SAFETY FIRST

CENTRAL OREGON AND PACIFIC RAILROAD

TIMETABLE NO. 8

EFFECTIVE 0001
PACIFIC STANDARD TIME
SUNDAY, JANUARY 5, 2003

DAN A. LOVELADY GENERAL MANAGER

GENERAL OFFICE 333 S.E. MOSHER ROSEBURG, OR 97470



a RailAmerica Company

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.
- 4. 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.

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TIMETABLE CHARACTERS

- A Automatic Interlocking
- O General Orders, General Notices
- C Standard Clock
- **B** Radio Base Station
- T Wye (Turning Facility)
- Y Yard Limits
- X Railroad Crossing At Grade
- D Hot Box and Dragging Equipment
 Detector equipped with verbal indicator
- M Manual Interlocking
- G Gate Normal Position Against Conflicting Route
- Gate Normal Position Against
 This Route
- **J** Junction with another Railroad
- R Restricted Limits

	LENGTH OF TRACK IN FEET	MILE POST LOCATION	STATION		STATION NUMBER	METHOD OF OPERATION	
		785.6	COQUILLE 16.9	Y	03340		
		768.9	COOS BAY	OTY	03300		
	Mary Lea	765.6	NORTH BEND 2.6	MY	03230		
	2500	763.0	CORDES 3.7	Y	03220		-
	2980	759.3	HAUSER 18.9	Y	03210	TRACK	
ı	2480	740.4	REEDSPORT 1.6	MY	03195	WARRANT	
	2376	738.8	GARDINER JCT. 17.5	Y	03185	CONTROL	
		721.3	CANARY 6.3	0	03170		000000000000000000000000000000000000000
	4520	715.0	WENDSON 6.0		03160	15 - 73-41	1
	1500	709.0	BECK 3.7		03155		
	4680	705.3	MAPLETON 53.7		03150	LATEMA	
	4680	651.6	DANEBO	Y	03105		

COOS BAY SUBDIVISION SPECIAL INSTRUCTIONS

1. MAXIMUM AUTHORIZED SPEED

25 MPH

2. PERMANENT SPEED RESTRICTIONS

MP 785.5 to MP 762.6 (Structure)	10 MPH
MP 741.7 (Trestle)	10 MPH
MP 740.6 to MP 739.6 (Bridge)	10 MPH
MP 733.0 to MP 730.5 (Trestle)	10 MPH
MP 728.0 to MP 727.7 (Tunnel 17)	
MP 726.4 to MP 726.3 (Trestle)	
MP 721.2 to MP 720.7 (Tunnel 16 – 15)	
MP 719.5 to MP 719.3 (Trestle)	
MP 717.1 to MP 716.4 (Trestle – Bridge)	
MP 698.5 to MP 696.6.	
MP 696.6 (Trestle)	
MP 696.6 to MP 678.4	
MP 678.4 (Bridge)	10 MPH
MP 678.4 to MP 678.0	
MP 671.4 to MP 667.4 (Tunnel 13)	10 MPH
MP 668.3 Vaughn – (Willamette Industries Tracks)	
MP 656.0 to MP 655.0 (Sink)	
MP 652.0 to MP 648.4 (U.P. Yard)	10 MPH
MP 651.9 (Danebo Siding)	

3. MAIN TRACK AUTHORIZATION

Coguille to MP 758.0	Yard Limits
MP 758.0 to MP 741.0	TWC
MP /58.U TO MP /41.U	Vard Limite
MP 741.0 to MP 737.0	Talu Lillius
MP 737.0 to MP 652.0	
MP 652.0 to end of CORP Main Track	Yard Limits

4. JOINT OPERATIONS

CORP trains and engines may occupy the Coos Bay main and yard tracks at Eugene, after receiving permission from the U.P. Yard Office and U.P. Footboard Yard Master. The Eugene Yard Office may be reached on AAR Channel 14 – 14. The Eugene Footboard Yard Master may be reached on AAR Channel 20 – 20, AAR Channel 24 – 24 or AAR Channel 88 – 88.

5. RAILROAD CROSSINGS AT GRADE AND JUNCTIONS

None

6. INDUSTRIAL SPURS

None

7. FRA EXCEPTED TRACK

Between MP 769.0 and MP 785.5

Coquille – Old siding
House Track

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

Vaughn – All tracks except Coos Bay Main Track

8. RADIO CHANNEL INSTRUCTIONS

RAILI	ROAD	AAR CHANNEL	CHANNEL #	
Dispatch Hauser - Coquille		53 – 12	7	
Trains	Hauser - Coquille	12 – 12	8	
Dispatch	Hauser - Eugene	65 – 22	9	
Trains	Hauser - Eugene	22 – 22	10	
U.P. Yard Office	Eugene	14 – 14	1	
U.P. Footboard	Eugene	20 – 20	13	
U.P. Footboard	Eugene	24 – 24	11	
U.P. Footboard	Eugene	88 – 88	12	

9. SPECIFIC SWITCH INSTRUCTIONS

None

10. DEFECT DETECTOR LOCATIONS

LOCATION	TYPE
MP 752.1	F1
MP 720.3	F1
MP 705.1	F1
MP 680.1	F1
MP 657.2	F1

11. LOCATIONS NOT LISTED AS STATIONS

None

12. OTHER SPECIFIC INSTRUCTIONS

A. DRAWBRIDGES:

INTERLOCKED:

North Bend, MP 763.6

Reedsport, MP 739.6

NON-INTERLOCKED:

Suislaw River, MP 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.

