SAFETY FIRST



CENTRAL OREGON AND PACIFIC RAILROAD

Timetable NO. 6

FOR THE INFORMATION AND GOVERNMENT OF EMPLOYEES

Effective 0001, April 2, 2000

R.W. Libby – Vice President & Regional General Manager C.L. McClean – General Manager



JOB BRIEFING

Prior to performing any task requiring the coordination of two or more employees, those employees involved must hold a "job briefing" to ensure all have a clear understanding of the task to be performed and their individual responsibility and must discuss the following:

- 1. The job(s) to be done or move(s) to be made.
- 2. The responsibility of each employee.
- 3. Any additional instructions due to an unusual condition.
- Any specific reminder due to a hazardous condition or unusual practice.
- 5. When on or near track, discuss how you are protected, what your limits are, what type and time given. If necessary, an additional briefing should be held as the work progresses or the situation changes.

STATEMENT OF SAFETY POLICY

It is the policy of RailAmerica that its operations be conducted in a safe manner. As an integral part of this policy, the management of RailAmerica believes that:

- · All injuries can be prevented
- We are committed to provide a safe work environment for all employees
- Employees of all levels are accountable for their own safety and the safety of their co-workers, preventing injuries and accidents, and displaying safe work behavior
- Remember: No job is so important, no service so urgent that we cannot take time to perform all work safely.

Timetable Characters:

- A Automatic Interlocking
- General Orders, General Notices,
- Standard Clock
- B-Radio Base Station
- T Wye (Turning Facility)
- (Y)-Yard Limits
- # Hot Box and Dragging Equipment
 Detector Station equipped with
 verbal indicator
- M Manual Interlocking
- G Gate Normal Position Against Conflicting Route
- G Gate Normal Position Against This Route
- Junction with another Railroad
- Maximum Speed may be resumed after Occupying the last Crossing

TELEPHONE NUMBERS

TEAM CO-ORDINATORS

Roseburg	C.L. McLean J.R. Becker G.L. Carter J.A. Boykin R.L. Reeves S.D. Patton L.J. Freadman D.D. Taylor	General Manager System S.L.E. Assistant Operations Mgr. Assistant Operations Mgr. Chief Mechanical Officer Roadmaster Safety Officer Office Manager Dispatch Manager Dispatch Office Customer Service Safety Hot Line	1-541-957-2501 1-541-461-8933 1-541-957-2504 1-541-957-2507 1-541-957-2506 1-541-957-2515 1-541-957-2510 1-800-344-8261 1-541-957-2503 1-541-957-2500 1-800-265-9148
Medford	B.E. Pfleiger	Superintendent of	1-541-857-9670
Eugene	J.R. Becker	Operations System S.L.E.	1-541-461-8933
Union Pacific Dispa Union Pacific Yard (Union Pacific Time WCTR-White City	Office		1-402-636-1646 1-541-341-5543 1-402-271-4601 1-541-826-2631

COOS BAY SUBDIVISION

NORTHWARD READ DOWN		STATIONS		HWARD AD UP
Mile Post	Rule 6.3		Station Number	Aux Track
786.5	TWC	COQUILLE	03340	
		16.9		
768.9		COOS BAY	03300	
		3.3		
765.6		NORTH BEND ₩ 🕥	03230	
		2.6		
763.0		CORDES	03220	2500
		3.7		
759.3		HAUSER Y	03210	2980
		18.9		
740.4		REEDSPORT ₩ ♡	03195	2480
		1.6		
738.8		GARDINER JCT.	03185	2376
		17.5		
721.3		CANARY	03170	
		6.3		
715.0		WENDSON	03160	4520
		6.0		
709.0		BECK	03155	1500
		3.7		
705.3		MAPLETON	03150	4680
		53.7		
651.6		DANEBO 💮	03105	4680

	MAIN TRACK AUTHORIZATION	TWC entire subdivision
Between	R	ules in Effect
Coquille and MP 758.0		GCOR 6.13
MP 741.0 and MP 737.0		GCOR 6.13
MP 652.0 and End of CO	RP Main Track	GCOR 6.13

COOS BAY SUBDIVISION NOTES:

1. MAXIMUM AUTHORIZED SPEED:

25 MPH

except as below:

786.6 - 762.6	10 MPH		Structure 696.6	10 MPH Trestle
740.6 - 739.6	10 MPH	Bridge	696.6 - 678.4	20 MPH
733.0 - 730.5	10 MPH	Trestle	Structure 678.4	10 MPH Bridge
728.0 - 727.7	10 MPH	Tunnel 17	678.4 - 678.0	20 MPH
721.2 - 720.7	10 MPH	Tunnel 15-16	671.4 - 667.4	10 MPH Tunnel 13
717.1 - 716.4	10 MPH	Trestle-Bridge	656.0 - 655.0	10 MPH Sink
698.5 - 696.6	20 MPH		652.0 - 648.4	10 MPH U.P. Yard

2. SPECIFIC OPERATING INSTRUCTIONS:

Vaughn, mileage 668.3 - Willamette Industries, tracks - 5 MPH DRAWBRIDGES:

INTERLOCKED:

North Dood will

North Bend, mileage 763.6

Reedsport, mileage 739.6

NON-INTERLOCKED

Suislaw River, mileage 716.4.

Gates are installed on each end of the span. If gates are open, movement can be made without stopping, at authorized speed. If gates are closed, trains will stop and not proceed until gates have been opened and bridge properly aligned.

COOS BAY SUBDIVISION NOTES Cont:

2. SPECIFIC OPERATING INSTRUCTIONS:

Horsefalls Rd., Cordes, MP 763.2, after stopping at the stop signs make sure gates are down and traffic clear before proceeding.

3. RAILROAD CROSSINGS AT GRADE AND JUNCTIONS:

None.

4. INDUSTRIAL TRACKS:

None.

5. MISCELLANEOUS:

IMPAIRED SIDE CLEARANCES, RULE 1.20:

Mileage	Description	Mileage	Description
763.6	Signals on Bridge	727.7	Tunnel 17
751.2	Tunnel 21	721.5	Tunnel 16
750.1	Tunnel 20	720.7	Tunnel 15
745.6	Tunnel 19	681.5	Tunnel 14
739.6	Bridge	669.5	Tunnel 13
734.5	Tunnel 18	664.9	Bridge

FRA EXCEPTED TRACK, RULE 6.12:

Between MP 771.0 and Mileage 786.5.

Coquille -

Old siding

House track

Coos Bay/North Bend - All yard tracks except Track 3805

When a single transportation specialist is charged with the movement of the train, movement must be made at a speed that will permit stopping within one half the range of vision. Multi-level auto carriers must not be handled.

ROSEBURG SUBDIVISION

NORTHWARD READ DOWN		STATIONS	REA	SOUTHWARD READ UP	
Mile Post	Rule 6.3		Station Number	Aux Track	
441.8	TWC	MEDFORD B□Y	04200		
		8.4			
450.2		TOLO T 🕥	04125	3858	
		14.7			
464.9		ROGUE RIVER	04110	2579	
		9.0	0.1400		
473.9		GRANTS PASS	04100	5493	
		8.6	0.4070		
482.5		MERLIN	04070	1845	
		4.9	0.4005		
487.4		HUGO	04065	4200	
		6.7	0.4000		
494.1		LELAND	04060	3366	
		13.8	0.4050		
507.9		GLENDALE Y	04050	3100	
		32.4	04045	2022	
540.3		CORNUTT 3.9	04045	2023	
			04040		
544.2		RIDDLE	04040	3080	
		5.1	04005	4000	
549.3		WEAVER	04035	1830	
		5.6	04005	4404	
554.9		7.1	04025	4461	
•			04045	0005	
562.0		DILLARD Y	04015	2935	
		10.6	04000		
572.6		ROSEBURG ®♥□	04000		
504.4		8.8	03670	0070	
581.4		WILBUR	03070	3078	
		5.0			

	MAIN TRACK AUTHORIZATION	TWC entire subdivision
Between	Ru	ules in Effect
MP 441.8 and MP 451.0		GCOR 6.13
MP 471.0 and MP 475.0		GCOR 6.13
MP 507.0 and MP 509.0		GCOR 6.13
MP 558.7 and MP 563.0		GCOR 6.13
MP 569.5 and MP 575.0		GCOR 6.13
MP 642.0 and MP 644.3		GCOR 6.13

ROSEBURG SUBDIVISION Cont:

