

SOUTHERN PACIFIC COMPANY



WESTERN DIVISION SPECIAL INSTRUCTIONS

No. 6

EFFECTIVE SUNDAY, SEPTEMBER 25, 1955

AT 12:01 A. M.,

PACIFIC STANDARD TIME

SUPERSEDING SPECIAL INSTRUCTIONS No. 5

THESE INSTRUCTIONS CONSTITUTE A PART
OF THE TIMETABLE CURRENTLY IN
EFFECT

R. E. HALLAWELL,
General Manager.

W. D. LAMPRECHT,
J. A. McKINNON,
Assistant General Managers.

C. H. GRANT,
General Superintendent of
Transportation.

J. M. HATCHER,
Superintendent of Transportation.

A. S. McCANN,
Superintendent.

⊙This symbol indicates change, except changes on
rating of engines pages are not so indicated.

○RULE A. Transportation Department rule revisions from December 1, 1951 to and including May 1, 1955 are shown on pages 1 and 2 of Book of Rules. Employees must have revised pages covering these revisions in their copy of Book of Rules.

RULE M. Employees are warned that it is dangerous to ride on top or side of cars while passing points where impaired clearance exists, and that they must protect themselves from injury. See list of impaired clearances on main track and siding.

There are numerous other structures with impaired clearance on yard and station tracks on the division, and employees must be familiar with their location and avoid personal injury.

○RULE 10-J. Speed signs prescribing an increase in speed will not be installed on branches. Speed Restrictions tables will indicate permissible speeds between mile post locations named.

○RULE 19. Certain passenger cars have supplemental roof-line markers in addition to side electric markers. When such cars are on rear of train, the supplemental markers must be lighted by day as well as by night and duplicate the display to the rear of side electric markers.

RULE 28. In double track territory signals will be placed to right of track according to direction of movement of train to be flagged. Trains in opposite direction will not be required to observe signals so placed.

○RULE 84. Passenger trains making station stop where rear end of train cannot be seen from the head end due to curvature of track, foggy or stormy weather, engineer will recall flagman from the rear as prescribed by Rule 14(d) or 14(e), as the case may be. When all passengers on rear of train have been loaded, flagman will sound signal 16(k) which will be answered by the engineer with signal 14(g). Train will not proceed until signal is given by trainman on head end of train.

RULE 98. Cars must not be kicked, dropped or shoved over railroad crossings not protected by interlocking, unless movement is protected.

RULE 99-C. Will apply on Ione, Lodi, Oakdale and Winters Branches; on Calistoga Branch between Napa and Calistoga, and on San Ramon Branch.

RULE 102. Yard engines must have two red flags for use in complying with this rule. If taken from engine they must be replaced after use.

RULE 107. Freight trains and engines must avoid passing between stations and loading tracks when passenger trains are closely approaching from opposite direction on double track, and care must be exercised by non-stopping passenger trains when approaching stations at about the same time that other passenger trains are approaching from the opposite direction. When practicable non-stopping trains are to be given preference, but each train must be operated in a manner to avoid confusion and hazard of personal injury.

RULE 283. Movements governed by semaphore type diverging route signals displaying "Proceed on Diverging Route", Figs. A and B, must be made with caution.

RULES 281 and 285. Movements against the current of traffic governed by semaphore type dwarf signals displaying "Proceed", Fig. E, Rule 281; or by light type dwarf signals displaying "Proceed not Exceeding Medium Speed.", Fig. G, Rule 285, must be made with caution and position of switches observed.

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

ELECTRIC SWITCH LOCKS

Where electric switch locks are installed, lock box door must not be opened if movement is to be made into a track leading from main track until engine or car is standing within 150 feet of the switch; or if movement is to be made from such track, or through a crossover to a main track, until block indicator indicates block clear on opposite track. Within CTC limits train dispatcher's permission must also be obtained before lock box door is opened.

After lock box door is opened lock lever cannot be moved to opposite position to release switch for hand throwing until indicator in lock box indicates "unlocked".

Lock lever must not be returned to locked position until all movements over the switch are completed, switch returned to normal position and locked, after which lock box door must be closed and locked. Within CTC limits train dispatcher must also be notified by telephone when completed.

When block indicators indicate "block occupied," instructions posted inside lock box for operation of push button to start time-release must be complied with if movement is to be made to main track while approach circuit is occupied by another train, in addition to providing flag protection when necessary.

Low type electric locks, such as are applied direct to lever of hub type switch stands, function as above except that the removal of the switch lock has the same effect as opening the lock box door. Instead of being equipped with an "unlocked" indicator, these locks have a pilot light that indicates by illumination when the lock is unlocked.

When pilot light will not illuminate to indicate electric lock is unlocked, push button on adjacent cast iron box, protected with cover and locked with switch lock, should be depressed to illuminate green light. After a time interval of from one to seven minutes pilot light on electric lock will be illuminated, indicating lock is unlocked.

Emergency lock release to be used only in case of electrical or mechanical failure, as indicated by failure of time-release to function after several minutes. When necessary to break seal on emergency lock release, train dispatcher must be notified immediately, and movement made only after flag protection provided on both tracks.

MECHANICAL SWITCH LOCKS

After lock box door is opened lock lever may be moved upward against stop. After a time interval of from one to seven minutes indicator will show UNLOCKED and lever may be moved to reverse position "R". Switch may then be operated in usual manner.

Lock lever must not be returned to normal position "N" until all movements over the switch are completed, switch returned to normal position and locked.

Emergency lock release to be used only in case of mechanical failure, as indicated by failure of time release to function after several minutes. When necessary to break seal on emergency release, train dispatcher must be notified immediately and movement made only after necessary flag protection is provided.

RULE 605. INTERLOCKING

Trains and engines must not enter main track within interlocking limits where no signal governs such movement until permission has been obtained from signal operator, and must then run with caution not exceeding 12 MPH to the next signal.

Movements governed by dwarf signals must be made with caution and position of switches observed, as such signals govern movements for various routes.

At all interlockings, when route lined is not to be used, following signal will be sounded by engineers: o o — o o.

GENERAL REGULATIONS

RULE 851. When necessary to discharge passengers on left side of train on double track, trainmen must caution passengers that trains may approach on opposite track, and use precaution to avoid injury.

AIR BRAKE RULES

○**RULE 3.** On diesel engines of DP-5, 6, 8, 9, 10 and 11 classes the safety valve in the discharge pipe must be set at 185 pounds.

Standard brake pipe pressure for No. 377 (PCE) and No. 378 (PCE) is 90 pounds.

STANDARD AIR BRAKE PRESSURES ON LOCOMOTIVES—POUNDS is revised as follows:

	Reducing Valve	Safety Valve
"Diesel passenger"	*30	55

(*On engines equipped with 24-RL brake equipment and speed governor control, the reducing valve will be set so brake cylinder gage will indicate 30 pounds when a full independent application has been made on a standing engine.)

RULE 13. Should all power units of a diesel engine running light or while handling train become inoperative on a grade, light engine or train, after stopping, must be immediately secured with hand brakes and engine wheels secured by blocking or chains.

FREIGHT TRAINS

RULE 22. Terminal test outlined in this rule, after having been made at originating terminal on through freight trains, will not be made at intermediate terminals West Oakland and Tracy, except when cars are added to the consist. Instead, test will be made as outlined in Air Brake Rule 25—Rear End test. Changing crews, caboose, and/or engine, will not necessitate terminal test outlined under Air Brake Rule 22.

RULE 25. Terminal test outlined in Air Brake Rule 22 has been made at originating terminals Rear End test outlined in Air Brake Rule 25 will be made at intermediate terminals West Oakland and Tracy on freight trains moving through without cars being added to the consist or on which only crews, caboose, and/or engines may be changed. Under these conditions, rolling inspection by carmen will be made on freight trains arriving and leaving the intermediate terminal.

○**RULE 29.** Second paragraph is revised to read:

"When dynamic brakes and/or retaining valves are used on trains of any length, air brakes may be released at speeds of 8 miles per hour or over if descending grades favor this release. This rule not to govern on level or rolling territory."

PASSENGER TRAINS

RULE 39. Passenger trains will make running air brake test on leaving initial terminals.

MISCELLANEOUS

- 4. Pushing trains out of yards:
 - (a) Engines must not be placed behind a wooden underframe caboose or other wooden underframe equipment.
 - (b) Engines weighing more than 330,000 lbs. on the drivers must not be placed behind steel underframe cabooses.
 - (c) Air must not be coupled through the pusher engine.
 - (d) Knuckle must not be removed, or closed, or cutting lever temporarily fastened in release position on a pusher engine, as means of preventing coupling being made.

- 5. Helper service:
 - (a) Helper engines must not be placed behind wooden underframe cars or wooden underframe cabooses.
 - (b) Engines weighing more than 330,000 lbs. on the drivers must not be placed behind steel underframe cabooses.
 - (c) Not more than one helper engine will be placed behind steel underframe cabooses.

○When steam engine is coupled next behind diesel engine on head end of either a freight or passenger train, dynamic brakes must not be used.

○In passenger service DF-1 to 12 class engine of not more than four units may be coupled ahead of steam engine; DF-1 to 12 class engine of not more than four units may be coupled ahead of DF-1 to 12 class engine; and steam engine may be coupled ahead of DP or DF-1 to 12 class engine. When so coupled dynamic brakes must not be used.

Helper or doubleheader engines must not be placed on head-end of freight trains powered by DF-1 to 12 class engines.

Except as provided below, one helper may be placed on head-end, except that not more than one AC class engine, nor more than two engines of other classes may be placed on head-end of any freight train. When additional helpers are required, they will be placed back in train and cut in ahead of any cars of wooden frame construction, and when practicable should be placed behind a loaded car.

Westward between Tracy and Niles if train consists of more than 49 cars, and eastward if train consists of more than 75 cars when only one helper is required it will be placed on rear ahead of caboose and any wooden frame cars, and when practicable should be placed behind a loaded car.

Where coupling of engines is not permitted, such engines must be separated by at least ten cars.

Air will be cut in all helper engines, and engine must not be cut off when train is in motion.

When used as helpers, AC class engines must not be coupled together, nor may more than two F, Mt, or heavier class be coupled together. When coupled in rear of train, larger engines must be placed ahead of smaller engines. If tonnage requires more power, additional helpers of not to exceed two coupled in each case, must be separated by at least four cars.

Helpers must not be operated backing except in emergency, and in such case engines should not push through a backing engine if it can be avoided.

Helper engines coupled in middle or rear of train must be cut off from forward portion before taking water. On grades, road engine and helper must not be cut off from train at the same time without hand brakes being securely set.

27. Should a passenger train, irrespective of the type of power being used, be stopped in a tunnel, air conditioned cars within the tunnel must immediately have the air conditioning systems, including ice engines and engine generators, shut off, fresh air intake shutters closed, and blower fans shut off.

Should a diesel-powered train be stopped with the engine in a tunnel and it is found that, in the case of a passenger train it cannot be moved within five minutes after stopping, and in case of a freight train it cannot be moved within a reasonable length of time, trainmen and enginemen must take necessary precautions to prevent movement. Independent brake and sufficient hand brakes must be immediately applied. Engine wheels must be secured by blocks and chains, and power plants and steam generators, if any, on diesel engine shut down.

○28. DF and DP class engines when moving without cars must, when possible, be operated from cab in direction of movement, except for short direct movements.

SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

⊙ **SPEED RESTRICTIONS FOR ENGINES:** Maximum speed shown below is subject to further restrictions applicable to certain territories as shown in Speed Restrictions for Trains:

NOMINAL CLASS	RUNNING FORWARD		RUNNING BACKWARD WITH TRAIN OR LIGHT
	WITH TRAIN	LIGHT	
AC.....	60	55	25
C.....	40	40	30
DF-1 to 12, except.....	**55	55	*30
Units 6138 to 6143, 6145 to 6149, 6161 to 6164, 6166 to 6169, 6171 to 6185, 6204, 6205, 6209, 6241, 6242, 6249 to 6253, 6256, 6257, 6265 to 6267, 6285, 6289, 6290, 6292, 6295 to 6299, 6304 to 6306, 6313, 6314, 6322, 6324, 6326, 6327, 6330, 6333, 6336, 6342, 6343, 6345 to 6350, 6352, 6353, 6356, 6358, 6361 to 6364, 6366, 6367, 6372 to 6377, 6406 to 6423, 6425, 6426, 6428 to 6439, 8022, 8023, 8026, 8029 to 8032, 8034, 8039 to 8043, 8045 to 8048, 8050, 8060 to 8068, 8070 to 8078, 8080 to 8085, 8140 to 8145, 8147 to 8152, 8156 to 8158, 8160, 8161, 8165, 8167, 8184, 8188 to 8194, 8196 to 8199, 8204, 8214, 8219, 8222, 8224, 8225, 8230, 8232, 8234, 8235, 8242, 8243, 8246 to 8249, 8252, 8253, 8256, 8259, 8260, 8262 to 8289.....	65	65	*30
Units 6190 to 6193, 6202, 6203, 6206 to 6208, 6210, 6214 to 6219, 6222 to 6229, 6232 to 6239, 6378 to 6382, 6394 to 6405, 6440 to 6461, (T&NO) 338 to 353, 8090 to 8093, 8102, 8103, 8106 to 8111, 8114 to 8119, 8122 to 8216, 8139, 8290 to 8303, (T&NO) 526 to 541.....	70	70	*30
DF-100, 114 to 120, 122, 123, except.....	65	65	65
Units 5279 to 5287, 5290 to 5293, 5309 to 5315.....	55	55	55
DF-101 to 112.....	60	60	60
DF-121.....	70	70	70
DF-200 to 205.....	55	55	55
DF-300 to 306.....	65	65	65
DF-500, 501.....	70	70	70
DF-603, 605, 606.....	65	65	65
DP.....	79	79	*30
DS-1, 4, 5.....	45	45	45
DS-2, 3, 6, 7, 8, 9.....	60	60	60
DS-100 to 108, 110, 111, 113 to 115, 117, 118, 119.....	60	60	60
DS-109.....	65	65	65
DS-200, 201.....	35	35	35
F.....	50	50	30
GS.....	75	55	30
M.....	50	50	25
MK-2, 4.....	40	40	30
Mk-5, 6.....	50	50	30
Mt.....	75	55	30
P-6 (2453).....	65	55	30
P-6 (2454, 2458), 8, 10.....	75	55	30
RDC.....	79	79	*30
S, SE.....	20	20	20
T-28, 31.....	50	50	30
T-32.....	60	55	30
Any engine not listed.....	35	35	25

*When on head end of train or running light and engineer is in other than leading control cab in direction of movement.

