

GETTING HURT IS A FOOLISH WAY
To Prove That Rules Mean What They Say

RULE 10-I

Oral authorization and acknowledgments between Foremen and Engineers for trains to pass "Red Conditional Stop" signs must be worded in the following forms:

NWP FOREMAN..... AT MP..... CALLING NWP (Train No.).....

(After train answers giving his identification): (i.e.) **NWP Train.....**

Foreman's Response

"THIS IS NWP FOREMAN..... IN CHARGE OF THE WORK BETWEEN MP..... AND MP..... NWP TRAIN ORDER NO..... WE ARE IN THE CLEAR AND YOU MAY PROCEED PAST THE RED CONDITIONAL SIGN AND THROUGH THE LIMITS OF ORDER AT ... MPH (REPEAT)..... MPH."*

Engineer's Response

"THIS IS ENGINEER NWP TRAIN.... I MAY PROCEED PAST THE RED CONDITIONAL STOP SIGN AND THROUGH THE LIMITS OF ORDER NO.... BETWEEN MP AND MP AT (Speed). REPEAT (Speed) MILES PER HOUR."

Foreman must acknowledge Engineer's response as follows: **"NWP TRAIN ORDER NO....., BETWEEN MP..... AND MP..... MPH* OK."**

*When no speed restriction account above Form "Y" Train Order, tell train engineer "At Maximum Authorized Speed."

SPEED TABLE

TIME PER MILE	MILES PER HOUR
1'11"	50.7
1'12"	50
1'13"	49.3
1'14"	48.6
1'15"	48
1'16"	47.4
1'17"	46.8
1'18"	46.2
1'19"	45.6
1'20"	45
1'25"	42.4
1'30"	40
1'35"	37.9
1'40"	36
1'45"	34.3
1'50"	32.7
1'55"	31.3
2'00"	30
2'15"	26.7
2'30"	24
2'45"	21.8
3'00"	20
3'30"	17.1
4'00"	15
5'00"	12
6'00"	10
7'00"	8.6
7'30"	8
8'00"	7.5
10'00"	6

NORTHWESTERN PACIFIC RAILROAD COMPANY

AND

PETALUMA AND SANTA ROSA RAILROAD COMPANY

TIMETABLE

1

EFFECTIVE MAY 31, 1970

AT 12:01 A. M.

PACIFIC STANDARD TIME

FOR THE GOVERNMENT AND INFORMATION OF EMPLOYEES ONLY

W. M. JONES,

Vice President and General Manager.

A. T. LEWIS,

District Superintendent.

SENIOR TRAINMASTER

H. B. FOWLER..... Eureka

TRAINMASTER

GERALD FOSTINE..... Santa Rosa

TRAINMASTER

ROAD FOREMAN OF ENGINES

J. D. LEWIS..... Willits

ASSISTANT TRAINMASTER

M. P. FORD..... Eureka

CHIEF TRAIN DISPATCHER

C. L. KENNEDY..... Roseville

TIMETABLE NO. 1

EAST- WARD	STATIONS	Station Number	WEST- WARD
Mile Post Location			Distance from Santa Rosa
0	Petaluma BKPQ	24309	23.2
	" —NWPRR	24310	
1.4	West Petaluma	24321	23.7
3.6	Yard Limits	Denman	19.6
11.3		Turner	11.9
11.8		Hessel	11.4
13.2		Cunningham	10.0
16.7		Sebastopol P	6.5
17.7		Gravenstein	5.5
19.7		Leddy	3.5
23.2		Santa Rosa YP	0
	" —NWPRR	24380	

EAST- WARD	FORESTVILLE BRANCH	Station Number	WEST- WARD
Mile Post Location	STATIONS		Distance from Sagu
16.7	Yard Limits	Sebastopol P	4.9
19.0		Molino	2.0
19.6		Barlow	2.0
20.3		Hop Yard	1.3
20.9		Graton	0.7
21.5		Manzana	0.1
21.6		Sagu	0.0

Main track out of service between Denman and Turner.

SPEED RESTRICTIONS

Movements must not exceed the following maximum speeds (shown in miles per hour):

Between:

Turner and Santa Rosa	15
Petaluma, West Petaluma and Denman	10
Sebastopol and Sagu	15

Through sidings, yard and other tracks, crossovers and turnouts 10

The above speeds are the maximum speeds permitted. Speed must be further reduced as prescribed by speed signs or by timetable bulletin. When fog, storms or other conditions obscure track or signals, speed of movements must be so reduced as to permit strict observance of signals and INSURE ABSOLUTE SAFETY.