B. CORDEZ:

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

C. IMPAIRED SIDE CLEARANCE, RULE 1.20:

MP	Description	MP	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

- D. When an engineer is charged with the movement of the train without a conductor on board 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.
- E. MP 785.5 to MP 651.0, Watch for uneven footing conditions.
- F. Cordes, MP 763.0, Industry track 3676, a single locomotive unit must be used when moving rail cars between Cordes and the Roseburg Forest Products chip facility.

	LENGTH OF	MILE POST			STATION	METHOD		
	AUX. TRACK IN FEET	LOCATION	STATION		NUMBER	OF OPERATION		
		441.8	MEDFORD 8.4	BOY	04200	1000 981		
	3858	450.2	TOLO 14.7	TY	04125	ABS/TWC		
	2579	464.9	ROGUE RIVER 9.0		04110			
	5493	473.9	GRANTS PASS 8.6	Y	04100			
	1845	482.5	MERLIN 4.9		04070			
)	4200	487.4	HUGO 6.7		04065		3	
5	3366	494.1	LELAND 13.8		04060		U T H W A R D	
ł	3100	507.9	GLENDALE 32.4	Y	04050			
V	2023	540.3	CORNUTT 3.9		04045	CHOO A		
}	3080	544.2	RIDDLE 5.1		04040			
	1830	549.3	WEAVER 5.6		04035			
	4461	554.9	DOLE 7.1		04025			
	2935	562.0	DILLARD 10.6	Y	04015		1	
		572.6	ROSEBURG 8.8	CBOY	04000	ADCITIAL	1	
	3078	581.4	WILBUR 5.0	·	03670	ABS/TWC		
	4615	586.4	SUTHERLIN 2.7		03665			
	2380	589.1	OAKLAND 8.4		03660			
	2935	597.5	RICE HILL 6.2		03655			
	3405	603.7	YONCALLA 9.5		03650			
	3092	612.2	SAFLEY 8.7		03635			

	LENGTH OF AUX. TRACK IN FEET	MILE POST LOCATION	STATION	STATION NUMBER	METHOD OF OPERATION	
N O	4180	621.9	DIVIDE 3.1	03620		8
R	2105	625.0	LATHAM 1.5	03610		
W	2820	626.5	COTTAGE GROVE 4.1	03605	ABS/TWC	V
A R D	3249	630.6	WALKER 4.9	03525	h my w	F
ĬĬ	3137	635.5	CRESWELL 8.8	03520	daris.	1
~		642.0	SPRINGFIELD JCT. T	y 03510		

ROSEBURG SUBDIVISION SPECIAL INSTRUCTIONS

1.	MAXIMUM AUTHORIZED SPEED	25 M PH
2.	PERMANENT SPEED RESTRICTIONS	
	MP 441.8 to MP 442.7	20 MPH
	MP 456.7 to MP 456.9 (Bridge)	10 MPH
	MP 471.5 to MP 472.0	10 MPH
	MP 490.5 to MP 496.0	20 MPH
	MP 504.0 to MP 504.3	20 MPH
	MP 508.3 to MP 511.0	20 MPH
	MP 511.0 to MP 516.0	20 MPH
	MP 516.0 to MP 516.2 (Tunnel)	10 MPH
	MP 516.7 to MP 530.6	20 MPH
	MP 530.6 to MP 530.9 (Curve)	10 MPH
	MP 530.9 to MP 582.3	20 MPH
	MP 609.0, Track 5980 (Drain Emerald Lead)	5 MPH
	MP 609.0 to MP 619.5	20 MPH
3.	MAIN TRACK AUTHORIZATION	
	MP 441.8 to MP 451.0	Yard Limits/ABS
	MP 451.0 to MP 471.0	
	MP 471.0 to MP 475.0	
	MP 475.0 to MP 507.0	
	MP 507.0 to MP 509.0	Yard Limits/ABS
	MP 509.0 to MP 558.7	
	MP 558.7 to MP 563.0	
	MP 563.0 to MP 569.5	

JOINT OPERATIONS 4.

U.P. Track Warrants and Track Bulletins for movement between Eugene Yard and Springfield Jct. will be obtained at the U.P. Yard Office, Eugene.

U.P. General Orders and Notices may be reviewed at the U.P. Yard Office, Eugene.

RAILROAD CROSSINGS AT GRADE AND JUNCTIONS 5.

None

INDUSTRIAL SPURS 6.

None

FRA EXCEPTED TRACK 7

Grants Pass

Yard Tracks

6802, 6807, 6702, 6706.