**May operate at maximum speed of 60 MPH when handling No. 377 (PCE) and No. 378 (PCE).

⊙ Steam engines running backward, and DF-1 to 12 and DP class engines operated with engineer in other than the lead unit in direction of movement, must not exceed 20 MPH when approaching highway or street crossings at grade, subject to further restrictions imposed by local conditions.

Steam engines coupled tender to tender must not exceed speed permitted same engines running light backward.

Maximum speed of engines under following conditions, running under own steam, or hauled in train:

- When all weight has been removed from any one pair of drivers..... 20 MPH
- When all weight has been removed from only one wheel of any pair of drivers..... 30 MPH
- When engine truck is removed..... 20 MPH
- When main rod only is removed..... 30 MPH
- When side rod only is removed..... 30 MPH
- When both main and side rods are removed... 20 MPH

Dead or disabled engines, and equipment listed in timetable which requires movement at reduced speed must first be reported as ready to move to the chief train dispatcher, who will designate the train in which the engine is to be moved. Any such engine must not be handled in train until train order designating maximum speed is issued.

⊙ Dead diesel engines hauled in train and weighing 150,000 pounds or more must be placed first behind the engine handling the train; and dead steam engines weighing 150,000 pounds or more on drivers must be placed with 8 to 15 cars between it and engine handling the train. If weight is less than 150,000 pounds, dead diesel or steam engines must be placed near rear of train. Dead steam engines should be headed in direction of movement when possible.

⊙ Maximum speed of trains handling dead engines of S or SE class 20 MPH; other steam engines 40 MPH; and diesel engines the speed shown for same engine running forward light, except DS-200, 201 class must have traction motor brushes removed and speed restricted to 30 MPH.

Unless otherwise restricted, two dead road locomotives may be coupled together for movement. When necessary to separate them, or when an S or SE class and a road locomotive are moved dead in train, a steel underframe freight car must be placed between them, and S or SE class locomotive entrained with tender ahead.

Movement of foreign line engines, in service or dead in train, must not be authorized until provisions of current Line Clearance Circular have been complied with.

SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT	MPH MAIN TRACKS OTHER THAN BRANCHES	MPH MAIN TRACKS ON BRANCHES
	Cars and loads with height, width or weight greater than maximum shown in Line Clearance Circular (when movement is authorized)	40	25
⊙ Double or triple loads.....	40	25
Scale test cars.....	40	30
Cars with arch bar trucks.....	40	30
Steel pile-drivers.....	40*	30*
Wooden pile-drivers.....	35*	25*
Relief outfits with steam derrick, except:.....	35*	25*
Nos. 7000 and 7010 on San Ramon Branch... Nos. 7000 and 7010 must not operate between Larkmead and Calistoga on Calistoga Branch.	..	10
Nos. 7000 and 7010 must not operate between Edwin and Ione on Ione Branch unless authorized by Superintendent. If movement authorized, speed of 15 MPH must not be exceeded.		
Nos. 7014 and 7025 must not operate on any branch except Schellville Branch; Calistoga Branch between Napa Jct. and Napa River bridge 69.62 at Napa; and on Vallejo Branch between Napa Jct. and MP 68.40.		
Power shovel on own wheels.....	35*	25*
Ditchers on own wheels, except:.....	35*	25*
SPMW-4044.....	25*	25*
Car-top ditchers, if blocking and tie-down cables are removed.....	35*	25*
⊙ K&J, Western, and Oliver, pedestal or center-hinged air-dump cars (except SPMW 5100 to 5189 loaded or empty).....	35*	25*
Locomotive cranes:		
With boom disconnected, heavy end forward	35*	25*
With boom disconnected, light end forward	20*	15
With boom in place, either end forward.....	25*	15
Rotary snow plows.....	25	15

*These speeds must not be exceeded, and on curves where authorized speed is more than 15 MPH speed must be reduced to 5 MPH less than shown in timetable and on speed signs.

OTHER MAXIMUM SPEEDS	MPH PASSENGER TRAINS	MPH FREIGHT AND MIXED TRAINS
Foreign steel-wheel cars not equipped with high speed trucks.....	60	55
Trains of deadhead equipment, with caboose...	55	..
Passenger trains, with caboose.....	55	..
Engine and caboose only, except:..... must not exceed speed for same engine running forward light.	..	55
Engine, flanger and caboose only, except:..... On curves.....	..	40 30

⊙ SPMW cars equipped with K type brakes must not be handled in trains consisting of more than 50 cars and train must not exceed 40 MPH while handling such equipment.

All cars handled in passenger trains must be equipped with steel-tired or all-steel wheels. Cars not so equipped must move in freight trains, passengers if any, to move on passenger trains.

Passenger carrying cars, baggage, express and other head-end cars, unless equipped with steel center sills and steel platforms must not be handled in passenger trains except on authority of Superintendent.

When foreign steel-tired or all-steel wheel cars are picked up at points where no car inspectors are on duty, conductor must contact train dispatcher to determine applicable speed restriction for the movement.

Freight cars must not be handled behind occupied passenger carrying cars, except in mixed trains in military or naval movements.

Baggage, express, mail, refrigerator or other head-end cars must not be handled on rear of passenger trains unless trainmen can pass through them, except between Oakland Pier and Pittsburg.

When moving against current of traffic, or when movement is not protected by block signals, speed of passenger trains must not exceed 50 MPH, and speed of freight trains and light engines must not exceed 40 MPH, nor may speed exceed that applying to normal operation. Unless proceed signal received, or it is known that warning devices are operating, such trains and engines must stop approaching road crossings where automatic warning devices are installed, and may proceed after member of crew protects crossing.

SPECIAL INSTRUCTIONS—MARTINEZ SUBDIVISION

RULE 10-J. Round yellow speed signs indicate the speed restrictions applying to CITY OF SAN FRANCISCO, CASCADE and SHASTA DAYLIGHT with diesel passenger engine and RDC 10.

RULE 14(d). As specified below, — — — — o will be indication that flagman may return from west: Martinez.....Trains on Tracy line.

RULE 14(e). As specified below, — — — — — will be indication that flagman may return from east: Martinez.....Trains on Tracy line, Napa Jct.....Trains on Schellville line, Suisun-Fairfield.....Trains on Napa Jct. line, Davis.....Trains on Woodland line.

RULE 14(l). Whistle must be sounded on westward trains immediately on emerging from Tunnel 2 at Selby and Tunnel 1 at Oleum.

RULE 14(m). Whistle will not be sounded one mile before reaching stations between Oakland Pier and San Pablo.

RULES 17 and 17-C. Headlights of engines standing at end of wharf at Oakland Pier must be extinguished when steamers are entering slip. Headlights of eastward trains must be extinguished while standing at Oakland Pier and dimmed until Oakland Pier Tower has been passed.

RULE 21-C. Engines to handle trains from Oakland Pier and from Desert unit West Oakland, may display indicators before leaving West Oakland roundhouse. Indicators of engines on trains arriving Oakland Pier and Desert Unit West Oakland, may be displayed until engine reaches roundhouse at West Oakland and must be removed immediately on arrival at delivery track.

RULE 30. Between the hours of 9:00 PM and 6:00 AM engine bell must not be rung, except in emergency, in city limits of Napa.

RULE 93. When freight cars are moved from one point to another on main track within Oakland yard limits at night, a red light must be displayed on rear of rear car.

Yard limits in which the provisions of Rule 93 will apply are established at the following points:

Table with 2 columns: West MP and East MP. Lists yard limits for various locations including Oakland (Martinez line), Port Costa, Suisun-Fairfield, Davis, Sacramento, Avon, Port Chicago, Pittsburg, Brentwood, Tracy, Napa Jct., Napa, Calistoga, Schellville, Vallejo, and Winters.

Oakland: Yardmen must use green flag by day and green light by night when signaling trains to enter or leave yard tracks.

RULE 98. Railroad crossings at grade not interlocked: Trains and engines must approach with caution, and may move over the following crossings without stopping, if crossing clear and no movement approaching on intersecting line:

Benicia: Government Ry., crossing of Benicia spur near Benicia arsenal. If Signal 340 or 341 displays stop indication, flag protection must be provided on intersecting track before movement made over crossing.

Napa Jct.: Big balloon track crossing of Calistoga-Vallejo main track. Schellville line trains using big balloon track need not stop.

Stop clear of the following crossings, then proceed if no movement approaching on intersecting line:

Napa Jct.: Calistoga-Vallejo main track crossing of big balloon track. Calistoga-Vallejo line trains must stop.

Las Juntas: SNRy, crossing of San Ramon Branch.

RULE 103-A. Automatic crossing gates: Following crossings protected by gates, with control circuits located within short distance of crossings.

Crews of trains or engines making stop, reverse movements, movements against the current of traffic or movements from yard tracks over crossings, must know that gates are down and crossings clear of vehicular traffic before entering crossings.

Table with 3 columns: Station, Location, and MP. Lists stations from Berkeley to Tracy with their respective locations and mileposts.

*Do not operate for against current of traffic movements and Rule 103-A will apply.

Crossover switches in vicinity of MP 11 must not be left open longer than necessary to avoid unnecessary operation of gates at Buchanan St., Albany.

Suisun-Fairfield: When necessary for freight trains to make stop blocking crossings east of passenger station, they must be opened with least possible delay.

Napa: When switching on or across any street crossing, city ordinance requires that member of crew must protect crossing.

Davis: To avoid excessive blocking of Cemetary Ave. crossing MP 76.2 Gerber line, air hose connections have been installed 110 feet each side of crossing to permit charging of train line prior to coupling up for departure.

SPECIAL INSTRUCTIONS—MARTINEZ SUBDIVISION

Public Utilities Commission orders prohibit operation of train, engine, motor or car over the following crossings unless first brought to a stop and traffic on the highway protected by a member of the crew:

- Suisun-Fairfield... Crossing Union Ave. when moving against current of traffic,
Thomann... Crossing highway on Napa Valley Cooperative Winery spur,
Vacaville... Crossing on Standard Oil spur,
Davis... Crossing County road on University spur,
Port Chicago... Crossing County road on leads to Naval Supply Base,
Pittsburg... Crossings on industry spurs,
Brentwood... Crossing highway on Irrigated Farms spur.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows:

- Avon... San Ramon line, for siding,
Suisun-Fairfield Napa Jct. line, for westward siding,
Napa Jct... Suisun-Fairfield line, for Schellville line, at MP 61.60,
Union... Crossover switch near west end siding, for West Napa line,
Schellville... Napa Jct. line, for NWPRR main track,
Tracy... Niles line, for Martinez line,
Tracy... End double track, for eastward track,
Tracy... Los Banos line, for Niles line.

Napa Jct.: Track known as big balloon is Schellville line main track.

All trains from Schellville line must stop at Lombard and call train-order operator Napa Jct., for authority to proceed.

RULE 107. Station train indicators are provided in approach to following stations:

Table with 2 columns: Station and direction (Eastward, Westward). Lists Berkeley, Crockett, Martinez, and Suisun-Fairfield.

When illuminated these indicators will convey the following information:

- TRAIN—Train at platform on opposite track.
CLEAR—Indicator in service.

When neither TRAIN or CLEAR is illuminated, indicator is out of service and report must be made to chief train dispatcher as soon as practicable.

RULE 306. The following block signals equipped with triangular plate bearing the letter "P" have included in their control limits some special protective device. Interlocking signals are listed as "P-I" or "P-SA".

Table with 3 columns: Signal, Protection, and Westward Signal. Lists signals P-356, P-358, P-I, P-470, P-510, and P-616.

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

Tracy: Eastward movements governed by dwarf light signals 710, 712, 714. Signals in east end of Tracy are numbered as automatic and are under control of switchtender.

Signal 709 governs movements as follows: Top unit governs movements to Martinez line. Lower unit governs movements to Niles line.

RULE 516. Overlap posts: Port Chicago... Eastward trains, Nichols (150 feet east of west switch)... Eastward trains, Los Medanos (250 feet west of Signal 509)... Westward trains.

RULE 535. SPRING SWITCHES
Spring switches equipped with facing point locks are located as follows:

Table with 2 columns: Location and Normal Position. Lists Mococo and Martinez.

Spring switches not equipped with facing point locks are located as follows:

Table with 2 columns: Location and Normal Position. Lists Martinez and Napa Jct.

Oakland Pier: West end of tracks 4, 5 and 6 must be lined in direction of movement for diesel engines arriving on trains to avoid any possibility of diesel engines being derailed.

RULE 605. INTERLOCKING

On double track within Oakland yard limits signal operator may arrange to move trains from one tower to another against the current of traffic, after having an understanding by telephone for each movement.

Oakland Pier: Limits extend eastward to automatic Signal 40 on eastward main track and to home signal 450 feet east of Signal 40 on westward main track on Martinez line, and to automatic Signal 42 on both main tracks on Niles line, and on yard tracks 9 and 10 to Signal 44; and on yard tracks 11, 12 and 13 to home signal 175 feet east of Maritime overpass.

When siren whistle is sounded, all movement must stop and await proper signal.

The last signal governing movement into any track except tracks 17, 18, 19 and 20 is a two-arm dwarf signal. When home signal displays proceed indication, and approach signal displays yellow aspect, it indicates that movement is to be made into a track occupied by engines or cars.

Oakland, 16th St.: Limits extend from eastward signal 1500 feet west of 14th St., to Signal Bridge 204.

Whistle signals: To West Oakland yard, o — —, From AT&SFRy interchange to Oakland Pier, —, To AT&SFRy interchange, o — o.

Telephone to Sixteenth St. Tower and West Oakland Tower are on lattice pole 1733, 250 feet east of Signal Bridge 200, and on signal case 30 feet west of junction of freight tracks 1 and 2, to be used when necessary to obtain permission to pass signals as prescribed by Rule 663 (b).

