as described in Whistle Signal 7, use the following:
At the speed indicated in the left column, wait the time indicated in the right column before sounding the whistle.

| Train Speed | Delay to Sound Whistle |
| :---: | :---: |
| 40 MPH | 3 seconds |
| 35 MPH | 6 seconds |
| 30 MPH | 10 seconds |
| 25 MPH | 16 seconds |
| 20 MPH | 25 seconds |
| 15 MPH | 40 seconds |
| 10 MPH | 1 minute 10 seconds |

