

BNSF Safety Vision

We believe every accident or injury is preventable. Our vision is that Burlington Northern Santa Fe will operate free of accidents and injuries. Burlington Northern Santa Fe will achieve this vision through:

A culture that makes safety our highest priority and provides continuous self-examination as to the effectiveness of our safety process and performance ...

A work environment, including the resources and tools, that is safe and accident-free where all known hazards will be eliminated or safe-guarded ...

Work practices and training for all employees that make safety essential to the tasks we perform ...

An empowered work force, including all employees, that takes responsibility for personal safety, the safety of fellow employees, and the communities in which we serve.

BNSF



System Special Instructions

All Subdivisions No. 9

IN EFFECT AT 0001
Central, Mountain and
Pacific Continental Time

Sunday, October 31, 2004

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In the individual division timetables, the number at the bottom of the schedule column entitled "Miles to Next Station" indicates total miles on the subdivision.

1. Speed Restrictions

All speeds are subject to modification by speed restrictions indicated under individual subdivision special instructions.

Passenger trains will be governed by freight train speed if passenger train speed is not specified under individual subdivision special instructions.

Unless defined differently in the individual subdivision special instruction, tons per operative brake (TOB) is defined as the gross trailing tonnage of the train divided by the total number of control valves.

Maximum Speeds Permitted

Freight trains up to 100 TOB 60 MPH.
 Trains 100 TOB and over 45 MPH.
 Trains handling empty cars 55 MPH.

Exceptions:

1. Passenger/commuter equipment.
2. Empty articulated double stack equipment.
3. Empty coal trains may operate at a maximum authorized speed of 60 MPH if train list indicates no speed restricted equipment in train.
4. AutoMax Cars. (Refer to 1(C) regarding empty intermodal equipment).

On sidings 20 MPH.
 (Unless a different speed is indicated in the division timetable).

Key trains 50 MPH.
 Key trains on sidings 10 MPH.
 Trains moving in non signaled territory 49 MPH.
 Trains moving against current of traffic 49 MPH.
 Solid consist of military equipment 55 MPH.
 Trains and engines through turnouts 10 MPH.
 On tracks other than main tracks and sidings 10 MPH.

Trains operating with lead controlling
 CN (Canadian National) locomotives 65 MPH.
 Within Mechanical Department limits 5 MPH.
 Movements on or off turntables 1 MPH.
 Trains with welded rail loaded in open end gondolas 45 MPH.
 Light engines must not exceed maximum authorized speed for freight trains.

Equipment	Main Line	Branch Line
Roadrailer equipment (loaded or empty)	70 MPH.....	70 MPH.
Exception: Roadrailer equipment maximum authorized speed is 60 MPH when handling empty trailers with the initials ECOZ, SWFZ, TCSZ, AMTZ and WNCZ. Amtrak roadrailer equipment may operate at maximum authorized passenger speed, loaded or empty.		
AMTK 1400 through AMTK 1569 (Material Handling Cars)	60 MPH.....	60 MPH.
Flat cars, empty, NP 580400-580739	50 MPH.....	50 MPH.
Flatcars OTTX 90000-97955 (loaded or empty)	45 MPH.....	45 MPH.
Gondolas: empty cars picked up enroute and not on conductor's wheel report or work order	50 MPH.....	50 MPH.
Gondolas: loaded and empty		
PC 598500 through 598999,		
CR 598500 through 598990		
SP 345000 through 345699	45 MPH.....	45 MPH.
Gondolas: empty KCS 801011 through 802930		
EJE 4000 through 4999		
CR 576026 through 579245	45 MPH.....	45 MPH.

Loram Rail Grinder traveling (not in work mode) as a train on its own power with a conductor or engineer pilot..... 60 MPH..... 60 MPH.
 When controlling movement from the rear control cab in the lead 40 MPH..... 40 MPH.
 Exception:

When descending a 1% to 1.4 % grade. 20 MPH..... 20 MPH.
 When descending a 1.5% or greater grade 15 MPH..... 15 MPH.

Empty bulkhead flatcars picked up enroute and not on conductor's wheel report or work order 45 MPH..... 45 MPH.
 Air dump cars, loaded 45 MPH..... 45 MPH.
 Clay Cars, RARW 3801-4199 45 MPH..... 45 MPH.