NORTHWARD READ DOWN		STATIONS	REA	SOUTHWARD READ UP	
Mile Post	Rule 6.3		Station Number	Aux Track	
586.4	TWC	SUTHERLIN	03665		
		2.7			
589.1		OAKLAND	03660	2380	
		8.4			
597.5		RICE HILL	03655	2935	
		6.2			
603.7		YONCALLA	03650	3405	
		9.5			
612.2		SAFLEY	03635	3092	
		8.7			
621.9		DIVIDE	03620	4180	
		3.1			
625.0		LATHAM ·	03610	2105	
		1.5			
626.5		COTTAGE GROVE	03605	2820	
		4.1			
630.6		WALKER	03525	3249	
		4.9			
635.5		CRESWELL	03520	3137	
		8.8			
642.0		SPRINGFIELD JCT. TY	03510		

ROSEBURG SUBDIVISION NOTES

MAXIMUM AUTHORIZED SPEED: except as below:	25 MPH
MP 441.8 and MP 442.7	20
►MP 511.0 and MP 516.0	20
MP 456.0 and MP 456.9	10
MP 516.0 and MP 516.2	10
MP 471.5 and MP 472.0	10
MP 516.7 and MP 530.6	20
MP 490.5 and MP 496.0	20
MP 530.6 and MP 530.9	10
MP 508.3 and MP 511.0	20
MP 530.9 and MP 582.3	20
MP 609.0 and MP 618.0 20	

2. SPECIFIC OPERATING INSTRUCTIONS:

ABS TERRITORY:

Automatic Block Signals are in service between:

Mileage 441.8 and Mileage 508.3

Mileage 539.6 and Mileage 644.3

MP 609.0, Track 5980, Drain Emerald Lead, do not exceed 5 MPH.

ROSEBURG SUBDIVISION Cont:

2. SPECIFIC OPERATING INSTRUCTIONS Cont:

Merlin, mileage 482.5, Charging Necessary Air Brakes, Rule 7.11:

When switching tracks 6756, 6760, 6764 air brakes must be in service on all cars. Cars must not be detached while in motion. After coupling to cars, air brakes must be cut in and operative on all cars being handled.

Cornutt, mileage 540.3, Switches in Sidings, Rule 8.11:

Switches at Cornutt siding, track 6490, must be left lined and locked for the industry and the tail track when not in use.

Dillard, MP 562.0:

Normal position for the switch at the north end of track 6424 is lined for track 6426. Switch must be left line in normal position after each use.

Cottage Grove, mileage 626.5:

Trains moving on siding must stop short of Main St. crossing, mileage 626.6, to allow crossing warning devices to operate before entering the crossing.

3. RAILROAD CROSSINGS AT GRADE AND JUNCTION

Tolo, mileage 450.2, Main Track Switches, Rule 8.3:

Crews operating to White City may leave the South Wye switch lined and locked in the reversed position. On return, switch must be lined and locked in the normal position.

4. INDUSTRIAL TRACKS

None

5. MISCELLANEOUS

A. FRA EXCEPTED TRACK, RULE 6.12:

Medford -	Yard tracks	7201,	7202,	7203,	7206,	7207.
Grant's Pass -	Yard Tracks	6802,	6807,	6702,	6706.	
Glendale -	Tracks	6512,	6516,	6518.		
Cottage Grove -	All tracks exce	nt main tra	ack and s	idina		

B. CLOSE SIDE CLEARANCE:

Mileage		Description	Mileage	Description
456.8		Bridge	523.9	Rock Cut
458.7		Bridge	525.0	Rock Cut
482.6	74	Bridge	526.7	Rock Cut
490.6		Tunnel	9 526.9	Rock Cut
505.2		Tunnel	8 528.1	Rock Cut
509.2		Bridge	539.3	Rock Cut
514.1		Tunnel	7 550.1	Bridge
514.7		Tunnel	6 578.0	Bridge
515.7		Tunnel	5 589.9	Bridge
516.0		Tunnel	4 607.8	Bridge
518.6	f.	Tunnel	3 608.6	Bridge
519.0		Rock Cut	610.7	Bridge
521.0		Tunnel	2 620.2	Rock Cut
521.1		Bridge	625.5	Bridge
521.4	1	Bridge	627.4	Bridge

C. Riddle, mileage 544.2:

Various overhead and side impairments exist on Track 6479 serving Roseburg Lumber Co. Impairments include door frames of entry doors, pipes on north wall of building, and ladders at fire escapes along the north wall. The door frames are impaired at both ends and pipe and ladder impairments are spaced at intervals within the building. Do not ride on side of cars or engine when passing these locations.

D. MILEAGE 634.9, BALD KNOB:

Impaired side clearance both sides of industry. Locomotive is not to go onto trestle.

To spot Bald Knob, there must be (6) cars between locomotive and cars to be spotted.

MP 579.0, Douglas County Lumber: Impaired clearance on Track 6066 due to new dock construction.

E. LEAVING CARS UNATTENDED

When cars are left unattended at the Divide, Rice Hill, Leland, Hugo and Merlin, rail skids must be placed under the first wheel in the descending direction and wheel moved onto skid. Employees are not relieved from securing sufficient hand brakes. Rail skids are located at the north and south end at Divide, Rice Hill, Leland, Hugo and at the north end of Merlin. When picking up cars at these locations, the skid must be replaced under car or hung on post and locked. If railskid is found to be missing, dispatcher must be notified immediately and cars must not be left unattended unless permission is obtained from the proper authority.

ROSEBURG SUBDIVISION Cont:

5. MISCELLANEOUS Cont:

F. MAXIMUM TONNAGE RATINGS:

GP38	GP40	SLUG
850	1000	1000
750	800	800
1575	1850	1850
2800	4200	4200
750	800	800
850	1000	1000
	850 750 1575 2800 750	850 1000 750 800 1575 1850 2800 4200 750 800

G. GRADE RESTRICTIONS:

On the following descending grades determine the maximum allowable speed from the following table, taking into account the trains TPOB and tons per axle of operative dynamic brake.

Oakland and Divide

Grants Pass and Glendale

Tons Per Axle Operative

Dynamic Brake

 Tons Per Operative Brake (TPOB)
 300 or Less
 300+ to 500
 500+ to 530

 Below 100
 25 MPH
 25 MPH
 20 MPH

 100 to 110
 25 MPH
 20 MPH

 110.1 to 140
 20 MPH

A train that exceeds the table, one that experiences dynamic brake failure, or if the use of dynamic brakes and a 16 pound brake pipe reduction will not control the train at the allowable speed, the train must be STOPPED and sufficient hand brakes set to prevent movement. The train must not proceed until additional dynamic braking is obtained, tonnage reduced, or the retainers on all cars placed in operative position. When it is necessary to use retainers, the train must not proceed except as instructed by a Supervisor of Locomotive Engineers.

H. COUPLER LIMITS:

The tonnage handled by the locomotive consist of a train must not exceed the following limits on an ascending grade. To determine tonnage handled by the locomotive consist when the train has a rear-end or entrained helper, subtract total locomotive tonnage ratings for the helper engine from the train's adjusted tonnage.

Northward: Grants Pass -

Glendale 5,000 tons Oakland - Yoncalla 5,500 Safely - Divide 5,500 "

Southward:

Yoncalla - Oakland 5,500 tons Glendale - Grants Pass 5,000

I. Eugene Locomotive Facility:

Tracks 49, 50 and 51 at Eugene Roundhouse and service track #1 from a point 300' west of swich #501, eastward to and including the sanding facility are designated as Locomotive Maintenance tracks.

J. Roseburg, mileage 572.6: Switch 6104 may be left lined & locked toward track 6101 and derail & switch at south end of track 6101 may be left lined & locked for movement to Main Track prior to the arrival of South bound trains to minimize delays at public crossings. Track 6124 is for spotting water cars. When cars need to be filled crews must spot to this track when practicable.

K. Divide, mileage 621.9, Rule 6.32.6:

When a train stops, blocking Martin Creek Road, mileage 622.2, a member of the crew will immediately proceed to the crossing to be available to cut the train and clear the crossing within the lawful time when vehicular traffic is waiting to cross. Train should remain cut until ready to proceed.

L. Mileage 625.0, Rule 6.32.4:

Rachel Rd., cars must not be left standing on storage track between crossing and signs placed 175 feet south and 200 feet north of crossing. In addition, white stripe has been painted on the side of rails to help identify restricted area.

M. Walker, mileage 630.6:

Locomotives left anywhere except the extreme North end of the siding must be shut down.

Locomotives on the extreme North end of the siding may be left running, but must be within 10 car lengths of the North switch.

N. Springfield Jct., mileage 644.3, Rule 8.8:

Wye switches are equipped with UP locks..

O. Riddle, mileage 543.9:

High car detector installed at signal 5439 for southward movement. Red and lunar light installed on mast of signals 5417 and 5439. Cars above fifteen feet, eight inches (15' 8") high will illuminate the light.