SPECIAL INSTRUCTIONS

PETALUMA AND SANTA ROSA RAILROAD COMPANY

RULE 93. Yard limits are established to include all tracks.

RULE 103-A.

Petaluma: Flashing light signals at Washington Street, West Petaluma, are not actuated for movement until equipment is within fifty (50) feet of crossing. Trains and engines must not proceed over crossing until flashing light signals are operating. Equipment must not be left standing on track within one hundred (100) feet of the crossing.

Sebastopol: Movements over Bodega-Santa Rosa Ave. must not enter the crossing until traffic signal on Main St. displays flashing yellow signal. When flashing yellow light is displayed and movement does not enter crossing within 1½ minutes, crossing must not be entered until traffic light displays green aspect for Main St. traffic.

MISCELLANEOUS

All engines are restricted from operating on the PSRR except the following: ES408, ES409, AS407, AS409, AS410 and GS407.

West Petaluma: Metal plates over rail just west of H Street between Kresky's buildings 1 and 2 must be removed before spotting cars.

MAXIMUM CAR LOADING

Load limit (car and contents) must not exceed 220,000 pounds.

SPECIAL INSTRUCTIONS

RULE A. Employes must know they have in their possession copy of Rules and Regulations of the Transportation Department effective January 1, 1969.

RULES 10-G, 10-H and 10-I. When unattended red flags or red lights, yellow signals, red **CONDITIONAL STOP** signs and yellow **PROCEED PREPARED TO STOP** signs are displayed between siding switches, they must be duplicated to right of siding in direction of approach. If clearance between siding and main track does not permit display of these signals to right of track in direction of approach, signals may be displayed to left of track in direction of approach. Display of these signals to the left of track in direction of approach must be respected as though they were displayed in accordance with these rules.

RULES 10-H, 10-I, 15 and FORM Y train orders are revised to read:

One and one-half (1½) miles where two (2) miles are shown.

RULE 10-J. Speed signs to left of track:

Eastward	Reading
MP 121.40	25
Westward	Reading
MP 255.70	45
MP 139.20	40
MP 37.95	10

RULE S-72. Westward trains are superior to trains of the same class in the opposite direction.

RULE 82-A.

San Rafael Trains originating will obtain clearance only when operator is on duty.
Schellville Trains originating will obtain clearance only when operator is on duty.

Extra trains are authorized to operate as extra trains between Alton and Carlotta without train order authority and without obtaining clearance at Alton.

RULE 83-A. At the following stations only trains indicated will register:

San Rafael Trains originating and terminating.
Ignacio No. 75 and trains instructed by train order.

(Train register located in phone booth at west end Ignacio Wye)

Petaluma Trains originating and terminating.
Healdsburg Trains originating and terminating.
Ukiah Trains originating and terminating.
Fort Seward Trains originating and terminating.
Scotia Trains originating and terminating.
Alton Nos. 3, 4 and extra trains departing Alton on Carlotta Branch.

RULE 82-A, 83 and 83-A: Extra trains operating on Carlotta Branch, in addition to information required by train register located at Alton, must register destination of trip (turning point) and date of departure in the column captioned "Signals." When trip has been completed, date of arrival at Alton must also be entered in column captioned "Signals." Extra trains enroute to this territory must not leave Alton until it has been ascertained from train register that the preceding extra train via the route to be used has completed the trip and registered time and date of arrival at Alton accordingly.

RULE S-90-A is revised to read:

One (1) mile where two (2) miles is shown.

RULE 93. Yard limits are established at the following stations:

West MP	East MP
6.84 Sausalito (Sausalito Branch)	
11.00 Meadowsweet (San Rafael Branch)	27.05
26.80 Ignacio	
44.95 Schellville	38.25
36.38 Petaluma	40.30
52.36 Santa Rosa	55.66
65.65 Healdsburg	69.71
74.52 Geyserville	78.39
110.84 Ukiah	116.10
120.21 Redwood Valley	122.39
137.90 Willits	141.40
193.94 Island Mountain	195.62
214.25 Fort Seward	218.50
280.56 Eureka (Korblex Branch)	End of NWP Track
" (Samoa Branch)	End of NWP Track

RULE 99. Flag protection to the rear is not required between Alton and Carlotta.