Shellmound: Limits extend from Signal Bridge 205 to Signal Bridge 206.

Whistle signal: To West Oakland yard from freight track 2, o — —.

Martinez: Limits extend on eastward main track from home signal 600 feet east of station building to westward dwarf signals 938 feet east of station building on Tracy line and on Suisun Bay bridge line.

Limits extend on westward main track from signals 2350 feet east of station building on Tracy line and on Suisun Bay bridge line, to interlocking signal 50 feet west of junction switch. Signal operator's permission must be obtained before fouling westward main track at crossover and switches from spurs to westward main track between Martinez and Ozol.

Whistle signals: To Bridge line, o — —, To Tracy line, — o —.

SPECIAL INSTRUCTIONS—MARTINEZ SUBDIVISION

Suisun Bay Bridge, Martinez: Bridge zone limits extend on both tracks from home signals 800 feet east of draw span to home signals 550 feet west of draw span.

Davis: Limits on eastward and westward main tracks extend from home signal 2200 feet west of tower to signal bridge 1700 feet east of tower, and on Woodland line to signal bridge 1200 feet east of tower.

Portion of track known as "old main line" between west derail and east switch of house track is not interlocked. Movements must be made with caution, and when view is restricted not exceeding 10 MPH.

Whistle signals:

To or from Sacramento from or to Woodland line, o — —, Western Division eastward trains to enter siding, — o —.

Sacramento River Drawbridge: Eastward trains failing to receive green aspect in approach Signal 878 must stop west of city limit sign, 1030 feet east of Signal 878, unless semi-automatic signal indicates "proceed".

Brazos Drawbridge over Napa River: Movement over bridge not permitted unless signal operator on duty. Derails in main track within interlocking limits east and west of draw span.

○RULE 680. AUTOMATIC INTERLOCKING

SNRy Crossing, MP 86.90: Signals governing use of crossing equipped with unit for display of red light. If signal fails to display proceed indication after time-release has been actuated, and indicator on signal displays red aspect, train may proceed over crossing.

If signal displays stop indication and indicator does not display red aspect after time-release has been actuated, train may proceed under the provisions of Rule 663(c).

RULE 705. LETTER TYPE INDICATORS

Indicators located as follows:

Table with columns: Illum. Letter, On Signal, Approaching, Authorizes Movement, and Requires as Follows. Rows include Shellmound, Stege, Pinole, Elmira, Dixon, and Davis.

GENERAL REGULATIONS

RULE 824. Tracy: When train stops on yard track on Martinez line, not less than four hand brakes must be set on west end of train before engine is detached.

RULE 825. Tracy: Train crews must not release brakes on outbound trains until engine is coupled and brake pipe is charged.

RULE 827. Passenger trains operating between Oakland Pier and Gerber, except streamlined Cascade and Shasta Daylight, making station stop at Davis, must approach at not to exceed 8 MPH to allow forward brakeman to detrain on station side where rear of train will stop.

Cars of rock, sand or gravel in westward trains must be given inspection at Danville.

AIR BRAKE RULES

RULE 2. Running test must be made on engines immediately after being detached from trains arriving Oakland Pier.

○RULE 17. Retaining valves must be used on freight and mixed trains as follows:

One retaining valve for every 80 tons in train, San Ramon to Walnut Creek. With 20 or more cars and tonnage averaging over 75 tons per operative brake, use 10 retaining valves on head end of train, or more if requested by engineer, Creston to Napa Jct., and Creston to Cordelia.

FREIGHT TRAINS

○RULE 22. Trainmen must not couple air hose on outgoing trains at Port Costa or Suisun-Fairfield until train is made up and caboose on train. Coupling caboose to rear of train will be considered as an indication that the train is made up and yardmen have completed their work.

PASSENGER TRAINS

○RULE 38. When engine crew and/or train crew is changed at Davis, rear end air test need not be made if continuity of brake pipe is not disturbed. Incoming engineer will apply brakes when train is stopped. Outgoing engineer will release them. Running test in accordance with Rule 39 must be made as soon as speed permits.

RULE 39. Running test must be made as follows: Equipment being handled between Oakland Pier and West Oakland, in either direction, as soon as practicable after starting. Eastward and westward trains at Creston.

SPECIAL INSTRUCTIONS—MARTINEZ SUBDIVISION

MISCELLANEOUS

○1. Emergency water supply only, at Pittsburg and Elmira.

10. Engines listed must not operate beyond clear point on tracks shown below, however, tracks may be switched beyond clear point with restricted engines by holding onto sufficient number of cars:

Table with columns: Class of Engine and Restricted Tracks. Lists various engine classes and their corresponding restricted track locations like Cordelia, Elmira, and Port Chicago.

○11. Load limit (car and contents):

Table listing load limits for various routes: Oakland-Sacramento (251,000 lbs), Martinez-Tracy (251,000 lbs), Suisun-Fairfield-Schellville (210,000 lbs), Napa Jct.-Larkmead (210,000 lbs), etc.

*Exception: Passenger equipment on six axles weighing not over 200,000 pounds may be handled.

**When notified that false bents are not in place on bridge 56.99 load limit between Avon and Radum will be 169,000 pounds.

Unless authorized by Superintendent, heavier loads must not be handled.

15. Sacramento: Trains must not pass switchtenders' stations at Sixth and Seventh Streets without receiving signal from switchtender to proceed (green flag by day and green light by night) and must move with caution between Sacramento River bridge and Seventh Street.

○13. LOCATION OF STOCK YARDS

Table with columns: Station and Capacity in cars. Lists stations like West Oakland, Pinole, Suisun-Fairfield, etc., with their respective capacities.

○30.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

Table with columns: Mile Post, At or Near, and Description. Lists locations like Oakland Pier, Emeryville, and various bridges with their descriptions.

SPECIAL INSTRUCTIONS—MARTINEZ SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in **SPEED RESTRICTIONS FOR ENGINES** appearing on page 4 and **MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT**, and **OTHER MAXIMUM SPEEDS** appearing on page 5 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and **INSURE SAFETY REGARDLESS OF TIME.**

TERRITORY				*Streamlined PASSENGER TRAINS	OTHER PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES		TERRITORY				*Streamlined PASSENGER TRAINS	OTHER PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES	
MP	MP	Column:	A				1	2	3	4	MP	MP				Column:	A	1	2	3	4
EASTWARD, OAKLAND PIER TO SACRAMENTO:									WESTWARD, SACRAMENTO TO OAKLAND PIER:								
3.50 to 4.25			15	15	15	15	15		89.50 to 88.54		10	10	10	10	10		
4.25 to 4.81 (crossing)			20	20	20	20	20		88.54 to 87.80		35	35	35	35	30		
4.81 to 11.42			45	45	40	40	30		87.80 to 86.82		50	45	45	45	30		
★11.42 to 16.00 (Richmond)			45	45	40	40	20		86.82 to 76.00		79	70	55	55	30		
16.00 to 16.31			45	45	40	40	30		76.00 to 75.20, except:		45	40	40	40	20		
16.31 to 21.50			70	65	50	50	30		76.00 to 75.60 (Gerber line)		40	40	30	30	20		
21.50 to 27.90			45	40	40	40	20		75.60 to 75.36 (west leg wye and jct. switch)		25	25	25	25	20		
27.90 to 34.40			45	45	40	40	20										
★34.40 to 34.70 (Martinez)			30	30	30	30	20		75.60 to 75.83 (switches and east leg wye)		15	15	15	15	15		
34.70 to 33.58			45	45	40	40	20		75.20 to 67.60		79	70	55	55	30		
33.58 to 33.64 (lift span)			30	30	30	30	20		67.60 to 67.40 (Dixon)		70	70	55	55	20		
33.64 to 35.50			45	45	40	40	20		67.40 to 49.00		79	70	55	55	30		
35.50 to 37.12			79	65	50	50	30		49.00 to 48.38 (Suisun-Fairfield)		60	45	45	45	20		
37.12 to 37.40			70	65	50	50	30		48.38 to 35.50		79	65	50	50	30		
37.40 to 48.38			79	65	50	50	30		35.50 to 33.64		45	45	40	40	20		
48.38 to 49.00 (Suisun-Fairfield)			60	45	45	45	20		33.64 to 33.58 (lift span)		30	30	30	30	20		
49.00 to 67.40			79	70	55	55	30		★33.58 to 34.70 (Martinez)		45	45	40	40	20		
67.40 to 67.60 (Dixon)			70	70	55	55	20				30	30	30	30	20		
67.60 to 75.20			79	70	55	55	30										
75.20 to 76.00, except:			45	40	40	40	20		34.40 to 27.90		45	45	40	40	20		
75.25 to 75.60 (crossover and west leg wye to Gerber line)			25	25	25	25	20		27.90 to 21.50		45	40	40	40	20		
75.60 to 76.00 (Gerber line)			40	40	30	30	20		21.50 to 16.31		70	65	50	50	30		
76.00 to 86.82			79	70	55	55	30		16.31 to 16.00		45	45	40	40	30		
86.82 to 87.80			50	45	45	45	30		★16.00 to 11.42 (Richmond)		45	45	40	40	20		
87.80 to 88.54			35	35	35	35	30		11.42 to 4.81		45	45	40	40	30		
88.54 to 89.50 (Sacramento)			10	10	10	10	10		4.81 to 4.25 (crossing)		20	20	20	20	20		
									4.25 to 3.50 (Oakland Pier)		15	15	15	15	15		
⊙ EASTWARD, AGAINST CURRENT OF TRAFFIC: Oakland Pier to Sacramento. (Subject to lesser restrictions on opposite track), except				50	50	40	40	30	⊙ WESTWARD, AGAINST CURRENT OF TRAFFIC: Sacramento Oakland Pier. (subject to lesser restrictions applying to opposite track), except				50	50	40	40	30
★★75.20 to 76.00				20	20	20	20	20	★★76.00 to 75.20				20	20	20	20	20
EASTWARD, MARTINEZ TO TRACY:									WESTWARD, TRACY TO MARTINEZ:								
34.70 to 34.79 (junction switch)				35	30	30	20		⊙82.39 to 82.10			15	15	15	15		
34.79 to 35.88				35	30	30	20		82.10 to 80.70			45	30	30	30		
35.88 to 35.91 (spring switch)				35	30	30	20		80.70 to 53.60			70	55	55	30		
35.91 to 48.90				70	55	55	30		★★53.60 to 53.30 (Antioch)			45	45	45	20		
★48.90 to 48.95 (Pittsburg)				25	25	25	20		53.30 to 48.95			70	55	55	30		
48.95 to 53.30				70	55	55	30		★48.95 to 48.90 (Pittsburg)			25	25	25	20		
★★53.30 to 53.60 (Antioch)				45	45	45	30		48.90 to 35.91 (Mococo)			70	55	55	30		
53.60 to 80.70				70	55	55	30		35.91 to 34.70 (Martinez)			30	30	30	20		
80.70 to 82.10				45	30	30	30										
⊙82.10 to 82.39 (junction Niles line)				15	15	15	15										

★Regulated by City ordinance. ★★ICC Regulation. ★★★Regulated by PUC order. #See Rule 536.
 ⊙*Streamlined passenger trains are CITY OF SAN FRANCISCO, CASCADE and SHASTA DAYLIGHT with diesel passenger engine and RDC 10.
 CITY OF SAN FRANCISCO, CASCADE and SHASTA DAYLIGHT with P-7, 8, 10; GS; or Mt class engine may run not to exceed 75 MPH on tangent track where 70 MPH is authorized in Column 1.
 Nos. 51 and 52, with DP class engine may run not to exceed 79 MPH where 70 MPH is authorized in Column 1.
 Nos. 51 and 52, with P-7, 8, 10; GS; or Mt class engine may run not to exceed 75 MPH where 70 MPH is authorized in Column 1.
 ⊙No. 377 (PCE) and No. 378 (PCE), when consist contains no restricted cars, may operate at passenger speeds shown in Column 1, except maximum speed must not exceed 60 MPH.
 No. 442 (CCM) when consist contains no restricted cars, may operate at passenger speeds shown in Column 1, except maximum speed must not exceed 55 MPH.