When lunar light is not displayed at both locations or red light is displayed at either location, train must be stopped and inspected. If restricted cars are found they must be set out at Cornutt. Train dispatcher must be notified when high car detector is activated

WHITE CITY SUBDIVISION

NORTH READ	HWARD DOWN	STATIONS	1050	JTHWARD READ UP
Mile Post	Rule 6.3		Station Number	Aux Track
450.5	YL	TOLO ①	Y) 04125	
455.9		WHITE CITY	04155	3137

MAIN TRACK	AUTHORIZATION	Yard Limits Entire Branch
Between	Ru	les in Effect

WHITE CITY SUBDIVISION NOTES:

1. MAXIMUM AUTHORIZED SPEED:

10 MPH

2. SPECIFIC OPERATING INSTRUCTIONS:

When operating beyond sign reading, "Entering WCTR Switching Limits" at mileage 454.4, crew must attempt to contact WCTR switch crew on channel 38-38 to notify them that they are working within the limits.

3 . RAILROAD CROSSINGS AT GRADE AND JUNCTIONS:

None

4 . INDUSTRIAL TRACKS:

None

5 .MISCELLANEOUS:

None

SISKIYOU SUBDIVISION

NORTH READ I		STATIONS	1	WARD D UP
Mile Post	Rule 6.3		Station Number	Aux Track
344.0	TWC	(U.P.) BLACK BUTTE TY	05360	
		4.4		
348.4		WEED 🗆 B T 🕎	04350	3421
		12.6		
361.0	51	GAZELLE	04345	5343
		14.5		
375.5		MONTAGUE Y	04335	YARD
		17.6		
393.1		HORNBROOK 🕜	04330	3583
		8.7		
401.8		HILT	04325	1261
		10.4		
412.2		SISKIYOU	04315	4588
		16.9		
429.1		ASHLAND	04305	5875
		12.7		
441.8		MEDFORD BY	04200	YARD
11110				

		MAIN TRACK AUTHORIZATION	TWC entire subdivision
Between		Rul	es in Effect
	MP 345.2 and MP 349.9	G	COR 6.13
	MP 374.5 and MP377.0	G	COR 6.13
	MP 392.0 and MP 394.5	G	COR 6.13
	MP 438.7 and MP 441.8	G	COR 6.13
i.	MP 438.7 and MP 441.8	G	COR 6.13

SISKIYOU SUBDIVISION NOTES

1. MAXIMUM AUTHORIZED SPEED:	25 MPH
except as below:	
MP 345.2 - MP 354.0	20
MP 402.0 - MP 422.0	12
MP 394.7 - MP 402.0	20
MP 422.0 - MP 433.8	20
*MP 440.5 - MP 441.8	20

2. SPECIFIC OPERATING INSTRUCTIONS:

ABS TERRITORY:

Automatic Block Signals are in service between mileage 428.3 and mileage 441.8.

SISKIYOU SUBDIVISION Cont:

3. RAILROAD CROSSINGS AT GRADE AND JUNCTION

None.

4. INDUSTRIAL TRACKS

None

5. MISCELLANEOUS

FRA EXCEPTED TRACK, RULE 6.12:

Weed - All tracks except siding and main track.

Hornbrook - Track 7532.

Ashland - Track 7404.

Medford - Yard tracks 7201, 7202, 7203, 7206, 7207

IMPAIRED SIDE CLEARANCE, RULE 1,20:

Mileage	Description
411.3	Tunnel 13
414.6	Tunnel 14
415.2	Tunnel 15

TRACKSIDE DETECTORS, RULE 6.29.1:

Mileage	Type	Mileage	Type	Mileage	Type
349.9	F1	398.0	F1	407.5	F1
363.0	E1, E2	401.4	F2*	416.6	F1
384.8	E1, E2	403.3	E1, E2	423.3	E1, E2

^{*} High Wide: For Northward trains only. If restricted cars are found they must be set out at Hilt.

Train dispatcher must be notified when highwide car detector is activated.

LEAVING CARS UNATTENDED:

When cars are left unattended at the following locations, rail skids must be placed under the first wheel in the descending direction and wheel moved onto skid. Employees are not relieved from securing sufficient hand brakes. Rail skids are located at the north end Siskiyou siding and Run-around track, mileage 426.2 (Bellview). When picking up cars at these locations, the skid must be placed under car or hung on post and locked.

GRADE RESTRICTIONS:

On the following descending grades the appropriate table must be used to determine the maximum allowable speed, taking into account the trains TPOB and tons per axle of operative dynamic brake.

Ashland and Hornbrook

Table A

MP 353.0 and Black Butte

Table B

TABLE A

Tons Per Operative Dynamic Brake

Tons Per Operative Brake (TPOB)	205 0r less	205+ to 250
Below 80	20 MPH	20 MPH
80 to 115	20 MPH	15 MPH

TABLE B

Tons Per Axle Operative Dynamic Brake

Tons Per Operative Brake (TPOB)

	300 or Less	300+ to 500	500+ to 530
Below 100	25 MPH	25 MPH	20 MPH
100 to 110	25 MPH	20 MPH	
110.1 to 140	20 MPH		

MAXIMUM TONNAGE RATINGS:

TERRITORY	GP38	GP40	SLUG
Medford to Ashland	1575	1850	1850
Ashland to Hornbrook	475	500	500
Hornbrook to Montague	950	1000	1000
Montague to Black Butte	750	800	800
Black Butte to Hornbrook	1575	1850	1850
Hornbrook to Ashland	475	500	500
Ashland to Medford	2800	4200	4200

COUPLER LIMITS:

The tonnage handled by the road engine of a train must not exceed the following limits on an ascending grade. No more than 7 GP 38 or GP 40 Locomotives may be operated on line in consist. Empty cars must be placed on rear of train only, behind loaded cars.

 Northward:
 MP 393.0 - MP 429.0
 3,500 tons

 Southward:
 MP 429.0 - MP 393.0
 3,500 tons

 Gazelle - Black Butte
 4,700

SISKIYOU SUBDIVISION Cont:

5. MISCELLANEOUS Cont:

PLACEMENT OF EMPTY CARS:

Between MP 428.0 and Hornbrook, empty cars must be placed on rear of train.

HELPERS:

Helper Locomotives are not to be used.

RUNNING AIR BRAKE TEST:

In the application of AB&TH Rule 201.15, Running Air Brake Test:

Northward trains will perform the running air brake test between MP 400 and MP 402.

Southward trains will perform the running air brake test, between Medford and MP 412.

Dynamic braking system must be tested as soon as possible after departing Medford and Hornbrook.

Black Butte, MP 344.0, Rule 8.8:

Wye switches are equipped with U.P. switch locks.

Number of Hand Brakes Required

When complying with GCOR 7.16, and setting a "sufficient number" of hand brakes, care must be given to the types of equipment being handled. Remember that WABCO type brakes set only on 1 axle when the hand brake is applied.

Flag Location

Revise second paragraph to read:

Flags must be displayed to the right of a main track or controlled siding as viewed from an approaching train when possible. When it is not possible to display a flag to the right, it must be displayed to the left of the track as viewed from an approaching train. Flags must be respected when displayed to either the right or left side of track.

Permanent Speed Signs

Following is added:

Reduce speed signs will be placed 2 miles in advance of restrictions.

5.10 Markers

When a train is set out clear of the main track somewhere other than a crew change location. When this happens, a crew member must remove the end of train telemetry device, if so equipped. Transport the device on the engine to the destination where the crew is relieved. If the engine remains with the train, a crew member must deliver the end of train telemetry device to the proper authority at the tie-in point. However, proper authority may advise the crew to leave the device with the train. Always notify the train dispatcher of the location of the telemetry device.

Block Signal With "P" Plate

New rule is added:

A block signal equipped with triangular plate displaying the "P" can be actuated by a special protective device. When a signal equipped with a "P" plate, displays a red aspect, in addition to complying with other applicable signal rules, an inspection from the ground must be made of train, track or structure for which protection is provided to be sure it is safe for the passage of trains.

EXCEPTION: An inspection from the ground is not required when it can be determined from the engine that the track or structure for which the protection is required, is safe for the passage of the train.

Number or location of each signal equipped with a "P" marker will be shown in timetable, with a description of the special protective device equipped to that signal.

Entering A Main Track At A Hand Operated Or Spring Switch

Does not apply in yard limits where GCOR Rule 6.13 is in effect.

Occupying Same Track Warrant Limits

Paragraph # 1 is not applicable.

Protecting Men or Equipment

Paragraph 1 is revised with the following addition.

A foreman authorized to proceed, may make a reverse movement within his authorized limits without authority of the train dispatcher. This reverse movement may not exceed 300 feet.

When a foreman, authorized to proceed, reports to the train dispatcher that he has passed a specific location, his warrant becomes void up to that point.