Glendale

Tracks

6512, 6516, 6518.

Cottage Grove Medford

All tracks except Main Track and Siding. Yard Tracks

7201, 7202, 7203, 7206, 7207

RADIO CHANNEL INSTRUCTIONS 8.

an F	AILROAD	AAR CHANNEL	CHANNEL #
UP	Eugene	14 – 14	1
UP	UP Footboard	20 – 20	13
UP	UP Footboard	24 – 24	11
UP	UP Footboard	88 – 88	12
Dispatch	Eugene – Rice Hill	65 – 22	9
Trains	Eugene – Rice Hill	22 – 22	10
Dispatch	Rice Hill - Medford	55 – 08	5
Trains	Rice Hill - Medford	80 – 80	6

9. SPECIFIC SWITCH INSTRUCTIONS

Tolo MP 450.2:

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

Cornutt, MP 540.3:

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

Riddle, MP 542.2, Track 6485, LVL Track:

Derail is equipped with a Roseburg Forest Products lock.

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 lined in normal position after each use.

Roseburg, MP 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.

Springfield Jct., MP 644.3, Rule 8.8:

Wye switches are equipped with U.P. locks.

Eugene Locomotive Facility:

Tracks 49, 50 and 51 at Eugene Roundhouse and service track 1 and 2 from a point 300' south of switch #501 northward to and including the sanding facility are designated as Locomotive Maintenance tracks. Tracks 49, 50 and 51 are maintained by CORP MOW.

10. DEFECT DETECTOR LOCATIONS

LOCATION	TYPE	LOCATION	TYPE
MP 445.0	E1 – E2	MP 563.0	E1 – E2
MP 452.8	F1	MP 575.2	F1
MP 463.0	E1 – E2	MP 583.0	E1 – E2
MP 475.0	F1	MP 592.0	F1
MP 482.8	E1 – E2	MP 602.2	E1 – E2
MP 492.0	F1	MP 623.3	E1 – E2
MP 498.7	E1 – E2	MP 641.6	. F1
MP 509.8	E1 – E2		
MP 517.1	F1		
MP 522.3	E1 – E2		
MP 538.0	F1		
MP 542.7	E1 - E2 - F2		

11. LOCATIONS NOT LISTED AS STATIONS

None listed.

12. OTHER SPECIFIC INSTRUCTIONS

A. BLOCK SIGNALS EQUIPED WITH "P" PLATES:

NORTHWARD	PROTECTION	SOUTHWARD
5574	Slide detector fence between mileage 558.8 and 559.1	5591
5632	Slide detector fence between mileage 563,7 and 563,9	5651
6418	Hi load detector, highway underpass Mileage 642.3	6429

B. 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 rail skid 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.

Merlin, MP 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.

Divide, MP 621.9, Rule 6.32.6:

When a train stops, blocking Martin Creek Road, MP 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.

Latham, MP 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.

Cottage Grove, MP 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.

Walker, MP 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.

Dillard, MP 562.0, Tracks 6434 and 6435:

When cars are left unattended a sufficient number of hand brakes must be set on each end of cut, to prevent movement should the hand brakes on the opposite end be released.

C. **EUGENE YARD**

All movement entering or moving within yard limits between MP 642.0 and MP 644.3 must be made at restricted speed unless operating under a block signal indication that is more favorable than Approach.

IMPAIRED SIDE CLEARANCE, RULE 1.20: D.

MP	Description	MP	Description
456.8	Bridge	523.9	Rock Cut
458.7	Bridge	525.0	Rock Cut
482.6	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	Tunnel 3	608.6	Bridge
519.0	Rock Cut	610.7	Bridge
·····	Tunnel 2	620.2	Rock Cut
521.0 521.1	Bridge	625.5	Bridge
521.4	Bridge	627.4	Bridge

Riddle, MP 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.

MP 579.4, Do-Able, Track 6060:

Impaired clearance from road crossing to end of track.

MP 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.

TERRITORY	GP38	GP40	SD40	SLUG
Medford to Ashland	1575	1850	2000	1850
Ashland to Hornbrook	475	500	800	500
Hornbrook to Montague	950	1000	1300	1000
Montague to Black Butte	750	800	1200	800
Black Butte to Hornbrook	1575	1850	2000	1850
Hornbrook to Ashland	475	500	800	500
Ashland to Medford	2800	4200	4400	4200

TERRITORY	GP38	GP40	SD40	SLUG
Eugene to Roseburg	850	1000	1300	1000
Roseburg to Grants Pass	750	800	1200	800
Grants Pass to Medford	1575	1850	2000	1850
Medford to Grants Pass	2800	4200	4400	4200
Grants Pass to Roseburg	750	800	1200	800
Roseburg to Eugene	850	1000	1300	1000

F. 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

	Ton	s Per Axle Opera Dynamic Brake	ative
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	10.64
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.

G. 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 rearend or entrained helper, subtract total locomotive tonnage ratings for the helper engine from the train's adjusted tonnage.

