

SOUTHERN PACIFIC COMPANY



SHASTA DIVISION SPECIAL INSTRUCTIONS

No. 2

EFFECTIVE SUNDAY, AUGUST 13, 1950

AT 12:01 A. M.,

PACIFIC STANDARD TIME

SUPERSEDING SPECIAL INSTRUCTIONS No. 1

THESE INSTRUCTIONS CONSTITUTE A PART
OF THE TIMETABLE CURRENTLY IN
EFFECT

R. E. HALLAWELL,
General Manager.

E. D. MOODY,
H. R. HUGHES,
Assistant General Managers.

C. H. GRANT,
General Superintendent of
Transportation.

M. S. OLSEN,
Superintendent of Transportation.

J. A. McKINNON,
Superintendent.

SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

RULE A. All, or portions of, the following rules have been changed. Pastors have been printed covering these changes, and employes must have the pasters in their copy of Book of Rules:

Rules	10 (H)	295
	15	297
	26	705
	99	707
	104 (D)	708
	210	763
	221	837
	271	

Definition of **FIXED SIGNAL** is changed to read as follows:

"A signal of fixed location indicating a condition affecting the movement of a train, such as train-order, automatic, interlocking or absolute signal; switch, stop boards, yard limit boards or speed boards."

RULE M. Employes 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 employes must be familiar with their location and avoid personal injury.

RULES 1(A), 2(A), 3(A) and 3(B) are cancelled, and Rules 1, 2 and 3 are amended as follows:

"RULE 1. Standard time, obtained from an authorized observatory, will be transmitted by telegraph daily except Sundays and holidays. Clocks bearing the prescribed sign 'Standard Clock' will be maintained at designated places, as shown in timetable, and employes charged with the duty of receiving time signal must set standard clock to agree with time signal and make record on prescribed form of any variation.

"At enginehouses and other locations of standard clocks where time signal is not received, employe in charge of standard clock must obtain correct time from nearest train-order operator by telephone, during, or after, transmittal of time signal, and set the clock."

"RULE 2. Each of the following employes, and such other employes as may be designated, must carry, while on duty, a reliable railroad grade watch, and must carry a watch certificate, Form CS-2821, which must be presented to an authorized watch inspector for renewal during the month of November of each year:

*Train-Order Operators	Outside Hostlers
*Signal Operators	Outside Hostler Helpers
*Except when assigned in offices where a standard clock is located.	General Yardmasters
Conductors	Asst. General Yardmasters
Brakemen	Yardmasters
Engineers	Asst. Yardmasters
Firemen	Yard-Engine Foremen
	Yardmen
	Switch Tenders
	Herders

"Employes must show their watches and certificates to division officers, authorized watch inspectors and traveling watch inspectors upon request."

"RULE 3. Conductors, yard-engine foremen, engineers and outside hostlers must compare their watches with a standard clock, and conductors and yard-engine foremen must compare time with their engineers, when commencing each day's work; and conductors must compare time with their brakemen, yard-engine foremen with their yardmen, and engineers with their firemen, as soon thereafter as practicable.

"The time when watch is compared with standard clock, and any variation of such watch, if not set to correct time, must be recorded on prescribed form.

"When an additional engine is added to a train en route, engineer of that engine must compare time with the conductor or an engineer of the train.

"When conductors and engineers tie up at a point where there is no standard clock, time must be compared with train-order operator on duty when commencing each day's work. If this cannot be done, time must be compared with conductor or engineer of first available train.

"At train-order offices and interlockings where there is no standard clock, train-order operators and signal operators must, during each tour of duty, compare time with time signal if possible, otherwise with a train-order operator where standard clock is maintained, or time signal is received.

"Watches must be set to correct time if they reflect a variation of more than twenty seconds from correct time when comparison is made as prescribed in this rule."

RULE 7 (B). Yardmen must use green flag by day and green light by night in giving proceed signals for movement of trains and engines at Gerber, Dunsmuir Yard, Dunsmuir, Klamath Falls Yard and Klamath Falls.

RULE 10 (J) is revised to read as follows:

"Speed boards will be located to the right of track in direction of approach where practicable, except on double track where trains keep to the left, they will be located to the left if proximity of adjoining main track prevents location to the right.

"Speed boards that prescribe reduction in speed will be located three-fourths mile from initial point of restriction. Speed boards that authorize an increase in speed will be located at the point where higher speed is permissible, and speed may be increased accordingly as soon as rear of train has passed the speed board."

(no change in Figs. 1, 2 and 3)

"The higher number on speed board indicates the maximum speed of trains consisting entirely of passenger equipment, and the lower number indicates the maximum speed of all other trains. Where but one number is shown it indicates the maximum speed of all trains.

"Round yellow speed boards indicate by black figures the maximum speed of certain passenger trains designated by special instructions in the timetable or by timetable bulletin; speed indicated by oval white speed boards applies to those trains unless a round yellow speed board is displayed on same post below the oval speed board.

"Certain speed boards have the word **SIGNAL** above the figures. Such speed boards in approach to a distant signal indicate the speed that must not be exceeded while engine is passing the distant signal three-fourths mile beyond the speed board, unless distant signal can plainly be seen to be displaying proceed indication; and such speed boards in approach to a home signal indicate the speed that must not be exceeded while approaching the home signal three-fourths mile beyond the speed board, until indication of home signal can plainly be seen. The word **SIGNAL** on an oval speed board also applies to a round yellow speed board if displayed on the same post."

Speed boards prescribing an increase in speed will not be installed on branches. Speed Restrictions tables will indicate permissible speeds between mile post locations named.

RULE 15. Each torpedo placed will be duplicated on opposite rail during snow storms, or when snow on rails.

RULE 17. Oscillating white light on engines so equipped must be operated during stormy weather day and night, foggy weather during daylight hours only and must be operated approaching road crossings at grade both day and night under all conditions.

Oscillating red light on engines so equipped shall be operated by day or night, only when a train has stopped, or is stopping, under circumstances that may cause an adjacent track to be fouled, and will not in any way relieve trainmen and engine-men from compliance with Rules 99 and 102. A train or engine on adjacent track must stop at once, and may proceed only after ascertaining that track is safe for passage of trains.

RULES 17, 17 (B), 17 (C) and S-17. Headlight will be displayed by day on all passenger and freight trains and light engines between Gerber and Redding, and between Jerome and Crescent Lake as an aid to motorists. When so displayed the provisions of Rules 17, 17 (B), 17 (C) and S-17 will not apply unless other conditions require.

RULE 19. Classification lamps on rear of DEF and DERS class engines will be considered as marker lamps by day or by night only when such lamps are lighted.

RULE 34. On multiple-unit Diesel engines in freight service, the fireman must not leave the cab while the train is in motion unless authorized by the engineer and unless a member of the train crew is in the cab in a position to communicate with the engineer the indication of signals affecting the movement of train as provided for in Rule 34. If a member of the train crew is not in the cab, and not engaged in other duties, the engineer may signal him to come to the cab by giving two short sounds of the whistle repeated twice (oo oo oo). If a condition arises which necessitates the fireman leaving the cab at a time that a member of the train crew is absent, which cannot await a regular stop of the train, the train must be stopped during the time that the fireman is absent from the cab.

RULE 102. Should a passenger train break in two or an emergency application of brakes occur while in motion on grade, head brakeman will immediately go towards rear, close angle cock at opening if train has parted, set hand brakes, and turn up retainers on detached portion. After train is coupled air must be applied from engine before hand brakes and retainers are released.

If necessary to leave detached portion on main track, rear truck of detached portion ascending grade or lead truck of detached portion descending grade must be blocked or chained in such manner as to derail car should they start.

RULE 221. Within block system limits only, third and sixth paragraphs of Rule 221 are modified to the extent that it will no longer be necessary for train to obtain clearance if train-order signal at an open train-order office is first seen and remains in proceed position.

If no orders are held for trains from the same direction, or if orders held are for trains originating only, the operator may clear the signal before train reaches such view-point.

Also, within block system limits only, signal may be cleared for a first-class train for which there are no orders, when orders are held for another train from the same direction, provided such orders do not restrict the train addressed at that station, and further provided that permission is first obtained from train dispatcher. Such permission must not be given if the train to which orders are addressed has passed the last open train-order office.

Last paragraph is changed to read as follows:

"When light is not displayed in a train-order signal at night, day indication of the signal arm will govern, and report must be made from next open office, unless special instructions provide that light will not be displayed."

RULE 281B. Movements governed by semaphore type diverging route signals displaying "Proceed on Diverging Route", Figs. 1 and 2, must be made with caution.

RULES 281 and 281D. Movements against the current of traffic governed by semaphore type dwarf signals displaying "Proceed", Fig. 5, Rule 281; or by light type dwarf signals displaying "Proceed Prepared to Stop at Next Home Signal", Fig. 7, Rule 281D, must be made with caution, and position of switches observed.

RULE 505. AUTOMATIC BLOCK SYSTEM

PUSH BUTTONS

Where signal protection is provided for movements from an adjacent track to main track, push buttons and lights are installed in box near each of the two signals, with time-release feature, to clear signals on one track when the control circuit on the other track is occupied.

Train on main track to let train on siding pass may clear signal on siding by pressing button bearing number of signal on siding until light appears. Train on siding to let train on main track pass should not pass Approach Circuit sign, but when necessary to do so, may clear signal on main track by pressing button bearing number of signal on main track. Further instructions posted inside push button box.

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 switch indicator indicates block clear on opposite track. Within C.T.C. limits 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 lock position until all movements over the switch are completed, switch returned to normal position and locked, (except at both crossovers opposite train-order office and Siskiyou main track at Black Butte, where lock levers must be returned to normal position after switch is reversed). After movements are completed switch must be returned to normal position and locked. Lock-box door must then be closed and locked. Within C.T.C. limits dispatcher must also be notified by telephone when completed.

When switch 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.

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, dispatcher must be notified immediately, and movement made only after flag protection provided on both tracks.

RULE 535. SPRING SWITCHES

Maximum speed for trailing movement when the spring is to be actuated, and maximum speed for facing movement with switch points in normal position, as indicated in speed restrictions tables must not be exceeded.

A spring switch with facing point lock must not be trailed through unless switch target displays the letters "SS" in normal position, or switch has been lined for the movement.

When a signal with triangular number plate protecting a spring switch with facing point lock displays stop indication, member of crew must open and close spring switch by hand, removing any obstruction. If signal does not then display proceed indication, switch must be hand thrown for the movement.

When a spring switch or spring derail is hand thrown, trainman so setting same must again set it for normal position after movement has been completed, unless he has arranged for another trainman to do so.

RULE 536. Wheels of tenders must not be considered as engine wheels.

RULE 760. CENTRALIZED TRAFFIC CONTROL SYSTEM.

White light which may appear on side of relay housings is maintainer's call light, but when train has been stopped by an absolute signal and white light is observed burning, member of crew will communicate with dispatcher even though another train may be seen approaching.

Instructions for operating dual control switch machines and electric locks are posted in telephone booths, or inside of electric lock boxes.

GENERAL REGULATIONS

RULE 813. Oregon law prohibits use of any person less than 21 years of age as flagman, or in connection with operation of any passenger train.

RULE 824. At terminals where instructions require application of hand brakes on freight trains, outgoing crews must not release hand brakes until road engine is coupled and brake system charged.

RULE 825. Fifth and sixth paragraphs are revised to read as follows:

"When empty cars are stored on tracks adjacent to buildings an opening of at least forty feet must be made every five car-lengths.

"Outfit cars must not be left adjacent to oil or gasoline loading or unloading locations, lumber yards, storehouses, warehouses or other buildings. When placed on tracks without fire protection, an opening of at least forty feet must be made every five car-lengths. Diner should not be separated from kitchen car."

RULE 826. When a sign reading "Occupied Outfit Cars" is attached to switch lock, the outfit cars must not be coupled to, nor moved, until occupants have been notified, and permission given by foreman or his representative.

RULE 827. Unless otherwise provided, when conditions are favorable and in the judgment of conductor it is safe, freight trains need not stop for train inspection. Where stops are made for other reasons, inspection of trains must be made as often as practicable. When weather conditions restrict visibility, or other conditions require, conductor will designate stops for inspection which in his judgment are necessary.

Trains, including military trains, made up in part of freight cars or caboose equipped with cast iron wheels, are required to comply with rules and timetable instructions applying to freight trains as they relate to stopping for train inspection, and speed restrictions.

When train handling logs (except in gondolas) takes siding to meet an opposing train or allow a following train to pass, such train must be thoroughly inspected to see that proper clearance exists to insure safe movement for the expected train, and no movement of train on siding attempted until expected train has passed.

Between sunset and sunrise, two Dietz lanterns must be placed on rear of caboose and trainmen must observe track for fallen logs.

Cars bearing placards denoting contents are explosive, inflammable, poisonous, or otherwise dangerous, must be given careful inspection at all points where train inspection is made.

When practicable, trainman must ride rear platform or in rear car on all trains, in position where he can observe fire that might be set from moving train, when passing through wooden lined tunnels and over long, open-decked wood trestles.