AIR BRAKE ANDTRAIN HANDLING RULES

Improper judgment in braking may permit the speed to get out of control in a very short time. When there is doubt as to whether or not the train can be properly controlled, THE TRAIN MUST BE BROUGHT TO A STOP. The engineer should evaluate the possible effects of an emergency application versus the effects of a service application and apply that method which appears to be the safest. Service applications react more slowly but will retain the dynamic brake whereas emergency applications nullify the dynamic brake. If the dynamic brake suddenly becomes ineffective on a heavy grade,

THE TRAIN MUST BE STOPPED. Use an emergency application if necessary. Following the stop refer to the following paragraph before attempting any further action.

When a stop is made on a grade the independent brake must be fully applied. If the independent brake and retainers, if in use, may not hold the train, the train must be secured with a sufficient number of hand brakes before releasing and recharging the automatic brake. After recharging is completed, a sufficient brake pipe reduction must be made to hold the train while hand brakes are released.

Starting:

It is of first importance that sufficient time be allowed for the automatic brake systems to be recharged to the required pressure before a train is allowed to start from a summit or, allowed to start after stopping on a heavy descending grade.

1. A train standing on a heavy grade will normally have slack bunched and the independent brake fully applied. As the independent brake is gradually released during starting, the engine may move some distance before the rear car moves, especially if retainers have been set.

Therefore, extreme care must be used to control the speed of the head portion of the train in order to prevent excessive in-train forces which could cause damage to the train or track structure.

2. The automatic brake may have to be applied soon after starting in order to control train speed or to free the brake shoes of snow or ice during times of winter operation.

3. Employing Pre-set Dynamic Brakes and Gradual Independent Brake Releases...

a. Before starting, move the dynamic braking lever to the fully applied position. Leave the independent brake applied and release the train air brakes. If train remains at rest after the train air brakes are completely released, gradually release the independent brake and allow the engine to move ahead a few feet. Reapply the independent brake and let the train come against the engine. Continue this procedure until the entire train is moving. Use the independent brake to keep the slack bunched and control acceleration until dynamic brake becomes effective. With extended range dynamic; brake, the brake cylinder pressure must be reduced below IPS setting before the dynamic brake will be effective at low speeds, at which time independent brake must be completely released.

b. If train starts to move before train brakes are completely released, care must be used to control run out of slack on head of train portion of train until brakes release on rear portion. This is done by keeping the independent brake fully applied until the rear car starts to move. After the entire train is moving the same procedure is used as described above to control movement until dynamic brake becomes effective.

C. Accelerating

1. With the entire train in motion, independent brake released, and dynamic brake fully applied, train can be accelerated by regulating the amount of dynamic brake, keeping the slack bunched while train is accelerating.

2. Locomotive consists having all or a mixture of extended range dynamic brakes must be handled with care when starting a train with the dynamic brake applied. Maximum dynamic braking will commence at about 6 to 8 MPH with

D. Negotiating: In some instances train speed can be controlled by the dynamic brake. Desired speed should be maintained by making slight increases or decreases in the dynamic braking effort in order to keep the speed and forces in the train as constant as possible. The use of dynamic brake alone, with maximum allowable axles providing maximum retarding force, may create excessive buff forces at head end of train especially when entering curves and turnouts, which could result in excessive L/V forces, rail turnover or wheel lift.

Engineer must use good judgment in determining use of dynamic brake in conjunction with train air brakes. If train air brakes are required to provide a safe level of dynamic braking effort and maintain the desired speed, make an automatic brake pipe reduction of 6 to 8 pounds. After the initial reduction has become effective throughout the train, additional light automatic brake pipe reductions may be made if required. After the required brake pipe reductions have become effective throughout the train, speed should be maintained by making very slight increases or decreases in the dynamic effort in order to keep the speed and forces in the train as constant as possible.

Should circumstances require reapplication of the brakes before there is sufficient time to fully recharge the brake system, subsequent reapplication should be such as to reduce brake pipe pressure to at least two pounds lower than before the release was made.

The maximum automatic brake pipe reduction permitted to control train speed is sixteen (16) pounds.

If the above brake pipe reduction is exceeded, the brake horsepower becomes excessive creating unacceptable wheel heat. When this occurs on long grades both brake shoes and wheels will lose the ability to retard the train.

In the event train speed cannot be controlled with a 16 pound automatic brake pipe reduction, train must be stopped and secured by the setting of hand brakes. Train must not proceed unless authorized by an officer.

If any hazard to safe operation develops, or should brake pipe pressure be reduced to 50 pounds, train must be stopped. After stopping, train must be secured by the setting of hand brakes before any attempt is made to release train air brakes. After condition has been corrected, train may proceed.

E. Slowing:

- 1. Employing Dynamic Brake Only: With some trains slowdowns can be accomplished by increasing the level of dynamic brake. Care must be taken to keep the forces within the train at a safe level.
- 2. Employing Dynamic and Automatic Brake: If the dynamic is applied as in the preceding paragraph and is found to be inadequate to slow the train, it will be necessary to supplement the dynamic brake with an automatic brake application as follows:
 - a. Make a minimum automatic brake pipe reduction of 6 to 8 pounds. At a sufficient distance to insure slowing before reaching the desired point, additional light automatic brake pipe reductions may be made if necessary.
- b. When the desired speed reduction has been achieved, the automatic brake should be released while the dynamic brake remains applied to keep the slack bunched during the release of the automatic brakes throughout the train. After the train brakes have been released, dynamic brake modulation can be used to maintain the desired speed.

CAUTION:

Supplementing the dynamic brake with an automatic brake application will normally require lowering the dynamic brake setting because each car will add additional braking force to that already being generated by the dynamic brake. Use of the automatic brake in this manner in conjunction with the dynamic brake distributes braking and in-train forces throughout the train rather than concentrating them at the rear of the engine consist. Supplementing dynamic braking with an automatic brake application should be considered whenever dynamic brakes are used in territory with a high degree of curvature.

When the automatic brake has been applied and the resulting brake is greater than desired, reduction of the dynamic brake to a point of ineffectiveness will allow the train slack to stretch out. Before releasing the automatic brake, train slack must be bunched to avoid severe action as the brakes release at the rear of the train.

Stopping

- 1. Employing Dynamic And Automatic Brakes:
- a. As the dynamic brake will already be in use to control the speed of the train, a minimum automatic brake pipe reduction of 6 to 8 pounds should be made at a sufficient to insure stopping at the desired point.
- b. When the automatic brake application becomes effective the dynamic brake should be fully applied if this has not already been accomplished. Subsequent automatic brake pipereductions should be made if they are needed to provide the d esired retardation. Leave the dynamic brake fully applied.
- c. When the dynamic brake begins to lose its effectiveness at lower speed, gradually apply the independent brake to prevent the engine from running out.
- d. Make an additional automatic brake pipe reduction just prior to stopping. Complete the stop with the brake pipe exhausting, **Dynamic Braking**

Add a third paragraph:

The dynamic brake concentrates the braking or retarding force at the head of the train. There are practical limits concerning the amount of retardation using the dynamic brake. Exercise extreme care be exercised in its use to avoid the development of excessive head end buff forces, and the independent brake applied. Use sand should only when necessary. **EQUIPMENT RESTRICTIONS**

The following cars must not operate between Cornutt and Hugo:

Woodchip cars: SP 352118 to 352177 SP 354000 to 355101.

Cars bearing "Exceed Plate C" symbol or words "Excess Height".

Cars 85 feet or longer, except a shown in item 7.

CORP 226000 series cars, CORP 59000 series cars, SP 226000 series cars, SSW 59000 cars.

The following cars must not operate between Ashland and Hornbrook:

Woodchip cars of any ownership except SP car type GC2, Series SP 350510 to 351009.

Exception: Woodchip cars bearing marking CORP 4000 to CORP 4099, CORP 30000 to CORP 30999 and SP and CORP 355150 to 355499 may operate between Cornutt and Hugo.

Cars bearing ""Exceed Plate C" symbol or words "Exceed Height".

SP and SSW closed cars over 61 feet inside length.

Foreign line closed cars 60 feet or longer, except: SPFE, UPFE, and WCTR box 100500-102799.

Cars 85 feet or longer, except as shown in item 7.

"Plate C" symbol bulkhead flat cars 60 feet or longer with bulkheads 15 feet or higher, may be moved if high/wide clearance is obtained. Bulk-head flat cars SSW 87500 through 88399 inclusive and all center beam cars, may move empty or loaded without clearance provided when loaded, load does not extend beyond sides or higher than bulkheads. Tank cars longer than 63 feet over pulling faces.

Exception: Woodchip cars bearing marking CORP 4000 to CORP 4099, CORP 30000 to CORP 30999, CORP 59000 series cars and SP 355102 to 355474 series cars may operate between Hornbrook and Ashland.