Northward:	Grants Pass - Glendale	5,500 tons
	Oakland - Yoncalla	6,500 *
	Safely - Divide	6,500 *
Southward:	Yoncalla - Oakland	6,500 tons
	Glendale - Grants Pass	5.500 "

- H. MP 642 to MP 441.8 Watch for uneven footing conditions
- When making shoving moves at Dillard, movement must be stopped and the crossing must be flagged at the following crossings.

Roseburg Forest Gate 1	MP 561.3
Roseburg Forest Gate 2	MP 560.95
Roseburg Forest Gate 3	MP 560.7
Roseburg Forest Gate 4	MP 560.2

		UIUIT	IYOU SUBDIVI	VIVII		_
	LENGTH OF AUX. TRACK IN FEET	MILE POST LOCATION	STATION	STATION NUMBER	METHOD OF OPERATION	
		344.0	(U.P.) BLACK BUTTE TY 4.4	05360	СТС	
	3421	348.4	WEED BOTY 12.6	04350	- 100 100 100 100 100 100 100 100 100 10	
	5543	361.0	GAZELLE 14.5	04345	TWC	
	YARD	375.5	MONTAGUE Y 17.6	04335		
	3583	393.1	HORNBROOK Y 8.7	04330		
	1261	401.8	HILT 10.4	04325		
	4588	412.2	SISKIYOU 16.9	04315	Simulation of the second	
,	5875	429.1	ASHLAND 12.7	04305	TWC/ABS	
	YARD		04200	IVICIADS		

SISKIYOU SUBDIVISION SPECIAL INSTRUCTIONS

1.	MAXIMUM AUTHORIZED SPEED	25 M PH
2.	PERMANENT SPEED RESTRICTIONS	
	MP 345.2 to MP 355.4	20 MPH
	MP 348.4, Weed Yard, only 2 locomotives on RFP veneer lead	5 MPH
	MP 348.5, Weed Yard, North and South legs of WYE	
	MP 348.5, Weed Yard, track 7570 at crossover	5 MPH
1	MP 368.89 to MP 369.0, Scale Track	10 MPH
	MP 377.0 to MP 374.5, all tracks except Main Track	5 MPH
	MP 381.0 to MP 392.0	20 MPH
	MP 393.0, Hombrook, track 7533 & 7532	5 MPH
	MP 394.7 to MP 402.0	20 MPH
	MP 402.0 to MP 422.0	12 MPH
	MP 422.0 to MP 433.8	20 MPH
	MP 440.5 to MP 441.8	
3.	MAIN TRACK AUTHORIZATION	
	Automatic Block signals are in service between:	
	MP 428.3 and MP 441.8	
	MP 345.2 to MP 349.9	Yard Limits
	MP 349.9 to MP 374.5	
	MP 374.5 to MP 377.0	
	MP 377.0 to MP 392.0	
	MP 392.0 to MP 394.5	
	MP 394.5 to MP 428.3	
	MP 428.3 to MP 438.7	TWC/ABS
	MP 438 7 to MP 441 8	

4. JOINT OPERATIONS

BLACK BUTTE:

CORP Crews must contact U.P. Dispatcher 64 (800) 726-1166 to obtain Track Warrant and Track Bulletins before departing from Weed for Black Butte. Warrants, Bulletins, General Orders and Notices will be Faxed to the Weed Depot.

CORP Trains and Engines may occupy Black Butte Controlled Siding for interchange purposes, after first obtaining authority from U.P. CTC Dispatcher 64 on (AAR) channel 80 – 80. Lunar switching light and signal to depart Black Butte will be controlled by Dispatcher 64.

Lighting system at Black Butte is radio controlled. To turn lighting system on, press 3452*. To turn lighting system off, press 3452#.

5. RAILROAD CROSSINGS AT GRADE AND JUNCTIONS

None

6. INDUSTRIAL SPURS

None

7. FRA EXCEPTED TRACK

Weed

All tracks except siding and main track

Hornbrook

Track 7532 Track 7404

Ashland Medford

Yard tracks 7201, 7202, 7203, 7206,7207

8. RADIO CHANNEL INSTRUCTIONS

RAILROAD		RAILROAD AAR CHANNEL	
Dispatch	Black Butte - Medford	85 – 23	3
Trains	Black Butte - Medford	23 – 23	4
UP	Black Butte	80 – 80	

9. SPECIFIC SWITCH INSTRUCTIONS

None

10. DEFECT DETECTOR LOCATIONS

LOCATION	TYPE	LOCATION	TYPE
MP353.4	F1	MP 403.3	E1 – E2
MP 363.0	E1-E2	MP 407.5	F1
MP 384.8	E1-E2	MP 417.3	F1
MP 398.0	F1	MP 423.3	E1 – E2
MP 401 4	F2*		

11. LOCATIONS NOT LISTED AS STATIONS

None listed

12. OTHER SPECIFIC INSTRUCTIONS

A. LEAVING CARS UNATTENDED:

When cars are left unattended at Siskiyou Station, MP 412.2, rail skid 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 skid is located at the north end Siskiyou siding and runaround. When picking up cars at this location, the skid must be hung on post and locked.

