SACRAMENTO NORTHERN RAILWAY

TIDEWATER SOUTHERN RAILWAY COMPANY

SPECIAL INSTRUCTIONS

2

AT 12:01 A. M.
PACIFIC STANDARD TIME

THESE INSTRUCTIONS CONSTITUTE A PART OF THE TIMETABLE CURRENTLY IN EFFECT

L. D. MICHELSON,

President and General Manager

H. J. MULFORD,
Superintendent

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

Special Instructions

GENERAL

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

RULE 4-B. Instructions issued in the form of "NOTICE NO. . . . " over the signature of the Superintendent and placed at terminals where runs begin or end will continue in effect until canceled. Trainmen and Enginemen and others concerned in the movement of trains and yard engines are required to familiarize themselves with the contents of such NOTICES and comply with them

RULE 10-H, first paragraph - Amended:

A metal banner at right of track displaying yellow indicates that trains must reduce speed over track to 10 miles per hour until rear of train has passed temporary resume speed signal unless otherwise directed by train order or bulletin. Such signal must be placed one-fourth (1/4) mile before the location is reached where speed of trains must be reduced.

RULE 17-C. Headlights must be dimmed while moving within city limits.

RULE 18 — Modified. Yard engines when making a continuous movement along city streets will not display the headlight at the rear by night. A red light must be displayed to the rear, and on the rear of the last car when cars are being handled.

It shall be the responsibility of the rear brakeman to see that a red light is continuously displayed at the rear until movement is completed.

When stop is made and train or yard engine is left standing in street, trainman will place lighted fusee in the street at rear of cut and when necessary for trainman to leave rear of cut to go ahead, one or more lighted fusees will be left to provide continuous protection at the rear end.

Rule 21 of the Operating Department Rules is suspended.

RULE 34. When seat is available, head brakeman will ride in forward cab of engine.

RULE S-72. Westward trains are superior to Eastward trains of the same class.

RULE 82-A — Amended. Regular trains will be authorized at their initial stations and at intermediate stations by permission of the Train Dispatcher. A written clearance is not required unless train orders are issued to regular trains.

RULE 340. Before opening a main track switch, train or engine crew must know by view of entire block to be entered that no train or engine is approaching within or adjacent to the block; and, when the view is obstructed or during inclement weather, flag or other authorized protection must be provided.

Train or engine must remain clear of main track three minutes after the switch is opened, and movement must not exceed restricted speed to the next governing signal in advance.

NOTE: Rule 340 does not apply at spring switches, or in Traffic Control Territory where other Rules and Instructions are applicable.

Present Rule 520 is CANCELLED, the above replacing both Rule 340 and Rule 520.

Back-up hose must be used by crews when shoving more than six cars ahead of engine over city streets.

Air must be cut in and air brakes in operation on all yard cuts, and on trains within yard limits, when moving over and along city streets except when doing station work or yard switching.

Air must be cut in and air brakes in operation on all yard cuts, and on trains within yard limits, when moving or working on grades where air brakes are necessary to keep cars under control.

Amber revolving light mounted on top of engine and the oscillating headlight may be used when in the judgment of the engineer their use will provide additional protection for train and yard movements, except that the amber revolving light must not be displayed on Western Pacific or Southern Pacific tracks at any time.

City Ordinances require all trains and yard engines within one hundred feet of an intersection to stop immediately on the approach of any police, ambulance, or fire apparatus sounding siren or signal going except they be at the time on, or crossing an intersection, in which event crossing must be cleared and then stop.

Civil, Military or Funeral processions must not be obstructed.

Movement over street intersections or around sharp curves in switching service when the engineer's view is obstructed must be protected by a member of the crew acting as a flagman. The conductor is jointly responsible with the engineer for this protection being given.

Conductor will see that trainmen are so distributed over the train as to control it most effectually and be able to pass signals from any part of it to the enginemen. This rule applies to continuous movements over and along city streets and in yards, and where required a trainman must take a position at the rear of yard cuts.

To reduce automobile accidents, special care should be used when approaching grade crossings known to be obscured or hazardous. Where vehicles are moving in public streets in the same direction as the train and are not clear of the track on which train is operating, speed should be so controlled as to permit train being stopped in case vehicle makes a sudden or unexpected stop or turn. When about to pass a vehicle moving in the same direction as train, the engineer should satisfy himself that the driver is aware of approach of the train.

The following instructions cover the use of push poles:

(a) The use of push poles in freight operations is prohibited, except in emergencies when poling of cars cannot otherwise be avoided.

(b) When such emergencies arise and it becomes absolutely necessary to pole cars, as quickly as pole is in position, member of crew placing pole must move into the clear a sufficient distance to insure his personal safety; being careful to place pole in pole pocket or in such position that pole will not slip. Such poling movements must be executed with great care and without cars coupled to engine, being careful to avoid misunderstandings of signals or damage to equipment. The use of non-standard push poles is strictly prohibited.

The following regulations will govern movement of Sacramento Northern trains and engines on joint track between Front Street and "R" Street, Sacramento, on single track crossing of the Interstate 5 freeway overpass bridge:

Wait indicators located East and West ends of joint track. Trains and engines must stop at the "W" indicators.

Operation of pushbutton will extinguish "W" indicator and flashing white light will authorize movement over the route to opposing "W" indicator. If, after receiving flashing white light, movement over the route is not made, cancel button is provided.

Should "W" indicator be found extinguished or flashing white light cannot be activated by operation of pushbutton, movements must be made with caution protecting against opposing trains or engines.

Pushbutton box located on case of "W" indicator. Advance pushbutton provided east of Third Street or Westward movements to minimize blocking 3rd Street crossing.

Switches on the joint track are equipped with targets to indicate their normal position and when movement is completed must be left properly lined.

JOINT TRACK

Sacramento Northern trains and engines use Santa Fe tracks between Stockton and Pittsburg.