Empty bulkhead wallboard flatcars:
 BN 616475 through 616674,
 CS 616375 through 616474,
 DJTX 9300 through 9398 and
 SOU 115250 through 115274 45 MPH..... 45 MPH.

Scale test cars 35 MPH..... 25 MPH.
 Exception: Scale test cars listed below have a minimum gross weight of 100,000 pounds and may move in any position in the train and at maximum authorized speed for which train is qualified:

WWBX 199917	MP 15510	UP 900700
WWBX 199918	MP 15511	UP 903600
WWBX 199919	MP 15512	BN 979019-979024
MP 15507	UP 167579	BN 979026-979036

FGWX 100000-500000
 Ribbon rail cars, (loaded) 35 MPH..... 25 MPH.
 Ribbon rail cars, (empty) 45 MPH..... 45 MPH.
 Ribbon rail loading and unloading cars 45 MPH..... 45 MPH.
 Wedge plow or dozer, hauled in tow 35 MPH..... 25 MPH.

Rotary plow, wrecking derrick, locomotive crane, pile driver or Jordan spreader, handled in trains 30 MPH..... 25 MPH.
 Exception: Locomotive cranes/pile drivers AT 199454 through AT 199468 may be handled in trains at a maximum of 45 MPH.
 Trains or engines handling this and similar equipment which is moving on its own running gear must operate through the curved side of turnouts at a speed not exceeding one-half the maximum authorized speed for that turnout.

Locomotive cranes, wrecking derricks and other types of heavy work equipment must not be operated on any subdivision designated as a Branch Line unless authorized by dispatcher and roadmaster or covered by specific instructions.

The following equipment when handled in trains will be handled on rear end of train only, and is subject to the following maximum speeds:

Kershaw, RKCX 104 and 105	45 MPH.....	45 MPH.
Balfour Beatty, BU 3005	45 MPH.....	45 MPH.
Plasser Machines, PACX 250, 255, 281 and 293	45 MPH.....	45 MPH.
P 811	50 MPH.....	45 MPH.
Loram, BC 09 and BC 17	50 MPH.....	45 MPH.

When moving coupled with maintenance of way tool cars, they must remain coupled to such cars.

Tank cars ACFX 17451 through 17495 45 MPH..... 45 MPH.
 Tank cars NATX 10841 through 10865 45 MPH..... 45 MPH.

Tank cars:

DVLX 4001 through 4190 and the following UTLX cars:		
76517	76742 thru 76745	78287 thru 78293
76539	76747	78326
76556	76748	78328 thru 78333
76558	76750	78336 thru 78340
76568	76751	78343
76595	78256 thru 78269	78344
76649	78272	78347
76656	78274	78348
76696	78278	78350
76733	78281	78353
76736 thru 76738	78285	40 MPH..... 40 MPH.

CORX tank cars, when empty 50 MPH..... 50 MPH.
 CELX 6400-6455 and 10400-10443,
 when loaded 45 MPH..... 45 MPH.
 (CELX 6400-6455 and 10400-10443, when loaded must not
 be handled nearer than 6 cars from locomotive).

EMPTY Schnabel type cars:

APWX 1004 GEX 40010, 80002, 80003
 BBCX 1000 GPIX 100
 CAPX 1001 HEPX 200
 CEBX 100, 101 KWUX 10
 CPOX 820 WECX 101, 102, 200-203, 301
 CWEX 1016 40 MPH..... 40 MPH.

All empty Schnabel cars listed must be handled on or near the
 rear of trains not exceeding 100 cars in length, must not be
 handled in trains requiring pusher service and must not be
 humped or switched with motive power detached.

Hopper cars WFAH 84654 through 84700
 and TUGX 36001 through 36125 45 MPH..... 45 MPH.