B. IMPAIRED SIDE CLEARANCE, RULE 1.20:

MP MP	Description
411.3	Tunnel 13
414.6	Tunnel 14
415.2	Tunnel 15

C. MAXIMUM TONNAGE RATINGS:

TERRITORY	GP38	GP40	SD40	SLUG
Medford to Ashland	1575	1850	2000	1850
Ashland to Hornbrook	475	500	800	500
Hornbrook to Montague	950	1000	1300	1000
Montague to Black Butte	750	800	1200	800
Black Butte to Hornbrook	1575	1850	2000	1850
Hombrook to Ashland	475	500	800	500
Ashland to Medford	2800	4200	4400	4200

D. 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 MP 353.0 and Black Butte Table A

TABLE A

		Operative ic 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	WT0965000		

F. COUPLER LIMITS:

The tonnage handled by the road engine of a train must not exceed the following limits on an ascending grade.

No more then 7 GP38, GP40 or SD40 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

4,000 tons

Southward:

MP 429.0 - MP 393.0

4,000 tons

Gazelle - Black Butte

4,700 tons

G. PLACEMENT OF EMPTY CARS:

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

H. HELPERS:

Helper Locomotives are not to be used.

I. 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.

J. Black Butte, MP 344.0, Rule 8.8:

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

K. 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.

L. MP 441.8 to MP 349.9 Watch for uneven footing conditions

		WHITE	CITY SUE	3DIV	ISION		
	LENGTH OF AUX. TRACK IN FEET	MILE POST LOCATION	STATION		STATION NUMBER	METHOD OF OPERATION	
N O		450.5	TOLO 5.4	TY	04125	YARD	. 0
R T H ↓	3137	455.9	WHITE CITY	Y	04155	LIMITS	T H

WHITE CITY SUBDIVISION SPECIAL INSTRUCTIONS

1. MAXIMUM AUTHORIZED SPEED...... 10 MPH

2. PERMANENT SPEED RESTRICTIONS

None

3. MAIN TRACK AUTHORIZATION

Rule 6.13 - entire subdivision

4. JOINT OPERATIONS

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.

5. RAILROAD CROSSINGS AT GRADE AND JUNCTIONS

None

6. INDUSTRIAL SPURS

None

7. FRA EXCEPTED TRACK

None

8. RADIO CHANNEL INSTRUCTIONS

RAII	ROAD	AAR CHANNEL	CHANNEL#
CORP	Dispatcher	85-23	3
CORP	Trains	23 – 23	4
CORP	Dispatcher	55 - 08	5
CORP	Trains	08 – 08	6
WCTR		38 – 38	

9. SPECIFIC SWITCH INSTRUCTIONS

Tolo MP 450.2

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

10. DEFECT DETECTOR LOCATIONS

None

11. LOCATIONS NOT LISTED AS STATIONS

None listed.

12. OTHER SPECIFIC INSTRUCTIONS

None

RAILROAD SPECIFIC INSTRUCTIONS

1. COMPANY OFFICERS

	Company Officers		
Name	Title		
Dan A. Lavolody	General Manager		
Dan A. Lovelady	Assistant General Manager		
Gerald L. Carter Michael T. Bakke	Trainmaster		
	Trainmaster		
John K. Bullion	Trainmaster		
D. J. Deevies	Chief Mechanical Officer		
Ron L. Reeves	Roadmaster		
- UD Taylor	Office Manager		
Donald D.Taylor	Vice President - Pacific Northwest Region		
Charlie L. McLean James R. (Jim) Becker	Regional Mgr. – Safety / Operating Practices		

2. EMERGENCY TELEPHONE NUMBERS

	Coos Bay Subdivision First Res	ii F	Emergency
MP	Contact	Non - Emergency	Same or 911
785.5 – 750.0	Coos County Sheriff's Office	(541) 396-2106	
	Douglas County Sheriff's Office	(541) 440-4471	Same or 911
750.0 – 721.3	Douglas County Stream of Chica	(541) 687-4150	Same or 911
721.3 - 652.0	Lane County Sheriff's Office	(341) 00: 1103	

	Roseburg Subdivision First Res	ponse relepitore reurin	Emergency
MP	Contact	Non - Emergency	Lineigency
****		(541) 687-4150	Same or 911
645.1 - 621.0	Lane County Sheriff's Office	(541) 440-4471	Same or 911
621.0 - 504.0	Douglas County Sheriff's Office		(541) 474-5115 or 91
504.0 - 468.0	Josephine County Sheriff's Office	(541) 474-5123	(541) 770 7000 or 01:
	Jackson County Sheriff's Office	(541) 776-7132	(541) 776-7208 or 91
468.0 - 440.7	Jackson County Sherin's Omeo		

	Siskiyou Subdivision First Res	ponse Telephone Numbe	ers
	Contact	Non - Emergency	Lineigency
MP		(541) 776-7132	(541) 776-7208 or 91
440.7 to 405.0	Jackson County Sheriff's Office	(530) 841-2908	(530) 841-2900 or 91
405.0 to 349.0	Siskiyou County Sheriff's Office	(330) 641-2900	

3. DETECTOR MESSAGE AND TRAIN CREW ACTION

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.