RULE 828 is revised to read as follows:

"Speed of freight trains must not exceed eight miles per hour for a distance sufficient to permit running inspection when starting. Trainmen must closely watch to see that brakes are released, and if necessary must signal enginemen to stop if wheels are found sliding. Conductor must promptly mail to the Superintendent a report of flat wheels discovered under cars in his train.

RULE 831 is revised to read as follows:

"Occupied wooden frame outfit cars must be placed next ahead of passenger cars if handled in mixed trains, or next ahead of caboose if handled in freight trains.

"Women and children must not be permitted to ride in outfit cars when moved in freight train. Other occupants of outfit cars must remain inside and not ride on top, sides or between these and other cars during course of road or yard movements."

RULE 832. Wooden underframe cars of any class must be placed next ahead of caboose, except that when handled in the same train with wooden frame outfit cars they must be placed next ahead of the outfit cars.

RULE 834. Will not apply to trains consisting entirely of logs.

RULE 837. In yards cars must not be left closer than one car length from fouling point of other tracks.

RULE 849. Train heat valve will not be opened on eastward or westward passenger trains approaching Gerber, Dunsmuir and Klamath Falls unless it is known in advance that engine is to be changed or train is to be switched in which case second paragraph of Rule 849 must be complied with. In event it is necessary to detach engine or cars after arrival precaution must be taken by employes to see that injury does not result from escaping steam in uncoupling steam connections.

RULE 869 is cancelled.

RULE 873. Sanders must not be operated within 150 feet of power operated switches.

Blow-off cocks must not be opened when passing over open-deck bridges and trestles.

AIR BRAKE RULES

RULE 3. Brake pipe pressure on Streamliners SHASTA DAYLIGHT and CASCADE is 110 pounds. When necessary to use steam engine to handle train, such engine must carry 110 pounds brake pipe pressure. High pressure side of air compressor governor of steam engine must be set for 140 pounds and low pressure side for 130 pounds.

RULE 25. Rear-end test must be made as indicated in accordance with Air Brake Rule 25(b).

When helper engine is in train, after rear-end test has been made, the lead engineer must not attempt to start until helper engineer has sounded Signal 14(b). The helper engineer must not sound whistle until signal is received from rear.

Whenever passenger equipment is handled on freight trains and a rear-end test is made, considerable time must elapse before brake pipe pressure will build up sufficiently to release the brakes on passenger equipment. Conductor will advise engineer when they have such passenger equipment on rear of train so he may allow a sufficient length of time for brakes to release before attempting to start train.

RULE 38. Road test on Streamliners SHASTA DAYLIGHT and CASCADE will be made at Dunsmuir and Klamath Falls as prescribed in last two paragraphs of Rule 38.

If electro-pneumatic brakes are inoperative or continuity of brake pipe has been disturbed, rear-end test at these stations shall be made as prescribed in paragraph 2 of this rule.

MISCELLANEOUS

1. Helper engines coupled in middle or rear of train must be cut off from forward portion before taking water, and where lead engine cannot handle forward portion without assistance of helper, latter must not be cut off until forward portion has stopped beyond water tank.

4. Helper service:

No helper engine will be placed behind wooden underframe cars or cabooses.

Engines weighing more than 320,000 pounds on drivers will not be placed behind steel underframe cabooses.

In no case will more than one helper engine be placed behind steel underframe cabooses.

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.

Helper or doubleheader engines must not be placed on head-end of freight trains powered by DEF class engines.

AC or MM class engines must not be coupled together in helper service, and not more than two F, Mt or heavier class engines, nor more than three smaller class engines, be coupled together in rear of train.

When coupled, 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 75% of the engine rating of the helper, or helpers coupled, next ahead of caboose.

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

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.

On grades, road engine and helper must not be cut off from train at the same time without hand brakes being securely set.

4(a). Pushing trains out of yards:

No engine will be placed behind wooden underframe caboose or other wooden frame equipment.

Engines weighing more than 320,000 pounds on the drivers will not be placed behind steel underframe cabooses.

Air will not be coupled through pusher engine.

Yard engines regularly so used will be equipped with Russell-Jordan device to hold the coupler pin from dropping, thus making it unnecessary for employes to uncouple the pusher engine when cutting off.

In no case shall the knuckle be removed, or closed, or cutting lever temporarily fastened in release position on a pusher engine, as means of preventing coupling being made.

Unless local conditions require, it will not be necessary to stop trains to detach pusher engines.

5. While train is on main track oscillating red light on rear of trains so equipped must be operated continuously by night, and by day when range of vision is impaired by fog, rain, or other adverse condition. Light must be extinguished when train is clear of main track. Red light shall be turned on and turned off by trainmen. Display of red light does not relieve conductors or engineers from providing proper flag protection, or from complying with other rules.

14. Enginemen will operate sprinklers on engines so equipped when passing through tunnels, and on all bridges. If engine is not equipped with sprinkler and it is possible to do so, tire coolers should be operated through tunnels and on bridges.

25. Electric hand lamps may be used for displaying white light only, except that yardmen may use electric lamp with green light in giving signals to trains entering or leaving yard tracks during night hours.

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	
A.....	70	50	30
AC.....	60	40	25
B.....	50	35	30
C-2, 4, 5, 8, 9, 10, 18, 19, 26, 27, 28, 29.....	40	35	30
DEF-1 (6122 to 6137).....	65	50	30
DEF-1 (6138 and 6139).....	55	50	30
DEF-2, 3, 4, 5, 6.....	55	50	30
DEP-3, 4, 7.....	95	70	30
DEP-5, 6.....	90	70	30
DERS-1, 2, 4 to 7.....	50	40	40
DERS-200, 201.....	40	40	40
DES-1 to 7; 100 to 109.....	40	40	40
DES-200, 201.....	30	30	30
F.....	50	40	30
GS.....	75	50	30
M.....	50	35	25
Mk-2, 4.....	40	30	30
Mk-5, 6, 7, 8, 9.....	50	40	30
Mk-10, 11.....	35	30	30
MM.....	35	30	25
Mt.....	75	50	30
P-1, 3, 4, 5, 6, 11.....	65	50	30
P-7, 8, 10, 12.....	75	50	30
S.....	20	20	20
SE.....	20	20	20
SP.....	50	35	30
T-1, 8, 23, 28, 31.....	50	35	30
T-26, 32, 37, 40.....	60	40	30
TW.....	40	30	30
GNRy: N-3.....	50	35	30
GNRy: F-5.....	40	30	30
GNRy: H-6.....	40	30	30
GNRy: O-1.....	40	30	30
GNRy: Q.....	30	30	30
Any engine not listed.....	35	35	25

Steam or Diesel engines when operated in backward motion must not exceed 30 MPH on all curves and 20 MPH when approaching highway or street crossings at grade.

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

Engines with tenders having water capacity of 7,000 gallons or less, except classes 70-R-1 and 70-SC-1, must not exceed 50 MPH.

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 or equipment is to be moved. Such engine or equipment must not be handled in train until train-order designating maximum speed is issued.

Maximum speed of trains handling dead engines of S or SE class 20 MPH; other steam engines 30 MPH; and Diesel engines the speed shown for same engine running forward light.

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.

When train-order is received indicating that main track is out of service and that trains are to be detoured through a siding or other track, or over a shoofly, necessitating a reduction in normal train speed, signal 16(f) must be sounded on passenger trains one mile before reaching point where train must reduce speed, which must be acknowledged by whistle signal 14(g).

SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT	MPH MAIN TRACKS OTHER THAN BRANCHES	MPH MAIN TRACKS ON BRANCHES
Steel pile-drivers.....	40*	30*
Relief outfits with steam derrick, except:..... (Relief outfits 7014 and 7025 must not be operated on any branch).	35*	25*
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.....	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 boards.

OTHER MAXIMUM SPEEDS	MPH PASSEN- GER TRAINS	MPH FREIGHT AND MIXED TRAINS
Baggage-express cars SP-5810 to 5874, incl.....	60	50
Foreign steel-wheel cars not equipped with high speed trucks.....	60	50
Trains handling not more than three wooden underframe passenger carrying cars.....	50*	50*
Trains handling more than three wooden under- frame passenger carrying cars.....	40*	40*
Trains of deadhead equipment, with caboos.....	50	..
Passenger trains, with caboose.....	50	..
Engine and caboose only, except:.....	..	50
must not exceed speed for same engine run- ning forward light.		
Engine, flanger and caboose only, except:.....	..	40
On curves.....	..	30
Logs loaded on flat or logging cars, except:...	..	25
On curves.....	..	20
Through truss bridges, tunnels, and passing stations.....	..	15
Trains handling beets loaded in rack equipped flat cars.....	..	40

*Wooden underframe passenger carrying cars must not be handled in regular passenger trains. When handled in other than regular passenger trains they must be kept together and handled on the rear.

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.

Where mail, papers, or ice are to be dispatched from passenger trains at points where train does not stop, slow down sufficiently to permit safe dispatch without hazard, and stop at such stations for this purpose if train is moving on adjoining track between passenger train and point of exchange.

When moving against current of traffic, or when movement is not protected by block signals, maximum speed of passenger trains 50 MPH, freight and mixed trains and engines 40 MPH, but must not exceed speed restrictions 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—REDDING SUBDIVISION

RULE 10 (J). Round yellow speed boards indicate the speed restrictions applying to Streamliners SHASTA DAY-LIGHT and CASCADE with DEP class engine only.

Speed boards to left of track:

Eastward	Reading	Westward	Reading
MP 258.50	50-45-40	MP 214.85	35
MP 270.25	65-60-50	MP 224.58	25
MP 273.35	60-55-50	MP 244.49	65-60-50
MP 285.18	55-50		

Speed boards to right of track with one track intervening:

Eastward	Reading
MP 257.25	25

Eastward speed board at MP 272.06 is 0.63 mile instead of three-fourths mile from point of restriction.

RULE 14(d). As specified below, — — — — o will be indication that flagman may return from west as prescribed by Rule 99:

Keswick Branch trains to recall flagman between Redding and Keswick.

RULE 14(e). As specified below, — — — — — will be indication that flagman may return from east as prescribed by Rule 99:

Keswick Branch trains to recall flagman between Keswick and Redding.

RULE 14(k). Will not apply in C.T.C. System between west switch Black Butte and Redding.

RULE 92. First sentence will not apply to trains arriving Dunsmuir.

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

West MP		East MP
211.92	Gerber.....	216.08
222.04	Red Bluff.....	224.63
256.10	Redding.....	258.74
	" (Keswick Branch).....	259.23
317.91	Dunsmuir.....	326.65

Gerber: Westward freight trains and light engines must not pass east switch of yard track No. 1 unless proceed signal received from yardman.

Dunsmuir Yard: Eastward trains and engines receiving diverging route signal to enter west end of Dunsmuir Yard must not pass signal unless flashing white light is displayed on the reverse side of absolute dwarf signal located just east of the derail between main track and lead track at west end of Dunsmuir Yard. Flashing light signal is authority for trains or engines to enter Dunsmuir Yard yard tracks.

When westward train is ready to leave yard track Dunsmuir Yard, whistle signal — o — should be sounded when opposite microphone on pole just west of Little Castle Creek crossing for dispatcher to line derail and switch.

Dunsmuir: Westward trains receiving diverging route signal at east switch must not pass absolute signal at east switch unless flashing white light is displayed. This flashing white light is mounted on mast of absolute signal which governs eastward movements on track 1 located 300 feet west of east switch. Westward trains or engines on tracks 1 or 2 must not pass fouling point of these tracks east of Shanty 3 just east of Butterfly Avenue crossing unless proceed signal received from yardman.

Eastward trains or engines on inside tracks must not pass Signal 3218, Butterfly Avenue crossing, unless proceed signal received from yardman at Shanty 3, and must not pass fouling point of 1 or 2 tracks west of Shanty 4 unless proceed signal received from yardman.

Westward trains, except first-class and light engines, moving on main track must not pass east switch of the third crossover west of Butterfly Avenue crossing unless proceed signal received from yardman.

Fouling point sign has been placed between west end of sand house lead and Pit track 25 governing both tracks and between Pit track 26 and outbound engine lead governing both tracks. Outbound engines must not pass these fouling point signs until derails have been lined and signal received from yardman.

Switching of house track at Dunsmuir must be done by using second crossover west of house track, keeping the main track crossover switch open at all times during this switching operation.

When handling passenger equipment Dunsmuir or Dunsmuir Yard, single car must not be left on track not protected by derail.

RULE 99. Within Redding interlocking limits trains may occupy main track without rear-end protection, except that flagman must take position not less than thirty feet behind a train carrying passengers. Signal operator must not authorize a train to pass an interlocking signal displaying stop indication until he has assured himself that conductor and engineer of all trains involved are fully acquainted with intended move so that proper protection will be provided.

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

Redding Keswick Branch, for Silverthorn line.

RULE 505. AUTOMATIC BLOCK SYSTEM

Trains or engines stopped by Signal 2141 at Gerber may then proceed with caution not exceeding 12 MPH provided signal is received from yardman.

Trains or engines stopped by Signal 3205 or 3206 at Dunsmuir Yard; 3218, 3221 or 3222 at Dunsmuir, may proceed with caution, not exceeding 12 MPH.