SPECIAL INSTRUCTIONS—MARTINEZ SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in **SPEED RESTRICTIONS FOR ENGINES** appearing on page 4 and **MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT**, and **OTHER MAXIMUM SPEEDS** appearing on page 5 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and **INSURE SAFETY REGARDLESS OF TIME.**

TERRITORY				PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES		TERRITORY				PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES	
MP	MP	Column:	A			1	2	3	4	MP	MP			Column:	1	2	3	4
EASTWARD, AVON TO RADUM:								WESTWARD, RADUM TO AVON:							
38.10 to 44.64			20	20	20	15		67.80 to 57.02			20	20	20	15	
44.64 to 44.67 (bridge)			15	15	15	15		57.02 to 56.99 (bridge)			10	10	10	10	
44.67 to 49.22			20	20	20	15		56.99 to 49.25			20	20	20	15	
49.22 to 49.25 (bridge)			10	10	10	10		49.25 to 49.22 (bridge)			10	10	10	10	
49.25 to 56.99			20	20	20	15		49.22 to 44.67			20	20	20	15	
56.99 to 57.02 (bridge)			10	10	10	10		44.67 to 44.64 (bridge)			15	15	15	15	
57.02 to 67.80 (Radum)			20	20	20	15		44.64 to 38.10 (Avon)			20	20	20	15	
EASTWARD, SUISUN-FAIRFIELD TO SCHELLVILLE:								WESTWARD, SCHELLVILLE TO SUISUN-FAIRFIELD:							
48.93 to 49.30			15	15	15	15		72.60 to 64.75			10	10	10	10	
⊙49.30 to 61.47			30	30	30	15		⊙72.60 to 64.75			30	30	30	15	
61.47 to 61.77 (Napa Jct.)			15	15	15	15		64.75 to 64.65 (Brazos drawbridge)			10	10	10	10	
⊙61.77 to 64.65			30	30	30	15		⊙64.65 to 61.77			30	30	30	15	
64.65 to 64.75 (Brazos drawbridge)			10	10	10	10		61.77 to 61.47 (Napa Jct.)			15	15	15	15	
⊙64.75 to 72.60			30	30	30	15		⊙61.47 to 49.30			30	30	30	15	
72.60 to NWPRR on wye			10	10	10	10		49.30 to 48.93 (Suisun-Fairfield)			15	15	15	15	
EASTWARD, NAPA JCT. TO CALISTOGA:								WESTWARD, CALISTOGA TO NAPA JCT.:							
61.25 to 61.30			15	15	15	15		95.78 to 87.70			20	20	20	15	
61.30 to 69.20			25	25	25	15		★87.70 to 87.00 (St. Helena city limits)			20	20	20	15	
★69.20 to 71.10 (Napa city limits)			25	25	25	15		87.00 to 77.50			20	20	20	15	
71.10 to 71.60			25	25	25	15		77.50 to 71.78			25	25	25	15	
71.60 to 71.78 (highway crossing)			15	15	15	15		71.78 to 71.60 (highway crossing)			15	15	15	15	
71.78 to 77.50			25	25	25	15		71.60 to 71.10			25	25	25	15	
77.50 to 87.00			20	20	20	15		★71.10 to 69.20 (Napa city limits)			25	25	25	15	
★87.00 to 87.70 (St. Helena city limits)			20	20	20	15		69.20 to 61.30			25	25	25	15	
87.70 to 95.78 (Calistoga)			20	20	20	15		61.30 to 61.25 (Napa Jct.)			15	15	15	15	
EASTWARD, NAPA JCT. TO VALLEJO:								WESTWARD, VALLEJO TO NAPA JCT.:							
61.60 to 61.75			15	15	15	15		69.00 to 67.01			20	20	20	15	
61.75 to 67.00			25	25	25	15		67.01 to 67.00 (Tennessee St.)			15	15	15	15	
67.00 to 67.01 (Tennessee St.)			15	15	15	15		67.00 to 61.75			25	25	25	15	
67.01 to 69.00 (Vallejo)			20	20	20	15		61.75 to 61.60 (Napa Jct.)			15	15	15	15	
EASTWARD, NAPA JCT. TO UNION.				10	10	10	10	WESTWARD, UNION TO WEST NAPA.				10	10	10	10
EASTWARD, ELMIRA TO ESPARTO:								WESTWARD, ESPARTO TO ELMIRA:							
59.60 to 76.00			25	25	25	15		90.35 to 76.00			15	15	15	15	
76.00 to 90.35			15	15	15	15		76.00 to 59.60			25	25	25	15	

★Regulated by City ordinance.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other tracks, wyes, balloon tracks	

SPECIAL INSTRUCTIONS—MARTINEZ SUBDIVISION

RATING OF ENGINES—In Units of 2000 Lbs. (Tons)

NOMINAL CLASS	ENGINE NUMBERS	Oakland and Martinez	Martinez to Bridge Summit	Bridge Summit to Sacramento	Sacramento to Martinez	Martinez and Tracy
DP-3, 4, 7	6000 to 6004, 6017, 6018, 5900 to 5909, 5916, 5917	1250	1150	1250	1250	1250
DP-5, 6	6005 to 6016, 5910 to 5915	3000	1100	2225	2100	3075
DP-8, 9, 10	6019 to 6033, 5918 to 5924	3075	1350	2900	2600	3075
DP-11	6034 to 6045	3425	1400	2975	2650	3425
DP-12	6046 to 6054	.....	.....	.....	.....	.....
DF-1 to 12	6138 to 6461, 8022 to 8303	.....	.....	.....	.....	.....
DF-100	5200 to 5202	.....	.....	.....	.....	.....
DF-101 to 108, 110, 112	5203 to 5249, 5253 to 5278, 5500 to 5502	5000	.....	4600	4100	5000
DF-109, 111	5250 to 5252, 5503 to 5505	.....	.....	.....	.....	.....
DF-114, 116 to 118, 120 to 122	5279 to 5293, 5308 to 5335, 5340 to 5444	.....	.....	.....	.....	.....
DF-115, 119, 123	5294 to 5307, 5336 to 5339, 5445 to 5448	.....	.....	.....	.....	.....
DF-200 to 205	5100 to 5119	.....	.....	.....	.....	.....
DF-300 to 304	4600 to 4623, 4700 to 4703	.....	.....	.....	①2550	.....
DF-305, 306	4624 to 4633	.....	.....	.....	.....	.....
DF-500, 501	4800 to 4815	.....	.....	.....	.....	.....
DF-603, 605, 606	5600 to 5625	.....	.....	.....	.....	.....
DS-1 to 8	1000 to 1032	1625	660	1425	1275	1625
DS-9	1033 to 1051	.....	.....	.....	.....	.....
DS-100 to 109, 111, 115, 119	1300 to 1441, 1464 to 1485, 1514 to 1528, 1551 to 1567	2450	1025	2650	1925	2450
DS-110, 114, 118	1442 to 1463, 1492 to 1513, 1539 to 1550	3200	1400	2775	2475	3200
DS-113, 117	1486 to 1491, 1529 to 1538	.....	.....	.....	.....	.....
DS-200, 201	1900 to 1903	.....	.....	.....	.....	.....
M-4	1629, 1713	2225	950	1950	1850	2225
M-6, 8	1726 to 1796, 1824, 1825	2625	1125	2775	2175	2625
M-9	1805 to 1817	2750	1200	2425	2300	2750
M-11	1833	2850	1250	2500	2400	2850
T-28, 31	2312 to 2361	3000	1300	2625	2500	3000
T-32	2366 to 2384	3075	1300	2675	2500	3075
P-6	2453, 2454, 2458	3050	1275	2675	2475	3050
P-7	2476, 2477	3250	1400	2850	2725	3250
P-8, 10	2463 to 2473, 2479, 2482	3400	1425	2950	2775	3400
P-8, 10	2475, 2484 to 2491	3400	1525	2950	2775	3400
C-8, 9, 10	2513 to 2598, 2700 to 2854	3300	1450	2875	2775	3300
C-18	3400, 3406	3025	1325	2650	2550	3025
C-19	3423	3150	1375	2775	2650	3150
Mk-2, 4	3203 to 3236	3825	1675	3350	3200	3825
Mk-5, 6	3247 to 3275	4225	1825	3675	3500	4225
F-1	3615 to 3643	4800	2100	4200	4025	4800
F-3, 4, 5	3653 to 3765	5950	2450	5200	4675	5950
AC-6 to 12	4133 to 4294	9150	4025	8000	7650	9150
Mt-1, 3, 4, 5	4300 to 4376	4500	2025	3925	3700	4500
GS-1, 2	4402 to 4415, 4470 to 4472	4800	2150	4200	3950	4800
GS-3, 4, 5, 6	4417 to 4469	5100	2200	4450	4250	5100
GS-7, 8	4475 to 4487	.....	.....	.....	.....	.....

①Applies Sacramento to Suisun-Fairfield only.

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

SPECIAL INSTRUCTIONS—MARTINEZ SUBDIVISION

RATING OF ENGINES—In Units of 2000 Lbs. (Tons)

NOMINAL CLASS	ENGINE NUMBERS	Suisun-Fairfield to Napa Jct.	Napa Jct. to Suisun-Fairfield	Napa Jct. and Larkmead Union and West Napa	Larkmead and Callatoga	Napa Jct. to Scheilville Napa Jct. to Vallejo	Scheilville to Napa Jct.
DF-100	5200 to 5202	.....	.....	.....	.....	.....	.....
DF-101 to 108, 110, 112	5203 to 5249, 5253 to 5278, 5500 to 5502	1575	2100	③3825	.....	5000	5000
DF-109, 111	5250 to 5252, 5503 to 5505	.....	.....	.....	.....	.....	.....
DF-114, 116 to 118, 120 to 122	5279 to 5293, 5308 to 5335, 5340 to 5444	1600	2175	2100	.....	10000	4200
DF-115, 119, 123	5294 to 5307, 5336 to 5339, 5445 to 5448	.....	.....	.....	.....	.....	.....
DF-200 to 205	5100 to 5119	550	750	725	725	3000	.....
DF-300 to 304	4600 to 4623, 4700 to 4703	825	1075	1050	.....	4000	2075
DF-305, 306	4624 to 4633	.....	.....	.....	.....	.....	.....
DF-500, 501	4800 to 4815	.....	.....	.....	.....	.....	.....
DF-603, 605, 606	5600 to 5625	.....	.....	.....	.....	.....	.....
DS-1 to 8	1000 to 1032	400	550	525	525	4000	1050
DS-9	1033 to 1051	.....	.....	.....	.....	.....	.....
DS-100 to 109, 111, 115, 119	1300 to 1441, 1464 to 1485, 1514 to 1528, 1551 to 1567	800	1050	1025	.....	4000	2000
DS-110, 114, 118	1442 to 1463, 1492 to 1513, 1539 to 1550	775	1050	1025	.....	4000	2050
DS-113, 117	1486 to 1491, 1529 to 1538	.....	.....	.....	.....	.....	.....
DS-200, 201	1900 to 1903	300	400	375	375	.....	.....
M-4	1629, 1713	550	750	900	900	2650	1550
M-6, 8	1726 to 1796, 1824, 1825	650	900	1050	.....	3100	1825
M-9	1805 to 1817	700	950	1125	.....	3275	1900
M-11	1833	725	1000	1150	.....	3410	2000
T-28, 31	2312 to 2361	750	1050	1225	.....	3585	2100
T-32	2366 to 2384	750	1050	1250	.....	3650	2075
P-6	2453, 2454, 2458	750	1050	③1675	.....	3650	2075
P-7	2476, 2477	800	1125	③1775	.....	3850	2200
P-8, 10	2463 to 2473, 2479, 2482	900	1250	.....	.....	4000	2450
P-8, 10	2475, 2484 to 2491	1075	1475	.....	.....	4000	2850
C-8, 9, 10	2513 to 2598, 2700 to 2854	850	1150	1325	.....	3900	2325
C-18	3400, 3406	775	1075	1250	.....	3615	2150
C-19	3423	825	1100	1300	.....	3765	2250
Mk-2, 4	3203 to 3236	950	1325	①2125	.....	4400	2625
Mk-5, 6	3247 to 3275	1075	1450	①2375	.....	5000	2925
F-1	3615 to 3643	1275	1750	②2725	.....	5650	3375
F-3, 4, 5	3653 to 3765	.....	.....	.....	.....	.....	.....
AC-6 to 12	4133 to 4294	.....	.....	.....	.....	.....	.....
Mt-1, 3, 4, 5	4300 to 4376	.....	.....	.....	.....	.....	.....
GS-1, 2	4402 to 4415, 4470 to 4472	.....	.....	.....	.....	.....	.....
GS-3, 4, 5, 6	4417 to 4469	.....	.....	.....	.....	.....	.....
GS-7, 8	4475 to 4487	.....	.....	.....	.....	.....	.....

①Applies to engines 3203, 3216, 3224, 3227, 3236, 3247 and 3251 only between Napa Jct. and Larkmead, and Union and West Napa. Other Mk-2, 4, 5, 6 class engines not permitted to operate beyond Napa River Bridge 69.62.

②F-1 class engines not permitted to operate beyond Napa River Bridge 69.62.

③P-6 and 7 class engines not permitted to operate beyond Yountville, nor between Union and West Napa.

④Not permitted to operate between Yountville and Larkmead, nor between Union and West Napa.

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

SPECIAL INSTRUCTIONS—MARTINEZ SUBDIVISION

RATING OF ENGINES—In Units of 2000 Lbs. (Tons)

NOMINAL CLASS	ENGINE NUMBERS	Vallejo to Napa Jct. Elmira to Winters	Winters to Elmira	Winters and Esparto	Radium to San Ramon	San Ramon to Radium	Avon to San Ramon	San Ramon to Avon
DF-100	5200 to 5202	.....	.....	.....	.....	.....	.....	.....
DF-101 to 108, 110, 112	5203 to 5249, 5253 to 5278, 5500 to 5502	3725	.....	.....	.....	.....	.....	.....
DF-109, 111	5250 to 5252, 5503 to 5505	.....	.....	.....	.....	.....	.....	.....
DF-114, 116 to 118, 120 to 122	5279 to 5293, 5308 to 5335, 5340 to 5444	.....	.....	.....	.....	.....	.....	.....
DF-115, 119, 123	5294 to 5307, 5336 to 5339, 5445 to 5448	.....	.....	.....	.....	.....	.....	.....
DF-200 to 205	5100 to 5119	975	1125	1800	.....	.....	.....	.....
DF-300 to 304	4600 to 4623, 4700 to 4703	1450	.....	.....	.....	.....	.....	.....
DF-305, 306	4624 to 4633	.....	.....	.....	.....	.....	.....	.....
DF-500, 501	4800 to 4815	.....	.....	.....	.....	.....	.....	.....
DF-603, 605, 606	5600 to 5625	.....	.....	.....	.....	.....	.....	.....
DS-1 to 8	1000 to 1032	725	.....	.....	.....	.....	.....	.....
DS-9	1033 to 1051	.....	.....	.....	.....	.....	.....	.....
DS-100 to 109, 111, 115, 119	1300 to 1441, 1464 to 1485, 1514 to 1528, 1551 to 1567	1400	1650	.....	.....	.....	.....	.....
DS-110, 114, 118	1442 to 1463, 1492 to 1513, 1539 to 1550	1400	.....	.....	.....	.....	.....	.....
DS-113, 117	1486 to 1491, 1529 to 1538	.....	.....	.....	.....	.....	.....	.....
DS-200, 201	1900 to 1903	1020	1150	2475	1250	2650	975	2650
M-4	1629, 1713	1200	1350	.....	1485	3100	③1125	③3100
M-6, 8	1726 to 1796, 1824, 1825	1275	1435	.....	1550	3275	③1200	③3275
M-9	1805 to 1817	1330	1490	.....	1625	3410	③1250	③3400
M-11	1833	1395	1565	.....	1715	3585	.....	.....
T-28, 31	2312 to 2361	1415	1595	.....	1750	3650	.....	.....
T-32	2366 to 2384	.....	.....	.....	.....	.....	.....	.....
P-6	2453, 2454, 2458	1425	1675	.....	1730	3650	.....	.....
P-7	2476, 2477	1525	1775	.....	1845	3850	.....	.....
P-8, 10	2463 to 2473, 2479, 2482	①1675	.....	.....	.....	.....	.....	.....
P-8, 10	2475, 2484 to 2491	①1975	.....	.....	.....	.....	.....	.....
C-8, 9, 10	2513 to 2598, 2700 to 2854	1525	1810	3700	1875	3900	③1475	③3900
C-18	3400, 3406	1415	1590	3425	1740	3615	③1350	③3625
C-19	3423	1475	1650	3550	1810	3765	③1425	③3775
Mk-2, 4	3203 to 3236	①1075	1215	.....	1335	2850	.....	.....
Mk-5, 6	3247 to 3275	①1950	①2185	.....	②5075	②5075	.....	.....
F-1	3615 to 3643	①2325	.....	.....	.....	.....	.....	.....
F-3, 4, 5	3653 to 3765	.....	.....	.....	.....	.....	.....	.....
AC-6 to 12	4133 to 4294	.....	.....	.....	.....	.....	.....	.....
Mt-1, 3, 4, 5	4300 to 4376	.....	.....	.....	②5400	②5400	.....	.....