- b. 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.
- d. When a trackside detector has been activated, train must be stopped and inspection must be made. 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,
 - ii. Train is not a KEY train;
 - iii. 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.
- e. 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.
- f. 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.
- g. 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.
- h. 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.
- k. 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.
- m. 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 axie 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 axie 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.

Decision tables:

The following charts outline aspects and specific conditions of Type E&F trackside detectors. Across the top of each chart are listed the aspects and specific conditions. Each of these are independent of one another. To determine the required action for each, follow vertically down the chart below each column to each box that has an entry. These are the symbols for the types of detectors requiring action for that specific aspect or condition. To determine the required action, follow the entry line to the right.

ASPECTS AND SPECIFIC CONDITIONS

No power message received	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 detectors and has not received a visual inspection on both sides, then train must be stopped and inspection made.
			E-1, E-2	Stop and inspect for the type of defect normally detected by that detector.
E-1, E-2	E-1 ,E-2 F-1, F-2			Report condition to train dispatcher.
		F-2		Freight train must be stopped short of protected structure and train inspected for high/wide load. Inspection required only in direction of approach to structure.

ASPECTS AND SPECIFIC CONDITIONS

Verbal defect message received	Verbal transmission received but not understood	Detector malfunction message received w/o a defect message	Detector malfunction message received with a defect message	Entering detector message is not received	REQUIRED ACTION
E-1, E-2 F-1, F-2			- 1 <u>197</u>		Stop and inspect for indicated defect.
Н		E-1,E-2 F-1			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 made.
	E-1, E-2 F-1, F-2		E-1, E-2 F-1, F-2		Stop and inspect entire train for the type of defect normally detected by that detector.
jiji F		E-1, E-2 F-1, F-2	E-1, E-2 F-1, F-2	F-2	Report condition to the train dispatcher.
		F-2	g Limite Fluid the	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.

4. RAILROAD CONTACT NUMBERS

General Office (Roseburg)	Office Fax	(541) 957-0160 (541) 957-0686
Regional Vice President	Office	(541) 957-2501
General Manager	Office	(541) 957-2512
Assistant General Manager	Office	(541) 957-2504
Trainmaster (Roseburg)	Office	(541) 957-2507
Trainmaster	Office	
Chief Mechanical Officer	Office	(541) 957-2509
Roadmaster	Office	(541) 957-2506
Regional Manager Safety and Operating Practices	Office Fax	(541) 461-8933 (541)461-8125
Yard Office	Office Fax	(541) 957-2505 (541) 957-0686
Dispatcher	Office Office Fax	(541) 957-2503 (800) 344-8261 (541) 957-2528
Eugene Depot	Crew Room Fax	(541) 341-5673 (541) 461-5743
Eugene Roundhouse	Mechanical Office Fax	(541) 461-3112 (541) 461-3876 (541) 461-8125
Canary Depot	Crew Room Fax	(541) 997-1108 (541) 902-0961
Coos Bay Depot	Crew Room Fax	(541) 269-5851 (541) 267-2745
Grants Pass Depot	Crew Room Fax	(541) 955-8539 (541) 955-8539
Medford Depot	Crew Room Fax	(541) 857-5148 (541) 858-9805
Trainmaster (Medford)	Office	(541) 857-9670
Weed Depot	Crew Room Fax	(530) 938-3992 (530) 938-3993

5. Other specific instructions:

A. SUBDIVISION MILEAGE

COOS BAY

Between Danebo and Canary 69.7 Between Canary and Coquille 64.2

ROSEBURG SUBDIVISION

Between Springfield Jct. and Roseburg 71.7
Between Roseburg and Medford 130.8
Between Tolo and White City 5.4

SISKIYOU SUBDIVISION

Between Medford and Black Butte 97.8

Total All Subdivisions 439.6

B. STANDARD CLOCK

Standard Clock is located in the CORP Dispatch Office, (Continental time will be used). (541) 957-2503

Correct time may be obtained from Union Pacific Time Service (402) 271-4601

C. Flag Location Rule 5.4.8:

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 lift side of track.

D. Permanent Speed Signs Rule 5.5:

The following is added:

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

E. Markers Rule 5.10

When a train is set out clear of the main track somewhere other than a crew change location, a crew member must remove the end of train telemetry device, if so equipped and 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-up 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.

F. Improperly Displayed Signals Rule 5.15

The following is added:

In accordance with this rule, any signal indicating a restricting condition that the crew is unable to determine the cause must be promptly reported to the train dispatcher.

G. Precautions for Coupling or Moving Cars or Engines Rule 7.4 The following is added:

To avoid damage when coupling to standing Locomotives, make a safety stop approximately one car length, (about 50 feet), from the coupling. Make the coupling with no more force than necessary.

H. Block signal With "P" Plate:

A block signal equipped with a triangular plate displaying the letter 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" plate will be shown in timetable, with a description of the special protective device equipped to that signal.