RULES 510 and 776. 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", and Rule 776 in addition to Rule 510 must be complied with when stopped by such signals:

Eastward Signal	Protection	Westward Signal
P-2330	Spring switch east end siding, Glade	P-2249
P-A	Spring switch west end siding, Hooker	
P-A	Slide detector fence, MP 270, McColl	P-A
P-A	Dragging equipment detectors, Pitbridge	P-A
P-A	Fire detector, Pitbridge	P-A
P-A	Slide detector fences, MP 273.7 and 274.1	P-2749
P-A	Fire detector, bridge 278.5	P-2793
P-2796	Fire detector, bridge 280.2	P-A
P-A	Fire detector, bridge 282.7	P-2829
P-2838	Fire detector, bridge 283.8	P-A
P-2868	Fire detector, bridge 287.9, and Slide detector fence, MP 287.6	P-2883
P-2882	Fire detector, bridge 288.5, and Slide detector fence, MP 296.0	P-A
P-3024	Slide detector fence, MP 302.7	P-A
P-3050	Slide detector fence, MP 305.6	P-A

Rule 516. Overlap posts:

Red Bluff: 300 feet west of east switch for eastward trains.

RULE 535. SPRING SWITCHES

Spring switches equipped with facing point locks are located as follows:

Location	Normal Position
Glade.....	East end siding..... Main track
Hooker.....	West end siding..... Main track

RULE 605. INTERLOCKING

Redding: Interlocking limits extend from eastward home signal 545 feet west of train-order signal, to beginning of C.T.C. at fouling point, eastward siding.

Top unit of westward absolute signal at east switch eastward siding will govern trains entering interlocking on main track. Lower unit governs movement on diverging route to end of C.T.C. only.

Trains from Keswick Branch will stop at Signal No. 2589 and call operator at Redding for permission to move into interlocking limits.

Trains or engines must get permission from operator at Redding before leaving Sterling Lumber spur or the engine spur or corral lumber spur, or before moving eastward through crossover at overhead bridge.

Telephones at Signals 2586, 2587 and 2589 and at derail of engine spur.

Call-on dwarf light signal on eastward siding near crossover at west interlocking limits. When flashing white light displayed authorizes train to proceed on eastward siding to beginning of C.T.C.

Call-on dwarf light signal near east end westward siding. When flashing white light displayed authorizes eastward train on westward siding to enter main track.

These flashing white lights do not dispense with the use or the observance of automatic, interlocking or other signals, or Rule 513.

When automatic signals within Redding interlocking limits display stop indication, operator's permission must be obtained before train proceeds as prescribed by Rules 509, 509 (F), or 509 (J).

RULE 705. LETTER TYPE INDICATORS

Indicators located as follows:

Illum. Letter	On Signal	Approaching	Authorizes and requires movement as follows:
M.....	2556	Redding.....	Proceed to fouling point east end westward siding.
S.....	2556	Redding.....	Enter eastward siding.
M.....	2585	Redding.....	Proceed to fouling point west end eastward siding.
S.....	2585	Redding.....	Enter westward siding.

RULE 760. CENTRALIZED TRAFFIC CONTROL SYSTEM

Centralized Traffic Control extends from eastward absolute signal at fouling point eastward siding Redding, to east switch Black Butte.

At the west end of Pit River bridge, there are two 2-indication dwarf light type special signals; one signal governs movement of eastward trains on the main track, and one signal governs movement of eastward trains on the siding.

At the east end of the Pit River bridge, there are four 2-indication dwarf light type special signals; two signals govern the movement of eastward trains, one for the main track and one for the siding, and two signals govern movement of westward trains, one for the main track and one for the siding.

These signals display "white" for proceed, and "red" for stop, and are identified as "dragging equipment signals".

Trains finding these signals indicating "stop", must stop and make inspection of their train for dragging equipment and obtain dispatcher's permission before proceeding.

Three-unit absolute signal at the east end of siding at Lakehead governing westward trains is equipped with a "call-on" signal.

Top Unit.....	Governs movement on main track,
Center Unit.....	Governs movement to siding,
Lower Unit.....	Governs movement to house track,
Call-on Signal (Flashing Yellow Light)...	Proceed to couple to train on main track or siding.

Helper engine that is to move and couple to a train on main track or siding after receiving proper absolute signal indication, must stop on short track circuit, just east of 3-unit absolute signal, and wait for "call-on" signal to operate. When call-on signal displays a flashing yellow light, it confers authority to pass the 3-unit absolute signal indicating "stop", and move to the train occupying the main track or siding after such train has stopped and hand signal is received from member of train crew.

Telephone for communicating with train dispatcher located at:

- Signal 2741 east end tunnel No. 3,
- Signal 2744 west of tunnel No. 5,
- Signal 2760 between tunnels Nos. 6 and 7,
- Signal 2869 (one mile east of Lakehead),
- Signal 2882 between tunnels Nos. 11 and 12.

RULE 762. Flag protection to rear of train as prescribed by Rule 99 is required by westward trains standing or delayed on main track between Signal 3205 and next absolute signal at west end Dunsmuir Yard, and by eastward trains standing or delayed on main track with rear of train between Signal 3206 Dunsmuir Yard and absolute signal located at first crossover east of Dunsmuir Yard yard office, or between Signal 3222 and absolute signal located at east end Dunsmuir.

RULE 763. Trains entering C.T.C. limits at Redding will display same indication and signals to the end of the subdivision. Trains leaving Dunsmuir or Dunsmuir Yard will display indicators and signals in accordance with address shown on clearance. Clearance issued to a section of a schedule must read "no signals" or "green signals" following the address. Trains originating at other intermediate points in C.T.C. limits will display indicators as an extra unless otherwise instructed by train dispatcher.

Second paragraph of Rule 96 will not apply at Redding when there is no change in the number of sections of a schedule moving from C.T.C. territory into train-order territory.

SPECIAL INSTRUCTIONS—REDDING SUBDIVISION

GENERAL REGULATIONS

RULE 824. Instructions for setting hand brakes: Dunsmuir and Dunsmuir Yard:

- Passenger trains..... { Two brakes on east end,
Three brakes on west end.
- Freight trains of 25 cars or less..... { Ten brakes on west end.
- Freight trains of 26 to 50 cars..... { Ten brakes on west end,
Five brakes on east end.
- Freight trains of over 50 cars..... { Ten brakes on west end,
Ten brakes in center of train,
Five brakes on east end.

Staff brakes on freight trains must be set with the assistance of a brake club after train has stopped. Any employe releasing any of these brakes, must set as many others to replace them.

Engines must not be cut off freight trains at Dunsmuir or Dunsmuir Yard until sufficient hand brakes are set to secure train and yard air must not be coupled into train until engine is cut off.

When it is necessary to double over incoming freight trains at Dunsmuir Yard, trainmen will secure that portion of train not doubled over, and yardmen will secure that portion of train doubled over, with the required number of hand brakes.

RULE 825. Cars must not be spotted on Oaks spur at Girvan less than two car-lengths beyond derail, to avoid obstructing view of motorists at road crossing.

Portable rail skids are hung on posts at lower end of sidings at Glade, Central Valley, McColl, Lakehead, Delta, Lamoine, Gibson, Fisher, Sims, Conant, Castella and Castle Crag.

When necessary to leave cars on these sidings, permission must first be obtained from chief train dispatcher, after which rail skid must be placed on rail and leading wheel of first car in descending direction run onto the rail skid, and hand brakes set if brakes are operative, before engine is detached. Trains picking up cars from these sidings must remove rail skid and return it to proper post and lock it in place with switch lock.

RULE 827. TRAIN INSPECTION

At Gerber, forward brakeman of Nos. 10 and 12, will take a position on station side where rear of train will stop and 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.

Trains handling logs must stop and crew must inspect load and chains before passing through tunnels and all crossings except 2nd, 4th, 5th, 14th and 15th over Sacramento River.

Westward freight trains using retainers will stop between switches at Delta 10 minutes for heat radiation at which time train inspection will be made, and enginemen will inspect engines.

On freight trains between Dunsmuir and Redding, member of train crew will observe track from rear of caboose so train may be stopped in event of derailment. Two Dietz lanterns placed on rear of caboose will be used at night to assist in observing track.

RULE 829. Trains using siding at Glade will afford a 200-foot clearance west of road crossing near east switch when possible.

AIR BRAKE RULES

RULE 17. One retaining valve for each 250 Ms in freight and mixed trains will be used from Dunsmuir Yard to Delta, except when handled by DEF class engine with three or more dynamic brakes in operation.

One retaining valve for each 100 Ms in train will be used on descending grades between Middle Creek and Matheson, except if tonnage exceeds 100 Ms per retaining valve train may be handled if not over 120 Ms per retaining valve.

FREIGHT TRAINS

RULE 22. Trainmen must not couple air hose on outgoing trains at Gerber until train is made up and engine and caboose on train.

RULE 25. Rear-end test made between Redding and Dunsmuir must be made in accordance with Air Brake Rule 25(b).

PASSENGER TRAINS

RULE 37. Trainmen must not couple steam and air hose on outgoing trains at Gerber until train is made up.

RULE 38. Rear-end air test need not be made at Gerber 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 immediately after leaving terminal.

MISCELLANEOUS

10. Engines listed are not permitted to operate on tracks shown below:

Class of Engine	Restricted Tracks
AC.....	Dirigo—Industrial tracks.
All engines and cars.....	Redding—Beyond stop sign 75 feet west of end of Union Ice spur.
Engines heavier than 233,000 lbs. on drivers..	Red Bluff—Yard track No. 1.
Engines heavier than 210,000 lbs. on drivers..	Red Bluff—Pioneer Fruit spur.
"	Redding—Hoefers spur; Sterling Lbr. spur.
"	Lamoine—Little Slate Creek bridge.
"	Gibson—Spur.

Cars must not be spotted east of road crossing on Del Loma Lbr. spur, Anderson.

14. Enginemen will operate tie sprinklers on engine tanks when so equipped on westward freight trains and light engines between Dunsmuir and Redding.

Load limit (car and contents):

Gerber-Dunsmuir.....	251,000 pounds
Redding-Coram.....	240,000 pounds

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

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

MP	Location	Description
258.5	Redding... Highway bridge.....	Overhead
301.8	Lamoine .. Sacramento River bridge No. 6...	Overhead
305.3	Gibson... Sacramento River bridge No. 8...	Overhead
305.4	Gibson... Tunnel No. 13.....	Overhead
306.7	Fisher... Sacramento River bridge No. 9...	Overhead
307.0	Fisher... Tunnel No. 14.....	Overhead
308.6	Fisher... Sacramento River bridge No. 10..	Overhead
308.9	Gibson... Sacramento River bridge No. 11..	Overhead
310.3	Sims..... Sacramento River bridge No. 12..	Overhead

SPECIAL INSTRUCTIONS—REDDING 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 6 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed boards, 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 ABSOLUTE SAFETY, REGARDLESS OF TIME.**

TERRITORY	Streamliners SHASTA DAYLIGHT CASCADE	OTHER PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES		Streamliners SHASTA DAYLIGHT CASCADE	OTHER PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES		
				RUNNING FORWARD	RUNNING BACKWARD				RUNNING FORWARD	RUNNING BACKWARD	
Column:	A	1	2	3	4	Column:	A	1	2	3	4
EASTWARD, GERBER TO DUNSMUIR:						WESTWARD, DUNSMUIR TO GERBER:					
MP MP						MP MP					
213.80 to 214.10	35	35	35	35	30	322.10 to 320.80	20	20	20	20	15
214.10 to 215.00	60	60	35	35	30	320.80 to 295.60 (288.66)	30	25	20	20	15
215.00 to 222.91	79	70	50	50	30	288.66 to 285.93 (curves)	55	50	50	50	30
★222.91 to 223.83 (Red Bluff)	25	25	25	25	20	285.93 to 281.00	60	55	50	50	30
223.83 to 226.20	65	60	50	50	30	281.00 to 277.47 (curves)	55	50	50	50	30
226.20 to 226.61 (curve)	60	55	50	50	30	277.47 to 275.76	60	55	50	50	30
226.61 to 230.62	65	60	50	50	30	275.76 to 275.40 (curve)	55	50	50	50	30
230.62 to 230.92 (curve)	60	55	50	50	30	275.40 to 273.35	60	55	50	50	30
230.92 to 233.60 (Hooker)	65	60	50	50	30	273.35 to 272.69 (Pitbridge)	50	45	45	45	30
233.60 to 242.46	79	70	50	50	30	272.69 to 270.25	65	60	50	50	30
242.46 to 243.74 (curve)	65	60	50	50	30	270.25 to 269.05 (curves)	55	50	50	50	30
243.74 to 258.00	79	70	50	50	30	269.05 to 261.17	65	60	50	50	30
★258.00 to 258.50 (Redding)	25	25	25	25	20	261.17 to 259.66 (curves)	60	55	50	50	30
258.50 to 259.66 (bridge)	50	45	40	40	30	259.66 to 258.50 (bridge)	50	45	40	40	30
259.66 to 261.17 (curves)	60	55	50	50	30	★258.50 to 258.00 (Redding)	25	25	25	25	20
261.17 to 269.05	65	60	50	50	30	258.00 to 243.74	79	70	50	50	30
269.05 to 270.25 (curves)	55	50	50	50	30	243.74 to 242.46 (curve)	65	60	50	50	30
270.25 to 272.69	65	60	50	50	30	242.46 to 233.60 (Hooker)	79	70	50	50	30
272.69 to 273.35 (Pitbridge)	50	45	45	45	30	233.60 to 230.92	65	60	50	50	30
273.35 to 275.40	60	55	50	50	30	230.92 to 230.62 (curve)	60	55	50	50	30
275.40 to 275.76 (curve)	55	50	50	50	30	230.62 to 226.61	65	60	50	50	30
275.76 to 277.47	60	55	50	50	30	226.61 to 226.20 (curve)	60	55	50	50	30
277.47 to 281.00 (curves)	55	50	50	50	30	226.20 to 223.83	65	60	50	50	30
281.00 to 285.93	60	55	50	50	30	★223.83 to 222.91 (Red Bluff)	25	25	25	25	20
285.93 to 288.66 (295.60) (curves)	55	50	50	50	30	222.91 to 215.00	79	70	50	50	30
295.60 to 320.80	30	25	20	20	15	215.00 to 214.10	60	60	35	35	30
320.80 to 322.10	20	20	20	20	15	214.10 to 213.80	35	35	35	35	30
EASTWARD, REDDING TO CORAM			15	15	15	WESTWARD, CORAM TO REDDING			15	15	15

★Regulated by City ordinance.