Trainmen and Enginemen using Santa Fe tracks will be governed by Santa Fe Operating Department rules and must have copy of current Santa Fe Operating Department Book of Rules, copy of current Santa Fe, Valley Division, timetable, and Santa Fe switch key in their possession at all times while on duty on Santa Fe.

Sacramento Northern trains and engines use Western Pacific tracks as follows:

Between South Sacramento and Stockton yard.

R Street line, Sacramento, between Front Street and east wye switch at WP MP 138.2.

Between WP MP 138.2 and Globe.

Between Sankey and Marysville.

Trainmen and enginemen using Western Pacific tracks will be governed by Western Pacific Operating Department rules and special instructions and must have copies of current Western pacific Operating Department Book of Rules, current Western Pacific, Timetable, and current Western Pacific Air Brake Rules and Regulations in their possession when on duty on Western Pacific.

Trains and engines must obtain permission from WP Train Dispatcher before entering WP main track unless switch is properly lined and signal displays a proceed indication.

On eastward movements from Haggin, inform Western Pacific dispatcher by telephone when ready to leave.

On westward movements from Globe, inform Western Pacific dispatcher by telephone when ready to move.

Telephones for communication with dispatcher are located near main track or junction switches.

Lunar White marker at east switch Haggin, WP MP 139.8:

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

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

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

Westward trains and yard engines must obtain permission to enter the siding at Marysville and must stop clear and contact the Western Pacific dispatcher before entering the siding.

Inside crossover switch on siding and hand-throw tandem derails on east end of tracks 1 and 2 are not electrically-locked and must NOT be operated before obtaining electirc lock 346 B.

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

When Westward SN trains or engines at Marysville have contacted train dispatcher for instructions to move Marysville to Sankey, it will not be necessary to obtain similar instructions at Globe for movement beyond, except to obtain permission to operate electric lock.

The following instructions govern the use of Western Pacific telephone circuits: When calling the train dispatcher at Sacramento on either the train dispatcher's circuit or code line telephone, discontinue the practice of first saying "Dispatcher." The person calling, as well as the dispatcher, should follow the formula outlined below: Person Calling—"West Merlin," Dispatcher's reply—"Dispatcher," Person Calling—"Conductor Jones, West Merlin, Exa. 905 West."

Before calling on any telephone, first listen to make sure the dispatcher is not busy on the line; if he is not busy, then follow the procedure outlined above.

Sacramento Northern trains and engines use Southern Pacific tracks between Cannon and 19th Street, Sacramento.

Sacramento Northern movements between Haggin and Westgate are made on Southern Pacific between 19th Street and Sacramento-Yolo Port RR connection.

Southern Pacific also uses Sacramento-Yolo Port RR between Broderick and Southern Pacific main line.

At 19th Street and at Port RR connection stop clear of fouling point and contact SP yardmaster for permission to enter SP tracks. Before entering SP at 19th Street, it must be known by observation that there is no movement closely approaching the track to be occupied.

Southern Pacific third rail between 19th and 23rd Streets, Sacramento, and east leg of wye between its connection with SP third rail and SN main track at 20th and B Streets will be used by SN crews to turn engines and cars. Permission of SP yardmaster must be obtained before entering third rail.

Southern Pacific uses Sacramento Northern tracks between junction switches of Sacramento-Yolo Port RR east and west of Broderick. All movements on the joint track at Broderick will be governed by block signals whose indications supersede the superiority of trains. Indicators at entrance switches indicate track occupancy. When indicator shows block clear, switch may be reversed and movement started when yellow aspect is displayed by the signal. If indicator shows block occupied, switch must not be reversed until it is known that there is no opposing or conflicting movement. If, after switch has been reversed, signal displays stop indication, train or engine must wait five (5) minutes and then be preceded by flagman through joint track area.

Flag protection to rear is not required on joint track at Broderick or on Sacramento-Yolo Port RR connection. All movements must be made at yard speed not exceeding ten (10) MPH.

Speed of trains handling loaded air dump cars on Southern Pacific between Sacramento and Cannon is restricted to twenty-five (25) MPH.

Sacramento Northern trains and engines use Southern Pacific tracks between Live Oak and Durham.

Hand operated switches equipped with electric locks located at SP MP 152.20 and SP MP 152.21, Live Oak, provide access to SP main track for movements between Live Oak and Durham and for movements across SP main track on Peachton Branch. Signals governing movements to SP main track located in advance of junction switches.

Hand operated switch equipped with electric lock located at SP MP 178.2, Durham, provides access to SP main track for movements between Durham and Live Oak. Sign reading DO NOT FOUL MAIN TRACK WITHOUT DISPATCHER'S PERMISSION located in advance of junction switch.

Contact SP Train Dispatcher for permission to operate electric locks. Instructions for operation of electric locks located in telephone boxes adjacent to junction switches.

Trainmen and Enginemen using Southern Pacific tracks will be governed by SP Co. Transportation Dept. Rules and Special Instructions and must have copy of Southern Pacific book of rules, current timetables with special instructions, and switch key in their possession while on duty on Southern Pacific.

FIRST SUBDIVISION

Port Chicago, Main St., Crossing No. 8-39.2:

Stop boards on both sides of crossing.

All trains, engines, motors or cars must come to a stop and no movement made over the crossing until a member of the train crew has protected traffic on the crossing.

Signs reading—Cars must not be switched beyond this point by S.P. Co.—S.N. Ry.—are located on track 1 at the Shell Chemical Plant, Shell Point.

During periods of heavy fog or when visibility is restricted, sound crossing whistle when approaching and before passing over private roadway northeast corner Shell Chemical plant, Shell Point.

The tracks at the Shell Chemical Company's plant at Shell Point are used jointly by the Sacramento Northern and Southern Pacific. All movements over these tracks must be made with caution. The tracks leading from the Sacramento Northern and from the Southern Pacific cross at grade. All trains, motors, engines or cars of the Sacramento Northern shall stop at the "STOP" signs located at each approach to the crossing, and shall not proceed over the crossing until it has been ascertained that it is safe to do so. Several derails, properly signed, are installed on the various tracks.