RULE 99-C. Will apply between Redwood Valley and Eureka.

RULE 103-A.

Trains moving under conditions that may require them to stop must, where possible, stop to clear public grade crossing. When not possible to stop clear of such crossings and train cannot proceed immediately, crews on other than passenger trains must cut these crossings within ten minutes unless no vehicles are waiting at or closely approaching crossing. Public crossings must be left open until it is known that trains are ready to depart. Crews required to pick up, set out or perform switching operations must, when track room exists, stop their trains back a sufficient distance to avoid blocking public crossings when coupling trains and while charging train lines. When recoupling at public crossings, trains shall be moved promptly consistent with safety.

Switching movements over public grade crossings should be avoided whenever possible. If not possible, such crossings must be cleared frequently to allow vehicles to pass and must not be occupied continuously for longer than ten minutes unless it can be seen that no vehicles are waiting at or closely approaching the crossing.

Cars or locomotives must not be left standing or switches left open within the controlling circuits of automatic gate protection devices unless timeout features are provided to allow the gate arms to rise.

Willits: Flashing light signals at Commercial Street crossing are not actuated for movements over Track 2 or House Track until equipment is within fifty (50) feet of crossing. Trains and engines using Track 2 or House Track must not proceed over crossing until flashing light signals are operating. Equipment must not be left standing on these tracks within one hundred (100) feet of the crossing.

A member of the crew must afford protection to traffic while movement is being made over Highway 101 crossing on wye track at Willits.

RULE 103-A. Following crossings protected by gates with controlled circuits located within short distance of crossing other than on main track. Before making movements over these crossings, from other than main track, it must be known that gates are down or protection to traffic must be provided while movement is being made.

Station	Location	Mile Post
Schellville	Highway 12	40.4
*Santa Rosa	Third Street	53.7
**Ukiah	Perkins Street	114.0
Redwood Valley	School Way	121.1
Alton	State Route 35 (Carlotta Br.)	262.85

*May be operated for movements from other than main track by operating key release on side of instrument case on east side of crossing and on relay post on west side of crossing.

**May be operated for movement over Lucas track by operating key release on relay post on west side of crossing.

Switch key may be removed but circuit must be occupied within one minute or gate will rise.

Meadowsweet: Flashing light signals at Paradise Drive, Mile Post 11.4, are not actuated until equipment is within 50 feet of crossing. Trains and engines must not proceed over crossing until flashing light signals are operating.

San Rafael:

Pedestrian crosswalk located at Los Gallinas Avenue, MP 19.3, must not be blocked by standing trains or cars.

Hamilton Field: Switching movements at Hamilton Air Force Base under jurisdiction of Air Force representative. Engines must not pass engine restriction sign without permission from Air Force representative.

Petaluma:

Switching movements on other than main tracks over the following crossings must not be made until a member of the crew has afforded protection to traffic.

East D St.

Washington St.

Uncontrolled movement of cars over these crossings prohibited.

Santa Rosa: Automatic warning devices at 6th, 7th and 8th Street crossings operate only when movements are made on main track and siding. Automatic warning devices at 9th Street crossing operates only when movements are made on main track. When movements over these crossings are made from other tracks and automatic crossing protection is not operating, movement must not be made until protection to traffic has been provided.

RULE 104. Normal position of junction switch of Carlotta Branch at Alton is for siding.

Normal position of junction switch at Carlotta is for The Pacific Lumber Co. track.

RULE 105. Capacity of sidings column indicate length of train in feet that can be accommodated between fouling points.

At the following stations, sidings are located as shown below:

SANTA ROSA. On east side of main track, from East Switch MP 54.97, to MP 53.85 (10 feet east of Sixth St.)

HEALDSBURG. On east side of main track, from east switch MP 67.40 (10 feet west of Bailhache Ave.) to west switch.

RULE 206. Second paragraph will not apply to Southern Pacific engines.

RULE 221. Unit for display of flashing light installed at the following locations:

Station	Location	Direction
Petaluma	East end siding	Eastward trains
Healdsburg	West end siding	Eastward trains

Display of flashing white light indicates that train-order signal is displaying proceed indication or that train-order operator has train orders ready for delivery and such train orders do not restrict train at that station and train may pass fouling point of siding if not restricted by timetable or train orders previously received.