Streamliners SHASTA DAYLIGHT and CASCADE when handled by steam power and consisting of streamlined equipment, may run not to exceed 75 MPH on Tangent Track where 70 MPH is authorized in Column 1.

◆RESTRICTED CARS are twin or multiple loads; cars of excess height or width; loads of excess height, width or weight; any equipment listed under "Maximum Speed Permitted with Certain Equipment"; scale test cars; and cars with arch bar trucks, and trains handling such cars must not exceed maximum speed of 40 MPH.

Trains handling logs must not exceed 5 MPH through tunnels and over all crossings Sacramento River except 2nd, 4th, 5th, 14th and 15th.

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 engine running backward	10
Engines moving west over spur switch east end Lamoine siding	10

SPECIAL INSTRUCTIONS—REDDING SUBDIVISION

RATING OF ENGINES—In Units of 1000 Lbs. (Ms)

NOMINAL CLASS	ENGINE NUMBERS	Gerber to Delta	Delta to Dunsmuir	Dunsmuir to Gerber
DEP-3	6017.....	4900	3300	7500
DEP-4, 7	6000 to 6004 and 6018.....	5000	3400	7500
DEP-5, 6	6005 to 6016.....	6550	5250	12000
DEF-1	6122 to 6137.....	.....	.....	.....
DEF-1	6138 and 6139.....	.....	.....	.....
DEF-2	6140 to 6179.....	.....	.....	.....
DEF-3, 4, 5, 6	6180 to 6339.....	14550	14400	20000
DERS-1	5200 to 5202.....	.....	.....	.....
DERS-2, 4 to 7	5203 to 5239.....	3900	3400	.....
DES-1 to 7	1000 to 1022.....	1210	1050	1900
DES-100 to 109	1300 to 1441.....	1850	1600	2850
M-4	1617 to 1713.....	1750	1450	2750
M-6, 8	1721 to 1803, 1824 and 1825.....	2100	1700	3250
M-9	1804 to 1822, 1826 to 1830 and 1836.....	2200	1800	3450
M-11	1832 to 1835.....	2300	1900	3550
T-1	2248 and 2252.....	1500	1200	2350
T-8	2178.....	1050	860	1650
T-23	2301 to 2310.....	2210	1800	3400
T-26	2296 and 2299.....	1900	1550	3000
T-28, 31	2312 to 2362.....	2300	1850	3750
T-32	2363 to 2370, 2372 to 2384.....	2450	2000	3800
T-40	2371.....	2450	2000	3800
T-37	2105 and 2106.....	2200	1800	3400
P-1, 3, 5	{2404, 2408, 2411, 2412, 2417, 2428 to 2433, 2439 } to 2452 and 2459	1950	1550	3050
P-1	2403, 2405 to 2407 and 2415.....	2050	1650	3200
P-4	{2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, } 2424 and 2436	2150	1700	3350
P-6	2453, 2454 and 2458.....	2450	1950	3800
P-7	2476 and 2477.....	2600	2100	4050
P-8, 10	2461 to 2474, 2478 to 2483.....	2650	2150	4150
P-8, 10	2475, 2484 to 2491.....	2800	2250	4400
P-11	3104 and 3109.....	2100	1700	3300
P-12	3120 to 3129.....	2700	2150	4300
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2625 to 2860, 3440 to 3469.....	2700	2150	4200
C-18	3400 to 3409.....	2500	2000	3800
C-19	3410 to 3426.....	2550	2100	3950
TW-1	2900 to 2913.....	2050	1650	3150
TW-2, 3	2937 to 2952.....	1600	1300	2500
TW-8	2914 to 2923.....	2400	1850	3500
A-3	3025 and 3057.....	1550	1250	2500
A-6	3000 and 3002.....	1850	1500	2950
Mk-2, 4	3201 to 3240.....	3000	2400	4900
Mk-5, 6	3241 to 3277.....	3200	2600	5300
Mk-7, 8, 9	3300 to 3324.....	3750	3050	5750
Mk-10	3295.....	3000	2350	4450
Mk-11	3297 and 3298.....	2800	2300	4250
F-1	3611 to 3652.....	3900	3150	5950
F-3, 4, 5	3653 to 3769.....	4750	3900	6900
MM-3	3930 and 3931.....	5200	4250	7550
AC-4, 5	4100 to 4125.....	7000	5600	10900
AC-6 to 12	3800 to 3811, 4126 to 4294.....	7500	6000	11600
Mt-1, 3, 4, 5	4300 to 4376.....	3500	2850	6200
Mt-2	4385 to 4390.....	.....	.....	.....
GS-1, 2	4401 to 4415.....	3700	3000	6450
GS-3, 4, 5, 6	4416 to 4469.....	3900	3100	6600
SP-1, 2, 3	5000 to 5048.....	5300	4300	8100

In figuring tonnage of train, add 6 Ms for each empty or underloaded car of less than 45 Ms, and 3 Ms for each such car of 45 to 55 Ms, except from Delta to Dunsmuir add 3 Ms for each such car of 55 Ms or less.

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

RULE 10 (J). Round yellow speed boards indicate the speed restrictions applying to Streamliners SHASTA DAY-LIGHT and CASCADE with DEP class engine only.

Speed boards to left of track:

Eastward	Reading	Westward	Reading
MP 426.14	60-50	MP 344.87	30-25-20
		MP 418.16	70-60-50

Westward round yellow speed board reading 45 at MP 368.26 is 0.57 mile instead of three-fourths mile from point of restriction.

RULE 14. Light engines arriving Dunsmuir from east, desiring to enter roundhouse lead, will sound whistle signal, o — o o.

RULE 14(d). As specified below, — — — — o will be indication that flagman may return from west as prescribed by Rule 99:

Siskiyou line trains to recall flagman between junction switch Black Butte and Weed.

RULE 14(e). As specified below, — — — — — will be indication that flagman may return from east as prescribed by Rule 99:

Siskiyou line trains to recall flagman between junction switch Black Butte and Weed.

RULE 14(k). Will not apply in C.T.C. System between west switch Black Butte and Redding.

RULE S-90. Eastward freight trains with more cars than will clear between the east portal, tunnel 13 and east switch, with train orders to meet westward train at Siskiyou, will not move train through tunnel until it has been ascertained that westward train is into clear on siding.

RULE 92. First sentence will not apply to trains arriving Dunsmuir.

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

West MP		East MP
317.91	Dunsmuir.....	326.65
	Black Butte.....	346.49
	" (Siskiyou line).....	346.50
425.67	Klamath Falls.....	432.66
552.04	" (Merrill line).....	
345.64	Weed.....	349.57
375.04	Montague.....	376.34
392.26	Hornbrook.....	394.01
426.92	Ashland.....	430.79

Dunsmuir: Westward trains receiving diverging route signal at east switch must not pass absolute signal at east switch unless flashing white light is displayed. This flashing white light is mounted on mast of absolute signal which governs eastward movements on track No. 1 located 300 feet west of east switch. Westward trains or engines on track No. 1 or No. 2 must not pass fouling point of these tracks east of Shanty No. 3 just east of Butterfly Ave. crossing unless proceed signal received from yardman.

Eastward trains or engines on inside tracks must not pass Signal 3218, Butterfly Ave. crossing, unless proceed signal received from yardman at Shanty No. 3, and must not pass fouling point of No. 1 or No. 2 tracks west of Shanty No. 4 unless proceed signal received from yardman.

Westward trains, except first class and light engines, moving on main track must not pass east switch of the third crossover west of Butterfly Ave. crossing unless proceed signal received from yardman.

Fouling point sign has been placed between west end of sand house lead and pit track No. 25 governing both tracks and between pit track No. 26 and outbound engine lead governing both tracks. Outbound engines must not pass these fouling point signs until derails have been lined and signal received from yardman.

Switching of house track at Dunsmuir must be done by using second crossover west of house track, keeping the main track crossover switch open at all times during this switching operation.

When handling passenger equipment Dunsmuir or Dunsmuir Yard, single car must not be left on track not protected by derail.

Klamath Falls: Eastward trains except first-class must stop before passing Signal 4286 unless they receive proceed signal from yardman. Yardman must not line switch for eastward trains to enter yard track until train has been identified.

Movements of GNRy trains and engines between initial switch east end of yard and junction switch of GNRy will be directed by yardmaster.

RULE 103 (A). Crossing leading to roundhouse, opposite ice house at Ashland must be kept open for fire protection except during switching operations.

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

- Mount Shasta..McCRRR main track, for interchange track,
- Black Butte...Siskiyou line, for controlled siding,
- Leaf.....L-B Lbr. Co. main track, for interchange track,
- Klamath Falls..GNRy main track, for SP main track,
- Klamath Falls..Merrill line, for Black Butte line,
- Klamath Falls..OC&ERY main track, for yard track,
- Montague.....YWRy main track, for house track.

Trains using McCRRR house track at Mount Shasta must leave derail lined and locked in derailing position.

Normal position of inside switches on house track Grass Lake is for the wye.

RULE 505. AUTOMATIC BLOCK SYSTEM

Trains or engines stopped by Signal 3205 or 3206 at Dunsmuir Yard; 3218, 3221 or 3222 at Dunsmuir; 4292, 4293 or 4295 at Klamath Falls, may proceed with caution, not exceeding 12 MPH.

Diverging route arm in proceed position on Signal 4112 west of Siskiyou, authorizes train to proceed with caution and enter siding.

RULE 509 (J). When necessary to send flagman through tunnel 13, at Siskiyou, train must wait until flagman calls on telephone from opposite end of tunnel.

RULE 510. The following block signals, equipped with triangular number plate displaying the letter "P", have included in their control limits some special protective device:

Eastward Signal	DUNSMUIR-KLAMATH FALLS	Westward Signal
P-3290	Slide detector fence east of tunnel 16, MP 329.5.....	P-3301
P-3602	Collision detector, bridge 360.82.....	P-3611
P-3682	Spring switch west end westward siding Grass Lake.....	
	Spring switch east end eastward siding Grass Lake.....	P-3695
P-3728	Spring switch, west end siding, Erickson.....	
P-4098	Collision detector, bridge 410.57.....	P-4119

BLACK BUTTE-ASHLAND

P-3506	Collision detector, bridge 351.73.....	P-3531
--------	--	--------

SPECIAL INSTRUCTIONS—BLACK BUTTE SUBDIVISION

RULE 512 (B). Switch indicators and signals located as follows:

Signal 4278 at derail GNRy Bieber line, top unit governs from Bieber line to Cascade line main track; lower unit governs from Bieber line to GNRy line crossing Lake Ewauna.

Signal 4277 at derail from line crossing Lake Ewauna governs to GNRy Bieber line, or SP Merrill line.

Signal 4279 just east of GNRy Lake Ewauna line connection on Cascade line, lower unit governs to GNRy Bieber line or SP Merrill line.

Signal 4275.5 at fouling point ladder tracks between tracks 17 and 18 governs from all ladder tracks to Merrill line.

Junction of GNRy and Cascade line (Signals 4284-4283). Should these signals fail to indicate "proceed" after switches are lined wait four minutes for time element relay to function, which will be effective when approach circuit to junction switch is occupied. After operation of time element relay, if signals fail to indicate "proceed", Rules 509 (F) and 99 apply.

RULE 516. Overlap posts:

Eastward trains:

Leaf.....Fouling point west switch,
Texum.....Near middle of siding.

Westward trains:

Somerset.....Near middle of siding.

RULE 535. SPRING SWITCHES

Spring switches equipped with facing point locks are located as follows:

Location	Normal Position
Grass Lake.....	West end westward siding... Main track
Grass Lake.....	East end eastward siding... Main track
Erickson.....	West end siding..... Main track

RULE 760. CENTRALIZED TRAFFIC CONTROL SYSTEM

Centralized Traffic Control extends from eastward absolute signal at fouling point eastward siding Redding, to east switch Black Butte.