I. Entering Main Track at Hand-Operated or Spring Switch Rule 9.17:

5 minute wait is not required in yard limits where Rule 6.13 is in effect.

J. Occupying Same Track Warrant Limits Rule 14.4:

Paragraph #1 is not applicable.

K. Protecting Men or Equipment Rule 14.5:

Paragraph #1 is revised with the following addition:

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.

L. AIR BRAKE AND TRAIN HANDLING RULES:

Refer to "RAILTEX AIRBRAKE AND TRAIN HANDLING RULES" and make the following changes:

Rule 201.12, paragraph A. and B., Rule 201.13, paragraph A and B.,

Change all references to "two hours" to "four hours.

OPERATING IN HEAVY GRADE TERRITORY

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.

- A. 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.
 - 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 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.

B. 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.

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 extended range dynamic brakes.

C. 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.

D. 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.

E. Stopping:

- 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 pipe reductions should be made if they are needed to provide the desired 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, and the independent brake applied. Use sand should only when necessary.

504.11 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 in its use to avoid the development of excessive head end buff forces.

Starting Locomotives at outside locations:

Locomotive units, which are required to be shut down at outside locations where there are no mechanical employees available will be started by the engineer. An engine that has been shut down for more than four hours and that is equipped with flash cock "T" handles, must have the flash cocks opened, the engine turned over at least three revolutions, and the flash cocks closed prior to starting.

M. Equipment Restrictions

Six axie locomotives my operate on Main Track, Yard Tracks and Auxiliary Tracks between Black Butte and Springfield Jct.

Six axle locomotives must not operate on industry tracks.

Six axle locomotives must not operate on Coos Bay Subdivision.

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 engine 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 an 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 axie car 132 tons 6-axie car 197 tons 8-axie 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 dearance 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 a crew- member of the relieving or 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.

N. 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

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

Make a 20 psi brake pipe pressure reduction.

After the brake pipe exhaust stops, cut out the automatic brake valve.

Ensure the independent brake is fully applied.

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.

Move the transition lever to Off (if equipped).

Center the reverse lever and remove the handle, placing it in the proper holder.

Position the control and fuel pump switch, the generator field switch and the engine run switch to their proper position.

Next cut out the independent brake valve.

Place the independent brake valve handle in the release position.

Then proceed to the new controlling unit without delay.

Cutting In - ABTH Rule 100.13

Place the independent brake valve handle in the full application position.

Cut in the independent brake valve.

Position the control and fuel pump switch, the generator field switch and the engine run switch to their proper position

Insert the automatic brake valve and move it to the release position.

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.

insert the reverse lever.

Comply with the Standing Locomotive Air Test or Light Locomotive Running Air Test which ever is applicable.

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

Operating by setting the regulating valve to a different position.

Stopping and securing train.

Changing regulating valve setting only while train is STOPPED.

After train has been properly secured.

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.

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 the regulating 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.

Engineer must actuate the independent brake valve handle for 5 seconds for each unit in consist in the fully applied position.

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.

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?

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.

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.

With the automatic brake applied and the train stopped the conductor or ground person will proceed to the rear of the train setting <u>ALL</u> retaining valves to the <u>High pressure (HP)</u> 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.

The conductor would then return to the locomotives and the engineer will release and recharge the brake pipe. With the brake pipe fully charged, release the independent brake slowly allowing the locomotives to roll out cently.

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.

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.

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.

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.

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

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.

<u>Caution:</u> 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.

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).

RAILAMERICA SYSTEM SPECIAL INSTRUCTIONS

ITEM 1. RULE BOOKS AND PUBLICATIONS 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 Effective August 1, 1998

Hazardous Materials

RailAmerica Transportation Safety Rules & Effective February 1, 2002

Recommended Work Practices

RailAmerica Mechanical Safety Rules & Effective November 1, 2002

Recommended Work Practices

RailAmerica Engineering Safety Rules & Effective November 1, 2002

Recommended Work Practices

Emergency Response Guidebook Dated February 2000

Roadway Worker Protection Rules Effective April 15, 2002

Maintenance of Way Rules Effective September 1, 2000

RailAmerica Rules Governing Effective January 1, 2002

Train Dispatchers

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	10 MPH
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

15

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	08	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

- 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.
- Two axle intermodal 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.
- 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:

- An engine is operating at its maximum.
- Train is operating on ascending grades.
- 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. All engine test cocks are to be opened and the engine rotated three revolutions prior to starting a locomotive which has been shut down for more than a 2 hour period.

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
- Passenger trains
- Trains that will not exceed 30 MPH
- Trains with equipment on rear having a functioning Emergency brake valve and occupied by a crewmember
- Light engines

When a train is required to have a two-way EOT device and a failure of device occurs enroute, speed must be reduced and 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. Contact 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 90 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.