Schellville is train order office only for trains originating when operator is on duty.

San Rafael is train order office only for trains originating when operator is on duty.

RULE 535. SPRING SWITCHES

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

Location	Normal Position
Geyserville	East switch Main track
Redwood Valley	East switch Main track

Switch point indicator, indicating position of switch for facing point movement at above locations, are located from 25 to 100 feet in approach to switch.

GENERAL REGULATIONS

RULE 811. The crew must eat as a unit, and conductor will notify train dispatcher in advance where they intend to do so.

RULE 825. At Willits train crews must not release hand brakes until engine is coupled and brake pipe is charged.

Rail skids are located at Ridge and Rounds lumber company spur.

RULE 827. On freight trains a member of the crew must frequently observe track to rear of train for evidence of derailment or any other condition requiring immediate stopping of train.

When trains stop through emergency brake application between Redwood Valley and Willits a member of the train crew must inspect the train before departing to determine whether or not cars are derailed.

Westward trains departing Willits must not exceed 12 MPH until rear of train has passed over Commercial Street crossing.

Trains handling logs not loaded in gondolas should not be in motion on tracks adjacent to main track when passenger trains are passing. If necessary to saw-by, passenger train must remain standing until caboose is clear of main track and train with logs has stopped.

RULE 872. Enginemen taking charge of engines at Eureka, Willits and Schellville will consider engines as having been amply supplied with fuel, sand and equipped with prescribed signals, tools, supplies and flagging equipment in serviceable condition.

RULE 884: When setting out units at Redwood Valley arrange to leave sufficient room on the west end of the siding to hold at least six (6) units.

RULE 958. Is revised to read:
NWP where SP is shown.

With caution
Not Exceeding
MPH

**SPEED RESTRICTIONS
FOR OTHER THAN MAIN TRACKS**

Through Sidings, yards and other tracks, balloon tracks, crossovers and turnouts, except:	15
Through turnouts on other than sidings.	10

Maximum Speed for Engines

Classification	Maximum Speed	Length (feet)
AF420-1	70	57
AF624C-1	75	67
AF624-1	70	67
AF628-1, 2	70	70
AF630-1	70	70
AF640-1	70	59
EF415C-1	70	56
EF415-5 to 9, 11	70	51
EF415B-6, 7, 9, 11, 13	70	50
EF418A-1	70	51
EF418B-1	70	50
EF418-1 to 9	70	56
EF418C-1, 2	70	56
EF618-1 to 5	70	61
EF420C-1	75	56
EF420C-1, 2	70	56
EF420-1, 2	70	56
EF423C-1	70	56
EF423-1	70	56
EF425C-1, 2, 3	70	56
EF425-1, 2, 3, 4	70	56
EF625-1	70	61
EF430C-1	70	59
EF630-1, 2	70	66
EF636-1 to 6	70	66
EF636C-1, 2, 3	70	66
BF850B-1	70	88
GF425-1, 2, 3	70	60
GF428-1	70	60
GF628-1	70	67
GF630-1, 2	70	67
GF633-1, 2, 3	70	67
GF850-1	70	84
ES410-1	60	44
ES410-2	65	44
ES412C-1 to 5	65	44
ES412-1 to 5	65	44
EF623-1, 2	70	66
ES415-1, 2, 3	65	45
ES415C-1, 2	65	45
ES615-1, 3	55	61
EP415A-1 to 5	79	55
EP415AC-1	70	55
EP415B-1, 2, 3	79	50
EP418-1 to 5	70	56
EP620B-1, 2	79	70
EP620A-2	79	71
EP624A-1	79	70
EP636-1	70	71
FP624-1, 2	70	66
AS407-1	60	44
AS409-1 to 5	60	45
AS410-3 to 6	60	45
AS415-1	65	54
AS416C-1, 2, 3	75	57
AS416C-4, 5	65	57
AS616-2 to 4	65	56
AS616C	65	56
AS418-1 to 6	70	57
AS618-1	70	58
BS410-2	60	49
BS410-4	60	49
BS412-1 to 4	60	46
BS615-2 to 5	35	58
BS616-2, 3, 5	35	58
BS616B-1	35	58
ES406-2, 3	45	44
ES408-1 to 4	65	44
ES408B-1	65	44
ES409-1, 2	65	44
ES61 no to 4	70	61
ES412-1 to 5	60	49
GS407-1, 6	55	37
RDC	79	74
Any locomotive not listed	35	..