Eastward absolute signals just west of station building Black Butte display indications as follows:

Main track signal: top unit for main track; center unit for crossover to Siskiyou line; lower unit for crossover to controlled siding.

Controlled siding signal: top unit for crossover to main track; center unit for Siskiyou line; lower unit to continue movement on controlled siding. Flashing white light on this signal to left of mast indicates signal is cleared for movement out of Siskiyou siding; and to right of mast indicates signal is cleared for movement from controlled siding.

RULE 762. Flag protection to the rear as prescribed by Rule 99 is required by eastward trains standing or delayed on main track with rear of train between Signal 3316 and east switch at Mott; and by westward trains standing or delayed on main track with rear of train between Signal 3317 and west switch Mott.

Flag protection to rear of train as prescribed by Rule 99 is required by westward trains standing or delayed on main track between Signal 3205 and next absolute signal at west end Dunsmuir Yard, and by eastward trains standing or delayed on main track with rear of train between Signal 3206 Dunsmuir Yard and absolute signal located at first crossover east of Dunsmuir Yard yard office, or between Signal 3222 and absolute signal located at east end Dunsmuir.

RULE 763. Trains entering C.T.C. limits at Black Butte will display same indication and signals to the end of the subdivision. Trains leaving Dunsmuir or Dunsmuir Yard will display indicators and signals in accordance with address shown on clearance. Clearance issued to a section of a schedule must read "no signals" or "green signals" following the address. Trains originating at other intermediate points in C.T.C. limits will display indicators as an extra unless otherwise instructed by train dispatcher.

Second paragraph of Rule 96 will not apply at Black Butte when there is no change in the number of sections of a schedule moving from C.T.C. territory into train-order territory.

GENERAL REGULATIONS

RULE 824. Instructions for setting Hand Brakes: Dunsmuir and Dunsmuir Yard:

Passenger Trains..... {Two brakes on east end,
Three brakes on west end.

Freight trains of 25 cars or less..... Ten brakes on west end.

Freight trains of 26 to 50 cars..... {Ten brakes on west end,
Five brakes on east end.

Freight trains of over 50 cars..... {Ten brakes on west end,
Ten brakes in center of train,
Five brakes on east end.

Ashland:

Passenger Trains..... Two brakes on east end.

Freight Trains..... {Five brakes on east end,
Five brakes on west end.

Klamath Falls:

Passenger Trains..... {Two brakes on west end,
Two brakes on east end.

Freight Trains..... {Five brakes on west end,
Five brakes on east end.

Hand brakes on east end of westward passenger trains Dunsmuir must not be set until after train stops, and must not be released until blue flag has been removed.

Staff brakes on freight trains must be set with the assistance of brake club after train has stopped. Any employe releasing any of these brakes, must set an equal number to replace them.

Engines must not be cut off freight trains at Dunsmuir, Dunsmuir Yard, Klamath Falls or Ashland until sufficient hand brakes are set to secure train and yard air must not be coupled into train until engine is cut off.

When it is necessary to double over incoming freight trains at Dunsmuir Yard, trainmen will secure that portion of train not doubled over, and yardmen will secure that portion of train doubled over, with the required number of hand brakes.

Eastward trains exceeding siding clearance at Siskiyou will cut in helpers a sufficient distance ahead of caboose at Hornbrook to avoid stopping helpers in Tunnel 13.

On arrival at Siskiyou, on westward trains, sufficient hand brakes must be set to hold rear of train before cutting off helper engine, and on rear portion of train when backing down to cut out helper.

Westward freight trains cutting all helpers at Siskiyou will take siding and use braking power track to run around rear portion of train. Cars must not be left standing on main track with engine detached.

RULE 825. Portable rail skids are hung on posts at lower end of sidings at Small, Mott, Azalea, Mount Shasta, Upton, Deetz and Black Butte.

When necessary to leave cars on these sidings, permission must first be obtained from chief train dispatcher, after which rail skid must be placed on rail and leading wheel of first car in descending direction run onto the rail skid, and hand brakes set if brakes are operative, before engine is detached. Trains picking up cars from these sidings must remove rail skid and return it to proper post and lock it in place with switch lock.

Engines may operate over the live rail of track scale at Weed, not exceeding 5 MPH.

RULE 827. Freight trains using retainers on descending grade will stop between switches as indicated, at the following stations for heat radiation, at which time train inspection will be made, and enginemen will inspect engines:

Steinman.....	10 minutes
Gregory.....	10 minutes
Hilt.....	5 minutes
Weed or Edgewood.....	10 minutes
Azalea.....	5 minutes
Andesite.....	10 minutes

(If stop of not less than 5 minutes has been made at Cougar, the stop at Andesite will not be necessary, in which event 10 minute stop must be made at Bolam.)

Engines running light on descending grade must stop at the above stations a sufficient length of time to permit heat radiation, at which time enginemen will inspect engines.

Trains handling logs must stop before entering yard at Klamath Falls; before passing through tunnels; over Dry Canyon viaduct between Hotlum and Bolam; and over Klamath River bridge west of Hornbrook, at which time load and chains on cars of logs must be inspected.

On freight trains between Black Butte and Edgewood, Snowdon and Ashland, Mt. Hebron and Dunsmuir Yard, member of train crew will observe track from rear of caboose so train may be stopped in event of derailment. Two Dietz lanterns placed on rear of caboose will be used at night to assist in observing track.

RULE 837. At Ashland all passenger equipment being switched must have air brakes in service on all cars.

RULE 862. After first-class trains have stopped at Klamath Falls, incoming trainmen will set necessary hand brakes. Outgoing trainmen must relieve incoming trainmen immediately and afford necessary flag protection as prescribed by Rule 99.

AIR BRAKE RULES

RULE 2. When Diesel switch engine is used on yard tracks at east end of Klamath Falls, handling cuts of forty empties or twenty-five loads or more, air brakes must be cut in on not less than four cars.

RULE 17. Retainers will be used on freight and mixed trains handled by steam engines on descending grades as follows:

Azalea-Dunsmuir Yard ...	One valve for each 100 Ms in train,
Grass Lake-Azalea.....	One valve for each 150 Ms in train,
Black Butte-Edgewood ...	One valve for each 100 Ms in train,
Snowdon-Hornbrook.....	One valve for each 150 Ms in train,
Siskiyou-Ashland.....	One valve for each 90 Ms in train,
Siskiyou-Hornbrook.....	One valve for each 90 Ms in train.

Westward freight trains must turn up not less than ten retainers on head-end of train before entering yard tracks at Klamath Falls.

If tonnage exceeds amount of Ms specified for each retainer, trains may be handled between Azalea and Dunsmuir Yard, Black Butte and Edgewood, up to 120 Ms; and between Ashland and Hornbrook up to 100 Ms per operative retainer.

Retainers must be turned down if stop is made between MP 388.4 and Hornbrook. The maximum retaining pressure must be used from Siskiyou to Ashland and Siskiyou to Hornbrook on loaded cars.

Conductor will ascertain gross weight of each refrigerator, and where such car weighs 95 Ms or more, retainers must be placed in high pressure position, or if less than 95 Ms must be placed in low pressure position (see Page 76, Fig. 9, Air Brake Rules).

Freight trains of not more than 60 cars and not more than 65 Ms per operative brake may be handled Snowdon to Hornbrook or Grass Lake to Azalea with no retainers provided engineer can properly control speed of train and charge brake pipe to standard pressure between applications. If necessary to use retainers to control speed of train engineer will instruct train crew number of retainers required.

The tonnage of any freight train between Hornbrook and Ashland must not exceed 100 Ms per operative brake when handled on descending grade by F or SP class engine. When other class engine is used, 90 Ms per operative brake will govern. Westward trains must not be moved out of Ashland in excess of this tonnage per operative brake. The tonnage of any freight train descending grade between Mount Shasta and Dunsmuir, Black Butte and Edgewood, must not exceed 120 Ms per operative brake.

Retainers will be used on freight and mixed trains handled by DEF class engines on descending grades as follows:

Between Grass Lake and Azalea:

With four dynamic brakes in operation and handling over 9500 Ms, one retainer for each 250 Ms; with three dynamic brakes in operation and handling over 7100 Ms, one retainer for each 200 Ms; with less than three dynamic brakes in operation retainers as required on trains with steam engine must be used.

Between Azalea and Dunsmuir:

With four dynamic brakes in operation and handling over 8000 Ms, one retainer for each 200 Ms; with three dynamic brakes in operation and handling over 6000 Ms, one retainer for each 200 Ms; with less than three dynamic brakes in operation retainers as required on trains with steam engine must be used.

Between Siskiyou and Ashland and between Siskiyou and Hornbrook:

With four dynamic brakes in operation and handling over 5300 Ms, one retainer for each 200 Ms; with less than four dynamic brakes in operation retainers as required on trains with steam engine must be used.

Passenger trains with more than four head-end cars will turn up retainers on head-end cars at Mount Shasta and turn up all other accessible retainers Azalea to east switch Dunsmuir except that westward passenger trains handled by DEP class engine will not use retainers Mount Shasta to Dunsmuir, provided dynamic or electro-pneumatic brakes are functioning. Engineer must notify trainmen if necessary to use retainers.

All retainers must be turned up on passenger trains Siskiyou to Ashland, and accessible retainers may be turned down after passing yard limit board west of Ashland.

All accessible retainers must be turned up on passenger trains Black Butte to Edgewood.

All retainers must be turned up on passenger trains Siskiyou to MP 403.6. Retainers on head-end cars must be left turned up between MP 403.6 and MP 400. All retainers must be turned up on passenger trains MP 400 to Hornbrook.

FREIGHT TRAINS

RULE 22. Trainmen must not couple air hose on outgoing trains at Weed until train is made up and engine and caboose on train.

RULE 25. Rear-end test must be made between following points: Dunsmuir Yard and Jerome; Black Butte and Edgewood; Snowdon and Ashland; in accordance with Air Brake Rule 25(b).

RULE 25(a). Rear-end test must be made at Grass Lake on westward trains and air gauge in caboose must be observed to see that proper brake pipe pressure is restored before leaving. Rear-end test must be made immediately prior to leaving Siskiyou on all trains; Hornbrook on eastward trains, and Black Butte on Siskiyou line trains.

PASSENGER TRAINS

RULE 38. Rear-end test must be made immediately prior to leaving Siskiyou on all trains (including mixed trains).

RULE 39. Running test on passenger trains must be made as follows: Eastward trains at Snowdon; Siskiyou line trains at Black Butte; westward trains at Grass Lake.

SPECIAL INSTRUCTIONS—BLACK BUTTE SUBDIVISION

MISCELLANEOUS

1. Leading and helper engines must not cut off from head and rear portion of train at the same time at Steinman when taking water. When leading engine is coupled to train, after taking water, engineman will place automatic brake valve on lap, then sound one long whistle signal. Helper engineman will than make fifteen pound reduction of brake pipe pressure, leading engineman noting fall of brake pipe pressure will release brakes and after brake pipe has been charged, helper engine may then be cut off. Trainmen will not cut off helper engine until advised by helper engineman that brake pipe has been recharged.

4. Helper service:

Helper engines on eastward freight trains between Gregory and Siskiyou will be cut in single, separated by not less than 12 cars.

10. Engines listed are not permitted to operate on tracks shown below:

Table with 2 columns: Class of Engine, Restricted tracks. Includes entries for engines heavier than 210,000 lbs., Mt. GS, AC, and All classes with their respective track restrictions.

At Mount Shasta, switching movements to or from McCRRR tracks 1, 2, 3 or 4, when made through the connection from siding to McCRRR main track, may be made without flag protection after ascertaining that there are no movements being made on McCRRR west of State highway. Movements on west leg of wye McCRRR track must not be made without proper flag protection.

Tracks, except main track at Leaf, are used by engines and motor cars of the Long-Bell Lbr. Company, and all movements over these tracks including both legs of wye, and to Long-Bell Lbr. Co. siding must be made with caution.

14. Enginemen will operate tie sprinklers on engine tanks when so equipped on westward freight trains and light engines between Azalea and Dunsmuir.

Load limit (car and contents):

Table with 2 columns: Location, Load limit. Lists Dunsmuir-Klamath Falls (251,000 pounds) and Black Butte-Ashland (251,000 pounds).

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

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

Table with 3 columns: MP, Location, Description. Lists mileposts and locations such as Dunsmuir, Cantara, Dorris, Ager, Gregory, Siskiyou, and Steinman with their respective overhead and side structures.

Planing mill tracks 1 and 2 of Long-Bell Lbr. Co. at Weed will not be switched except between hours of 10 AM and 4 PM. Yardmen will not ride on top of cars when using these tracks.

Account impaired clearance, trains and engines must not operate east of Fruit Growers warehouse on interchange track, Hilt.