① P-8, 10, F-1 and Mk class engines, except engines 3203, 3216, 3224, 3227, 3236, 3247 and 3251 are not permitted to operate between Elmira and Winters.

② Not permitted to operate between Dougherty and San Ramon.

③ When notified that false bents are not in place on bridge 56.99, C, M-6, 8, 9 and 11 class engines not permitted to operate.

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

SPECIAL INSTRUCTIONS—NILES SUBDIVISION

RULE 14(d). As specified below, — — — — o will be indication that flagman may return from west:

Newark and Santa Clara. Trains on Elmhurst-Santa Clara line,
Niles..... Trains on Elmhurst-San Jose line.

RULE 14(e). As specified below, — — — — — will be indication that flagman may return from east:

Elmhurst-Newark-
Santa Clara..... Trains on Elmhurst-Santa Clara line.
Niles..... Trains on Milpitas line.

RULE 14(l). Whistle signal must be sounded and bell kept ringing when entering or leaving the Sugar Co.'s yard at Alvarado or approaching their road crossing.

RULE 14(m). Whistle will not be sounded one mile before reaching stations between:
Oakland Pier and Elmhurst.

RULES 17 and 17-C. Headlights of engines standing at end of wharf at Oakland Pier must be extinguished when steamers are entering slip. Headlights of eastward trains must be extinguished while standing at Oakland Pier and dimmed until Oakland Pier Tower has been passed.

RULE 21-C. Passenger engines to handle trains from Oakland Pier may display indicators before leaving West Oakland.

Indicators of engines on trains arriving Oakland Pier may be displayed until engine reaches roundhouse at West Oakland, and must be removed immediately on arrival at delivery track.

RULE 93. When freight cars are moved from one point to another on main track within Oakland yard limits at night, a red light must be displayed on rear of rear car.

Yard limits in which the provisions of Rule 93 will apply, are established at the following points:

West MP	East MP
Oakland (Martinez line).....	17.35
" (Niles line).....	15.82
" (Alvarado line).....	14.01
14.02 Mulford.....	16.39
17.75 Hayward.....	21.69
80.70 Tracy (Martinez-Los Banos line).....	85.64
69.19 " (Niles-Lathrop line).....	74.37
24.44 Redwood Jct. (San Mateo-Newark line).....	28.20
" (Palo Alto line).....	27.17
③35.20 Newark (Centerville-Redwood Jct. line).....	39.00
28.79 " (Alvarado-Santa Clara line).....	32.25
41.29 Niles (Tracy-Redwood Jct. line).....	30.67
26.60 " (Hayward-Milpitas line).....	30.95
41.70 Eliot.....	45.40
63.25 " (San Ramon line).....	.....
45.89 Livermore.....	48.66
54.03 Altamont.....	55.64
③38.50 Milpitas.....	42.50
43.47 San Jose (Palo Alto-Coyote line).....	56.00
44.85 " (Milpitas line).....	.....
43.74 " (Alviso line).....	.....

③ Tracy: Eastward trains from Niles line must receive proceed signal from yardman before passing "C" Street.

Oakland: Yardmen must use green flag by day and green light by night when signaling trains to enter or leave yard tracks.

RULE 103-A. Automatic crossing gates:
Following crossings protected by gates, with control circuits located within short distance of crossings.

Crews of trains or engines making stop, reverse movements, movements against the current of traffic or movements from yard tracks over crossings, must know that gates are down and crossings clear of vehicular traffic before entering crossings.

Station	Location	MP
Oakland.....	77th Ave.....	12.2
③ Elmhurst.....	98th Ave.....	13.3

Oakland: When moving against current of traffic flagman must protect crossing before moving over 5th, 29th Aves., and High St.

Hayward: Member of crew must protect traffic over Winton Ave. crossings on drill track and corral track before movement is made.

Public Utilities Commission orders prohibit operation of train, engine, motor or car over the following crossings unless first brought to a stop and traffic on the highway protected by a member of the crew.

Mulford..... Crossing Maitland Drive on Airport drill.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows:

Elmhurst ... End of double track, for eastward track;
Alvarado line, for Niles line;
Stonehurst line, for house track extension.

Switches handled by train-order operator for trains.

Whistle signals:

For Alvarado line, o — —,
For Niles line, — o —.

Tracy..... Niles line, for Martinez line.

Tracy..... End double track, for eastward track.

Tracy..... Los Banos line, for Niles line.

RULE 306. Following block signals equipped with a triangular plate displaying the letter "P", have included in their control limits some special protective device:

Eastward Signals	Protection	Westward Signals
③ P-420	Spring switch, Shinn.....	P-423
P-422	Spring switch, end double track, Redwood Jct.	P-274
P-274	Rock slide detector fence, MP 53.50.....	P-543
③ P-530	Spring switch, Niles.....	P-290
P-290	Spring switch, Milpitas wye, San Jose.....	P-I

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

Elmhurst: Signals are numbered as automatic and are under control of train-order operator. When signals display stop indication, trains must stop, and not proceed until signal displays proceed indication, or proceed signal is given by operator with yellow flag by day or yellow light by night.

③ Trains or engines stopped by Signal 133 must contact train-order operator for permission to use switch. Signal should display proceed indication after switch is thrown. If signal fails to display proceed indication after switch has been thrown, trains or engines must not pass the signal unless proceed signal is received from train-order operator yellow flag by day, yellow light by night.

SPECIAL INSTRUCTIONS—NILES SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in SPEED RESTRICTIONS FOR ENGINES appearing on page 4 and MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT, and OTHER MAXIMUM SPEEDS appearing on page 5 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE SAFETY REGARDLESS OF TIME.

Table with columns for Territory, Passenger Trains, Freight and Mixed, Light Engines (Running Forward/Backward), and speed restrictions in MPH for various routes like Eastward, Redwood Jct. to Tracy, Westward, Tracy to Redwood Jct., Eastward, Niles to San Jose Yard, Westward, San Jose Yard to Niles, Eastward, Oakland Pier to Santa Clara, Westward, Santa Clara to Oakland Pier, Eastward, Elmhurst to Niles Jct., Westward, Niles Jct. to Elmhurst, and Eastward, Elmhurst to Niles Jct.

★Regulated by City ordinance. ★★ICC Regulation.
①AC, F or GS class engines must not be operated coupled with any other engine over Alameda Creek Bridge 31.56 west of Farwell nor over San Lorenzo Creek Bridge 18.16 east of Lorenzo.
Trains must not exceed 20 MPH when passing trains being serviced between Cedar and Kirkham Sts., Oakland.
No. 335 (CMW) and No. 336 (CME), when consist contains no restricted cars, may operate at passenger speed shown in Column 1, except maximum speed must not exceed 60 MPH. No. 444 (CCM), when consist contains no restricted cars, may operate at passenger speeds shown in Column 1, except maximum speed must not exceed 50 MPH.

SPECIAL INSTRUCTIONS—NILES SUBDIVISION

RATING OF ENGINES—In Units of 2000 Lbs. (Tons)

Table with columns for Nominal Class, Engine Numbers, and ratings for various territories: Oakland and Santa Clara, Oakland and San Jose Yard via Niles, Niles and Redwood Jct., Tracy to Allamont, Livermore to Allamont, Niles to Livermore, and Allamont to Niles/Allamont to Tracy.

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

RULE 14(d). As specified below, — — — o will be indication that flagman may return from west:

Fresno Trains on Pratton line,
Biola Jct. Trains on Biola line.

RULE 14(e). As specified below, — — — — — will be indication that flagman may return from east:

Tracy Trains on Los Banos line,
Kerman Trains on Biola line,
Ingle Trains on Riverdale Branch.

RULE 93. Yard limits in which the provisions of Rule 93 will apply are established at the following points:

West MP	East MP
80.70	85.64
69.19	74.37
105.85	108.62
117.95	121.04
139.61	142.01
164.94	166.98
173.38	175.73
181.97	215.00
192.46	194.53
206.04	194.65
208.44	210.79
199.07	208.15
	209.60

Fresno: Trains or engines will not move against current of traffic on double track, except on authority of yardmaster. When making movements against current of traffic, trains or engines must be preceded by flagman over railway and street crossings at grade where wigwags installed, protecting crossings during movements, except where crossing watchman located.

Eastward first-class trains, after passing Signal 2052 (west of Tuolumne St.), must proceed with caution and be prepared to cross to westward main track on signal from yardman.

Westward trains via Pratton line must receive signal from yardman at Divisadero St. (green flag by day, green light by night).

When Signal 2046 on Pratton line, or Signal 2042 on eastward track displays stop indication train must stop, and after proceed signal received from yardman (green flag by day, green light by night) may then proceed as prescribed by Rules 509 and 513.

Eastward trains via Pratton line to Fresno Yard may pass Signal 2068 on Pratton line displaying stop indication without stopping, to enter west leg of wye, if wye switch is properly set and proceed signal received from yardman, white flag by day, white light by night, which will confer authority for movement to derail only.

Eastward trains via Pratton line to Fresno Yard must receive proceed signal from yardman (green flag by day, green light by night) before fouling eastward or westward main track.

Fresno Yard: Trains entering or leaving yard tracks must receive proceed signal from yardman (green flag by day, green light by night), except within limits of diverging route signals.

RULE 103-A. Public Utilities Commission orders prohibit operation of train, engine, motor or car over the following crossings unless first brought to a stop and traffic on the highway protected by a member of the crew:

Vernalis Crossing on Associated Dehydrators spur,
Puerto Highway crossing on H&N Farms spur,
Los Banos Crossing 2nd and 4th Sts., on drill crossovers and storage tracks,
Firebaugh Crossing 12th and 13th Sts., on drill and spur tracks,
Cromir Crossing Shaw Ave. on team track.
Helm County road crossing on Holly Sugar Co. track.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows:

Tracy Niles line, for Martinez line,
Tracy End double track, for eastward track,
Tracy Los Banos line, for Niles line,
Ingle Riverdale Branch, for siding,
Kerman Biola line, for Pratton line,
Fresno Yard End double track, for westward track,
Fresno Pratton line, for eastward main track.

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

Tracy: Signals in east end Tracy are numbered as automatic and are under control of switchtender. When "stop" is indicated, trains must stop and not proceed until "proceed" is indicated or proceed signal is given with green flag or green light by switchtender.

Eastward movements governed by dwarf light Signals 710, 712, 714.

Westward movements from Los Banos Subdivision governed by Signal 827, located 800 feet east of junction switch. Top unit governs movement on main track and lower unit governs movements to hill or local yard.

Signal 709 governs movements as follows:

Top unit governs movements to Martinez line.
Lower unit governs movements to Niles line.

Trains and engines stopped by Signal 709 may proceed with caution if proceed signal received from yardman.

Kerman: Westward Signal 1941, located 1000 feet east of MP 194 on Biola Line, governs movement through crossover to main track only. Signal is dark when crossover is in normal position.

Westward trains from Floyd line restricted for an opposing eastward train, must not pass Signal 1929 east of station building until opposing train has arrived at initial switch of siding or diverging route.

RULE 605. INTERLOCKING

Biola Jct.: Limits extend on Merced line from 675 feet west of junction switch, and on Biola line from 575 feet west of junction switch, to 930 feet east of junction switch on Merced line, and to two unit signal 290 feet east of junction switch on No. 1 drill track.

Trains and engines stopped by signals will call signal operator at train-order office Muscatel by telephone and be governed by his instructions. Telephones and instructions for hand operation of dual control switches are located in battery house at junction switch and at derail on Biola line.

Two unit signal on No. 1 drill track. Top unit governs movement to Merced line; lower unit to Biola line.

○RULE 680. AUTOMATIC INTERLOCKING

Lyoth: WPRR crossing, MP 85.16. Limits extend from eastward SA Signal 825 feet west of crossing to westward SA Signal 475 feet east of crossing on main track and from SA Signal near east end Lyoth siding, 350 feet west of crossing.

Signals are approach clearing, if movement over crossing is not completed within 8 minutes after train enters approach circuit, signals will revert to STOP position.

Approach clearing circuits are provided approximately 1050 feet in advance of eastward SA home signal and 500 feet in advance of westward SA home signal to clear signals for trains desiring to complete movement over crossing after signals have assumed "STOP" position due to expiration of the 8 minute time interval.

Cars or engines are not to be left standing on these circuits. Push button time release in box marked "SP" and block indicator marked "WP" are installed near crossing.

Instructions for operating time release are posted in box.

If signal indicates STOP for train desiring to make movement over crossing, a member of crew will proceed to crossing to operate time release. If block indicator marked "WP" indicates block clear, press push button until yellow light appears, then release. Approximately 8 minutes later a red light should appear under the button and signal indicate proceed.

If signal does not display proceed indication after time release has been operated, if red indication light on home signal is displayed, train may proceed through interlocking limits.

If home signal indicates STOP and red indicator light is not displayed, train may proceed over crossing as provided in Rule 663(c).

GENERAL REGULATIONS

○RULE 824: Tracy: When train stops on yard track in Hill yard not less than three hand brakes must be set on cut west of C St. or on New Liberty Track on west end of train, and four hand brakes must be set on east end of train before engine is detached.