SPECIAL INSTRUCTIONS

When operated in multiple unit control, on head end of train or running light and engineer is in other than the leading control cab in direction of movement, speed must not exceed 30 MPH. "A" type units (indicated by letter "A" following classification numerals) operating in reverse as lead unit in direction of movement must not exceed 30 MPH.

OTHER SPEED RESTRICTIONS

Trains handling relief crane SPMW 7170 must not exceed 35 MPH.

Trains handling shovels, ditchers, cranes, except SPMW 7170, pile drivers and derricks on own wheels:

	MPH MAIN Tracks Other Than Branches	MPH MAIN Tracks on Branches
With boom disconnected and counterweight forward	25	25
With boom disconnected and light end forward	20	15
With boom in place, either end forward	25	15

Facing point movements over spring switches must not exceed 35 MPH.

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

Dead engines hauled in train and weighing 100,000 pounds or more must be placed first behind the engine handling the train. If weight is less than 100,000 pounds, dead engines must be placed near rear of train.

Trains handling SPMW-2639, Scale Test Car must not exceed 40 MPH on main track other than Branches and 30 MPH on main track on Branches.

MISCELLANEOUS

Forward brakeman in freight service will ride the lead diesel unit unless otherwise instructed by conductor or engineer.

SP 354000-354199 series wood chip cars exceed clearances east of Cloverdale and must not be moved beyond that point. Trains handling loaded cars in above series, must reduce speed of train not exceeding 10 MPH over Healdsburg bridge, MP 67.62. On all movements, cars must be separated at least five cars from engine or caboose, train length permitting.

Engines listed must not operate on tracks shown below:

Class of Engine	Restricted Tracks
All engines	Firco... Beyond engine restriction sign placed 100 feet east of derail.
All engines except ES408 or ES409 series	South Bay... Beyond engine restriction sign placed 547 feet from point of switch on PG&E Spur.
All engines except ES408 or ES409 series	Samoa... Beyond engine restriction sign placed 100 feet from end of long track serving warehouse No. 14, Georgia-Pacific Co.

TPL Co. engines permitted to operate on NWP tracks between Rohnerville and South Fork and Alton and Carlotta.

MAXIMUM CAR LOADINGS

Load limit (car and contents) must not exceed 240,000 pounds except load limit on wharf Samoa Yard must not exceed 169,000 pounds.

Unless authorized by chief train dispatcher, heavier loads must not be handled.

SPMW 7170, relief crane, weighs 222,700 pounds.

When handling 20,000 gallon loaded wine tank cars which have a gross weight of over 230,000 pounds, an empty car, or a load which does not exceed 199,000 pounds, must be handled immediately ahead of and immediately to the rear of each of these cars.

LIGHT TYPE INDICATORS

Light type indicators are installed on Scotia Bluff at MP 256.85 and MP 257.49. Protective equipment is installed on trestle to detect disturbance from falling rocks or high water. On approach, lunar aspect indicates proceed; yellow aspect indicates proceed at reduced speed not to exceed 4 MPH over trestle and trainmen and enginemen most closely observe the trestle to determine if trestle has been displaced or damaged.

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

Mile Post	At or Near	Description	Side or Overhead
37.8		Wingo bridge	Side
28.5	Black Point	Drawbridge	Side
37.2	Petaluma	Drawbridge	Overhead and side
53.8	Santa Rosa	Cement Shed of Mead Clark Lumber Co.	Side
68.0	Healdsburg	Steel bridge over Russian River	Side and overhead
284.1	Eureka	Simpson Plywood, track into building	Overhead and side
284.1	Eureka	Halvorsen Lbr. Co. No. 2	Side
284.1	Eureka	Shell Oil Co., spur	Side
300.5	Samoa	Georgia-Pacific Co., warehouse No. 14	Overhead

FREIGHT TRAINS

(a) When helper engine is placed behind caboose not more than two operating units or 4000 operative horsepower will be used.

(b) When helper engine is placed immediately ahead of caboose a combination of not more than 18 axles and/or 7500 HP will be used.

(c) When helper engine is placed directly ahead of caboose, additional helpers must not be coupled behind caboose. Helper engines must be separated by at least 20 cars.

(d) Air will be cut in on all helper engines, and engines must not be coupled or uncoupled while train is in motion.