SPECIAL INSTRUCTIONS—BLACK BUTTE 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 6 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed boards, 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 ABSOLUTE SAFETY, REGARDLESS OF TIME.**

TERRITORY	Streamliners SHASTA DAYLIGHT CASCADE	OTHER PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES		TERRITORY	Streamliners SHASTA DAYLIGHT CASCADE	OTHER PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES	
				RUNNING FORWARD	RUNNING BACKWARD					RUNNING FORWARD	RUNNING BACKWARD
Column:	A	1	2	3	4	Column:	A	1	2	3	4
EASTWARD, DUNSMUIR YARD TO KLAMATH FALLS:						WESTWARD, KLAMATH FALLS TO DUNSMUIR YARD:					
MP MP						MP MP					
321.20 to 322.57.....	20	20	20	20	15	429.50 to 427.80.....	50	30	30	20	20
322.57 to 327.87.....	30	25	20	20	15	427.80 to 426.89.....	60	50	50	50	30
327.87 to 328.17 (curve).....	20	15	15	15	15	426.89 to 417.41.....	79	70	50	50	30
328.17 to 335.61.....	30	25	20	20	15	417.41 to 417.21 (curve).....	70	60	50	50	30
335.61 to 337.87 (curves).....	40	35	30	30	25	417.21 to 415.27.....	70	65	50	50	30
337.87 to 343.94.....	55	50	35	35	30	415.27 to 407.35.....	55	50	40	40	30
343.94 to 344.12.....	30	25	20	20	15	407.35 to 390.10.....	79	70	50	50	30
344.12 to 348.95.....	35	35	25	25	20	390.10 to 382.16.....	55	50	50	50	30
348.95 to 349.14 (curve).....	30	30	25	25	20	382.16 to 380.25.....	70	60	50	50	30
349.14 to 350.50.....	35	35	25	25	20	380.25 to 379.12 (curves).....	55	50	50	50	30
350.50 to 350.79 (curve).....	30	30	25	25	20	379.12 to 373.76.....	70	60	50	50	30
350.79 to 354.97.....	40	35	25	25	20	373.76 to 369.45.....	55	50	50	50	30
354.97 to 355.50 (curves).....	35	30	25	25	20	369.45 to 367.69.....	50	40	35	35	30
355.50 to 359.01.....	40	40	35	35	30	367.69 to 366.97 (curves).....	45	40	35	35	30
359.01 to 363.71.....	45	40	35	35	30	366.97 to 363.71.....	50	40	35	35	30
363.71 to 366.97.....	50	40	35	35	30	363.71 to 359.01.....	45	40	35	35	30
366.97 to 367.69 (curves).....	45	40	35	35	30	359.01 to 355.50.....	40	40	35	35	30
367.69 to 369.45.....	50	40	35	35	30	355.50 to 354.97 (curves).....	35	30	25	25	20
369.45 to 373.76.....	55	50	50	50	30	354.97 to 350.79.....	40	35	25	25	20
373.76 to 379.12.....	70	60	50	50	30	350.79 to 350.50 (curve).....	30	30	25	25	20
379.12 to 380.25 (curves).....	55	50	50	50	30	350.50 to 349.14.....	35	35	25	25	20
380.25 to 382.16.....	70	60	50	50	30	349.14 to 348.95 (curve).....	30	30	25	25	20
382.16 to 390.10.....	55	50	50	50	30	348.95 to 344.12.....	35	35	25	25	20
390.10 to 407.35.....	79	70	50	50	30	344.12 to 343.94.....	30	25	20	20	15
407.35 to 415.27.....	55	50	40	40	30	343.94 to 337.87.....	55	50	35	35	30
415.27 to 417.21.....	70	65	50	50	30	337.87 to 335.61 (curves).....	40	35	30	30	25
417.21 to 417.41 (curve).....	70	60	50	50	30	335.61 to 328.17.....	30	25	20	20	15
417.41 to 426.89.....	79	70	50	50	30	328.17 to 327.87 (curve).....	20	15	15	15	15
426.89 to 427.80.....	60	50	50	50	30	327.87 to 322.57.....	30	25	20	20	15
427.80 to 429.50.....	50	30	30	20	20	322.57 to 321.20.....	20	20	20	20	15

Streamliners SHASTA DAYLIGHT and CASCADE when handled by steam power and consisting of streamlined equipment, may run not to exceed 75 MPH on Tangent Track where 70 MPH is authorized in Column 1.

⚡RESTRICTED CARS are twin or multiple loads; cars of excess height or width; loads of excess height, width or weight; any equipment listed under "Maximum Speed Permitted with Certain Equipment"; scale test cars; and cars with arch bar trucks, and trains handling such cars must not exceed maximum speed of 40 MPH.

Trains handling logs must not exceed 5 MPH through tunnels, over Dry Canyon viaduct between Hotlum and Bolam, and over 16th crossing Sacramento River.

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 engine running backward.....	10

SPECIAL INSTRUCTIONS—BLACK BUTTE 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 6 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed boards, 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 ABSOLUTE SAFETY, REGARDLESS OF TIME.**

TERRITORY	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES		TERRITORY	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES	
			RUNNING FORWARD	RUNNING BACKWARD				RUNNING FORWARD	RUNNING BACKWARD
Column:	1	2	3	4	Column:	1	2	3	4
EASTWARD, BLACK BUTTE TO ASHLAND: MP MP					WESTWARD, ASHLAND TO BLACK BUTTE: MP MP				
345.20 to 359.05	25	20	20	15	429.10 to 426.41	30	20	20	15
359.05 to 360.83	40	35	35	30	426.41 to 418.06	20	20	20	15
360.83 to 372.24	50	40	40	30	418.06 to 417.74 (curve)	15	15	15	15
372.24 to 375.14	25	20	20	15	417.74 to 415.05	20	20	20	15
375.14 to 381.48	50	40	40	30	415.05 to 414.72 (curve)	15	15	15	15
381.48 to 394.32	25	20	20	15	414.72 to 413.48	20	20	20	15
394.32 to 407.65	20	20	20	15	413.48 to 413.33 (curve)	15	15	15	15
407.65 to 407.98 (curve)	15	15	15	15	413.33 to 411.90	20	20	20	15
407.98 to 411.90	20	20	20	15	411.90 to 407.98	20	15	15	15
411.90 to 413.33	20	15	15	15	407.98 to 407.65 (curve)	15	15	15	15
413.33 to 413.48 (curve)	15	15	15	15	407.65 to 394.32	20	15	15	15
413.48 to 414.72	20	15	15	15	394.32 to 381.48	25	20	20	15
414.72 to 415.05 (curve)	15	15	15	15	381.48 to 375.14	50	40	40	30
415.05 to 417.74	20	15	15	15	375.14 to 372.24	25	20	20	15
417.74 to 418.06 (curve)	15	15	15	15	372.24 to 360.83	50	40	40	30
418.06 to 426.41	20	15	15	15	360.83 to 359.05	40	35	35	30
426.41 to 429.10	30	20	20	15	359.05 to 345.20	25	20	20	15

Trains handling logs must not exceed 5 MPH through tunnels, and over Klamath River bridge at MP 390.00.

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 engine running backward	10
Hornbrook, engines using wye	8

SPECIAL INSTRUCTIONS—BLACK BUTTE SUBDIVISION

RATING OF ENGINES—In Units of 1000 Lbs. (Ms)

NOMINAL CLASS	ENGINE NUMBERS	Dunsmuir and Edgewood Dunsmuir to Black Butte	Black Butte to Grass Lake	Mt. Hebron to Dunsmuir	Grass Lake to Klamath Falls Klamath Falls to Mt. Hebron	Snowdon to Edgewood Edgewood to Hornbrook	Hornbrook to Ashland Ashland to Hilt	Hilt to Snowdon
DEP-3	6017	①1900	2950	5200	7500	.....	.....	.....
DEP-4, 7	6000 to 6004 and 6018	①1900	3050	5200	7500	.....	.....	.....
DEP-5, 6	6005 to 6016	①2850	4750	6550	13700	.....	.....	.....
DEF-1	6122 to 6137	.....	.....	.....	.....	.....	.....	.....
DEF-1	6138 and 6139	.....	.....	.....	.....	.....	.....	.....
DEF-2	6140 to 6179	.....	.....	.....	.....	.....	.....	.....
DEF-3, 4, 5, 6	6180 to 6339	8400	11700	15800	20000	15800	4900	9500
DERS-1	5200 to 5202	.....	.....	.....	.....	.....	.....	.....
DERS-2, 4 to 7	5203 to 5239	①1950	3100	4300	8000	.....	.....	.....
DES-1 to 7	1000 to 1022	570	950	1320	2750	1320	330	730
DES-100 to 109	1300 to 1441	910	1470	2050	4150	2050	550	1130
M-4	1617 to 1713	770	1250	1900	3850	1760	460	1000
M-6, 8	1721 to 1803, 1824 and 1825	930	1500	2250	4550	2070	570	1200
M-9	1804 to 1822, 1826 to 1830 and 1836	1000	1600	2400	4800	2150	620	1300
M-11	1832 to 1835	1050	1650	2500	5000	2250	650	1350
T-1	2248 and 2252	660	1100	1650	3300	1450	390	860
T-8	2178	440	760	1150	2400	1100	250	590
T-23	2301 to 2310	970	1550	2350	4750	2150	590	1250
T-26	2296 and 2299	820	1350	2050	4200	1850	490	1070
T-28, 31	2312 to 2362	1000	1650	2300	5250	2450	700	1400
T-32	2363 to 2370, 2372 to 2384	1100	1800	2650	5350	2520	680	1420
T-40	2371	1100	1800	2650	5350	2520	680	1420
T-37	2105 and 2106	980	1600	2350	4800	2200	600	1260
P-1, 3, 5	{2404, 2408, 2411, 2412, 2417, 2428 to 2433, 2439 to 2452 and 2459}	810	1350	2100	4300	1950	470	1070
P-1	2403, 2405 to 2407 and 2415	850	1450	2200	4500	2050	490	1130
P-4	{2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436}	900	1500	2300	4700	2150	520	1200
P-6	2453, 2454 and 2458	1050	1750	2600	5350	2450	620	1360
P-7	2476 and 2477	1050	1850	2800	5650	2600	620	1500
P-8, 10	2461 to 2474, 2478 to 2483	1100	1900	2900	5900	2650	640	1500
P-8, 10	2475, 2484 to 2491	1200	2000	3050	6200	2800	700	1590
P-11	3104 and 3109	900	1500	2250	4650	2100	530	1180
P-12	3120 to 3129	1100	1900	2700	6000	2800	700	1600
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2625 to 2860, 3440 to 3469	1200	1950	2700	5850	2700	800	1600
C-18	3400 to 3409	1100	1800	2650	5300	2450	710	1450
C-19	3410 to 3426	1150	1850	2750	5550	2550	730	1500
TW-1	2900 to 2913	920	1450	2200	4400	2000	570	1180
TW-2, 3	2937 to 2952	720	1150	1750	3550	1700	440	950
TW-8	2914 to 2923	1050	1650	2500	5000	2250	640	1350
A-3	3025 and 3057	630	1100	1700	3550	1550	340	870
A-6	3000 and 3002	770	1300	2000	4150	1800	430	1030
Mk-2, 4	3201 to 3240	1300	2100	3000	6500	3100	930	1900
Mk-5, 6	3241 to 3277	1400	2300	3200	7000	3450	970	2000
Mk-7, 8, 9	3300 to 3324	1700	2700	4050	8050	3700	1000	2200
Mk-10	3295	1300	2100	3000	6200	2900	830	1680
Mk-11	3297 and 3298	1250	2000	3000	5950	2750	810	1660
F-1	3611 to 3652	1750	2800	4150	8350	4000	1100	2300
F-3, 4, 5	3653 to 3769	2150	3550	4900	10100	4900	1290	2700
MM-3	3930 and 3931	2350	3750	5600	11150	5300	.....	3050
AC-4, 5	4100 to 4125	3100	5000	6900	14000	7200	.....	②4300
AC-6 to 12	3800 to 3811, 4126 to 4294	3300	5300	7400	15000	7600	.....	②4500
Mt-1, 3, 4, 5	4300 to 4376	1550	2500	3500	7750	3700	1000	2250
Mt-2	4385 to 4390	.....	.....	.....	.....	.....	.....	.....
GS-1, 2	4401 to 4415	1600	2600	3700	8400	3950	.....	②2150
GS-3, 4, 5, 6	4416 to 4469	1650	2700	3850	8500	4150	.....	②2250
SP-1, 2, 3	5000 to 5048	2400	3850	5700	11350	5500	1500	3150

①Does not apply between Black Butte and Edgewood.

②AC and GS class engines not permitted to operate Hilt to Hornbrook.

From Grass Lake to Klamath Falls, Klamath Falls to Mt. Hebron, Mt. Hebron to Dunsmuir, Snowdon to Edgewood and Edgewood to Hornbrook, in figuring tonnage of train, add 6 Ms for each empty or underloaded car of less than 45 Ms, and 3 Ms for each such car of 45 to 55 Ms; and in all other districts listed above add 3 Ms for each such car of 55 Ms or less.

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—KIRK SUBDIVISION

RULE 10 (J). Round yellow speed boards indicate the speed restrictions applying to Streamliners SHASTA DAY-LIGHT and CASCADE with DEP class engine only.

Speed boards to left of track:

Eastward	Reading	Westward	Reading
MP 456.70	65-60-50	MP 431.70	60-50
		MP 434.66	55-50
		MP 438.65	65-60-50
		MP 447.31	65-60-50

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

West MP		East MP
425.67	Klamath Falls.....	432.66
552.04	" (Merrill line).....	
527.50	Crescent Lake.....	529.17

Klamath Falls: Westward trains except first class approaching Klamath Falls must not pass Signal 4305 unless flashing white light is displayed on mast of this signal.