Empty covered hopper cars:

ASGX 1-50,
 BCAX 50-149
 CGLX 4200-4249,
 CHTT 200400-200499
 CRDX 3000-3014, CRDX 9905-9989, CRDX 9755-9904
 CRDX 20100-20199, CRDX 20200-20209
 CRDX 20300-20324, CRDX 20525-20724
 CSXT 242000-242299
 DME 29000-29324
 DJLX 97300-97319, DJLX 97800-97999
 ERCX 9400-9699
 FLOX 3200-3241, FLOX 983400-983414
 GACX 3000-3139, GACX 3150-3196
 GACX 3202-3359, GACX 3486-3510, GACX 7959-8008
 GCCX 55000-55099,
 GPIX 9900-9999
 IMRL 9200-9299
 HS 1301-1331
 LCEX 801-820, LCEX 824-898
 NAHX 21000-21054, NAHX 29700-29867,
 NAHX 320000-320399
 NCUX 20001-20050, NCUX 20106-20130
 NRLX 32500-32605, NRLX 32706-32725
 NVCX 9500-9619
 NS 294220-294319
 RGCX 650-899, RGCX 902-1067
 RGCX 1069-1142, RGCX 1183-1222, RGCX 5100-5102
 RGCX 20051-20100
 SDWX 9700-9919, SDWX 10000-10333, SDWX 11000
 SHPX 132001-132056
 SHPX 432118-432137, SHPX 432057-432116
 TILX 2900-2904
 WW 7001-7300 40 MPH..... 40 MPH.

(Unless no speed restriction is indicated by train
 documentation)

Flatcars ATSF 190298, 209144, 209149,
 loaded with track panels 35 MPH..... 35 MPH.

1(A). Control of Harmonic Rocking on Jointed Rail

Under certain conditions, operation of trains between 13 MPH
 and 21 MPH can cause derailments due to harmonic rocking
 of cars. Where specified by individual subdivision special
 instructions or general order, the following restrictions apply
 when operating on jointed rail:

Freight trains, other than coal trains, ore trains, or trains
 consisting entirely of empty equipment, which cannot maintain
 a minimum speed of 21 MPH, must reduce speed to 13 MPH
 or less until movement can again exceed 21 MPH.

1(B). Maximum Speed of Engines

Engines	MPH	When not controlled from leading unit (MPH)
Amtrak	90*	45
Metrolink	90*	45
Metra	79*	45
Sounder (Sound Transit)	79*	45
All other classes	70	45

Exception: When the controlling locomotive of the train is a
 car body type or has comfort design cab and is in the backing
 position, maximum speed is 45 MPH.

*Engine without cars must not exceed 70 MPH.

1(C). Multiplatform Equipment-All Types and Single Unit Intermodal Equipment TOB/Car Count and Speed Restriction

TSS Car Kind Codes	Car Description	Units or Segments	Maximum Car Length	Axle Count	Control Valves and/or Car Count	Trailers=T Containers=C Either=T/C
Articulated cars						
QY	Doublestack	5	308 ft.	12	3	C
QV	Doublestack	3	190 ft.	8	2	T/C
QM	Spine Car	3	189 ft.	8	2	T/C
QC	Spine Car	3	189 ft.	8	2	T
QO	Spine Car	5	291 ft.	12	3	T/C
Q5	Spine Car	5	291 ft.	12	3	C
QE	Spine Car	5	291 ft.	12	3	T
FM	Twin Flat	2	88 ft.	6	2	C
M3F	Automax	2	144 ft.	6	2	
CSX	Superhopper	5	167 ft	12	3	
HT	Trough Car	13	279 ft	26	3/6#	
Non-Articulated Cars *						
QW	Doublestack	3	215 ft.	12	3	T/C
QX	Doublestack	4	286 ft.	16	4	T/C
QT	Doublestack	5	359 ft.	20	5	C
QB QD	Twin Flats	2	186 ft.	8	2	T
QL	Twin Flats	2	186 ft.	8	2	T/C
QDE	Front-Runner	4	188 ft.	8	4	T
Single Unit Intermodal Cars						
QU	Doublestack	1	72 ft.	4	1	T/C
QA	Front-Runner	1	51 ft.	2	1	T
QK	Doublestack	1	72 ft.	4	1	T/C

For TOB calculation purposes, trough cars are counted as 6 cars each divided by total weight of the car. Refer to Special Instructions, Item 3(C) for additional information on handling this equipment.