(e) When helper engine is shoving on ascending grade, throttle must be reduced as train speed reduces, then throttle regulated so that amperage will be approximately the same as indicated before train speed reduction.

(f) All cars 70 ft. or longer, loaded or empty, must be handled in rear of train and behind helper units between Eureka and Redwood Valley.

(g) Westward trains departing Willits must not handle any empties within 10 cars of road engine or 10 cars ahead of helper engine when three or more units are employed in road or helper service and train exceeds 3600 tons.

(h) When helper engines are not employed in train ascending grade from Willits to Redwood Valley tonnage will be reduced for Eastward trains 200 tons per unit not to exceed 3000 tons and/or 90 cars, for Westward trains 300 tons per unit not to exceed 4800 tons and/or 65 cars.

HELPERS

WILLITS AND REDWOOD VALLEY

Unless otherwise instructed helper engines will be left in train between Willits and Redwood Valley and will be placed as follows:

WESTWARD TRAINS:

On trains handled by 1-2 or 3 unit road engines... One, two or three units ahead of caboose.

Power to be balanced when practicable with concentration of horsepower on head end.

On trains exceeding 6000 tons four unit road engines... Three helper units ahead of caboose.

On trains exceeding 6700 tons four unit road engines... Four helper units placed approximately 1900 tons ahead of caboose.

On trains exceeding 7700 tons four unit road engines... Five helper units placed approximately 2400 tons ahead of caboose.

On trains exceeding 8500 tons four unit road engine... Six helper units placed approximately 2800 tons ahead of caboose.

On trains exceeding 9300 tons five unit road engine... Six helper units placed approximately 4000 tons ahead of caboose.

On trains exceeding 10,200 tons six unit road engine. Six helper units placed approximately 4500 tons ahead of caboose.

On trains exceeding 11,200 tons instructions as to placement of power must be obtained from proper authority.

EASTWARD TRAINS:

On trains not exceeding 2100 tons or 60 cars . . . Ahead of road engine.

On trains exceeding 2100 tons or 60 cars . . . Not more than two helper units placed ahead of caboose.

On trains exceeding 2800 tons or 85 cars helper unit will be cut in not less than 24 cars ahead of caboose up to three units. 10 cars will be placed behind helpers for each additional unit used.

Unit of power refers to ES-615 and EF-618 class of engine or equivalent.

After starting freight trains at Willits and Redwood Valley, helper engineer at rear of train will reduce throttle sufficiently to allow road engineer to stretch entire train. Helper engineer will then bunch the slack in a manner to avoid objectionable run in.

AIR BRAKE RULE

RULE 2B. Dynamic brake on head end of freight and mixed trains must not exceed three 8-axle units, four 6-axle units, six 4-axle units, or any combination thereof which totals 24 axles, except dynamic brake on EF415A&B and EP415A&B classes is limited to five units.

Dynamic brake must not be used when operating in multiple with engines other than SP or SSW units unless equipped with dynamic brake interlocks.

RULE 3. Engineer will reduce feed valve to not over 80 lbs. when handling rear of train during switching movements, when cutting helpers in or out and to assist in the charging of train line. Feed valve will be returned to 90 lbs. when work is completed and/or brake valve is cut out.

A full independent brake application on road locomotives, classes EP636, GE628, GF630, GF633, EF623, EF630, EF636, EF8508 results in a brake cylinder pressure of 72 PSI. This brake cylinder pressure must be maintained to provide required braking power at very low speeds or when stopped. Under no circumstances must self-lapping portion of independent brake valve be changed except to obtain brake cylinder pressure of 72 PSI from a full independent brake application.

RULE 11. Cars equipped with brake cylinder release valve may have one or two operating release rods. Operating rods connected to brake cylinder release valve may be identified by stencil reading "Br.Cyl.Rel.", or by a diamond shaped stencil or by noting that ends of release rod form a small closed circle.

Air brakes can be released on cars equipped with brake cylinder release valve by a hard momentary pull on release rod after brake pipe pressure has been depleted.

RULE 14. Dynamic brake will be used on descending grade by helper engines placed at or near rear of freight train unless relieved of the requirement by road engineer.

RULE 17. If at any time in engineer's judgment use of retaining valves is required, stop will be made and retaining valves turned up in accordance with his request.