Westward trains originating at West Pittsburg will report their departure to the Pittsburg Office.

A two-indication color light train order signal is located on the depot building at Pittsburg. This signal governs movements in the westward direction only.

The signal will indicate "stop" when there is an operator on duty, except when changed to indicate "proceed" to allow a train or engine to pass when there are no train orders for any train or engine in the westward direction. When the signal is dark, the office will be considered a closed train order office.

Westward trains and engines must call for the signal, except when it indicates a closed office.

A gate has been installed on the Santa Fe track which crosses the Sacramento Northern main track at MP 46.24, Pittsburg. This gate is equipped with a Santa Fe switchlock and a switch lamp is mounted at the top of the mast supporting the gate.

This gate normally shall be locked in position across the line of railroad of The Atchison, Topeka & Santa Fe Railway Co. and all trains, motors, engines and cars of The Atchison, Topeka & Santa Fe Railway Company shall stop before proceeding across said crossing and said gate shall not be unlocked and moved from its normal position until a member of the train crew or other competent employe has gone upon the crossing to ascertain that it is safe to do so. As soon as trains, motors, engines and cars of The Atchison, Topeka & Santa Fe Railway Company have proceeded across said crossing, such gate shall be returned to its normal position.

Trains, motors, engines and cars of Sacramento Northern Railway shall approach said crossing at speeds not in excess of fifteen (15) miles per hour, prepared to stop in the event such crossing is occupied by trains, motors, engines or cars of The Atchison, Topeka & Santa Fe Railway Company or in the event such gate is in other than its normal position, and one long blast of the engine whistle shall be sounded by the Sacramento Northern Railway when approaching said crossing in accordance with

Rule 14 (M).

Distance warning signs located 1000 feet from crossing.

Sacramento Northern industrial lead taking off of the main track approximately $^{3}\!/_{4}$ mile west of Pittsburg crosses industrial lead track of A.T. & S.F. Ry. at grade.

All engines, motors, cars or trains approaching the crossing shall come to a stop not less than ten (10) nor more than fifty (50) feet from nearest rail of the crossing and shall not proceed thereafter until receiving an appropriate signal from a flagman or other qualified employee. Such signal shall not be given until it has been definitely ascertained that no engines, motors, cars or trains are approaching from either direction on the conflicting route under conditions which will render it possible for an interference to occur with the movement about to be made over the crossing.

The A.T. & S.F. Ry. have precedence in the use of the crossing.

Harbor Street, Pittsburg; M.P. 47.37

No train, engine, motor or car shall be operated over said crossing of Harbor Street unless said train, engine, motor or car is brought to a stop and traffic on the highway is protected by a member of the train crew or other competent employee acting as a flagman.

A.T. & S.F. Ry. crossing east of Harbor Street, MP 47.39, Pittsburg, is protected by stop boards. All engines, trains, motors and cars must come to a stop at the "STOP" boards located on either side of the crossing and no movement made over this crossing until a flagman has preceded over the crossing and ascertained that it is safe to proceed. A.T. & S.F. Ry. have the preference at this crossing.

At a point 360 feet east from the curb line of Columbia St., MP 48.06, Pittsburg, a rail crossing at grade over the Atchison, Topeka & Santa Fe Railway lead track is installed. The following instructions will govern in operating over this crossing.

All trains, motors, engines and cars of the Sacramento Northern Railway, the Atchison, Topeka & Santa Fe Railway, and U.S. Steel Company shall come to a stop not less than ten feet (10') nor more than fifty feet (50') from the nearest rail of the crossing, and shall not proceed thereafter until a member of the train crew or other competent employee has gone upon the crossing and has ascertained that it is safe so to do and shall have given a suitable signal to proceed. In event the trains, motors, engines and cars of either railroad have approached the crossing and made the stop, as herein-before required, and any trains, motors, engines and cars are approaching upon the conflicting route within a distance which will render them in any way liable to conflict with the movement over the crossing about to be made, such movement shall not be made until the trains, motors, engines and cars approaching upon the conflicting route have been brought to a stop.

Eastward trains will make air brake test as prescribed in Rules 24-A and 24-B, Initial Terminal Road Train Air Brake Test, at Pittsburg, before entering Santa Fe main track.

Trains and engines approaching highway crossings on the Rice Mill Lead and River Spur at MP 92.35, Westside, Sacramento yard, will allow not less than twenty (20) seconds to elapse from time flashing light crossing signals start operating before engines or cars enter the highway traffic lanes. Indicators are installed on the crossing signal masts which govern movements in the Westward direction only and operate in conjunction with the highway crossing signals.

When train or engine occupies approach circuit, indicators will, after a lapse of twenty (20) seconds, display a flashing yellow aspect indicating that the crossing signals are operating and train or engine may proceed.

If the flashing light indicators fail to operate, allow not less than twenty (20) seconds to elapse before entering the highway crossing.

Trains and engines operating on Sacramento-Yolo Port Railroad trachage will stop at 15th Street, Westgate, and no movement made over this crossing until a flagman has proceeded to the crossing and ascertained that it is safe to proceed.

All trains will report arrival at Cannon.

Eastward trains will make air brake test as prescribed in Rules 24-A and 24-B, Initial Terminal Road Train Air Brake Test, before entering Southern Pacific main track at Cannon.

HOLLAND BRANCH, Greendale, Highway Crossing No. 8J-9.9:

Movements of trains, engines, motors or cars approaching this highway crossing are restricted to twenty (20) MPH 800 feet from crossing.

MONTEZUMA BRANCH, Gum Grove Highway crossing No. 8-53.9, approximately 3.9 miles west of Rio Vista Jet.:

No train, motor, engine or car shall be operated over this crossing without first having been brought to a stop before entering the crossing. Proceed with caution.