OPERATIONAL TESTING

When performing operational testing, stop signal appliances such as unattended burning fusees, red flags, red lights or banners displaying the words "STOP" or "STOP OBSTRUCTION" may be used to test for compliance with GCOR 6.27 and 6.28. When unattended fusees are used for this purpose, the officer may allow the movement to depart the testing site without complying with restricted speed as required by GCOR 5.6.

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.

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

1.3.1 RULES, REGULATIONS AND INSTRUCTIONS

Add: Roadway Worker Protection Rules and Maintenance of Way Rules:

Employees whose duties include the inspection, construction, maintenance or repair of track, bridges, roadway, signals, machinery or provides protection for other employees or themselves must be qualified on these rules and have access to these rules while on duty.

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.

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.

6.23 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 or proper authority.

7.7 KICKING OR DROPPING CARS

Add: The dropping of cars is prohibited when movement is initiated by a locomotive..

7.14 SAFETY STOP

Add New Rule:

15

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

8.16 DAMAGED OR DEFECTIVE SWITCH

Add: When switches are spiked they will be identified by a tag or colored tape attached to the switch stand or handle. This does not relieve the requirements of additional protection as required.

8.20 DERAIL LOCATION AND POSITION

Add: Crew members must communicate when derails have been placed in the nonderailing position before proceeding with movement.

14.5 PROTECTING MEN AND EQUIPMENT

Item #2 is changed to read:

All trains authorized are notified of the men or equipment using track warrant line 12 or line 18 and the track warrant identifies the employee in charge by name. Trains must not enter the limits of the track warrant held by men or equipment unless verbally authorized by the employee in charge named. Also, a track warrant must inform the employee in charge about the trains using track warrant line 11. Employee in charge must not authorize train movement into the limits unless all men and equipment are clear of the main track and the track is safe for train movement. When so authorized, trains may move as specified by the employee in charge. Restricted speed as indicated by line 12 does not apply.

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. 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.
- If cars are attached and brake pipe charged, brake pipe must be reduced sufficiently to prevent movement with a minimum reduction of 10 psi.
- Center and remove the reverse handle.
- Turn generator field switch to off.
- Isolate the locomotive
- 6. Crewmembers leaving a locomotive "unoccupied" must inform other crewmember(s) prior to doing so.

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:

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: CHANGES AND REVISIONS TO INSTRUCTIONS FOR HANDLING HAZARDOUS MATERIALS

Section II, #6, Paragraph b, first sentence is changed to read: The train crew must have a document indicating the position in the train of each placarded car containing hazardous materials.

Section II, #6, Paragraph c, is changed to read: A member of the crew must update the train consist when the train is changed by setting off and/or picking up cars.

ITEM 10: ADDITION TO RAILAMERICA'S EMPLOYEE HANDBOOK

Add to the policy concerning Drugs and Alcohol:

"In addition, no employees who performs covered service may use a controlled substance at any time, whether on duty or off duty, except as prescribed by a medical practitioner."



BLOCK AND INTERLOCKING SIGNALS

{Except Central Oregon and Pacific}

RULE	ASPECTS	CORP	NAME	INDICATION
9.1.1			Clear	Proceed.
9.1.2			Approach Medium	Proceed, approaching next signal at 30 MPH.
9.1.3			Approach	Proceed, preparing to stop at next signal. Frains exceeding 30MPH must at once reduce speed. Reduction to 30MPH before passing signal.
9.1.4			Medium Clear	Proceed, 30 MPH within interlocking limits or through turnout.
9.1.5			Medium Approach	Proceed at 30 MPH preparing to stop at next signal.
9.1.6			Slow Clear	Proceed, 10 MPH within interlocking limits or through turnout.
9.1.7		— ®—∐+	Restricting	Proceed at restricted speed.
9.1.8	 	1	Stop and Approach	Stop, then proceed at restricted speed.
9.1.9			Stop	Stop.
9.1.10	NOTE: Lighted "S" or flashing light is used in conjunction with block or interlocking signal.		Take (or leave) Siding	Be governed by signal indication. Take (or leave) siding when "S" lighted or light flashing NOTE: Lighted "S" or flashing light is used in conjunction with a block or interlocking signa

STANDARD ROADWAY SIGNS

APPEARANCE INDICATION	APPEARANCE INDICATION
Yard Limit Yard Limit Yard Limit	CTC OR BEGIN CTC C.T.C. Begins
Yellow & Red Flag Protecting hten & Equipment Yellow Flag Red Flag Green Flag	OR END C.T.C. Ends
Spring Switch	SHAW OR A Station Name Sign
Begin Whistle and Bell for grade crossing requiring Whistle	X CIRCUIT Crossing circuit ends
275 OR 2 7 5 Mileage	Block Clearance Point
Derail	Block Ends
BEGIN X Begins or Ends BRT Blocks BLOCK	TAKTS TAKTS TOTAL TENNOL T

PERMANENT SPEED RESTRICTION SIGN



Signs will be placed at the beginning of permanent speed restrictions. The sign will be placed 2500 feet in advance of beginning speed restriction point. Sign may be any shape or color.

PERMANENT RESUME SPEED SIGN



The sign indicates the end of a permanent speed restriction.