Retaining valves must be used on freight and mixed trains on descending grades as follows:

Redwood Valley to Willits
Willits to Redwood Valley

Without dynamic brake in operation:

One retaining valve for each 80 tons in train. If gross tonnage exceeds 80 tons per operative brake, retaining valves must be used on all cars and speed must not exceed 10 MPH.

With dynamic brake in operation:

Permissible Tons Per Unit
Without Retaining Valves*

Basic Dynamic Brake
4-Axle 6-Axle

With dynamic brake in operation but without pressure maintaining system of braking:			
Redwood Valley to Willits	525	800	
Willits to Redwood Valley	375	550	

Extended Range Dynamic Brake

4-Axle 6-Axle 8-Axle

With dynamic brake in operation but without pressure maintaining system of braking:			
Redwood Valley to Willits	675	1000	1325
Willits to Redwood Valley	450	675	900

Basic Dynamic Brake

4-Axle 6-Axle

With dynamic brake in operation but with pressure maintaining system of braking:			
Redwood Valley to Willits	1600	2400	
Willits to Redwood Valley	800	1200	

Extended Range Dynamic Brake

4-Axle 6-Axle 8-Axle

With dynamic brake in operation but with pressure maintaining system of braking:			
Redwood Valley to Willits	2000	3000	4000
Willits to Redwood Valley	1000	1500	2000

If permissible tonnage is exceeded, one retaining valve must be used for each 150 tons in excess thereof.

*If any unit having basic dynamic brake is operated with units having extending range dynamic brake, all units in consist must use tonnage authorized for units having basic dynamic brake.

Locomotive classes AF628, AF630, EF425, EF623, EF625, EF630, EF636, GF425 (except series 6700-6727), GF628, GF630, GF633, EF850B and GF850 are equipped with extended range dynamic brake.

RULE 23. The following series of cars are equipped with ABEL brake system which has automatic change-over feature to provide proper function when car is loaded and when empty:

SSW 75700-75799	Gondolas
SSW 78500-78599	Hoppers (Open Top)
SP 333500-334399	Gondolas
SP 337500-337599	Gondolas
SP 345000-345669	Gondolas
SP 354000-354399	Gondolas
SP 463500-463999	Hoppers (Open Top)
SP 467500-467549	Hoppers (Open Top)
SP 480000-480193	Hoppers (Open Top)
SP 491000-491059	Hoppers (Covered)
SP 492000-492039	Hoppers (Covered)
SP 500604	Flat Cars
SP 590000-590099	Flat Cars

Before leaving a station or point where such cars have been added to the consist, engineer must actuate the automatic change-over feature by reducing brake pipe pressure to below 20 pounds whether cars are loaded or empty.

RULE 33. Redwood Valley-Willits:

Maximum tonnage per operative brake—80 tons except with dynamic brake and pressure maintaining system of braking in operation with not more than 15 cars for each six axles of dynamic brake with speed not exceeding 15 MPH and with all retaining valves on loaded cars in high pressure position 110 ton

Should dynamic brake failure occur while handling in excess of 80 tons per operative brake train may proceed at speed not exceeding 10 MPH if in judgment of conductor and engineer it is safe to do so and provided retaining valves are used as prescribed by Air Brake Rule 17.

SPECIAL INSTRUCTIONS

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** and **OTHER SPEED RESTRICTIONS** appearing on pages 5 and 6 of Special Instructions for All Divisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by time-table bulletin.