WILLOTTA BRANCH, MP 10.6, HIGHWAY CROSSING No. 8F-10.6:

All trains, engines and cars approaching and entering this highway crossing will not exceed 10 MPH.

Light engine movements will be prepared to stop and flag unless flashing lights are operating.

FAIRFIELD, MP 11.6, WILLOTTA BRANCH:

Traffic signals are installed and in service at North Texas Street. Track circuits connected to the traffic signals extend approximately 130 feet each side of crossing and are so arranged when an engine or train occupies the circuit, traffic signals are preempted and will, after a pre-determined time, change to a flashing indication.

STOP before entering the crossing and when the traffic signals display a flashing indication and it is safe to do so, train or engine may proceed over the crossing.

SECOND SUBDIVISION

Pearson, MP 130.9, Highway Crossing:

All trains, engines and cars must come to a stop and no movement made over the crossing until a member of the train crew, or other competent employee, acting as a flagman, has protected the traffic on the highway. After stopping, and when traffic on the highway permits, and it is safe to proceed, the employee acting as a flagman shall display a red flag by day and a lighted red lantern by night from the leading end of engine or car until front end of engine or car passes over the crossing.

Automatic block signals between Marysville and Yuba City:

Two indication color light home signals located as follows: Signal 190 feet east of junction switch opposite Marysville depot governs eastward movements.

Signal 1074 feet west of Yuba City depot governs westward movements.

Movement of trains and yard engines within home signal limits will be made in accordance with indication of signals subject to the following regulations:

Flashing white light located on track side of Yuba City depot is to apprise trains and yard engines of condition of route between home signals. When flashing, route is unoccupied.

Before proceeding from Yuba City depot to Marysville, member of crew shall press push button mounted on pole adjacent to west crossover switch near Yuba City depot which holds route for westward movements for a period of ten (10) minutes and causes flashing light to burn steadily. Train or yard engine may then proceed, being governed by indication of home signal.

YUBA CITY, MP 137.5:

The "B" lead, track 99, crosses the main track at grade on the east side of Bridge & Plumas Streets. Movements on "B" lead, track 99, will have priority in use of the crossing and trains and yard engines on the main track will approach the crossing prepared to stop if the crossing is occupied or a conflicting movement is approaching the crossing on the intersecting track.

BRIDGE & PLUMAS STREETS, YUBA CITY:

Traffic signal pre-emption equipment is installed and in service at intersection of Bridge and Plumas Sts. Yuba City. Trach circuits connected to the traffic signals extend approximately 100 feet each side of the crossing on main and "B" lead tracks, except that on main track east of crossing, track circuit extends approximately 150 feet east of the edge of Bridge Street and are so arranged when a train or engine occupies the circuit, traffic signals will be pre-empted and will, after a predetermined time, change to flashing-red indication. When traffic signals display a flashing red indication, and it is safe to do so, train or engine may proceed over the crossing. When switching or through

movements are to be made on the main track affecting vehicular traffic on Bridge Street, wait for the traffic signals to display flashing-red indication before proceeding into the vehicular traffic lanes on Bridge Street.

Track circuits connected to the traffic signals are installed on Main Street and Park Avenue, Chico. Traffic signals are located at each of the intersections between First Street and Humbolt Street (just west of 9th St.) and at the intersections of 12th, 14th and 16th Streets.

The track circuits extend approximately 40 feet on each side of the intersections and are so arranged that when an engine or train occupies the circuit, traffic signals are preempted and signals governing movements on Main Street and Park Avenue will display a flashing yellow aspect and those governing movements on the intersecting streets will display a flashing red aspect. The flashing aspects will continue until the rear of the train clears the track circuit at the intersection.

Movements on Main Street and Park Avenue will proceed without stopping when the flashing yellow aspect is displayed.

The following regulations apply to movements on Main St, Chico:

Trains, cuts of cars, or single cars or locomotives shall not be permitted to stop or stand on any track located in Main St., except to do so for vehicular traffic, traffic signals, or in the event of emergencies such as derailments, mechanical failures and the like.

Train and engine movements are prohibited on Main Street, Chico, between the hours of 7:00 a.m. and 7:00 p.m.

Freight trains are limited to engine and 20 cars on Main St., Chico.

Trainmen are prohibited from diding on the side of engines and cars between MP 184.5 and MP 185.8 on the Esplanade at Chico.

In addition to displaying a red light to the rear as required by Rule 18-Modified, a lighted red fusee must be placed at the rear of all eastward movements on city streets at Chico.

Amber revolving light mounted on top of engine will be displayed for all movements within Chico yard limits. If amber light is inoperative or when using an engine not equipped with amber revolving light, a lighted red fusee will be displayed on leading end of engine in direction of movement.

INTERLOCKING PLANTS AND SIGNALS

MP 37.21, CLYDE, NAVAL AMMUNITION DEPOT RAIL-ROAD CROSSING, INTERLOCKING.

Home signal located 610 feet east of crossing governs movement of trains over the crossing westward. Home signal located 578 feet west of crossing governs movement of trains over the crossing eastward. The westward distant signal is located 2410 feet in advance of the home signal. The eastward distant signal is located 3269 feet west of the home signal.

Distant signals are permanently lighted and display yellow aspect only per Rule 285, "Proceed, preparing to stop at next signal," not exceeding fifteen (15) MPH.

Approach circuits extend 277 feet east and 669 feet west of home signals.

When train approaches the crossing and enters the approach circuit, the home signal should indicate PROCEED.

If home signal displays STOP indication, be governed by Rule 663.