When train stops on yard track on Martinez line, not less than four hand brakes must be set on west end of train before engine is detached.

○RULE 825. Floyd: Cars must not be left within 250 feet of highway crossing.

Tracy: Train crews must not release brakes on outbound trains until engine is coupled and brake pipe is charged.

Los Banos: Westward freight trains stopping to take water, pick up or set out cars, will leave train east of Pacheco Pass Highway Crossing. Eastward freight trains stopping to take water, pick up or set out cars, will leave train west of Second Street Crossing.

RULE 827. Passenger trains making station stop at Los Banos must approach at not to exceed 8 MPH to allow forward brakeman to detrain on station side where rear of train will stop. He will then make rolling inspection of train, then walk length of train on opposite side making standing inspection, giving careful attention to running gear and journal boxes and entrain on station side.

MISCELLANEOUS

10. Engines listed must not operate beyond clear point on tracks shown below, however, tracks may be switched beyond clear point with restricted engines by holding onto sufficient number of cars:

Class of Engine	Restricted Tracks
AC, F, GS, Mk, Mt, P	Tracy — Brewery spur, Holly Sugar spur.
"	Patterson—Frozen Food spur.
"	Newman—Golden State spur, Lumber Co. spur.
"	Gustine—California Milk spur, Carnation loading spur.
"	Los Banos—Builders Lbr. spur, Union Oil spur.
"	Pratton—Naman & Krum Winery spur.
"	Crayold—Brick Yard spur.
"	Fresno (MP 206.6)—Peerless Pump spur.
AC, F, GS	Los Banos—Wye.

○11. Load limit (car and contents):
Tracy-Fresno 251,000 pounds
Ingle to Riverdale 210,000 pounds
Unless authorized by Superintendent, heavier loads must not be handled.

○13. LOCATION OF STOCK YARDS

Station	Capacity in cars
Tracy	18 (Water)
Newman	15 (Water)
Ingomar	16
Volta	18 (Water)
Los Banos	23 (Water)
Dos Palos	8 (Water)
Mendota	20 (Water)
Jamesan	17
Helm	10 (Water)
Burrell	10

○30. LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

Mile Post	At or Near	Description
140.2	Los Banos	Warehouse opposite east leg of wye . . . Side

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS

	With Caution Not Exceeding MPH
Through sidings, yard and other tracks, wyes, balloon tracks, crossovers and turnouts, except:	15
Through slip switches	10
Through turnouts on other than sidings	10
On branches	10
○Through all sidings, yard tracks and other tracks with steam engine running backward	10

SPECIAL INSTRUCTIONS—LOS BANOS SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in **SPEED RESTRICTIONS FOR ENGINES** appearing on page 4, and **MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT** and **OTHER MAXIMUM SPEEDS** appearing on page 5 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and **INSURE SAFETY, REGARDLESS OF TIME.**

TERRITORY				TERRITORY									
MP	MP	Column:	1	2	3	4	MP	MP	Column:	1	2	3	4
EASTWARD, TRACY TO FRESNO:				WESTWARD, FRESNO TO TRACY:									
○82.62 to 83.00				★208.40 to 207.36									
83.00 to 85.16				207.36 to 206.87 (junction switch)									
85.16 to 85.17 (WPRR crossing)				206.87 to 141.30									
○85.17 to 140.10				141.30 to 140.10 (Los Banos)									
140.10 to 141.30 (Los Banos)				○140.10 to 85.17									
141.30 to 206.87				85.17 to 85.16 (WPRR crossing)									
206.87 to 207.36 (junction switch)				85.16 to 83.00									
★207.36 to 208.40 (Fresno)				○83.00 to 82.62 (junction Niles line)									
EASTWARD, KERMAN TO BIOLA JCT.:				WESTWARD, BIOLA JCT. TO KERMAN:									
194.09 to 194.11 (junction switch)				Thru jct. switch & crossover, Biola Jct.									
194.11 to 200.00				208.60 to 200.00									
200.00 to 208.60				200.00 to 194.11									
Thru jct. switch & crossover, Biola Jct.				194.11 to 194.09 (junction switch)									
EASTWARD, INGLE TO RIVERDALE:				WESTWARD, RIVERDALE TO INGLE:									
181.97 to 182.21				215.00 to 182.21									
182.21 to 215.00				182.21 to 181.97									

★Regulated by City ordinance.

SPECIAL INSTRUCTIONS—LOS BANOS SUBDIVISION

RATING OF ENGINES—In Units of 2000 Lbs. (Tons)

NOMINAL CLASS	ENGINE NUMBERS	Tracy and Fresno Kerman and Biola Jct	Ingle and Riverdale
DP-3, 4, 7	{6000 to 6004, 6017, 6018, 5900 to 5909, 5916, 5917}	1250	.....
DP-5, 6	6005 to 6016, 5910 to 5915	.....	.....
DP-8, 9, 10	6019 to 6033, 5918 to 5924	3075	.....
DP-11	6034 to 6045	3425	.....
DP-12	6046 to 6054	.....	.....
DF-1 to 12	6138 to 6461, 8022 to 8303	.....	.....
DF-100	5200 to 5202	.....	.....
DF-101 to 108, 110, 112	5203 to 5249, 5253 to 5278, 5500 to 5502	5000	.....
DF-109, 111	5250 to 5252, 5503 to 5505	5000	.....
DF-114, 116 to 118, 120 to 122	5279 to 5293, 5308 to 5335, 5340 to 5444	6500	.....
DF-115, 119, 123	5294 to 5307, 5336 to 5339, 5445 to 5448	.....	.....
DF-200 to 205	5100 to 5119	.....	1625
DF-300 to 304	4600 to 4623, 4700 to 4703	.....	.....
DF-305, 306	4624 to 4633	.....	.....
DF-500, 501	4800 to 4815	.....	.....
DF-603, 605, 606	5600 to 5625	.....	.....
DS-1 to 8	1000 to 1032	1625	1175
DS-9	1033 to 1051	.....	.....
DS-100 to 109, 111, 115, 119	{1300 to 1441, 1464 to 1485, 1514 to 1528, 1551 to 1567}	2450	1775
DS-110, 114, 118	1442 to 1463, 1492 to 1513, 1539 to 1550	3200	2525
DS-113, 117	1486 to 1491, 1529 to 1538	.....	.....
DS-200, 201	1900 to 1903	.....	925
M-4	1629, 1713	2375	1800
M-6, 8	1726 to 1796, 1824, 1825	2800	2150
M-9	1805 to 1817	2925	2250
M-11	1833	3057	2350
T-28, 31	2312 to 2361	3225	2575
T-32	2366 to 2384	3200	.....
P-6	2453, 2454, 2458	3200	.....
P-7	2476, 2477	3400	.....
P-8, 10	2463 to 2473, 2479, 2482	3800	.....
P-8, 10	2475, 2484 to 2491	3800	.....
C-8, 9, 10	2513 to 2598, 2700 to 2854	3550	2850
C-18	3400, 3406	3275	2625
C-19	3423	3425	2750
Mk-2, 4	3203 to 3236	4025	.....
Mk-5, 6	3247 to 3275	4500	.....
F-1	3615 to 3643	5175	.....
F-3, 4, 5	3653 to 3765	5950	.....
AC-6 to 12	4133 to 4294	9900	.....
Mt-1, 3, 4, 5	4300 to 4376	4775	.....
GS-1, 2	4402 to 4415, 4470 to 4472	5125	.....
GS-3, 4, 5, 6	4417 to 4469	5350	.....
GS-7, 8	4475 to 4487	5125	.....

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

RULE 14(e). As specified below, — — — — — will be indication that flagman may return from east:

- Galt.....Trains on Ione Branch,
- Lodi.....Trains on Kentucky House Branch and Wood-bridge Branch,
- Stockton...Trains on Oakdale Branch,
- Lathrop....Trains on Merced line,
- Tracy.....Trains on Los Banos line.

RULE 14(k). Will not apply in CTC limits.

RULE 93. Yard limits in which the provisions of Rule 93 will apply, except within CTC limits, are established at the following points:

West MP		East MP
80.70	Tracy (Martinez-Los Banos line)	85.64
69.19	" (Niles-Lathrop line)	74.37
80.39	Lathrop (Tracy-Stockton line)	83.04
	" (Merced line)	94.29
85.07	Stockton	93.72
	" (Oakdale Branch)	94.41
120.23	Oakdale	140.29
101.57	Lodi	104.25
	" (Kentucky House Branch)	107.50
	" (Woodbridge Branch)	End track
111.10	Galt	113.21
	" (Ione Branch)	112.91
85.51	Sacramento	95.35
131.60	" (Stockton line)	136.33
129.04	Valley Spring	130.50
141.94	Kentucky House	End track
138.28	Ione	End track

RULE 98. Railroad crossings at grade not interlocked: Trains and engines must approach with caution, and may move over the following crossings, without stopping, if crossing clear and no movement approaching on intersecting line:

Stockton... CCTCo., crossing of Oakdale Branch near MP 92.0,

Stop clear of the following crossings, then proceed if no movement approaching on intersecting line:

- Brandywine... CCTCo., crossing of Kentucky House Branch,
- Oakdale... AT&SFRy, crossing of Oakdale Branch, MP 116.7 on Ione Branch. CCTCo., crossing of Ione Branch.

Drawbridge not interlocked:

Stockton: Drawbridge over San Joaquin River, on spur connecting with SPBRy. Drawbridge normally closed. SP movement must stop. Sound whistle Signal 14(j) when necessary for bridge to be lined.

○RULE 103-A. Automatic crossing gates:

Following crossings protected by gates, with control circuits located within short distance of crossings.

Crews of trains or engines making stop, reverse movements, movements against the current of traffic or movements from yard tracks over crossings, must know that gates are down and crossings clear of vehicular traffic before entering crossings.

Station	Location	MP
*Stockton	McKinley Ave.	87.80
○Stockton	Market Street	90.90
○Stockton	Main Street	90.95
○Stockton	Weber Avenue	91.00

*Gates may be lowered by inserting switch key in lock box and turning key to right and gates will remain down until lock is returned to locked position and key removed.

Public Utilities Commission orders prohibit operation of train, engine, motor or car over the following crossings unless first brought to a stop and traffic on the highway protected by a member of the crew.

- Lodi.....Crossing Oak St. and Pine St. on yard tracks,
- Tomspur....Crossing on Aaron Canning Co. spur,
- Woodbridge..Crossing Woodbridge road on General Mills spur,
- Carbondale...Crossing county road when on industry track.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows:

- Tracy.....Niles line, for Martinez line,
- Tracy.....End double track, for eastward track,
- Tracy.....Los Banos line, for Niles line,
- Lodi.....Woodbridge Branch, for Lathrop line,
- Lodi.....Yard track for Kentucky House Branch,
- Galt.....West leg of wye for Ione Branch,
- Galt.....East leg of wye for straight leg of wye.

RULE 306. The following block signals equipped with triangular plate bearing the letter "P" have included in their control limits some special protective device. Absolute signals are listed as "P-A" or "P-SA".

Eastward Signal	Protection	Westward Signal
P-A	Collision detector, highway underpass, MP 104.16 (Lodi)	P-1049

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

Tracy: Signals in east end of Tracy are numbered as automatic and are under control of switchtender. When "stop" is indicated, trains must stop and not proceed until "proceed" is indicated or proceed signal is given with green flag or green light by switchtender.

Eastward movements governed by dwarf light Signals 710, 712, 714.

Westward movements from Lathrop Subdivision governed by Signal 713, the top light governs movement on main track and the lower light governs movement to hill or local yard, and dwarf light Signal 715 located on right of eastward track governs movement to all routes.

Westward freight trains stopped by Signal 717, located east of overhead crossing east of Tracy, use telephone located on this signal, call switchtender and be governed by his instructions.

Westward movements from Los Banos Subdivision governed by Signal 827, located 800 feet east of junction switch. Top unit governs movements on main track and lower unit governs movements to hill or local yard.

○Signal 709 governs movements as follows:

- Top unit governs movements to Martinez line.
- Lower unit governs movements to Niles line.

Trains and engines stopped by Signal 709 may then proceed with caution if proceed signal received from yardman.

Lathrop: Trains and engines stopped by Signal 828 may apply Rule 509 only after obtaining permission of train-order operator.

RULE 535. SPRING SWITCHES

Spring switches not equipped with facing point locks are located as follows:

Location	Normal Position
Stockton, east leg of wye to Oakdale Branch	Drill track

RULE 605. INTERLOCKING

San Joaquin River Drawbridge: Derails in eastward main track 892 feet west of lift span, and in westward main track 1208 feet east of lift span. Normally no signal operator on duty and signals and derails will be left lined for trains. A train stopped by interlocking signals may flag through interlocking limits at once, if derails and drawbridge in position for train movement.

Lathrop: East zone: Limits extend from SA signal 575 feet west of west switch of crossover to SA signal 65 feet east of east switch of crossover.

West zone: Limits extend from 360 feet west of junction switch to 340 feet east of junction switch.

South zone: Limits extend from 225 feet west of junction switch to 65 feet east of junction switch.

WP zone: Limits extend between semi-automatic signals either side of WPRR crossing.

Telephones at interlocking signals governing entrance to East, West and South zones, and in door of concrete shelter at WPRR crossing.

○RULE 680. AUTOMATIC INTERLOCKING

French Camp Tower: TSRY crossing 1.6 miles east of French Camp, MP 87.70. Limits extend on eastward track 500 feet west to 650 feet east of crossing. On westward track 400 feet west to 600 feet east of crossing. On drill track 250 feet east to 250 feet west of crossing. Signals normally in position for SP movements. When interlocking signals display stop indication Rule 663 (c) will govern.

Push button release is provided for reverse movement over crossing when signal governing such move does not indicate proceed.

Push button enclosed in box just east of crossing, marked "SP Co" and locked with switch lock.

Stockton Tower No. 2: AT&SFRy crossing, Sacramento and Taylor Streets, Stockton: Sound whistle signals as follows:

- Westward main track, o o — —,
- Eastward main track, — o — —,
- Middle track, o — —,
- Old siding, — — o o,
- Gauns track, o — o,
- Houser-Haines track, o o — o.

One short sound of tower siren (o) will be signal for all train movements to stop.