Train Makeup Restriction Applicable Between Divide and Black Butte:

When train tonnage exceeds 3,600 tons, each of the first five cars behind the road must weigh 50 tons or more. When train tonnage exceeds 4,000 tons, each of the first five cars behind the road engine must be 73 feet or less in length. Entrain the following cars with no more than 3,000 trailing tons:

Empty car exceeding 73 feet in length;

TOFC/COFC flat car loaded on one end only;

Articulated double-stack car having one or more empty platforms;

Loaded two-axle intermodal car weighing 25 tons or more;

Loaded or empty multi-platform articulated spine.

(Note) For applications of train makeup restrictions (a) and (b), consider two consecutively loaded double-stack platforms the equivalent of one car weighing 50 tons or more and less than 73 feet in length.

Trains handling woodchip cars CORP 4000 to 4099, CORP 30000 to CORP 30999, SP 355100 to 355474 and log cars CORP 817466 to 818745, must not exceed 10 MPH through Tunnel #13, MP 411.3 to MP 411.9.

Foreign line cupola cabooses

must not operate between Hilt and Cornutt, without obtaining an excessive dimension clearance.

When in possession of a excessive dimension

clearance message for a car otherwise prohibited, the car may be handled in accordance with instructions contained in the message.

Do not handle TOFC/COFC cars measuring 79 to 89 feet in length if the load exceeds the following dimensions:

79 ft - 85 ft cars maximum height 14'8" ATR, 8'8" wide 89 ft cars maximum height 14'8" ATR, 8'0" wide.

LOAD LIMIT

When a car does not exceed its load limit, the following load limits apply:

4 axle car

132 tons

6-axle car

197 tons

8-axle car

263 tons

Unless authorized, do not operate any relief outfit cranes, locomotive cranes, cranes and pile drivers over branches listing a load limit less than 132 tons.

Load limit will not apply to articulated cars.

MOVEMENT OF HIGH / WIDE LOADS

A high/wide load may move in a train only after the crew receives an excessive dimension clearance message or a crew member ascertains any applicable restrictions from the train dispatcher.

Crew member must advise train dispatcher and other crew members that train contains a high/wide load. Until the train dispatcher has been notified, the crew member is responsible for protection against other wide loads.

Clearance message will contain all restrictions encountered over the entire route of movement.

When necessary to set out a high/wide load en route between terminals, place the load on a track which will provide sufficient clearance from the main track. Advise the train dispatcher that car is being set out.

The inbound crew of a train containing a high/wide load must determine that crew member of the outbound crew has a copy of the clearance message.

When handling a high/wide load, the crew is responsible for compliance with all restrictions in the excessive dimension clearance message. A train must not pass a location where a restriction is shown for the meeting or passing of trains without authority from the train dispatcher. The train dispatcher will not grant such authority until it is known no restricted meet or pass will occur at that location. The train dispatcher will assume responsibility for the safe movement of a high/wide load at the restricted meet or pass location when granting such authority.

TRACKSIDE DETECTORS

The type and location of all trackside detectors will be listed for each subdivision.

SYMBOL TYPE OF DETECTOR

E-1Hot Box Talker

E-2Dragging Equipment Talker

F-1Dragging Equipment Talker

F-2High/Wide Load Talker

Following detector instructions apply:

Train speed of at least 10 MPH must be maintained while train is moving over hot box detector when possible.

Do not stop over hot box detector when possible.

Avoid braking, if possible, while approaching or passing hot box detector. Excessive braking may cause false indication.

When a trackside detector has been activated, stop train must be and make an inspection. When a hot box detector has been activated, after stopping the train to allow a crew member to detrain, the train may move ahead, not exceeding 5 MPH, to the location of the indicated hot journal under the following conditions:

It is not the second activation on the same car;

Train is not a KEY train;

While stopping, a visual observation of the train indicated no smoke, flame or abnormal amount of dust; and Indicated axle will not pass over switch or structure.

When a detector gives an axle count of defect location and defect is not located at the reported axle location, crew must inspect 20 axles ahead and 20 axles behind the axle indicated on both sides. If axle location is not provided, crew must inspect both sides of entire train for the indicated defect.

If train stops, or if speed of train is below 10 MPH while passing a hot box detector and train subsequently receives a hot box indication, all bearings on both sides of entire train must be inspected. An additional inspection is not required when train clears detector location, regardless of message received.

A train which receives defect message and stops to inspect for indicated defect prior to clearing detector does not have to perform a second inspection if leaving message is a repeat of the original message.

When inspecting for hot bearings, check each roller bearing requiring inspection by use of a tempilstik, if available, on the bearing cup (exposed underside of bearing). If tempilstik melts, car must be set out. If tempilstik is not available and no obvious sign of overheating is present on axle indicated, cautiously place bare hand on truck side frame working hand toward roller bearing end cap, keeping in mind that any part of this equipment may be extremely hot. If bare hand cannot be held on side frame or roller bearing for a few seconds, car must be set out.

Connecting crew, when possible, must be notified of a car that experiences a false hot box detector actuation.

When a car experiences two false hot box detector actuations, car must be set out at first available track.

When setting out a car suspected of having a hot bearing, attach a fluorescent tag or other marker as close as possible to the hot bearing. Report the journal size of the car to the train dispatcher.

When trackside detector has been activated and axle location of defect received, crew must physically count axles from head end of train to indicated axle. Do not determine the location of indicated axle in any other manner.

If defect is located and it cannot be corrected, car must be set out at the first available track provided it is safe to be moved.

Type E & F: Radio Readout (talker) detector: When movement over an F-2 detector begins, the system should transmit the following entering example message:

" CORP detector milepost 121.3, detector working"

Type E detectors report the axle count location of a defect from the front of train.

Type F detectors do not report the axle count.

If defect is detected during movement, the system will immediately transmit a defect message.

Type E Example: "CORP detector milepost 121.3, Stop your train! Stop your train! First hot box axle 210 on left side."

Type F Example: "CORP detector milepost 121.3, Stop your train! Stop your train! Dragging equipment."

When train has cleared the detector, the defect message will be transmitted an additional two times. If defect messages are received during passage of train over the detector site and the end of train message combines defect reports with the phrase "Detector Malfunction" train must be stopped and entire train must be inspected on both sides for the type(s) normally detected by that detector.

Example: "CORP detector milepost 121.3, Stop your train! Stop your train! First hot box axle 210 on left side, detector malfunction,"

When train has passed the detector with no defects found, the system will transmit " no defect" message.

Example: "CORP detector milepost 121.3 no defects."

When detector is not functioning properly, it will transmit "CORP detector milepost 121.3, detector malfunction."

After receiving a "No Power" message, notify the train dispatcher.

4. Decision tables:

The following charts outline aspects and specific conditions of Type E&F trackside detectors. Across the top of each chart are

	specific conditions. Each of			
	down the chart below each co			
	ion for that specific aspect or	condition. To determine the	e required action, follow	the entry line to the right.
ASPECTS AND SPEC				
No power message receive	No verbal transmission received	Advised detector is out of service	Advised by train dispatcher detector has been activated	REQUIRED ACTION
	E-1, E-2 , F-1	E-1, E-2, F-1		No action required except if train passes two consecutive inoperative detector and has not received a

Stop and inspect for the type of defect E-1, E-2 normally detected by that detector.

Report condition to train dispaatcher

visual inspection on both sides, then train must be stopped and inspection made.

Freight train must be stopped short of protected structure and train inspected for high/wide load. Inspection requeired only in direction of approach to structure.

E-1, E-2, F-1, F-2 E-1, E-2

F-2

ASPECTS AND SPECIFIC CONDITIONS

Verbal defect message revieved

Verbal transmission recieved but not understood

Detector malfunction msssage received w/o a defect message

Detector malfunction message received with a defect message

Entering detector message is not received

REQUIRED ACTION

Stop and inspect

made

for indicated defect. No action required except if train passes two consecutive detectors and has not received a

visual inspection on both sides, then train must be stopped and inspection

Stop and inspect entire train for the type of

defect normally detected

E-1, E-2, F-1, F-2

E-1, E-2, F-1,

E-1, E-2, F-1, F-2

E-1, E-2, F-1, F-2

by that detector.

E-1, E-2, F-1, F-2

E-1, E-2, F-1, F-2

Report condition to the train dispatcher.

F-2

F-2

Freight train must be stopped short of protected structure & train inspected for high/wide load unless verbal "no defect" message is received. Inspection required only in direction of approach.