When required to operate the emergency release under Rule 663 (C), if the home signal indication does not change to "PROCEED" it may display a flashing-red aspect in accordance with Rule 288. The yellow indicator light in the emergency release housing will also be illuminated. If no train or engine is seen or heard approaching on the conflicting route, on receiving hand signal from member of the crew stationed at the crossing, proceed at yard speed expecting to find engine or cars occupying the track ahead in the opposing approach and looking out for broken rail, misplaced switch or other obstructions.

Speed must not exceed fifteen (15) MPH between distant signals and crossing.

RULE 670 is modified at this location to permit reverse movements to be made within interlocking limits provided that engine or part of train is between interlocking home signals.

MP 109.17, SANKEY, WP CROSSING AND CONNECTION. Sacramento Northern:

Eastward — Inoperative distant signal located 3385 feet west of absolute signal.

Absolute Signal is a two-unit signal. Upper unit governs movements to WP main track. Lower unit governs movements on SN main track.

Westward — Inoperative distant signal located 3685 feet east of absolute signal.

Absolute Signal governs movements on SN main track.

Western Pacific:

Westward — Absolute Signal is a two-unit signal. Upper unit governs movements on WP main track. Lower unit gov-

governs movements on WP main track. Lower unit governs movements to SN main track.

Dual control switches provide entrance to and crossing over

WP main track. Instructions for operating Dual Control switches by hand are posted in telephone booth adjacent to the crossing.

Speed on approach curves and through turnouts of Dual

Speed on approach curves and through turnouts of Dual Control switches shall not exceed 10 miles per hour.

When train or engine is stopped by Absolute Signal displaying STOP indication, a member of the crew must contact WP Train Dispatcher by telephone. Rules 509 and 546 apply.

WOODLAND BRANCH. MP 1.55 MIKON, SP CROSSING INTERLOCKING.

Home signals located 500 feet east and west of crossing. Inoperative approach signals located 2000 feet from home signals display aspect per Rule 285.

Speed of trains shall not exceed fifteen (15) MPH between approach signals and home signals.

All trains, engines and cars must be brought to a stop before passing home signals at Southern Pacific crossing at Mikon and wait sixty (60) seconds before proceeding.

CLOCKWORK TIME RELEASE: When trains are stopped by signals governing the use of automatic interlocking, flagman must be sent to crossing to operate clockwork time release located in box at the crossing locked with switch lock.

Release must not be operated when trains are within interlocking limits as defined by interlocking home signals, or seen or heard approaching on intersecting tracks.

Approximately four minutes after release has been operated, a red indication light for train direction will be displayed over release, and home signal should indicate proceed. If, for any reason, home signal cannot indicate proceed, red indication light

on home signal (located on mast below home signal) will be displayed and this will be authority to proceed through interlocking limits.

If home signal is in stop position and red indication light on home signal (located on mast below home signal) is not displayed, train may proceed over crossing as provided by Rule 663.

Instructions for operating time release are posted inside of box.

HOLLAND BRANCH, BASCULE BRIDGE, INTERLOCKING:

Bascule type drawbridge at MP 90.66 west end of Westgate, Sacramento Yard. This is a combination rail and highway bridge. Normal position of lift span is closed and locked for train movements and vehicular traffic.

Automatic interlocking governs movements on the bridge: Two indication color light interlocking home signals displaying red and green aspects located 522 feet west of the bridge and 524 feet east of the bridge. APPROACH LIGHTED.

Approach signal for eastward movements displaying yellow aspect only per Rule 285, located 1551 feet west of the eastward home signal. This signal is approach lighted at a point 562 feet west of the signal. No approach signal for westward movements.

Approach circuits extend 2635 feet west and 1201 feet east of bridge.

All movements approaching and passing over the bridge will be made at yard speed, not exceeding ten (10) MPH.

If automatic interlocking home signal does not display a proceed indication, train or engine must be brought to a stop. Before passing home signal at Stop, the following regulations must be observed:

- (1) Member of the crew will inform the Lockmaster or his Assistant that signal is at Stop and movement will be made under flag protection. (Applies only when Lockmaster or his Assistant is on duty).
- (2) A member of the crew will examine the rail locks at the west end of the lift span of the bridge to determine that the locks are in normal position with the bridge in proper surface and alignment for rail movement.
- (3) Unless Lockmaster or his Assistant informs the crew that bridge is about to be raised, train or engine may proceed with caution on signal of member of crew acting as flagman.

Release mechanism adjacent to signal relay case at east end of the bridge and rail locks at west end of the lift span MUST NOT be operated by trainmen or enginemen.

SPEED RESTRICTIONS — in miles per hour
FIRST SUBDIVISION — Pages 1 and 2: Concord—Crossing No. 8-33.2, Cowell-Galindo Road Stop and Flag Concord—Between MP 33.2 and MP 34.9 St. Crossings 15 MPH Concord—Between MP 34.9 and MP 35.1 St. Crossings 25 MPH
MP 36.04 to MP 37.21—Eastward trains descending
Ohmer grade
Nichols, Road Crossing, MP 41.015 MPH
Shell Point — MP 43.59 SP CrossingStop (See Special Rule on Page 5)
301 Class Engines between Montezuma St.
(MP 46.66) Pittsburg and Concord
and MP 44.50
East leg of wve. West Pittsburg 5 MPH
ATSFe crossing, MP 46.24
Between Montezuma St. (MP 46.66) and
MP 48.06 Pittsburg
Pittsburg — All street crossings
(See Special Rule on Page 6)
Pittsburg — Columbia Street, MP 47.98
Between Vacaville Jct., MP 7.60 and Vacaville, MP 4.21 20 MPH
19th Street, Jct., SPCo. Washington, Jct., SPCo.
See Special Rule Page 4
Dozier Branch, Page 2: Eastward trains, Highway crossing MP 6.420 MPH
Montezuma Branch, Page 2: Between Creed and Montezuma20 MPH
Gum Grove, Highway crossing, MP 53.9Stop (See Special Rule on Page 7)
Willotta Branch, Page 2: Between Vacaville Jct. MP 7.60 and Willotta
MP 17.0220 MPH
MP 10.6, Highway Crossing
MP 11.6, Highway CrossingStop (See Special Rule on Page 8)
Holland Branch, Page 1: Between MP 86.95 and MP 15.77 all curves15 MPH
Greendale, Highway crossing, No. 8J-9.920 MPH (See Special Rule on Page 7)
Sacramento Yard
Sacramento, City Limits between MP 92.68 and MP 101.5
Except — All street crossings
Sacramento — Arterials, trains and yard enginesStop Sacramento — Traffic light signals
All movements governed by signal indication Sacramento.—Street intersections
When traffic officer on duty, all movements governed by traffic officer signals.
Swanston Line North Sacramento, Del Paso Blvd., Crossing No. 8E-0.5. Stop
SACRAMENTO-YOLO PORT RR:
Creed of trains and angines must not avoid ten (10) MPI