Two short sounds repeated several times (oo oo oo) will be signal for yard and train crews to clear the plant at once.

Stockton Tower No. 3: WPRR crossing Weber Avenue and Union St., Stockton.

○Sound whistle signals as follows for:

- West leg of wye, — — o,
- East leg of wye, — — o o.

Stockton Tower No. 4: WPRR crossing MP 92.3. Limits on eastward main track extend from signal 660 feet west of crossing to absolute signal at beginning of CTC 900 feet east of crossing; and on westward main track from signal at end of CTC 900 feet east of crossing to dwarf signal 200 feet west of crossing.

Switches and derails on Gulf Red Cedar spur, Gilmore Oil spur and Stockton Box Co. No. 2, are hand throw and equipped with electric lock controlled by signal operator.

Whistle signal:

For crossover, — o —.

Polk: West switch and eastward signals operated by signal operator at Elvas, and their use governed by Sacramento Division special instructions.

RULE 760. CENTRALIZED TRAFFIC CONTROL

Limits extend from east limit of Stockton Tower No. 4 at east crossover, to interlocking signal just west of west switch at Polk eastward and from absolute signal just east of west switch Polk to east interlocking limit at Stockton Tower No. 4 westward.

On double track between end of double track east of Akers and east interlocking limits at Stockton Tower No. 4 movements may be made in either direction on either track being governed by absolute and automatic signals. Rule 509 applicable to single track will apply on both tracks.

GENERAL REGULATIONS

○RULE 824: Tracy: When train stops on yard track in Hill yard not less than three hand brakes must be set on cut west of C St. or on New Liberty track on west end of train, and four hand brakes must be set on east end of train before engine is detached.

When train stops on yard track on Martinez line, not less than four hand brakes must be set on west end of train before engine is detached.

RULE 825. Tracy: Train crews must not release brakes on outbound trains until engine is coupled and brake pipe charged.

AIR BRAKE RULES

○RULE 17. Retaining valves must be used on freight and mixed trains on descending grades as follows:

- Toyon to 1/2 mile east of Valley Spring ... 1 retaining valve for every 75 tons in train.
- MP 129 to Helisma ... 1 retaining valve for every 85 tons in train.

FREIGHT TRAINS

RULE 25. Rear end test must be made immediately prior to departure from:

- Toyon.....All trains.

SPECIAL INSTRUCTIONS—LATHROP SUBDIVISION

RATING OF ENGINES—In Units of 2000 Lbs. (Tons)

NOMINAL CLASS	ENGINE NUMBERS	Tracy and Polk	Stockton to Montpelier	Montpelier to Stockton	Lodi to Wallace Toyon to MP 138.0	Wallace to Toyon MP 138.0 to Kentucky House	MP 138.0 to Toyon	Valley Spring to MP 128
DP-3, 4, 7	6000 to 6004, 6017, 6018, 5900 to 5909, 5916, 5917	1250	.....	.....	.....	.....	.....	.....
DP-5, 6	6005 to 6016, 5910 to 5915	3425	.....	.....	.....	.....	.....	.....
DP-8, 9, 10	6019 to 6033, 5918 to 5924	3075	.....	.....	.....	.....	.....	.....
DP-11	6034 to 6045	3425	.....	.....	.....	.....	.....	.....
DP-12	6046 to 6054	.....	.....	.....	.....	.....	.....	.....
DF-1 to 12	6138 to 6461, 8022 to 8303	.....	.....	.....	.....	.....	.....	.....
DF-100	5200 to 5202	.....	.....	.....	.....	.....	.....	.....
DF-101 to 108, 110, 112	5203 to 5249, 5253 to 5278, 5500 to 5502	.....	.....	.....	.....	.....	.....	.....
DF-109, 111	5250 to 5252, 5503 to 5505	5000	.....	.....	.....	.....	.....	.....
DF-114, 116 to 118, 120 to 122	5279 to 5293, 5308 to 5335, 5340 to 5444	6500	.....	.....	4650	1125	1925	3000
DF-115, 119, 123	5294 to 5307, 5336 to 5339, 5445 to 5448	.....	.....	.....	.....	.....	.....	.....
DF-200 to 205	5100 to 5119	.....	1400	1875	.....	.....	.....	.....
DF-300 to 304	4600 to 4623, 4700 to 4703	3250	.....	.....	2350	575	975	1500
DF-305, 306	4624 to 4633	.....	.....	.....	.....	.....	.....	.....
DF-500, 501	4800 to 4815	.....	.....	.....	.....	.....	.....	.....
DF-603, 605, 606	5600 to 5625	.....	.....	.....	.....	.....	.....	.....
DS-1 to 8	1000 to 1032	1625	1350	1850	.....	.....	.....	.....
DS-9	1033 to 1051	.....	.....	.....	.....	.....	.....	.....
DS-100 to 109, 111, 115, 119	1300 to 1441, 1464 to 1485, 1514 to 1528, 1551 to 1567	2450	2125	2850	2250	550	950	1450
DS-110, 114, 118	1442 to 1463, 1492 to 1513, 1539 to 1550	3200	.....	.....	2275	550	950	1475
DS-113, 117	1486 to 1491, 1529 to 1538	.....	.....	.....	.....	.....	.....	.....
DS-200, 201	1900 to 1903	.....	.....	.....	.....	.....	.....	.....
M-4	1629, 1713	2375	1525	2200	1725	400	725	1100
M-6, 8	1726 to 1796, 1824, 1825	2800	1800	2575	2025	455	800	1300
M-9	1805 to 1817	2925	1900	2700	2125	485	850	1375
M-11	1833	3075	1975	2825	2225	525	950	1450
T-28, 31	2312 to 2361	3225	2075	2975	2325	525	925	1475
T-32	2366 to 2384	3200	2100	2950	2325	525	925	1475
P-6	2453, 2454, 2458	3200	.....	.....	.....	.....	.....	.....
P-7	2476, 2477	3400	.....	.....	.....	.....	.....	.....
P-8, 10	2463 to 2473, 2479, 2482	3800	.....	.....	.....	.....	.....	.....
P-8, 10	2475, 2484 to 2491	3800	.....	.....	.....	.....	.....	.....
C-8, 9, 10	2513 to 2598, 2700 to 2854	3550	2275	3300	2575	625	1100	1675
C-18	3400, 3406	3275	2100	3025	2375	575	1000	1550
C-19	3423	3425	2175	3175	2475	600	1050	1600
Mk-2, 4	3203 to 3236	4025	①2550	①3725	①2900	①675	①1275	①1900
Mk-5, 6	3247 to 3275	4500	②2900	②4150	②3300	②775	②1425	②2150
F-1	3615 to 3643	5175	.....	.....	.....	.....	.....	.....
F-3, 4, 5	3653 to 3765	5950	.....	.....	.....	.....	.....	.....
AC-6 to 12	4133 to 4294	9900	.....	.....	.....	.....	.....	.....
Mt-1, 3, 4, 5	4300 to 4376	4775	.....	.....	.....	.....	.....	.....
GS-1, 2	4402 to 4415, 4470 to 4472	5125	.....	.....	.....	.....	.....	.....
GS-3, 4, 5, 6	4417 to 4469	5350	.....	.....	.....	.....	.....	.....
GS-7, 8	4475 to 4487	1525	.....	.....	.....	.....	.....	.....

①Applies to engines 3203, 3216, 3224, 3227 and 3236 only.

②Applies to engines 3247 and 3251 only.

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

SPECIAL INSTRUCTIONS—LATHROP SUBDIVISION

RATING OF ENGINES—In Units of 2000 Lbs. (Tons)

NOMINAL CLASS	ENGINE NUMBERS	Kentucky House to MP 138.0 Toyon to Valley Spring MP 128 to Lodi	Lodi and Woodbridge	Galt to Edwin	Edwin to Ione	Ione to Edwin	Edwin to Galt
DF-100	5200 to 5202	.....	.....	.....	.....	.....	.....
DF-101 to 108, 110, 112	5203 to 5249, 5253 to 5278, 5500 to 5502	.....	.....	.....	.....	.....	.....
DF-109, 111	5250 to 5252, 5503 to 5505	.....	.....	.....	.....	.....	.....
DF-114, 116 to 118, 120 to 122	5279 to 5293, 5308 to 5335, 5340 to 5444	10000	.....	.....	.....	.....	.....
DF-115, 119, 123	5294 to 5307, 5336 to 5339, 5445 to 5448	10000	.....	.....	.....	.....	.....
DF-200 to 205	5100 to 5119	.....	.....	.....	.....	.....	.....
DF-300 to 304	4600 to 4623, 4700 to 4703	4000	.....	.....	.....	.....	.....
DF-305, 306	4624 to 4633	.....	.....	.....	.....	.....	.....
DF-500, 501	4800 to 4815	.....	.....	.....	.....	.....	.....
DF-603, 605, 606	5600 to 5625	.....	.....	.....	.....	.....	.....
DS-1 to 8	1000 to 1032	.....	.....	775	③1725	③4000	4000
DS-9	1033 to 1051	.....	.....	.....	.....	.....	.....
DS-100 to 109, 111, 115, 119	1300 to 1441, 1464 to 1485, 1514 to 1528, 1551 to 1567	4000	.....	1250	③1250	③4000	4000
DS-110, 114, 118	1442 to 1463, 1492 to 1513, 1539 to 1550	4000	.....	1675	③1675	③4000	4000
DS-113, 117	1486 to 1491, 1529 to 1538	.....	.....	.....	.....	.....	.....
DS-200, 201	1900 to 1903	.....	.....	.....	.....	.....	.....
M-4	1629, 1713	2225	2500	810	810	2650	2650
M-6, 8	1726 to 1796, 1824, 1825	2625	2925	950	③950	③3100	3100
M-9	1805 to 1817	2750	3100	1020	③1020	③3275	3275
M-11	1833	2875	3225	1060	③1060	③3410	3410
T-28, 31	2312 to 2361	3000	3400	1110	③1110	③3585	3585
T-32	2366 to 2384	3075	3450	1130	③1130	③3650	3650
P-6	2453, 2454, 2458	.....	.....	.....	.....	.....	.....
P-7	2476, 2477	.....	.....	.....	.....	.....	.....
P-8, 10	2463 to 2473, 2479, 2482	.....	.....	.....	.....	.....	.....
P-8, 10	2475, 2484 to 2491	.....	.....	.....	.....	.....	.....
C-8, 9, 10	2513 to 2598, 2700 to 2854	3300	3700	1215	③1215	③3900	3900
C-18	3400, 3406	3050	3425	1135	③1135	③3615	3615
C-19	3423	3175	3550	1180	③1180	③3765	3765
Mk-2, 4	3203 to 3236	①3750	①4200	①1360	①③1360	①③4400	①4400
Mk-5, 6	3247 to 3275	②4200	②4725	②1550	①③1550	①③4400	②5000

①Applies to engines 3203, 3216, 3224, 3227 and 3236 only.

②Applies to engines 3247 and 3251 only.

③Not permitted to operate between Edwin and Ione when notified false bents are not in place on bridges 135.87 and 136.64.

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

RULE 14(d). As specified below, — — — — o will be indication that flagman may return from west: Fresno... Trains on Pratton line, Biola Jct... Trains on Biola line.

RULE 14(e). As specified below, — — — — will be indication that flagman may return from east: Lathrop... Trains on Merced line,

RULE 93. Yard limits in which the provisions of Rule 93 will apply are established at the following points:

Table with 2 columns: West MP, East MP. Rows include Lathrop (Tracy-Stockton line), Modesto, Turlock, Merced, Chowchilla, Berenda (Berenda Branch), Madera, Fresno (Pratton-Tulare line), Biola-Porterville line, Merced-Clovis line.

Fresno: When making movements against current of traffic, trains or engines must be preceded by flagman over railway and street crossings at grade where wigwags installed, protecting crossings during movement, except where crossing watchman located.

Eastward first-class trains, after passing Signal 2052 (west of Tuolumne St.), must proceed with caution and be prepared to cross to westward main track on signal from yardman.

When Signal 2046 on Pratton line, or Signal 2042 on eastward track displays stop indication train must stop, and after proceed signal received from yardman (green flag by day, green light by night) may then proceed as prescribed by Rules 509 and 513.

Eastward trains via Pratton line to Fresno Yard must receive proceed signal from yardman (green flag by day, green light by night) before fouling eastward or westward main track.

Fresno Yard: Trains entering or leaving yard tracks must receive proceed signal from yardman (green flag by day, green light by night), except within limits of diverging route signals.

RULE 103-A. Turlock: Switching must not be done over Main and Olive Street crossings between hours of 12 Noon and 1:00 PM.

Merced: Advance automatic warning device is not provided for tracks other than main track at "R" Street crossing. Trains and engines must approach this crossing with caution on tracks other than main track and must not enter crossing until crossing signal is operating.

Madera: Automatic crossing signals at Yosemite Ave. and Sixth St., do not apply to back track which serves Valley Feed & Fuel Co.

Public Utilities Commission orders prohibit operation of train, engine, motor or car over the following crossings unless first brought to a stop and traffic on the highway protected by a member of the crew:

- Salida... Broadway St. crossing for any movement that does not operate wigwag, Modesto... Tully Ave., on Grange Co. spur, Modesto... B St. on Shoemake spur, Chowchilla... Highway crossing and Robertson St., on Standard Oil Co. spur, Herndon... Crossing Judson Ave. on PG&E spur.

RULE 104. The normal position of rigid switches at the end of double track and at junctions, is as follows: Berenda... Daulton line, for house track, Chowchilla... Dairyland line, for house track, Fresno Yard... End double track, for westward track, Fresno... Pratton line, for eastward main track.

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

Lathrop: Trains and engines stopped by Signal 828 may apply Rule 509 only after obtaining permission of train-order operator.

RULE 516. Overlap posts: Manteca (2300 ft. east of west switch)... Eastward trains.

RULE 605. INTERLOCKING

Lathrop: East zone: Limits extend from 575 feet west of west switch of crossover to 65 feet east of east switch of crossover.

West zone: Limits extend from 360 feet west of junction switch to 340 feet east of junction switch.

South zone: Limits extend from 225 feet west of junction switch to 65 feet east of junction switch.