20

TRAIN HANDLING - HEAVY GRADE TERRITORY WITHOUT PRESSURE MAINTAINING FEATURE ON THE LEAD LOCOMOTIVE

Your train is cresting the grade in heavy grade territory. About half-way over the crest you make a minimum reduction, as you proceed down the grade you notice that the pressure maintaining feature is not working properly and the brake pipe is down to 60 lbs. How would you handle this train if you were the engineer?

There are several different methods of train handling in this scenario. But with any of these methods REMEMBER, only operate within these instructions until the first available point where the failed unit must be rearranged back into the locomotive consist.

METHOD 1

A. Operating from another unit in the consist by:

- · Stopping and Securing the train with a sufficient number of hand brakes to prevent movement.
- · Change controlling units in the following sequence, without delay:

Cutting Out - ABTH Rule 100.13

- 1. Make a 20 psi brake pipe pressure reduction.
- 2. After the brake pipe exhaust stops, cut out the automatic brake valve.
- 3. Ensure the independent brake is fully applied.
- 4. Remove the automatic brake valve handle and place it in the proper holder. If it is not removable, maintain it in the handle off position.
- 5. Move the transition lever to Off (if equipped).
- 6. Center the reverse lever and remove the handle, placing it in the proper holder.
- 7. Position the control and fuel pump switch, the generator field switch and the engine run switch to their proper position.
- 8. Next cut out the independent brake valve.
- 9. Place the independent brake valve handle in the release position.
- 10. Then proceed to the new controlling unit without delay.

Cutting In - ABTH Rule 100.13

- 11. Place the independent brake valve handle in the full application position.
- 12. Cut in the independent brake valve.
- 13. Position the control and fuel pump switch, the generator field switch and the engine run switch to their proper position.
- 14. Insert the automatic brake valve and move it to the release position.
- 15. After the equalizing reservoir pressure reaches 90 psi, place the automatic brake valve cutoff valve in the freight or passenger position as dictated by the intended service.
- 16. Insert the reverse lever.
- 17. Comply with the Standing Locomotive Air Test or Light Locomotive Running Air Test which ever is applicable.
- 18. Finally, perform an Application and Release Air Test (Rule 201.8)
- · With the controlling unit changed, the engineer will release the automatic brake valve to recharge brake pipe while using hand brakes and the locomotive brakes to hold the train.
- · Now, make an automatic brake pipe reduction of 10 psi. This must be done prior to starting in order to control speed. Additional brake pipe reductions may be needed to control speed after movement begins.
- · Release all hand brakes on the train at this time.
- · Before moving, move the dynamic braking lever to the fully applied position.
- Extreme care must be taken when starting, by gradually releasing the independent brake to allow the locomotives to roll out gently to prevent excessive in-train forces which could cause damage to the train or track structure. Lightly reapply the independent brake and let the train come against the locomotives gently. Continue this procedure until the entire train is moving.
- · Use the independent brake to keep the slack bunched and to control acceleration until the dynamic brake becomes effective (at which time the independent brake must be completely released).
- · With the entire train in motion, the independent brake released and the dynamic brake fully applied, the train can be accelerated by regulating the amount of the dynamic brake keeping the slack bunched while the train is accelerating.
- · Leave the conductor or ground person on the lead unit of the train to sound the whistle and ring the bell.

METHOD 2

- B. Operating by setting the regulating valve to a different position.
- · Stopping and securing train.
- · Changing regulating valve setting only while train is STOPPED.
- 1. After train has been properly secured.
- 2. With the train standing on a heavy descending grade, release the automatic brake valve to fully recharge the brake system to a safe level. This will be accomplished by using hand brakes and locomotive brakes to hold the train while the brake pipe is being recharged.
- 3. Next, with the air system fully charged to 90 psi. Make a reduction of the brake pipe by reducing equalizing reservoir down to 80 psi with theregulating valve (only while the train is stationary). This must be done prior to starting in order to control train speed. NOTE: If there is no air flow indicator or rear-end device which indicates a fully charged brake pipe. Engineer would need to wait one minute for each 12 cars or fraction thereof. Also listen very carefully to the air flowing through the brake system until the engineer can no longer hear air flowing.
- 4. Engineer must actuate the independent brake valve handle for 5 seconds for each unit in consist in the fully applied position.
- 5. Release all hand brakes on the train at this time.
- 6. Before moving, move the dynamic braking lever to the fully applied position.
- 7. Extreme care must be taken when starting, by gradually releasing the independent brake to allow the locomotives to roll out gently to prevent excessive in-train forces which could cause damage to the train or track structure. Lightly reapply the independent brake and let the train come against the locomotives gently. Continue this procedure until the entire train is moving.
- 8. Use the independent brake to keep the slack bunched and to control acceleration until the dynamic brake becomes effective (at which time the independent brake must be completely released).
- 9. With the entire train in motion, the independent brake released and the dynamic brake fully applied, the train can be accelerated by regulating the amount of the dynamic brake keeping the slack bunched while the train is accelerating.
- This method is not to be used unless the engineer has been qualified on these procedures by the Supervisor of Locomotive Engineers. If this procedure is used it must be reported to the Mechanical Department and noted on the Engine Inspection Report of the leakage. Also report this to any relieving engineer.

TRAIN HANDLING - HEAVY GRADE TERRITORY WITHOUT DYNAMIC BRAKE

You are moving down the grade in heavy grade territory with a sufficient number of locomotives to normally balance the grade through the use of dynamic braking in conjunction with a maximum of 16 lbs of brake pipe reduction. Suddenly your dynamic brake becomes ineffective. How would you handle this train?

- 1. Immediately after losing dynamic brakes apply 25 to 30 lbs of independent brake to keep the locomotives from running out and to maintain a slack bunched condition.
- 2. Next, make an automatic brake pipe reduction sufficient enough to stop. At the same time bail off the independent brake while maintaining the 25 to 30 lbs of independent brake pressure. As the train begins to slow, increase the independent to the fully applied position as the train comes to a stop.
- 3. With the automatic brake applied and the train stopped the conductor or ground person will proceed to the rear of the train setting ALL retaining valves to the High pressure (HP) position.
 - Note: Walk back to the rear of the train setting all retainers on one side of the train, then cross over to the opposite side and set all retainers as you return to the head-end.
- 4. The conductor would then return to the locomotives and the engineer will release and recharge the brake pipe.
- 5. With the brake pipe fully charged, release the independent brake slowly allowing the locomotives to roll out gently.
- 6. As the train begins to move, supplement the retainers with a minimum reduction application of air.
- Caution!! When brake pipe reductions are made to cars with the retaining valve set, further pressure will be added to the brake cylinder.
- 7. If speed increases make a further reduction of 2 to 3 lbs. Another reduction of 2 to 3 lbs may be required. Make sure an exhaust of air is heard coming from the brake valve during the additional reductions. Remember: A 16 lb Brake pipe reduction must not be exceeded to control train on heavy grade territory.
- 8. When the desired speed has been reached, the independent brake would be used to control train slack and speed (at very low speeds 10 to 12 mph) until the train has descended the grade.
- 9. Note: This system was tested on Syskiyou Mountain and using this procedure, independent brake pressure of 10 to 20 lbs was all that was needed to control train and maintain track speed of 12 mph.

10. Note: Trains using retainers must not exceed 15 M.P.H.

11. Crew members must watch trains closely for signs of overheating or sliding wheels while the train is in motion, particularly for wheels sliding at a low speed and while retainers are in use.

Caution: Retaining valves must be turned down on cars developing excessive wheel heat. Excessive wheel heat will be detected by Hot

Box Detectors stationed along the right-of-way.

12. Once the train has reached a point where the retaining valves are no longer needed, train must be stopped and the retainers reset to the exhaust position (EX Position).

RADIO CHANNEL INFORMATION:

Channel	TX	RX	Use
1	14	14	U.P Eugene
2	96	96	U.P Black Butte
3	85	23	Dispatch - Black Butte - Grants Pass
4	23	23	Trains - Black Butte - Grants Pass
5	55	08	Dispatch - Medford - Roseburg
6	08	.08	Trains - Medford - Roseburg
7	. 53	12	Dispatch - Coos Bay - Roseburg
8	12	12	Trains - Coos Bay - Roseburg
9	65	22	Dispatch - Roseburg - Eugene
10	22	22	Trains - Roseburg - Eugene
		Colores AV	2.0

The radio base station located in Roseburg is monitored 24 hours a day.