Note: Multiplatform (articulated or non-articulated) intermodal equipment (other than coal multiplatform equipment) is identified with a single initial and number and its individual units identified by a letter designation (refer to Special Instruction, Item 41). Individual units of multiplatform solid drawbar-connected (non-articulated) coal equipment are identified as individual cars with a unique initial/number for each unit. Not all conventional intermodal equipment is listed in the table.

Car Kind Codes

Car kind codes are usually 3 characters. On cars shown above, only the first two characters are required to identify car type, with the exception of CSX, M3F, and QDE.

Definitions of Multiple-Unit Equipment

Articulated—Refers to cars with multiple units (segments) that are connected with an articulated couplings that share a common truck.

Non-Articulated—Refers to cars with multiple units (segments) that are connected with solid drawbars. Each unit is a stand-alone unit and does not share a common truck with another unit.

Tons Per Operative Brake (TOB)

Tons per operative brake on cars above are determined by dividing the number of control valves/car count into the weight of the car. This can be determined without inspection as follows:

Articulated cars = total number of units divided by two, rounded up to next number divided into total weight of the car.
(Example: five unit doublestack, Car kind code QY=3 by car count)

Non-articulated cars = total number of units divided into weight of car.
(Example: Four Unit doublestack Car Kind Code QX=4 by car count)

Speed

In order to limit truck hunting, trains must not exceed 55 MPH unless all cars in train are loads. Caboose and any car loaded with container chassis are considered loads for the purpose of the rule.

Articulated Cars—Articulated spine cars (Car kind Codes QM, QC, QO, Q5, QE) are considered loads if it can be determined that car is loaded with at least one empty or loaded, container or trailer. Due to the load bearing characteristics of shared trucks on articulated cars, truck hunting is limited even when such cars have empty units. Empty articulated doublestack cars (Car Kind Codes QY or QV) and AutoMax cars (Car Kind Code M3F) may operate at maximum authorized speed when completely empty due to constant contact side bearings which prevent truck hunting.

* *Non-Articulated Cars*—Non-articulated cars (Car Kind Codes QW, QX, QD, QB, QL, QT and QDE) are restricted to 55 MPH unless each unit is loaded with an empty or loaded trailer or container. These cars do not share a common truck and empty units are subject to truck hunting as with any empty, conventional car. (This may require a review of train documentation to determine). Non-articulated, Twin Flats (TTEX, FEC and CN) can be loaded with three 48'-57' or four 45' or shorter trailers. When loaded with three trailers, trailer can straddle the drawbar. Each unit must be loaded with all or one-half of a trailer to be considered loaded for movement at speeds greater than 55 MPH. (More than 90' of total trailer length shown on train documentation indicates each unit is loaded or the car must be visually inspected.)

2. Locomotive and ETD Information

Locomotives coupled together in multiple-unit configuration must be limited to 12 locomotives.

When locomotive consist exceeds 8 locomotives, 200 tons per locomotive exceeding 8 will be included when calculating TOB.

2(A). 2-Way ETD Grade Reference Chart for 2-mile / 2% Grades

Trains operating on the following grades listed must be equipped with an operable 2-way end-of-train telemetry device (ETD and HTD) or equivalent device. However, passenger trains do not require a 2-way EOT or equivalent device.

Cajon Sub.	MP 56.6 to MP 80, both tracks
Raton Sub.	MP 639 to MP 660
Glorieta Sub.	MP 775 to MP 810 and MP 818 to MP 842
Pikes Peak Sub.	MP 52 to MP 66
Hi Line Sub.	MP 1151 to MP 1166, both tracks
Midway Sub.	MP 0.5 to MP 5, both tracks
St. Paul Sub.	MP 430 to MP 5, both tracks
Scenic Sub.	MP 1694.5 to MP 1731.3
Stampede Sub.	MP 41.0 to MP 58.5
San Diego Sub.	MP 250 to MP 255 (SDN RR)
Gateway Sub.	MP 178.0 to MP 188.0

On UP Railroad:

Mojave Sub.	MP 331.3 to MP 381.3
Moffat Tunnel Sub.	MP 19 to MP 50 and MP 58.1 to MP 61.7
Provo Sub.	MP 630.5 to MP 638.1 and MP 652 to MP 682
Roseville Sub.	MP 115 to MP 170 and MP 195 to MP 210