Speed of trains and engines must not exceed ten (10) MPH approaching and entering the intersection of Stone and Jefferson Boulevards west end of Westgate yard.

SPEED	RESTRIC	TIONS — in	miles	per	hour	
	TACABLE	D 9.				

SPEED RESTRICTIONS — in miles per hour
SECOND SUBDIVISION — Page 3:
Sacramento, "B" Street, MP 94.99 Jct. WPRR
Globe — MP 96.44 Junction WPRR
Del Paso, MP 99.2 — Street crossing
Rio Linda, Street crossings 102.4, 102.9, 103.5. 15 MPH Riego, MP 107.5 — Road crossing. 15 MPH
Sankey, MP 109.17 — WPRR crossing and connection 10 MPH
Sankey, MP 109.17 — WPRR crossing and connection. 10 MPH Pearson, MP 130.9 — Highway crossing
MP 134.3 — Arboga Highway crossing
Maryevilla MP 136 31 (Junction WPRR)
Westward trains and vard engines
Yuba City. City Limits — Between MP 136.71 and
MD 139 07
Yuba City, SP Crossing, MP 137.08
MP 138.8, Colusa Highway crossing east of Paloro25 MPH
Yuba City — Traffic light signals, governed by signal indication.
Yuba City, Street intersections —When traffic officer
on duty be governed by traffic officer signals. Sanders, MP 143.8 Road Crossing
MP 144.8 Encinal road crossing
Live Oak City limits, between MP 148.22 and MP 149.38.15 MPH
Live Oak ArterialsCaution
Live Oak, MP 149.6 Highway crossing
MP 158.6 East Biggs Highway crossing 15 MPH MP 159.5 Rio Bonito Highway crossing
Durham, MP 177.5 Highway crossing
MP 180.1 Savona Highway crossing
Stirling Jct. SP crossing MP 182.02Stop
Chico, MP 182.5 Highway crossing
Chico, Arterials — Train and Yard enginesStop
Chico-Airport line:
Crossing No. 186.0C — Cohasset Road 10 MPH
" " 186.3C — Rio Lindo Ave 15 MPH " 186.6C — East Ave
" 187.2C — Burnap Ave
" 187.5C — Lasson Ave
Woodland Branch, Page 4:
MP 2.1 Rose Orchard, highway crossing —
Reduce to 20 MPH 300 feet from crossing and to
15 MPH at crossing
MP 8.0 Kiesel Highway crossing
MP 8.0 Kiesel Highway crossing
MP 11.81, Conaway line
Woodland, MP 16.4, Road crossing Shell Oil Plant. 6 MPH
Tarke Branch, Page 5:
MP 1.6 Alamendra road crossing
Sutter, MP 5.1 Highway crossing
Speed Restrictions — General
Maximum speed through turnouts, crossovers, on sidings and other inside tracks10 MPH
Trains handling loaded air dump cars, steam
shovels, derricks, cranes, or pile drivers on own wheels
Maximum permissible speed, Trains and engines30 MPH
Speed restriction sign located at various places
where speed shall be reduced must be observed.
Speed permitted by city ordinances within city
limits as shown in above speed restriction table
does not dispense with the observance of Rule 93.

TABLE OF WEIGHT LIMITATIONS

BETWEEN	AND	GROSS WEIGHT (Car and Contents)
Concord Sacramento	Sacramento Swanston Woodland Pearson Mulberry	263,000
Sacramento ,, ,, ,, Live Oak Colusa Jct.	Oxford Vacaville Willotta Saxon Montezuma Peachton Sutter	220,000
Sutter Durham Sankey Mulberry	Tarke Oroville Jct. Catlett Chico Airport	169,000

YARD LIMITS

FAST MD

WEST MP	YARD	EAST MP
31.8	Concord	32.4
38.6	Port Chicago	39.7
40.6	Nichols-McAvoy	43.25
44.5	Pittsburg	48.6
49.7	Montezuma Branch	64.6
4.2	Vacaville-Cannon	
7.6	Willotta Branch	17.1
90.4	Sacramento	101.5
1.85	Woodland Branch	0.0
11.5	Conaway-Woodland	16.7
102.5	Rio Linda-Elverta	104.7
109.2	Catlett Bch.	
129.7	Pearson Branch	134.4
134.7	Marysville-Yba City	139.6
139.6	Colusa Jct.	140.2
0.0	Tarke Bch.	
4.9	Sutter	
149.3	Peachton Bch.	
177.3	Oroville Jct. Bch.	164.8
181.8	Chico	
101.0	Offico	100.0

INTERCHANGE TRACKS

Clyde	- Naval Ammunition Depot R. R.
Port Chicago	— A. T. & S. F. Ry.
McAvoy	S. P. R. R.
Sacramento	— W. P. R. R.
	— S. P. R. R.
	C. C. T. Co.
Marysville	— W. P. R. R.
	S. P. R. R.
Chico	— S. P. R. R.