Indication displayed by Signal 4305 must be respected.

Flashing white light will authorize movement to east switch, where trains to enter yard tracks, if handled by steam engine or DEF class engine with less than four dynamic brakes in operation, must stop and not proceed into yard tracks until signal received from yardman. Trains handled by DEF class engines with four dynamic brakes in operation need not stop, provided signal received from yardman.

Movements of GNRy trains and engines between initial switch east end of yard and junction switch of GNRy will be directed by yardmaster.

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

Klamath Falls... GNRy main track, for SP main track,
 Gilchrist Jct.... KNRy main track, for interchange track,
 Chemult..... GNRy main track, for siding.

RULE 505. AUTOMATIC BLOCK SYSTEM

Trains or engines stopped by Signal 4292, 4293 or 4295 at Klamath Falls, may proceed with caution, not exceeding 12 MPH.

RULE 510. The following block signals, equipped with triangular plate displaying the letter "P", have included in their control limits some special protective device.

Eastward Signal	Klamath Falls-Crescent Lake	Westward Signal
P-4412	Slide detector fence between MP 441.9 and MP 444.....	P-4447
P-4422		P-4435
P-4434		P-4421

RULE 512 (B). Switch indicators and signals located as follows:

Signal 4278 at derail GNRy Bieber line, top unit governs from Bieber line to Cascade line main track; lower unit governs from Bieber line to GNRy line crossing Lake Ewauna.

Signal 4277 at derail from line crossing Lake Ewauna governs to GNRy Bieber line, or SP Merrill line.

Signal 4279 just east of GNRy Lake Ewauna line connection on Cascade line, lower unit governs to GNRy Bieber line or SP Merrill line.

Signal 4275.5 at fouling point ladder tracks between tracks 17 and 18 governs from all ladder tracks to Merrill line.

Junction of GNRy and Cascade line (Signals 4284-4283). Should these signals fail to indicate "proceed" after switches are lined wait four minutes for time element relay to function, which will be effective when approach circuit to junction switch is occupied. After operation of time element relay, if signals fail to indicate "proceed", Rules 99 and 509 (F) apply.

Normal indication of Signal 5031 governing movement from GNRy connection and Signal 5025 governing movement from interchange track at Chemult is "stop". Proceed indication will be displayed after switches and derails are lined for movement if block is clear. Should these signals fail to indicate "proceed" after switches are lined, train may proceed in accordance with Rule 509 (F). All movements to main track must be protected as prescribed by Rule 99.

RULE 516. Overlap posts:

Westward trains:

Pine Ridge.....Near middle of siding.

RULE 705. LETTER TYPE INDICATORS

Indicators located as follows:

Illum Letter	On Signal	Approaching	Authorizes and requires movement as follows:
M.....	4550..	Chiloquin ..	Proceed to fouling point east end of Chiloquin siding.
S.....	4550..	Chiloquin ..	Enter siding.
M.....	4585..	Pine Ridge ..	Proceed to fouling point west end of Chiloquin siding.
S.....	4585..	Pine Ridge ..	Enter Chiloquin siding.
M.....	5018..	Chemult ...	Proceed to fouling point east end of siding.
S.....	5018..	Chemult ...	Enter siding.
M.....	5051..	Chemult ...	Proceed to fouling point west end of siding.
S.....	5051..	Chemult ...	Enter siding.

Letter type indicators do not apply to GNRy trains approaching Chemult.

GENERAL REGULATIONS

RULE 824. Instructions for setting hand brakes:
Klamath Falls:

Passenger Trains..... {Two brakes on west end,
Two brakes on east end.
Freight Trains..... {Five brakes on west end,
Five brakes on east end.

Staff brakes on freight trains must be set with the assistance of brake club after train has stopped. Any employe releasing any of these brakes, must set an equal number to replace them.

Engines must not be cut off freight trains at Klamath Falls until sufficient hand brakes are set to secure train and yard air must not be coupled into train until engine is cut off.

RULE 827. Trains handling logs must stop and crew must inspect load and chains before entering yard at Klamath Falls, passing through tunnels and over Sprague River bridge west of Chiloquin.

On freight trains between Kirk and Chiloquin, member of train crew will observe track from rear of caboose so train may be stopped in event of derailment. Two Dietz lanterns placed on rear of caboose will be used at night to assist in observing track.

RULE 862. After first-class trains have stopped at Klamath Falls, incoming trainmen will set necessary hand brakes. Outgoing trainmen must relieve incoming trainmen immediately and afford necessary flag protection as prescribed by Rule 99.

AIR BRAKE RULES

RULE 2.—When Diesel switch engine is used on yard tracks at east end of Klamath Falls, handling cuts of forty empties or twenty-five loads or more, air brakes must be cut in on not less than four cars.

RULE 17. Westward freight trains handled by steam engine or DEF class engine with less than four dynamic brakes in operation, must turn up not less than ten retainers on head-end of train before entering yard tracks at Klamath Falls.

Sufficient retainers must be turned up, in the judgment of engineer, to properly control train handling logs Kirk to Chiloquin.

FREIGHT TRAINS

RULE 25. Rear-end test made between:

Chiloquin and Kirk; Chemult and Crescent Lake must be made in accordance with Air Brake Rule 25(b).

MISCELLANEOUS

1. Take water at Kirk only in emergency, and then only sufficient to make next water supply.

10. Look out for falling rocks between Algoma and Modoc Point.

Engines listed are not permitted to operate on tracks shown below:

Class of Engine	Restricted Tracks
Engines heavier than 210,000 lbs. on drivers.	On industrial tracks other than house tracks, between Klamath Falls and Kirk and Gladney & Adams spur at MP 446.60.
Engines heavier than 275,000 lbs. on drivers.	Chiloquin—Chiloquin Lbr. Co., off stem of wye
All	Modoc Point—Lamm Lbr. Co. spur, except that SP and GNRy engines not exceeding 275,000 pounds on drivers may operate over main spur to lumber shed.
All	Lobert—Big Lakes log track, except for 20 car-lengths from west end.
Engines heavier than 233,000 lbs. on drivers.	Paunina—Pumice Sales Co. spur.

Load limit (car and contents):

Klamath Falls-Crescent Lake..... 251,000 pounds

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

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

MP	Location	Description
456.0	Chiloquin . Sprague River bridge . . .	Overhead and side

SPECIAL INSTRUCTIONS—KIRK 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 6 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed boards, 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 ABSOLUTE SAFETY, REGARDLESS OF TIME.**

TERRITORY	Streamliners SHASTA DAYLIGHT CASCADE	OTHER PASSENGER TRAINS	↑FREIGHT AND MIXED	LIGHT ENGINES		TERRITORY	Streamliners SHASTA DAYLIGHT CASCADE	OTHER PASSENGER TRAINS	↑FREIGHT AND MIXED	LIGHT ENGINES	
				RUNNING FORWARD	RUNNING BACKWARD					RUNNING FORWARD	RUNNING BACKWARD
Column:	A	1	2	3	4	Column:	A	1	2	3	4
EASTWARD, KLAMATH FALLS TO CRESCENT LAKE: MP MP 429.50 to 429.90 50 30 30 20 20 429.90 to 431.70 60 60 50 50 30 431.70 to 433.91 (curves)..... 55 50 50 50 30 433.91 to 438.65 65 60 50 50 30 438.65 to 439.02 (curve)..... 60 55 50 50 30 439.02 to 446.56 65 60 50 50 30 446.56 to 451.81 79 70 50 50 30 451.81 to 454.96 65 60 50 50 30 454.96 to 456.70 (curves)..... 55 50 50 50 30 456.70 to 459.03 65 60 50 50 30 459.03 to 462.87 (curves)..... 55 50 50 50 30 462.87 to 466.09 65 60 50 50 30 466.09 to 467.67 (curves)..... 55 50 50 50 30 467.67 to 471.04 65 60 50 50 30 471.04 to 508.70 79 60 50 50 30 508.70 to 511.96 (curves)..... 60 55 50 50 30 511.96 to 516.48 65 60 50 50 30 516.48 to 518.95 (curves)..... 60 55 50 50 30 518.95 to 522.86 70 60 50 50 30 522.86 to 523.51 (curve)..... 65 60 50 50 30 523.51 to 528.60 79 60 50 50 30						WESTWARD, CRESCENT LAKE TO KLAMATH FALLS: MP MP 528.60 to 523.51 79 60 50 50 30 523.51 to 522.86 (curve)..... 65 60 50 50 30 522.86 to 518.95 70 60 50 50 30 518.95 to 516.48 (curves)..... 60 55 50 50 30 516.48 to 511.96 65 60 50 50 30 511.96 to 508.70 (curves)..... 60 55 50 50 30 508.70 to 471.04 79 60 50 50 30 471.04 to 467.67 65 60 50 50 30 467.67 to 466.09 (curves)..... 55 50 50 50 30 466.09 to 462.87 65 60 50 50 30 462.87 to 459.03 (curves)..... 55 50 50 50 30 459.03 to 456.70 65 60 50 50 30 456.70 to 454.96 (curves)..... 55 50 50 50 30 454.96 to 451.81 65 60 50 50 30 451.81 to 446.56 79 70 50 50 30 446.56 to 439.02 65 60 50 50 30 439.02 to 438.65 (curve)..... 60 55 50 50 30 438.65 to 433.91 65 60 50 50 30 433.91 to 431.70 (curves)..... 55 50 50 50 30 431.70 to 429.90 60 60 50 50 30 429.90 to 429.50 50 30 30 20 20					

Streamliners SHASTA DAYLIGHT and CASCADE when handled by steam power and consisting of streamlined equipment, may run not to exceed 75 MPH on Tangent Track where 70 MPH is authorized in Column 1.

⚡**RESTRICTED CARS** are twin or multiple loads; cars of excess height or width; loads of excess height, width or weight; any equipment listed under "Maximum Speed Permitted with Certain Equipment"; scale test cars; and cars with arch bar trucks, and trains handling such cars must not exceed maximum speed of 40 MPH.

Trains handling logs must not exceed 5 MPH over Sprague River bridge, west of Chiloquin.

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 engine running backward.....	10
Chiloquin, stem of wye to log pond.....	6

RATING OF ENGINES—In Units of 1000 Lbs. (Ms)

NOMINAL CLASS	ENGINE NUMBERS	Crescent Lake to Klamath Falls	Klamath Falls to Crescent Lake
DEP-3	6017.....	7500	5350
DEP-4, 7	6000 to 6004 and 6018.....	7500	5400
DEP-5, 6	6005 to 6016.....	13700	8000
DEF-1	6122 to 6137.....	.....	.....
DEF-1	6138 and 6139.....	.....	.....
DEF-2	6140 to 6179.....	.....	.....
DEF-3, 4, 5, 6	6180 to 6339.....	20000	18100
DERS-1	5200 to 5202.....	.....	.....
DERS-2, 4 to 7	5203 to 5239.....	8000	4950
DES-1 to 7	1000 to 1022.....	2750	1550
DES-100 to 109	1300 to 1441.....	4150	2350
M-4	1617 to 1713.....	3850	2200
M-6, 8	1721 to 1803, 1824 and 1825.....	4550	2600
M-9	1804 to 1822, 1826 to 1830 and 1836.....	4800	2800
M-11	1832 to 1835.....	5000	2900
T-1	2248 and 2252.....	3300	1900
T-8	2178.....	2400	1350
T-23	2301 to 2310.....	4750	2750
T-26	2296 and 2299.....	4200	2400
T-28, 31	2312 to 2362.....	5250	3050
T-32	2363 to 2370, 2372 to 2384.....	5350	3100
T-40	2371.....	5350	3100
T-37	2105 and 2106.....	4800	2750
P-1, 3, 5	{2404, 2408, 2411, 2412, 2417, 2428 to 2433, 2439 } to 2452 and 2459	4300	2450
P-1	2403, 2405 to 2407 and 2415.....	4500	2550
P-4	{2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, } 2424 and 2436	4700	2700
P-6	2453, 2454 and 2458.....	5350	3050
P-7	2476 and 2477.....	5650	3250
P-8, 10	2461 to 2474, 2478 to 2483.....	5900	3350
P-8, 10	2475, 2484 to 2491.....	6200	3550
P-11	3104 and 3109.....	4650	2650
P-12	3120 to 3129.....	6000	3400
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2625 to 2860, 3440 to 3469.....	5850	3400
C-18	3400 to 3409.....	5300	3100
C-19	3410 to 3426.....	5550	3200
TW-1	2900 to 2913.....	4400	2550
TW-2, 3	2937 to 2952.....	3550	2050
TW-8	2914 to 2923.....	5000	2900
A-3	3025 and 3057.....	3550	2000
A-6	3000 and 3002.....	4150	2350
Mk-2, 4	3201 to 3240.....	6500	3650
Mk-5, 6	3241 to 3277.....	7000	3750
Mk-7, 8, 9	3300 to 3324.....	8050	4650
Mk-10	3295.....	6200	3600
Mk-11	3297 and 3298.....	5950	3450
F-1	3611 to 3652.....	8350	4850
F-3, 4, 5	3653 to 3769.....	10100	5650
MM-3	3930 and 3931.....	11150	6450
AC-4, 5	4100 to 4125.....	14000	8000
AC-6 to 12	3800 to 3811, 4126 to 4294.....	15000	8600
Mt-1, 3, 4, 5	4300 to 4376.....	7750	4500
Mt-2	4385 to 4390.....	.....	.....
GS-1, 2	4401 to 4415.....	8400	4800
GS-3, 4, 5, 6	4416 to 4469.....	8500	4900
SP-1, 2, 3	5000 to 5048.....	11350	6600

In figuring tonnage of train, add 6 Ms for each empty or underloaded car of less than 45 Ms, and 3 Ms for each such car of 45 to 55 Ms.