SUBDIVISION MILEAGE

COOS BAY

Between Danebo and Canary Between Canary and Coquille 64.5

ROSEBURG SUBDIVISION

Between Springfield Jct. and Roseburg 69.4 Between Roseburg and Medford 130.8 Between Tolo and White City

SISKIYOU SUBDIVISION

Between Medford and Black Butte 97.8

Total All Subdivisions 437.6

BLOCK SIGNALS WITH "P" PLATES, RULE 9.5.8: **NORTHWARD PROTECTION**

SOUTHWARD Slide detector fence between mileage 558.8 and 559.1 5591 5574 5651 Slide detector fence between mileage 563.7 and 563.9 5632 High load detector, highway underpass mileage 642.3 6429 6418

TRACKSIDE DETECTORS, RULE 6.29.1:

Mileage	Type	Mileage	Type	Mileage	Type	Mileage	Type
445.0	E1, E2	509.8	E1, E2	575.7	F1	752.1	F1
452.8	F1	517.1	F1	583.0	E1, E2	752.2	F1
463.0	E1, E2	522.3	E1, E2	592.0	F1	752.3	F1
477.3	F1	538.0	F1	602.2	E1, E2	752.4	F1
482.8	E1, E2	542.7	E1, E2	623.3	E1, E2	752.5	F1
492.0	F1	543.9	**	641.6	E1, E2		
498.7	E1. E2	563.0	E1, E2				

RAILAMERICA SYSTEM SPECIAL INSTRUCTIONS

ITEM 1. RULE BOOKS IN EFFECT

Employees must provide themselves with and have available for reference:

General Code of Operating Rules, 4th Edition, Effective April 2, 2000

RailTex Air Brake and Train Handling Rules, Effective May 10, 1995

RailTex Instructions for Handling

Hazardous Materials

Effective August 1, 1998

RailTex Safety Rules,

Effective July 1, 1997

RailTex Instructions Governing

Train Dispatchers

Effective April 10, 1994

Roadway Worker Protection Act

Effective May 15, 1997

North American Emergency Response Guidebook Dated February, 2000

All employees operating over foreign railroads are required to have the rulebooks, timetable and Special Instructions of that railroad while operating over it.

ITEM 2. MAXIMUM SPEEDS

Train and equipment speeds specified by rules, Special Instructions, signal indications, track bulletins or other means must be maintained to the extent feasible, consistent with safety, but must not be exceeded. Where there is a difference in speeds, the lowest speed will govern.

SYSTEM SPEED RESTRICTIONS

Movement on all tracks other than main track				
Trains or engines with lead units not equipped with event recorders	30 MPH			
A controlling locomotive unit with a defective speed recorder	20 MPH			

TABLE OF TRAIN SPEEDS

Min.	Sec.	MPH	Min.	Sec.	MPH	Min.	Sec.	MPH
1	00	60.0	1	28	40.9	1	56	31.0
1	02	58.0	1	30	40.0	1	58	30.5
1	04	56.2	1	32	39.1	2	00	30.0
1	06	54.2	1	34	38.3	2	05	28.8
1	80	52,9	1	36	37.5	2	10	27.7
1	10	51.4	1	38	36.8	2	15	26.7
1	12	50.0	1	40	36.0	2	24	25.0
1	14	48.6	1	42	35.3	2	30	24.0
1	16	47.4	1	44	34.6	2	45	21.8
1	18	46.1	1	46	34.0	3	00	20.0
1	20	45.0	1	48	33.3	3	30	17.1
1	22	43.9	1	50	32.7	4	00	15.0
1	24	42.9	1	52	32.1	5	00	12.0
1	26	41.9	1	54	32.6	6	00	10.0

ITEM 3. TRAIN MAKEUP AND EQUIPMENT RESTRICTIONS

- 1. When trailing tonnage exceeds 5000 actual tons, the first five cars behind the locomotive must weigh 50 tons or more provided the train contains 5 cars weighing 50 tons or more, For application of this restriction, two consecutively loaded platforms of an articulated car are to be considered the equivalent of one car weighing 50 tons.
- 2. The following cars must be entrained with no more than 4000 trailing tons:
 - Empty tank cars less than 35 feet in length
 - Other cars measuring less than 42 feet in length and they must not be coupled to a car longer than 75 feet in length.
- 3. Two axle intermodel cars weighing less than 25 tons must be entrained with no more than 1500 trailing tons.
- 4. Scale test cars and other cars designated as required to be on the rear end of trains must be entrained within the rear 5 cars of the train. Unless equipped with operative air brakes, scale test cars must not be handled as the rear car in a train.
- 5. Loaded continuous welded rail (CWR) trains must be handled separately from other trains.
- 6. When making up trains, the following will govern:
 - Loaded cars should be placed toward the head end of trains, with empties placed near the rear.
 - Loaded multi-platform double stack cars should be entrained on the head end of trains.
 - Blocks of ten or more cars having an average weight over 100 tons per car must be placed near the head end of trains.

 Any block of 20 or more conventional TOFC / COFC or multilevel cars must be placed as close to the rear as good train make-up will permit i.e., loads ahead of empties.

PREVENTION OF HARMONIC ROCK

The critical speed range for harmonic rock is between 13 and 19 MPH. Every effort must be made to operate trains at speeds above or below these limits except when:

- 1. An engine is operating at its maximum.
- 2. Train is operating on ascending grades.
- 3. When automatic brakes are applied.

Trains operated in a draft condition are less susceptible to harmonic rock. While in the critical speed range, the engineer and conductor should make a constant and careful observation of as much of their train as possible to determine if any cars are rocking excessively.

ITEM 4. LOCOMOTIVE INSTRUCTIONS

FUEL CONSERVATION

Locomotive engineers must comply with fuel conservation instructions and employ train handling techniques consistent with efforts to reduce fuel costs. Always isolate unneeded locomotives within a consist.

ITEM 5.

TWO-WAY END OF TRAIN DEVICES

All freight trains operating at speeds over 30 MPH must be equipped with an operational two-way end of train (EOT) device, except as outlined below: Any train equipped with a two-way end of train (EOT) device must not depart its initial terminal until the device is armed and the engineer has been informed that the two-way EOT device has been tested at the point of installation. The device must remain armed and operable until the train reaches its final destination. The following trains are not required to be equipped with a two-way end of train (EOT) device:

- 1. Local and work trains with less than 4,000 trailing tons
- 2. Passenger trains
- 3. Trains that will not exceed 30 MPH
- 4. Trains with equipment on rear having a functioning Emergency brake valve and occupied by a crewmember
- 5. Light engines

When a train is required to have a two-way EOT device and a failure of the device occurs enroute, speed must be reduced to not exceed 30 MPH until the ability to initiate an emergency application at the rear of the train has been restored or until the train reaches the next point where the defective unit can be repaired or replaced.

ITEM 6. MISCELLANEOUS

HIGHWAY / RAIL GRADE CROSSING SIGNAL BOXES

An illuminated white light above the door of a signal box at highway/rail grade crossings indicates the AC power is being used for an active device(s) at that location. When the light is not illuminated, AC power is not being used and the crossing warning device(s) is operating on battery power only. Extended battery operation of crossing warning devices can affect the safety of the crossing. Notify the train dispatcher if the light on the signal box is not illuminated.

RAIL HEAT STRESS

Reduce all maximum authorized speeds of greater than 20 MPH by 5 MPH when the ambient temperature is 95 degrees Fahrenheit or above. Train crew personnel, if uncertain of the temperature, should contact the train dispatcher or a supervisor for clarification. This restriction applies only to trains that exceed 850 feet in length or have greater than 62 axles.

OPERATIONS TESTING

When operations testing is performed to test for compliance with operating rules, a banner, approximately three feet by five feet with red lettering on a white background may be stretched across the track. It will display "STOP OBSTRUCTION". This banner is considered a stop signal and a simulation of on-track equipment. Whenever required by an operating rule, stop all train, engine and on-track equipment movements short of the "STOP OBSTRUCTION" banner. Examples of operating rules where the banner may be used are: GCOR 6.27, Restricted Speed and GCOR 6.28, Movement On Other Than Main Track. Expect to find "STOP OBSTRUCTION" banner erected at any location or at any time the above restricted movement.

CONSIST VERIFICATION

All crews receiving trains or picking up cars on foreign railroads must verify that the cars received are part of the train by comparing at least six (6) cars of each track to the train list furnished by the delivering road.

DAILY OPERATING BULLETIN (DOB)

All train and engine crews are required to have a copy of the current Daily Operating Bulletin or Track Bulletin.

ITEM 7. CHANGES AND REVISIONS TO THE GENERAL CODE OF OPERATING RULES (and MofW rules as applicable)

1.3.1 RULES, REGULATIONS AND INSTRUCTIONS

Add: Roadway Worker Protection:

Employees who are otherwise rules qualified and whose duties require the inspection, construction, maintenance or repair of track, bridges, roadway, signal and communications systems, roadway facilities or machinery must be qualified and have a copy of these rules available while on duty. Other covered employees not rules qualified, must be qualified on these rules ands have access to these rules while on duty.