2(B). Locomotive Data Tables

DC Traction Locomotives				
Model	Rated Powered Axles	Rated Dynamic Brake Axles	Horsepower	Weight
SW1	4	0	600	198,000
SW10	4	0	1,000	250,000
NW10	4	0	1,200	252,000
SW12	4	0	1,200	250,000
GP15	4	0	1,500	262,000
SW15	4	0	1,500	261,000
MK1200G	4	0	1,200	250,000
SWBL-W	4	0	1,500	262,000
GP7	4	0	1,500	249,000
GP9	4	4 *	1,750	259,000
GP9B	4	0	1,750	248,000
GP10	4	0	1,800	260,000
GP15 GP15-1	4	0	1,500	258,000
GP18	4	0	1,800	248,000
GP20	4	4 BT	2,000	261,000
GP28 M/P	4	4 BF	1,800	260,000
GP30	4	4 BT	2,500	262,900
GP35	4	4 BT	2,500	266,000
GP38, GP38-2	4	4 ET	2,000	285,000
GP39, GP39-2	4	4 EF #	2,300	270,000
GP40 M,E,-2	4	4 BF	3,000	278,000
GP40X	4	4 BF	3,000	278,000
GP50	4	4 EF	3,600	275,000
GP53, GP53L	4	4 EF	3,000	272,000
GP60M	5 +	5 EF +	3,800	274,000
GP60B	5 +	5 EF +	3,800	270,000
B23-7	4	4 EF	2,300	268,000
B30-7A	4	4 BF	3,000	275,000
B36-B-7	6 +	4 EF	3,600	280,000
B-39-8	6 +	5 EF +	3,900	280,000
B-40-8	6 +	5 EF +	4,000	283,000
SD7	6	5 BF +	1,500	314,500
SD9	6	5 *	1,750	368,000
SD18	6	0	1,800	349,000
SD35	6	5 * #	2,500	390,000
SD38-2	6	6 * #	2,000	368,000
SC38P	6	6 BF	2,000	391,000
TEBC6	6	6B	2,000	387,000
SD39	6	6 EF	2,500	389,000
SD40, SD40-2	6	6 EF * #	3,000	391,000
SD45, SD45-2	6	6 ET	3,600	395,000
SDFP45	6	6 ET	3,600	395,000
SD50	6	6 EF	3,600	388,000
SD60, SD60M	7 +	8 EF **+	3,800	401,000
SD70M	7 +	9 EF +	4,000	400,000
SD75M	7 +	9 EF +	4,300	394,000
C30-7	6	6 EF #	3,000	417,000
SF30C	6	6 EF	3,000	319,500
C36-7	6	6 EF	3,600	394,000
C40-8	7 +	8 EF +	4,135	394,000
C44-9W	8 +	8 EF +	4,400	392,000/419,000

+ Power or dynamic brake axle rating exceeds actual axles
 * May not be equipped with dynamic brakes
 # May be equipped with standard range dynamic brake
 ** UP 6000-6059 are rated at 6 dynamic brake axles

AC Traction Locomotives				
Model	Rated Powered Axles	Rated Dynamic Brake Axles	Horsepower	Weight
C44AC ¹ &C60/44AC ¹				
All TM operating	9 +	10 +	4400 ³	420,000
1 TM c/o	9 +	8 +		
2 TM c/o	6	6		
3 TM c/o	4	5		
4 TM c/o	3	3		
5 TM c/o	2	2		
C60/44 ¹ (UP 7300-7335)				
All TM operating	9 +	12 +	4400 ³	420,000
1 TM c/o	9 +	10 +		
2 TM c/o	6	8 +		
3 TM c/o	4	6		
4 TM c/o	3	4		
5 TM c/o	2	2		
C44AC ¹ (Canadian Pacific)				
All TM operating	9 +	8 +	4400 ³	420,000
1 TM c/o				
2 TM c/o				
3 TM c/o				
4 TM c/o				
5 TM c/o				
C60AC ¹			6000	420,000
All TM operating	10 +	12 +		
1 TM c/o	10 +	10 +		
2 TM c/o	8 +	8 +		
3 TM c/o	6	6		
4 TM c/o	4	4		
5 TM c/o	2	2		
SD70MAC			4000	415,000
All TM operating	8 +	8		
1 Truck c/o	4	5		
SD80MAC			5000	420,000
All TM operating	9 +	10		
1 Truck c/o	5 +	5		
SD90/43MAC			4300 ³	415,000
All TM operating	9 +	10		
1 Truck c/o	4	6		
SD90MAC			6000	415,000
All TM operating	11 +	11		
1 Truck c/o	6	6		