SIDE AND OVERHEAD OBSTRUCTIONS

(Not Standard Clearance)

Chico — Trees, side and overhead. Clarksburg — Sugar plant eaves — side. Sacramento — Subway, side and overhead. GENERAL RULE M. Add. Employees are prohibited from riding or walking on the roof of any moving car.

RULE 4-B. Instructions issued in the form of "NOTICE NO...." over the signature of the Superintendent and placed at terminals where runs begin or end will continue in effect until cancelled. Trainmen and Enginemen and others concerned in the movement of train and yard engines are required to familiarize themselves with the contents of such Notices and comply with them.

RULE 11 (A). During the hours of darkness, or when visibility of motorists is impaired by weather conditions, the front brakeman on all trains entering or leaving the Modesto Yard at 9th and E Streets must drop a 5-minute lighted fusee to the pavement as near the center of the intersection as possible. The rear brakeman will extinguish the fusee if it can be done with safety.

RULE 17 (C). Headlight must be dimmed while moving over 9th Street, Modesto.

RULE 17 (F). First line of this rule is extended to include the word "Amber" as well as the word "White." Reverse movements over grade crossings must be protected per the provisions of this rule by engineer operating the oscillating white (or amber) light, reversing handle located inside the locomotive cab roof as necessary so that this light is displayed in the direction of movement prior to entering the crossing.

RULE 21 of the Operating Department is suspended.

RULE 30. The Engine bell must be sounded 1320 feet in advance of public Crossings at grade and kept ringing until engine has passed over the crossing.

RULE 34. When seat is available, head brakeman will ride in forward cab of engine.

RULE S-72. Westward trains are superior to eastward trains of the same class.

RULE 103 (B). When leaving cars on main track or passing tracks at Escalon or Aurora, all private crossings must be left open.

RULE 104. Main track switches in yards must be left lined and locked for main track. Switch leading to S. P. transfer, Modesto, must be kept lined for transfer, except when using Lyng spur. Switches in joint M&ET-TS Yard, Modesto, must be kept locked and lined for lead tracks.

RULE 340. Before opening a main track switch, train or engine crew must know by view of entire block to be entered that no train or engine is approaching within or adjacent to the block; and, when the view is obstructed or during inclement weather, flag or other authorized protection must be provided.

Train or engine must remain clear of main track three minutes after the switch is opened and movement must not exceed restricted speed to the next governing signal in advance.

"NOTE" Rule 340 does not apply at spring switches or in traffic control territory where other rules and instructions are applicable.

Present Rule 520 is cancelled, the above replacing both Rule 340 and Rule 520.

RULES 811-812. Permission of an Operating Department officer is required for absences from or unavailability for duty except in cases of valid emergency.

RULE 900. Conductors will see that front brakeman rides on engine between all stations.

RULE 1019. Diesel locomotives must be brought to full stop prior to and during any inspection or maintenance of the locomotives.

17

STOCKTON: Tidewater Southern trains and engines use Western Pacific tracks in Stockton Yard.

STOCKTON YARD:

- 1. Normal position for switch between No. 2 and No. 3 leads at the west end of the leads is lined for No. 2 lead.
- 2. Normal position for switch between No. 1 and No. 2 leads at west end of leads is lined for No. 2 lead.
- 3. Normal position for switch leading to Tidewater Southern main track off No. 1 lead is lined for No. 1 lead.
- ORTEGA: Arrival time at Stockton Yard will be determined by the actual time of arrival at Ortega. This time will be used for:
 - 1. Reporting arrival to the train dispatcher.
 - 2. Wheel reports.
 - 3. Delay reports and final terminal delay.
- MANTECA JUNCTION: Before picking up or moving cars left at Manteca Junction for any period of time, inspect all journal boxes to know that brasses and fittings have not been removed.
- MODESTO: Tracks in Modesto between E Street and Tuolumne River Bridge and Joint yard are operated jointly with the M&ET Co.

All movement on 9th Street, Modesto, will be governed by traffic signal indication except at 9th and B Streets where traffic lights are synchronized with track circuit and when trains enter circuit lights go red on both 9th and B Streets to to stop vehicular traffic and allow trains to proceed through intersection. Trains must not stand in circuit but should proceed so as to reduce delay to vehicular traffic to a minimum.

At 9th and P Streets traffic signals are synchronized with track circuits. Trains and engines will not foul the intersection until signals governing movement through the intersection display flashing red. Signal timing circuits are so arranged that flashing red will not be displayed until after the end of a normal green period for 9th Street traffic.

City ordinances require trains and yard engines within 100 feet of an intersection to stop immediately on the approach of any police, ambulance or fire apparatus sounding siren or signal gong, except they may be at the time on, or crossing an intersection in which event crossing must be cleared and then stop. Civil, military or funeral processions must not be obstructed.

ROAD CROSSINGS: No train, engine or car shall be operated over any crossing where special signs appear reading: STOP—FLAG HIGHWAY TRAFFIC or CAUTION—FLAG HIGH-WAY TRAFFIC unless same be first brought to a stop or caution observed (as indicated by sign) and traffic on crossing protected by member of train crew or other competent employee acting as flagman.

MECHANICAL: Dead engines handled in trains must be placed next to caboose or engine. Prior to movement of diesel locomotives dead in train, the automatic brake valve must be cut out and handle placed in running position; distributing valve pop set to 15 pounds pressure; dead engine feature cut in; main battery switch pulled and reverser locked in neutral position. Flat spots on: 1. locomotive wheels which are not in excess of 2½ inches in length; 2. on loaded freight car wheels which are not in excess of $2\frac{1}{2}$ inches in length; 3. on empty freight car wheels which are not in excess of $3\frac{1}{2}$ inches in length; and 4. on passenger car wheels which are not in excess of 21/2 inches in length; the locomotive or car may be moved without speed restrictions. If the flat spot exceeds these limitations, then the train or engine is to be operated at a speed not to exceed ten (10) MPH to the first terminal where the locomotive or car can be set out or repairs made.