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—MERRILL SUBDIVISION

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

West MP		East MP
425.67	Klamath Falls.....	432.66
552.04	" (Merrill Line).....	—
528.60	Tule Lake.....	530.40
454.93	Alturas.....	461.23
—	" (Lakeview Branch).....	460.19
510.63	Lakeview.....	513.05

KLAMATH FALLS

Movements of GNRy trains and engines between initial switch east end of yard and junction switch of GNRy will be directed by yardmaster.

Trains and engines approaching Klamath Falls Yard must not pass Signal 5528 unless flashing white light is displayed on mast of this signal. Indication displayed by Signal 5528 must be respected. Flashing white light will authorize movement to east end of track 17 where signal must be received from yardman before moving to receiving track.

RULE 99 (C) will apply on Lakeview Branch.

RULE 104. The normal position of rigid switches at junctions is as follows:

- Klamath Falls . . . GNRy main track, for SP main track,
- Klamath Falls . . . Merrill line, for yard track 17,
- Klamath Falls . . . OC&ERy main track, for yard track,
- Alturas Merrill line, for Lakeview Branch.

RULE 505. AUTOMATIC BLOCK SYSTEM

Trains or engines stopped by Signal 4292, 4293 or 4295 at Klamath Falls, may proceed with caution, not exceeding 12 MPH.

RULE 512 (B). Switch indicators and signals located as follows:

Signal 4278 at derail GNRy Bieber line, top unit governs from Bieber line to Cascade line main track; lower unit governs from Bieber line to GNRy line crossing Lake Ewauna.

Signal 4277 at derail from line crossing Lake Ewauna governs to GNRy Bieber line, or SP Merrill line.

Signal 4279 just east of GNRy Lake Ewauna line connection on Cascade line, lower unit governs GNRy Bieber line or SP Merrill line.

Signal 4275.5 at fouling point ladder tracks between Tracks 17 and 18 governs from all ladder tracks to Merrill line.

Junction of GNRy and Cascade line (Signals 4284-4283). Should these signals fail to indicate "proceed" after switches are lined wait four minutes for time element relay to function, which will be effective when approach circuit to junction switch is occupied. After operation of time element relay, if signals fail to indicate "proceed", Rules 99 and 509 (F) apply.

AUTOMATIC INTERLOCKING

Stronghold: Crossing GNRy one-half mile east of Stronghold.

When trains are stopped by signals governing the use of automatic interlocking, flagman must be sent to crossing to operate clock-work time-release. Release must not be operated when trains are between home signals or seen approaching on intersecting line.

After release has been operated, a red indicator light should be displayed over release and home signal should indicate "proceed" or red indicator on home signal must be displayed. Trains may then proceed.

If red indicator lights are not displayed, trains may proceed over crossing as provided by Rule 663.

Instructions for operating clock-work time-release are posted on door of box.

GENERAL REGULATIONS

RULE 824. Instructions for setting hand brakes:

Klamath Falls:

- | | |
|-----------------------|--|
| Passenger trains..... | } Two brakes on west end,
Two brakes on east end. |
| Freight trains..... | |

Staff brakes on freight trains must be set with the assistance of brake club after train has stopped. Any employe releasing any of these brakes, must set an equal number to replace them.

Engines must not be cut off freight trains at Klamath Falls until sufficient hand brakes are set to secure train and yard air must not be coupled into train until engine is cut off.

RULE 827. Freight trains using retainers on descending grade will stop between switches at Canby and Hackamore 10 minutes for heat radiation at which time train inspection will be made, and enginemen will inspect engines.

AC class engines running light on descending grade will stop sufficient length of time, and other engines running light on descending grade will stop 10 minutes at those stations for heat radiation, at which time enginemen will inspect engines.

Trains handling logs must stop and crew must inspect load and chains before entering yard at Klamath Falls.

On freight trains between Ambrose and Canby, member of train crew will observe track from rear of caboose so train may be stopped in event of derailment. Two Dietz lanterns placed on rear of caboose will be used at night to assist in observing track.

RULE 862. After passenger trains have stopped at Klamath Falls, incoming trainmen will set necessary hand brakes. Outgoing trainmen must relieve incoming trainmen immediately and afford necessary flag protection as prescribed by Rule 99.

AIR BRAKE RULES

RULE 17. Retainers will be used on freight and mixed trains on descending grades as follows:

Ambrose to Canby . . . One valve for each 100 Ms in train.

If tonnage exceeds amount of Ms specified for each retainer, trains may be handled Ambrose to Canby, up to 130 Ms per operative brake.

Sufficient retainers must be turned up, in the judgment of engineer, to properly control train handling logs Ambrose to Perez.

All accessible retainers must be turned up on passenger trains Ambrose to Canby.

FREIGHT TRAINS

RULE 25. Rear-end test must be made between following points:

Perez and Canby, in accordance with Air Brake Rule 25(b).

RULE 25(a). Rear-end test must be made immediately prior to leaving Ambrose on westward trains.

MISCELLANEOUS

4. Helper service:

Helper engine must not be placed on head end of freight trains, except on trains consisting entirely of logs, between Canby and Ambrose.

10. Engines listed are not permitted to operate on tracks shown below:

Class of Engine	Restricted Tracks
Engines heavier than 210,000 lbs. on drivers . . .	Lakeview Branch—Between MP 457.50 and Lakeview.
All	Alturas—Farmers Exchange spur beyond Fourth St.
AC, F	Staley—Wye.

Cars or engines must not be moved beyond a point 500 feet from switch on R. L. Smith Lbr. Co. track at west end house track, Canby.

Load limit (car and contents):

Alturas-Klamath Falls	251,000 pounds
Alturas-Lakeview	169,000 pounds

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

SPECIAL INSTRUCTIONS—MERRILL 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 6 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed boards, 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 ABSOLUTE SAFETY, REGARDLESS OF TIME.**

TERRITORY	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES		TERRITORY	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES	
			RUNNING FORWARD	RUNNING BACKWARD				RUNNING FORWARD	RUNNING BACKWARD
Column:	1	2	3	4	Column:	1	2	3	4
EASTWARD, ALTURAS TO KLAMATH FALLS: MP MP					WESTWARD, KLAMATH FALLS TO ALTURAS: MP MP				
458.30 to 460.03 (curves).....	30	30	30	25	429.50 to 427.00 (553.30)(wye).....	15	15	15	10
460.03 to 465.26.....	35	35	35	30	553.30 to 552.89.....	15	15	15	10
465.26 to 467.28 (curves).....	30	30	30	25	552.89 to 510.50.....	35	35	35	30
467.28 to 478.63.....	35	35	35	30	#510.50 to 485.05.....	25	25	25	20
478.63 to 485.05 (curves).....	20	20	20	15	485.05 to 478.63 (curves).....	20	20	20	15
#485.05 to 510.50.....	25	25	25	20	478.63 to 467.28.....	35	35	35	30
510.50 to 552.89.....	35	35	35	30	467.28 to 465.26 (curves).....	30	30	30	25
552.89 to 553.30 (427.00)(wye).....	15	15	15	10	465.26 to 460.03.....	35	35	35	30
427.00 to 429.50.....	15	15	15	10	460.03 to 458.30 (curves).....	30	30	30	25
EASTWARD, ALTURAS TO LAKEVIEW:					WESTWARD, LAKEVIEW TO ALTURAS:				
456.80 to 462.04.....	..	20	20	15	512.30 to 462.12.....	..	20	20	15
462.04 to 462.12 (cut).....	..	10	10	10	462.12 to 462.04 (cut).....	..	10	10	10
462.12 to 512.30.....	..	20	20	15	462.04 to 456.80 (458.30).....	..	20	20	15

#A-3, 6; F-3, 4, 5; P-8, 10; and SP class engines restricted to 20 MPH.

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 engine running backward.....	10
Canby, Lumber Company's spur.....	8

(Faint, mirrored text from the reverse side of the page, including references to rules and instructions.)

SPECIAL INSTRUCTIONS—MERRILL SUBDIVISION

RATING OF ENGINES—In Units of 1000 Lbs. (Ms)

NOMINAL CLASS	ENGINE NUMBERS	Klamath Falls and Perez Canby and Alturas	Perez to Canby	Canby to Perez	Alturas and Lakeview
DEP-3	6017	.....	.....	.....	.....
DEP-4, 7	6000 to 6004 and 6018	.....	.....	.....	.....
DEP-5, 6	6005 to 6016	.....	.....	.....	.....
DEF-1	6122 to 6137	.....	.....	.....	.....
DEF-1	6138 and 6139	.....	.....	.....	.....
DEF-2	6140 to 6179	.....	.....	.....	.....
DEF-3, 4, 5, 6	6180 to 6339	20000	15800	8700	.....
DERS-1	5200 to 5202	.....	.....	.....	.....
DERS-2, 4 to 7	5203 to 5239	6050	4300	1950	.....
DES-1 to 7	1000 to 1022	1850	1320	570	.....
DES-100 to 109	1300 to 1441	2850	2050	910	.....
M-4	1617 to 1713	2650	1800	770	1500
M-6, 8	1721 to 1803, 1824 and 1825	3100	2100	930	1750
M-9	1804 to 1822, 1826 to 1830 and 1836	3300	2250	1000	1900
M-11	1832 to 1835	3450	2350	1050	1950
T-1	2248 and 2252	2250	1550	660	1250
T-8	2178	1600	1100	440	900
T-23	2301 to 2310	3250	2250	970	1850
T-26	2296 and 2299	2850	1950	820	1600
T-28, 31	2312 to 2362	3550	2450	1050	2050
T-32	2363 to 2370, 2372 to 2384	3650	2500	1100	2100
T-40	2371	3650	2500	1100	.....
T-37	2105 and 2106	3250	2250	980	1850
P-1, 3, 5	{2404, 2408, 2411, 2412, 2417, 2428 to 2433, 2439 to 2452 and 2459 }	2900	1950	810	1600
P-1	2403, 2405 to 2407 and 2415	3050	2050	850	1700
P-4	{2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436 }	3200	2150	900	1800
P-6	2453, 2454 and 2458	3650	2450	1050	2050
P-7	2476 and 2477	3850	2650	1050	2200
P-8, 10	2461 to 2474, 2478 to 2483	4000	2700	1100	.....
P-8, 10	2475, 2484 to 2491	4200	2850	1200	.....
P-11	3104 and 3109	3150	2150	900	1750
P-12	3120 to 3129	4200	2850	1150	.....
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2625 to 2860, 3440 to 3469	3950	2750	1200	2250
C-18	3400 to 3409	3650	2500	1100	2100
C-19	3410 to 3426	3800	2600	1150	2200
TW-1	2900 to 2913	3000	2050	920	1700
TW-2, 3	2937 to 2952	2400	1650	720	1350
TW-8	2914 to 2923	3400	2300	1000	1900
A-3	3025 and 3057	2400	1600	630	1300
A-6	3000 and 3002	2800	1900	770	1550
Mk-2, 4	3201 to 3240	4550	3100	1350	①2500
Mk-5, 6	3241 to 3277	5050	3450	1400	①2850
Mk-7, 8, 9	3300 to 3324	5550	3800	1700	.....
Mk-10	3295	4200	2950	1250	2450
Mk-11	3297 and 3298	4100	2850	1250	2350
F-1	3611 to 3652	5700	3950	1750	.....
F-3, 4, 5	3653 to 3769	6900	4900	2150	.....
MM-3	3930 and 3931	7650	5300	2350	.....
AC-4, 5	4100 to 4125	10450	7200	3200	.....
AC-6 to 12	3800 to 3811, 4126 to 4294	11000	7600	3350	.....
Mt-1, 3, 4, 5	4300 to 4376	5350	3600	1550	.....
Mt-2	4385 to 4390	.....	.....	.....	.....
GS-1, 2	4401 to 4415	5700	3850	1550	.....
GS-3, 4, 5, 6	4416 to 4469	6050	4050	1650	.....
SP-1, 2, 3	5000 to 5048	7800	5350	2400	.....

①Applies to engines 3201, 3203 to 3206 incl., 3213, 3224, 3227, 3229, 3236, 3237, 3241, 3247, 3251, 3253, 3255, 3259, 3266 and 3272 only.

In figuring tonnage of train, add 6 Ms for each empty or underloaded car of less than 45 Ms, and 3 Ms for each such car of 45 to 55 Ms, except from Canby to Perez add 3 Ms for each such car of 55 Ms or less.

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