+ Power or dynamic brake axle rating exceeds actual axles
¹ GE Locomotives (C44AC, C60AC, etc.) have one inverter per axle and can have individual traction motors cut out as with DC locomotives.

² Dynamic braking is operational with Inverters/Traction motors cut out on AC locomotives.

³ Convertible unit to be upgraded to 6000 hp.

Note: It is permissible to cut out traction motors or trucks on units equipped with locked axle protection (GE AC, GE C40-8, GE C44-9 and EMD AC locomotives) in order to comply with the above axle limitations. All locomotives rated at 3,800 hp or less are given a rated powered axle rating (RPA) equal to their "actual" axles.

2(C). TFM Locomotives

TFM 1505 through 1515 must not be used as the lead locomotive in an engine consist.

3. Equipment Restrictions

The following equipment must be placed next ahead of caboose or at rear of cabooseless trains, except in work trains, unless otherwise indicated in the individual subdivision special instructions.

- Outfit cars (Exception: Univans may be placed anywhere in the train.)
- Pile drivers
- Locomotive cranes
- Ribbon rail loading and unloading cars
- Empty ribbon rail cars
- Rear end only cars
- Jordan spreaders
- Rotary snowplows
- Wedge plows
- Dozers

Except as provided in Item 1, scale test cars must be placed ahead of caboose or, on cabooseless trains, ahead of the last car.

Scale test cars must not be humped.

When locomotive cranes/pile drivers, wrecking derricks or similar equipment are being moved on their own wheels or on cars in a train, they will be handled on the rear of the train only.

Exception: Locomotive cranes/pile drivers AT 199454 through AT 199468 must be handled in trains next to the engine.

This equipment must be properly loaded and secured. Booms must be properly secured and, when possible, boom must be trailing. Equipment must be inspected before being moved. Such equipment is allowed to operate on any subdivision designated as Main Line but must not be operated on any subdivision designated as Branch Line unless authorized by roadmaster or covered by specific instructions. Equipment of this type must not be humped.

Spreaders and dozers being moved in trains must, when possible, be headed in the direction train is moving, and wings must be properly secured.

DODX 40000-40100 are cars belonging to the Department of Defense. Handbrakes on these cars must not be used to control movement and must be applied from a ground position while car is standing.

Loaded ribbon rail cars must not be:

- Coupled to other cars except buffer cars. (Buffer cars will be placed ahead of and behind ribbon rail cars at welding plant.)
- Handled in freight service with other cars unless authorized and train is equipped with Rail Movement Detectors (RMD).
- Separated for maintenance or repairs unless under direct supervision of a roadmaster.

3(A). Multi-Platform and Stack Intermodal Cars

Unless otherwise indicated in the individual subdivision special instructions, multiplatform stack intermodal cars are authorized for movement on tracks with weight limit of 177,000 pounds or more.

These cars must not be cut off in motion or struck by any car moving under its own momentum.

3(B). Rotary/Rapid Discharge Coal Cars

All cars equipped with dump door air lines, this includes foreign line cars, having:

- elevated hoses for dump door air line or,
- air brake train line on one side of coupler and the dump door air line on the other side (both hoses at end sill level) must have the dump door air line coupled between cars equipped in unit trains or in proper receptacle to prevent dragging when not in use.

Note: Connect door air line hoses to locomotives only when at unloading facility or shortly before unloading.

3(C). Trough Cars—BN 552000 through BN 552022 (13 section articulated coal cars, 278 ft. long)

Speed restrictions—None (unless there are restrictions on individual subdivisions based on gross weight of car and its axle equivalency).