100.4.5 (ROADWAY WORKER ACT) TRAIN APPROACH WARNING (TAW) Delete the last paragraph located under speed and distance chart, reading:

Note: A Lone Worker or a roadway work group at or within 150 feet of a road crossing on a main track equipped with operable automatic warning devices may use the warning provided by bells and flashers as the Train Approach Warning as long as the activation of the devices can be clearly seen and heard by all roadway workers and a minimum of 15 seconds advance warning is provided.

100.4.5 (ROADWAY WORKER ACT) Train Approach Warning (TAW) and Statement of On-Track Safety, Form SOTS-1

Add the following sentence in bold above the tables of maximum speeds and sight distances:

"Additional time must be added for the time required to clear the track."

Example: Add the time it will take to clear the track to a place of safety to the 15 second minimum already provided by the table.

Job Briefings at work sights for Roadway Workers must identify beforehand where employees will be considered "clear of the track."

The sentence above the example given must appear in bold type above each table mentioned when used or referred to or a copy of this General Order must be in the possession of those employees using or referring to either table until the Railroad modifies the tables as above.

1.33 INSPECTION OF FREIGHT CARS Add:

Tie Down Chains/Cable - Cars equipped with tie down chains and/or cables must not be moved until the chains and/or cables are properly secured.

1.48 ENGINEER DECERTIFICATION Add New Rule:

The following violations will result in decertification of a locomotive engineer as required by applicable law:

 Operation of a locomotive or train past a signal indication, excluding a hand or radio signal indication or a switch, that requires a complete stop before passing it.

2. Operation of a locomotive or train at a speed which exceeds the maximum

authorized limit by at least 10 miles per hour.

 Operation of a locomotive or train without adhering to procedures for the safe use of train or engine brakes when the procedures are required for compliance with the initial terminal, intermediate terminal, transfer train and yard or running brake tests.

4. Failure to comply with any mandatory directive concerning the movement of a locomotive or train by occupying main track or a segment of main track

without proper authority or permission.

5. Failure to comply with prohibitions against tampering with locomotive mounted safety devices, or knowingly operate or permit to be operated a train with an unauthorized disabled safety device in the controlling locomotive.

6. Use of drugs or alcohol.

5.4.4 AUTHORIZED PROTECTION BY YELLOW OR YELLOW-RED FLAG

Authorized on all subdivisions where the maximum speed does not exceed 40 mph.

5.9.2 HEADLIGHT OFF CHANGE ITEM #2 TO READ:

The train is left unattended on the Main Track

6.13 YARD LIMITS

Second paragraph is changed to read:

All movements entering or moving within Yard Limits must be made at restricted speed, regardless of signal indications.

6.19 FLAG PROTECTION

Flag protection is not required against following trains on the same track.

7.7 KICKING OR DROPPING CARS

Add:

The dropping of cars is prohibited.

7.14 SAFETY STOP Add New Rule:

Before a cut of cars exceeding 2,000 feet is coupled to other cars, movement must stop within 100 ft. of the other cars. When shoving in spur tracks containing other car(s), stop must be made within 1 car length before making coupling.

8.20 DERAIL LOCATION AND POSITION

Crew members must communicate when derails have been placed in the non-derailing position before proceeding with movement.

8.23 EMERGENCY STOP OR SEVERE SLACK ACTION Add: Inspection of Cars and Units

The entire train must be inspected for derailed cars, shifted loads or other conditions affecting safe train movement. Promptly report results on the inspection to the train dispatcher.

15.2.2 PROTECTION OF PRIVATE CONTRACTORS Add New Rule:

Track bulletin Form B may be used to protect contractor's employees and equipment near or fouling the track without use of flags as specified in Rule 5.4.3 (Display of Yellow-Red Flags). However, flags must be displayed when working on-track.

GLOSSARY

Add: DAILY OPERATING BULLETIN (DOB)

Instructions regarding track conditions, restrictions and other information which affect the safety and movement of a train or engine. Daily operating bulletins may be used instead of track bulletins. All track bulletin rules apply to DOBs.

ITEM 8. CHANGES AND REVISIONS TO RAILTEX AIR BRAKE AND TRAIN HANDLING RULES

100.2 STANDING LOCOMOTIVE AIR TEST, PARAGRAPH 7:

When checking the PC switch, ensure the generator field switch is off, then place the throttle in position three. When the PC switch trips, each unit in the consist must drop its engine speed to idle. If locomotive fails to drop its load, verify that the engine run and control and fuel pump switches in the trailing units are off.

100.8 LEAVING LOCOMOTIVE UNATTENDED Add:

A locomotive may be considered temporarily "unoccupied", but only if a crew member is in close proximity to immediately board the locomotive and stop any undesired movement, should it occur. When a locomotive controlling cab is to be left "unoccupied" and the locomotive will not be left "unattended", the following tasks must be performed:

- 1. Independent brake fully applied.
- 2. If cars are attached and brake pipe charged, brake pipe must be reduced sufficiently to prevent movement with a minimum reduction of 10 psi.
- 3. Center and remove the reverser handle.
- 4. Turn generator field switch to off.
- 5. Isolate the locomotive

Crewmembers leaving a locomotive "unoccupied" must inform other crewmember(s) prior to doing so.

100.9 LOCOMOTIVE SHUTDOWN PROCEDURE

In the second bullet, change "40 degrees F." to read "32 degrees F."

201.5 INITIAL TERMINAL ROAD TRAIN AIR TEST

Change the first paragraph to read:

This test must be performed under any one of the following conditions:

- When the train is originally made up;
- When the train consist is changed other than by adding or removing a solid block of cars and car air brake reservoirs remain charged: or
- When the train is received in interchange and the train consist is changed (other than by one or a combination of the following)
- removing or adding a solid block of cars:
- changing locomotive: or
- changing or removing caboose, and the car air brake reservoirs remain charged:

302.1.7 USE OF RETAINERS

Delete that portion reading:

"The short-cycle method of braking must be used. This method consists of making frequent automatic brake applications and short holds of the application".

Add: "DO NOT short cycle train brakes at any time."

GLOSSARY

Change the definition of Transfer Train Movement to read:

A movement of a locomotive and one or more cars on a main track from a yard, interchange or industry, not exceeding 20 miles.

ITEM 9. ADDITIONS AND REVISIONS TO RAILTEX SAFETY RULES

71.5 EYE PROTECTION:

Employees must wear company approved eye protection in all designated areas or when specified by a department, except when employees are in closed vehicles, lunchrooms or office buildings. *Company approved* means approved by the RailAmerica Safety Department and in accordance with the Canadian Standards Association (CSA) in Canada, and the American National Standards Institute (ANSI Z87.1-1989) and CA standards in the United States. Eyeglass lenses must be plastic or polycarbonate. Transitional or photogrey lenses are not approved.

A. Areas that Require Eye Protection:

Employees must wear company-approved spectacle-type, 100-percent safety glasses with side shields when on duty or present:

- at locomotive or car repair and servicing facilities;
- at maintenance-of-way work sites, shops and facilities;
- · at signal work sites, shops and facilities;
- in train, engine and yard service

Employees requiring corrective lenses must wear company approved prescription safety glasses with side shields or coverall-type safety goggles.

B. Eye Protection in Hazardous Areas:

When performing procedures specified in outstanding instructions, employees must wear protection as identified for the hazard involved. Employees must wear appropriate eye protection when working in or near areas designated hazardous to eyes (e.g., derailment cleanup).

C. Contact Lenses:

Employees should not wear contact lenses when working in areas where wind, dust, or other foreign matter constitute a hazard, or when chemicals may cause a splash, mist, or vapor hazard. When wearing contact lenses, safety glasses, as required above, must also be worn.

71.6.1 SAFETY FOOTWEAR

Change to read:

Transportation, Maintenance of Way, Signal, Mechanical and other employees who work in the field must wear safety toe footwear that covers their ankles and has a defined heel.

Employees who must get on and off standing or moving equipment must wear lace up, safety toe footwear not less than 6 inches in height.

80.21.7 COUPLING AND UNCOUPLING

Add: Three Point Protection

Before acknowledging a signal that a crew members is going between equipment, the engineer must take these three actions:

1. Apply the air brake.

2. Place the reverser lever in neutral position

3. Turn the generator field switch off.

The engineer must maintain this protection until notified by the employee who requested it, that the protection is no longer required Once the protection has been canceled, it must be re-established before fouling equipment again.

81.4 GETTING ON OR OFF EQUIPMENT

Change to read:

Except in emergency, employees must not get on or off engines, cars or other equipment while equipment is moving.

81.10 TANK CARS AND FLAT CARS

Change to read:

Employees must not ride on tank cars, flat cars or bulkhead flat cars with single vertical hand holds except in designated locations and then only if absolutely necessary. Employees must not ride on the deck of a flat car.