WP zone: Limits extend between semi-automatic signals either side of WPRR crossing.

Telephones at interlocking signals governing entrance to East, West, and South zones, and in door of concrete shelter at WPRR crossing.

Kismet Tower: AT&SFRy crossing.

Biola Jct. Limits extend on Merced line from 675 feet west of junction switch, and on Biola line from 575 feet west of junction switch, to 930 feet east of junction switch on Merced line, and to two unit signal 290 feet east of junction switch on No. 1 drill track.

Trains and engines stopped by signals will call signal operator at train-order office Muscatel by telephone and be governed by his instructions. Telephones and instructions for hand operation of dual control switches are located in battery house at junction switch and at derail on Biola line.

Two unit signal on No. 1 drill track. Upper unit governs movement to Merced line; lower unit to Biola line.

RULE 680. AUTOMATIC INTERLOCKING

Modesto Tower: TSRY crossing, MP 114.70. Signals governing use of crossing equipped with unit for display of red light. If signal fails to display proceed indication after time-release has been actuated, and indicator on signal displays red aspect, train may proceed over crossing.

If signal displays stop indication and indicator does not display red aspect after time-release has been actuated, train may proceed under the provisions of Rule 663(c).

GENERAL REGULATIONS

RULE 825. Modesto: When stopping to take water, eastward freight trains leave train clear of L St. (second street west of passenger station), and westward trains clear of B St. (street at west end of Tuolumne River bridge).

Livingston: Eastward trains having set out, pick up, or to take water will leave train clear of Third Street crossing before detaching engine from train.

Madera: Eastward freight trains when stopping to set out, leave train clear of River Drive (first crossing west of Fresno River west of west switch) and westward freight trains clear Olive Avenue or just clear of east switch siding.

Merced: When stopping to take water eastward freight trains leave train clear of R St. crossing (first crossing west of roundhouse), and westward trains leave train clear of hospital crossing.

RULE 827. All passenger trains, and other trains of passenger equipment only making station stop, except Nos. 51 and 52, must approach station at Modesto at speed not exceeding 8 MPH to allow forward brakeman to detrain on station side where rear of train will stop. Forward brakeman will then make rolling inspection of train, then walk length of train on opposite side making standing inspection, giving careful attention to running gear and journal boxes and entrain on station side.

RULE 829. Turlock: City ordinance requires that in event of fire alarm being sounded any train blocking Main St. must clear crossing immediately.

MISCELLANEOUS

1. Emergency water supply only at Lathrop on westward track.

6. Cars must not be left on straight leg of wye, Lathrop, to block tool house or crossover.

Sugar beet dump at Spreckels Sugar Beet Factory, Manteca, uncovered and care should be exercised by trainmen while working thereon.

10. Engines listed must not operate beyond clear point on tracks shown below, however, tracks may be switched beyond clear point with restricted engines by holding onto sufficient number of cars:

Table with 2 columns: Class of Engine, Restricted Tracks. Rows include AC, F, GS, P... Lathrop—Tracks leading to Army Supply Depot; and Permanente spur. AC, F, GS, Mk, Mt, P. Lathrop—Fresno No. 2 track; beet track; slop track. AC, F, GS, Mk, Mt, P. Manteca—Portion of Spreckels Sugar spur beyond point 100 feet east of Highway crossing.

Engines over 305,000 pounds on drivers... Modesto—Park spur. AC, F, GS, Mk, Mt, P. Livingston—Spur to shed 101. AC, F, GS, Mt, P-6, 7, 8, 10 and Mk class engines over 210,000 pounds on drivers...

Table with 2 columns: Restricted Tracks, With Caution Not Exceeding MPH. Rows include Manteca—Calif. Fruit Co.; and Manteca Canning Co. Bardi—Cella Vineyards Co. Ripon—Ripon Lumber Co.; and Nestles Milk Co. Modesto—Poultry Producers; and Butchertown drill and spurs. Ceres—Sunland Oil Co.; and C. H. Haas. Turlock—Track opposite Roy Day Milling Co.; and Poultry Producers track, leading off drill track. Livingston—Minturn & Crowell. Atwater—Industry track north of highway; and Calif. Packing Co.

Table with 2 columns: Class of Engine, Restricted Tracks. Rows include AC, F, GS, Mt, P-6, 7, 8, 10 and Mk class engines over 210,000 pounds on drivers... Merced—American Partion spur; Central Calif. Tomato Growers spur; and G. Mondo spurs: Onion, old G.S.Co., and spur on south side of track. AC, F, GS, Mt, P-6, 7, 8, 10, 12, and Mk class engines over 210,000 pounds on drivers... Creegan—Brantley drill and spurs. Sierra Vista—Sierra Vista Vineyard Co. Chowchilla—Valley Feed & Fuel Co.; and Danish Creamery Co. Berenda—Corral track. Madera—Western Grain Mill; and Madera Olive Growers. Herndon—PG&E spur. AC, F, GS, Mt, P-8, 10, 12... Madera—Winery spur.

Table with 2 columns: Station, Capacity in cars. Rows include Ripon... 3, Modesto... 6 (Water), Turlock... 6 (Water), Merced... 16 (Water), Chowchilla... 5 (Water), Dairyland... 12, Madera... 9 (Water), Daulton... 24 (Water). Section 11. Load limit (car and contents): Lathrop-Fresno... 251,000 pounds, Chowchilla-MP 172.5... 210,000 pounds, *MP 172.5-Dairyland... 169,000 pounds, Berenda-Daulton... 210,000 pounds. *Exception: Passenger equipment on six axles weighing not over 200,000 pounds may be handled. Unless authorized by Superintendent, heavier loads must not be handled.

Section 13. LOCATION OF STOCK YARDS. Table with 2 columns: Station, Capacity in cars. Rows include Ripon... 3, Modesto... 6 (Water), Turlock... 6 (Water), Merced... 16 (Water), Chowchilla... 5 (Water), Dairyland... 12, Madera... 9 (Water), Daulton... 24 (Water).

Section 30. SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS. Table with 2 columns: Through sidings, yard and other tracks, wyes, ballon tracks, crossovers and turnouts, except: Through slip switches... 15, Through turnouts on other than sidings... 10, On branches... 10, Through all sidings, yard tracks and other tracks with steam engine running backward... 10, On Spreckels Sugar spur, Manteca... 10, On Winery spur, Madera... 20.

SPECIAL INSTRUCTIONS—MERCED SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in **SPEED RESTRICTIONS FOR ENGINES** appearing on page 4, and **MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT** and **OTHER MAXIMUM SPEEDS** appearing on page 5 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and **INSURE SAFETY, REGARDLESS OF TIME.**

TERRITORY		PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES		TERRITORY		PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES							
MP	MP	Column:	1	2	3	4	MP	MP	Column:	1	2	3	4				
EASTWARD, LATHROP TO FRESNO: Thru switches, East and West Zones, at Lathrop.....						25	25	25	25	WESTWARD, FRESNO TO LATHROP: ★205.50 to 204.50 (Fresno).....				20	20	20	20
On east leg of wye, Lathrop.....						15	15	15	15	○204.50 to 199.28 (Biola Jct.).....				50	30	30	30
92.83 to 93.07 (switches).....						15	15	15	15	199.28 to 184.75.....				70	55	55	30
93.07 to 94.00.....						30	30	30	20	184.75 to 183.16 (Madera).....				45	45	45	20
94.00 to 112.60.....						70	55	55	30	183.16 to 151.60.....				70	55	55	30
112.60 to 113.60 (Modesto).....						45	30	30	20	151.60 to 149.70 (Merced).....				45	45	45	20
113.60 to 114.69.....						70	55	55	30	○149.70 to 126.30.....				70	55	55	30
114.69 to 114.70 (TSRy. crossing).....						40	40	40	30	★126.30 to 126.00 (Turlock).....				30	30	30	20
114.70 to 125.20.....						70	55	55	30	126.00 to 125.20.....				70	55	55	20
125.20 to 126.00.....						70	55	55	20	125.20 to 114.70.....				70	55	55	30
★126.00 to 126.30 (Turlock).....						30	30	30	20	114.70 to 114.69 (TSRy. crossing).....				40	40	40	30
○126.30 to 149.70.....						70	55	55	30	114.69 to 113.60.....				70	55	55	30
149.70 to 151.60 (Merced).....						45	45	45	20	113.60 to 112.60 (Modesto).....				45	30	30	20
151.60 to 183.16.....						70	55	55	30	112.60 to 94.00.....				70	55	55	30
183.16 to 184.75 (Madera).....						45	45	45	20	94.00 to 93.07.....				30	30	30	20
184.75 to 199.28 (Biola Jct.).....						70	55	55	30	93.07 to 92.83 (switches).....				15	15	15	15
199.28 to 201.89 (Fresno Yard).....						50	30	30	30	On east leg of wye, Lathrop.....				15	15	15	15
201.89 to 201.93 (thru turnout).....						25	25	25	25	Thru switches, East and West Zones, at Lathrop.....				25	25	25	25
○201.93 to 204.50.....						50	30	30	30	WESTWARD, DAULTON TO BERENDA:				20	20	20	15
★204.50 to 205.50 (Fresno).....						20	20	20	20	WESTWARD, DAIRYLAND TO CHOWCHILLA: 178.38 to 172.71.....				10	10	10	10
EASTWARD, BERENDA TO DAULTON:						20	20	20	15	172.71 to 168.15.....				15	15	15	15
EASTWARD, CHOWCHILLA TO DAIRYLAND: 168.15 to 172.71.....						15	15	15	15								
172.71 to 178.38.....						10	10	10	10								

★Regulated by City ordinance.
Nos. 51 and 52, with P-7, 8, 10; GS; or Mt class engine, may run not to exceed 75 MPH where 70 MPH is authorized in Column 1.
Nos. 51 and 52, with DP class engine, may run not to exceed 79 MPH where 70 MPH is authorized in Column 1.

SPECIAL INSTRUCTIONS—MERCED SUBDIVISION

RATING OF ENGINES—In Units of 2000 Lbs. (Tons)

NOMINAL CLASS	ENGINE NUMBERS	Lathrop and Fresno	Chowchilla and Dairyland	Berenda to Daulton	Daulton to Berenda
DP-3, 4, 7	{6000 to 6004, 6017, 6018, 5900 to 5909, 5916, 5917.....}	1250	.....	.....	.....
DP-5, 6	6005 to 6016, 5910 to 5915.....	.....	.....	.....	.....
DP-8, 9, 10	6019 to 6033, 5918 to 5924.....	3075	.....	.....	.....
DP-11	6034 to 6045.....	3425	.....	.....	.....
DP-12	6046 to 6054.....	.....	.....	.....	.....
DF-1 to 12	6138 to 6461, 8022 to 8303.....	.....	.....	.....	.....
DF-100	5200 to 5202.....	.....	.....	.....	.....
DF-101 to 108, 110, 112	5203 to 5249, 5253 to 5278, 5500 to 5502.....	5000	.....	.....	.....
DF-109, 111	5250 to 5252, 5503 to 5505.....	5000	.....	.....	.....
DF-114, 116 to 118, 120 to 122	5279 to 5293, 5308 to 5335, 5340 to 5444.....	6500	.....	.....	.....
DF-115, 119, 123	5294 to 5307, 5336 to 5339, 5445 to 5448.....	.....	.....	.....	.....
DF-200 to 205	5100 to 5119.....	.....	.....	.....	.....
DF-300 to 304	4600 to 4623, 4700 to 4703.....	.....	.....	.....	.....
DF-305, 306	4624 to 4633.....	.....	.....	.....	.....
DF-500, 501	4800 to 4815.....	.....	.....	.....	.....
DF-603, 605, 606	5600 to 5625.....	.....	.....	.....	.....
DS-1 to 8	1000 to 1032.....	1625	.....	.....	.....
DS-9	1033 to 1051.....	.....	.....	.....	.....
DS-100 to 109, 111, 115, 119	{1300 to 1441, 1464 to 1485, 1514 to 1528, 1551 to 1567.....}	2450	.....	.....	.....
DS-110, 114, 118	1442 to 1463, 1492 to 1513, 1539 to 1550.....	3200	.....	.....	.....
DS-113, 117	1486 to 1491, 1529 to 1538.....	.....	.....	.....	.....
DS-200, 201	1900 to 1903.....	.....	.....	.....	.....
M-4	1629, 1713.....	2375	2625	1020	2650
M-6, 8	1726 to 1796, 1824, 1825.....	2800	3050	1200	3100
M-9	1805 to 1817.....	2925	3175	1275	3275
M-11	1833.....	3075	3375	1325	3410
T-28, 31	2312 to 2361.....	3225	③3550	1395	3585
T-32	2366 to 2384.....	3200	③3600	1415	3650
P-6	2453, 2454, 2458.....	3200	.....	.....	.....
P-7	2476, 2477.....	3400	.....	.....	.....
P-8, 10	2463 to 2473, 2479, 2482.....	3800	.....	.....	.....
P-8, 10	2475, 2484 to 2491.....	3800	.....	.....	.....
C-8, 9, 10	2513 to 2598, 2700 to 2854.....	3550	3875	1525	3900
C-18	3400, 3406.....	3275	3590	1415	3615
C-19	3423.....	3425	3740	1475	3765
Mk-2, 4	3203 to 3236.....	4025	③4400	①1715	①4400
Mk-5, 6	3247 to 3275.....	4500	③4950	②1950	②5000
F-1	3615 to 3643.....	5175	③5825	.....	.....
F-3, 4, 5	3653 to 3765.....	5950	③6700	.....	.....
AC-6 to 12	3804, 3805, 3808, 4133 to 4294.....	9900	.....	.....	.....
Mt-1, 3, 4, 5	4300 to 4376.....	4775	.....	.....	.....
GS-1, 2	4402 to 4415, 4470 to 4472.....	5152	.....	.....	.....
GS-3, 4, 5, 6	4417 to 4469.....	5350	.....	.....	.....
GS-7, 8	4475 to 4487.....	5125	.....	.....	.....

①Applies to engines 3203, 3216, 3224, 3227 and 3236.
②Applies to engines 3247 and 3251 only.
③F, Mk, T-28, 31, 32 not permitted to operate between Ash and Dairyland.

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.