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

TERRITORY		TERRITORY	
MP	MP	MP	MP
EASTWARD, SONOMA TO EUREKA:		WESTWARD, EUREKA TO SONOMA:	
44.95 to 43.00 (Sonoma)	15	284.10 to 283.14 (Eureka)	10
43.00 to 40.39	25	283.14 to 282.00	20
40.39 to 32.30	30	282.00 to 277.55	45
32.30 to 29.01	45	277.55 to 277.05	40
29.01 to 28.74 (bridge)	10	277.05 to 273.34	45
28.74 to 25.80	45	273.34 to 270.60	35
25.80 to 25.57	25	270.60 to 267.60	45
25.57 to 36.85	45	267.60 to 266.00	40
36.85 to 39.25 (Petaluma)	20	266.00 to 262.70	45
39.25 to 53.00	45	262.70 to 262.50	35
53.00 to 55.00 (Santa Rosa)	25	262.50 to 258.08	40
55.00 to 67.60	45	258.08 to 257.00 (Scotia Bluff)	20
67.60 to 68.58 (Healdsburg)	25	257.00 to 255.70	35
68.58 to 70.91	45	255.70 to 252.46	45
70.91 to 71.16	40	252.46 to 247.20	30
71.16 to 85.53	45	247.20 to 246.85	25
85.53 to 89.25	30	246.85 to 242.80	30
89.25 to 94.99	25	242.80 to 240.96	45
94.99 to 108.72	30	240.96 to 237.74	30
108.72 to 113.50	45	237.74 to 232.50	40
113.50 to 114.54	25	232.50 to 228.13	30
114.54 to 118.28	45	228.13 to 222.15	25
118.28 to 119.60	30	222.15 to 213.08	30
119.60 to 122.15	45	213.08 to 144.65	25
122.15 to 124.07	25	144.65 to 143.10	30
%124.07 to 136.35	15	143.10 to 140.87	40
136.35 to 139.20	40	140.87 to 139.20	20
139.20 to 141.40	20	139.20 to 136.35	40
141.40 to 143.10	40	%136.35 to 124.07	15
143.10 to 144.65	30	124.07 to 122.15	20
144.65 to 213.08	25	122.15 to 119.60	45
213.08 to 222.15	30	119.60 to 118.28	30
222.15 to 228.13	25	118.28 to 114.54	45
228.13 to 232.50	30	114.54 to 113.50	25
232.50 to 237.74	40	113.50 to 108.72	45
237.74 to 240.96	30	108.72 to 94.99	30
240.96 to 242.80	45	94.99 to 89.25	25
242.80 to 246.85	30	89.25 to 85.53	30
246.85 to 247.20	25	85.53 to 71.16	45
247.20 to 252.46	30	71.16 to 70.91	40
252.46 to 255.70	45	70.91 to 68.58	45
255.70 to 257.00	35	68.58 to 67.60 (Healdsburg)	25
257.00 to 258.08 (Scotia Bluff)	20	67.60 to 55.00	45
258.08 to 262.50	40	55.00 to 53.00 (Santa Rosa)	25
262.50 to 262.70	35	53.00 to 39.25	45
262.70 to 266.00	45	39.25 to 36.85 (Petaluma)	20
266.00 to 267.60	40	36.85 to 25.82	45
267.60 to 270.60	45	25.82 to 25.57	25
270.60 to 273.34	35	25.57 to 25.80	45
273.34 to 277.05	45	25.80 to 28.74	45
277.05 to 277.55	40	28.74 to 29.01 (bridge)	10
277.55 to 282.00	45	29.01 to 32.30	45
282.00 to 283.14	20	32.30 to 40.39	30
283.14 to 284.10 (Eureka)	10	40.39 to 43.00	25
		43.00 to 44.95 (Sonoma)	15
EASTWARD, MEADOWSWEET TO IGNACIO:		WESTWARD, IGNACIO TO MEADOWSWEET:	
11.00 to 19.50	20	25.82 to 19.50	25
19.50 to 25.82	25	19.50 to 11.00	20
EASTWARD, SAUSALITO TO DETOUR:		WESTWARD, DETOUR TO SAUSALITO:	
6.84 to 11.69	20	14.30 to 12.10	20
11.69 to 12.10 (tunnel)	10	12.10 to 11.69 (tunnel)	10
12.10 to 14.30	20	11.69 to 6.84	20
EASTWARD, EUREKA TO KORBLEX		WESTWARD, KORBLEX TO EUREKA	
284.10 to 285.80 (Eureka)	10	295.57 to 292.23	20
285.80 to 292.10	25	292.23 to 292.10	10
292.10 to 292.23	10	292.10 to 285.80	25
292.23 to 295.57	20	285.80 to 284.10 (Eureka)	10
EASTWARD, ARCATA TO SAMOA		WESTWARD, SAMOA TO ARCATA	
	25		25
EASTWARD, ALTON TO CARLOTTA		WESTWARD, CARLOTTA TO ALTON	
	25		25

RDC 10 is authorized to operate 5 MPH in excess of speed shown in speed tables but not to exceed 49 MPH.

%Passenger Trains, Light Engines and trains handling passenger equipment only; 20 MPH between MP 124.07—136.35.

Trains must approach and cross Wingo bridge with caution, watching carefully for pedestrians and vehicles.

Speed to and from Ignacio through East switch of Wye to San Rafael Branch must not exceed 10 MPH.