INTERLOCKING PLANTS AND SIGNALS

MP 32.7 — SP Crossing — Remote Controlled.

Remote controlled interlocking signals are located each side of crossing and are under the control of the Southern Pacific Train Dispatcher. Fixed signs are located approximately 2640 feet east and west of interlocking signals.

Approach circuits 500 ft. in advance of interlocking signals indicate to the Southern Pacific Train Dispatcher the approach of a Tidewater Southern train. Trains must proceed with caution within the approach circuits and will proceed on proper signal indication. Light movements of 44 ton locomotives through this interlocking are prohibited. Diesel engine throttle must be placed in off position while locomotive moving over crossing frog.

If signals fail to indicate proceed after a reasonable time, a member of the train crew must contact the Southern Pacific Train Dispatcher by telephone located at the crossing.

Emergency time release box is located adjacent to the crossing. The box is marked T.S.Ry. and locked with a switch padlock. Instructions for the operation of the emergency release are posted in the box.

The emergency release must only be operated when instructed to do so by the Southern Pacific dispatcher or if conditions are such that the Southern Pacific dispatcher cannot be contacted. The release may be operated only after it has been determined that no trains can be seen or heard approaching on the SP tracks. Rule 663 will govern after the emergency release has been operated.

Any defect in connection with this interlocker must be reported immediately to the Southern Pacific Train Dispatcher that he may notify signal maintainer. SP telephone line circuit switch is located inside the telephone booth above the door.

Operators of motor cars must stop at Southern Pacific crossing and when there is more than one man on the car the crossing will be flagged. Operator must know there are no Southern Pacific trains approaching before going over crossing.

YARD LIMITS

WEST MP	YARD	EAST MP
0.0	Stockton	2.3
3.0	Manteca Jct.	5.8
0.0	Manteca Jct. (Branch)	0.3
4.2	Manteca	
13.5	Simms	15.2
25.3	McHenry	
28.7	Modesto	33.7
0.0	Chemurgic Branch	2.9
46.1	Turlock	47.9

46 A. N.

TO TIDEWATER SOUTHERIN
SPEED RESTRICTIONS in miles per hour:
Maximum permissible speed, trains and engines 30 MPH Except between MP 35.1 and 43.7
sidings and other inside tracks
M.P. 14.2 - Simms - Highway Crossing 10 MPH
M.P. 17.0 - Alba - Highway Crossing Stop and Flag
M.P. 19.3 - Curve West of Escalon
M.P. 27.2 - Highway Crossing - Eastward Trains 10 MPH Westward Trains 20 MPH
Modesto - City Limits
Coldwell Avenue Lyng SpurFlag
M.P. 31.65 - Tuolumne River Trestle
M.P. 41.3 - Hatch - Highway Crossing and Yard 15 MPH Turlock - City Limits
Lander Avenue
Manteca Branch:
Manteca City Limits
INTERCHANGE TRACKS
Stockton — WP
SP
ATSFe
CCT ST&E
Modesto — SP
M&ET
Turlock — SP
RAILROAD SURGEONS
M. E. Childress, M.D Chief Surgeon San Francisco, Calif. E. G. Hermosillo, M.D Local Surgeon Stockton, Calif. P. H. McHugh, M.D Local Surgeon Stockton, Calif. J. D. Wilson, M.D Local Surgeon Stockton, Calif.
H. F. Quinn, M.D. Local Surgeon. Stockton, Calif. V. S. Solis, M.D. Local Surgeon. Stockton, Calif.
O. R. Vannucci, M.D Local Surgeon Stockton, Calif. H. J. Zeiter Opthalmologist Stockton, Calif. W. H. Plageman, M.D. Oculist Stockton, Calif.
G. B. Harter, M.D. Local Surgeon Modesto, Calif. F. N. Hatch, M.D. Local Surgeon Modesto, Calif.
R. D. Husband, M.D Local Surgeon Modesto, Calif. R. R. Treadwell, M.D Local Surgeon Modesto, Calif.
P. von Hungen, M.D Local Surgeon Escalon, Calif. M. C. Collins, M.D Local Surgeon Turlock, Calif. E. H. Johnson, M.D Local Surgeon Turlock, Calif.
R. C. Winter, M.D Local Surgeon Manteca, Calif.
WATCH INSPECTORS
K. I. Dunlap, Manager of Time Service, San Francisco
W. K. Banks & Son, Watch Inspector
Modesto, Call.

TONNAGE RATING IN TRAILING TONS

Between	And	380 H. P. Diesels	600 H. P. Diesels	1000 H. P. Diesels
Concord	Clyde	200	500	700
Clyde Except Eastwa	Pittsburg ard Montezuma St.	650	1500	2000
to Harbor S	t., Pittsburg	400	750	1000
	vard Harbor St. to St., Pittsburg	200	600	800
Montezuma	Dozier	700	1500	2000
Dozier	Sacramento	800	2000	3000
Except from I	A CONTRACT OF THE PARTY OF THE	550	1000	1500
Vacaville Jct.	Vacaville	800	1500	2000
Vacaville Jct.	Willotta	800	1500	2000
Sacramento	Marysville	800	2000	3000
Marysville	Yuba City	450	1000	1500
Yuba City	Chico	800	2000	3000
Colusa Jct.	Tarke	800	2000	3000
Broderick	Woodland	800	2000	3000
Broderick	Oxford	700	1500	2000
So. Sacramento	Concord	301 AD	3400 tons	per unit
Stockton	Turlock	800	2000	3000

Note — Safe operating limits as prescribed in operating instructions for type of locomotive in use must be observed.

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

Engine Nos.	Unit H. P.	Maximum Speed
144-145-146	380	35 MPH
301 AD	1500	65 ''
401-402	600	45 ''
403-404	1000	50 ''
405	660	35 ''
745-746-747	1000	50 "

When handled dead-in-train:

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