Gross Weight of Trough Car	Axle Equivalency
855 tons	263,000 lb.
871 tons	268,000 lb.
884 tons	272,000 lb.
904 tons	278,000 lb.
917 tons	282,000 lb.
930 tons	286,000 lb.

Switching restrictions—Trough cars must not be cut off in motion or struck by any car moving under its own momentum.

Coupling speed restrictions—Due to unique design and experimental nature of this equipment, when coupling to or coupling with loaded Trough Cars, maximum speed must not exceed 2 MPH. To comply with this speed, when coupling to or coupling with loaded Trough Cars, stop movement 10 to 20 feet short of a coupling, then proceed to couple cars.

Hand brakes (there are four hand brakes per trough car)

- All four hand brakes are accessible only from the left side of the trough car.
- Operate hand brake only when car is stopped. Do not attempt to apply hand brake while car is moving.
- When hand brake is required, apply all four hand brakes on a car.
- When applying hand brakes because of grades, use the same required percentage of cars, rounded upward to the next **whole** car. For example: if there are 22 trough cars in a train, and the requirement is 10% of cars need hand brakes applied, then the requirement for hand brakes is 2.2 cars, rounded upward to 3 whole cars, so apply all four hand brakes on 3 trough cars.

Air cut-out cocks (there are three air cut-out cocks per trough car)

- All three air cut-out cocks are accessible only from left side of the trough car.
- Each air cut-out cock controls four trucks - two on each side of the control.
- To cut out air, pull up on rod end and pull out away from car, directions are on a decal above the air cut-out cock.

Dump door line air hoses

- The dump door line air hoses must be coupled between all trough cars, and must be coupled above train line air hoses.
- At front of train and rear of train, dump line air hoses must be secured so as not to drag on ground.
- Connect dump door air line hoses to locomotives only when at unloading facility or when near unloading facility shortly before unloading.

3(D). V-Slope Flat Cars

V-Slope Flat Car loads of pulpwood logs, without side retainers, are restricted to 35 MPH and must be observed closely enroute. Trains handling these cars will stop before passing through truss or girder bridges and crew will inspect cars to ensure safe passage through bridge before proceeding.

3(E). Two-Axle Cars

Hand brakes must not be depended upon to hold two-axle cars. When a two-axle car is set out, it must be chained to the rail or coupled to a non-two-axle car with operative hand brake.

3(F). Air Dump Cars

Employees are prohibited from riding in air dump cars. Cars must not be moved with doors open, except as necessary to clear material just dumped. Air dump cars must not be cut off in motion or struck by any car moving under its own momentum.

When air dump cars are being operated, the conductor must personally supervise the handling to see that all locked devices are in proper position and that all people are in the clear before charging actuating air line and before they are operated.

Only employees who are knowledgeable in the operation of air dump cars may operate such cars in unloading operations. When coupling actuating air hoses, not more than three air dump cars may be charged at a time.

Before charging the actuating air line, or before attempting to dump air dump cars, it must be known that protection against movement on adjacent tracks which could be fouled by material to be dumped, has been provided as follows:

- If the adjacent track is an auxiliary track, except where CTC is in effect, movement must not be permitted to pass air dump cars which are being charged or being unloaded.
- If the adjacent track is a main track, authority must be obtained as prescribed by MWOR Rule 6.3.1 (Track Occupancy) or flag protection must be provided in both directions as prescribed by MWOR Rule 6.19 to control movement by the work area.

3(G). Caboose Placement

All cabooses other than the working caboose moving in trains for any reason, are to be handled on rear of train or just ahead of working caboose, except:

- Trains operating with helpers on the rear end must have cabooses other than the working caboose placed behind helpers.
- Trains or yard movements limited to maximum speed of 10 MPH may operate with caboose placed anywhere in train.
- Cars with defective couplers may be transported to repair facilities behind caboose.

3(H). Georgetown Equipment Restrictions

Georgetown Equipment Cars (cars with initials GREX) must be placed next ahead of caboose or at the rear end of cabooseless trains, except they may be in any location in

work trains. They must not be cut off in motion or struck by any car moving under its own momentum. They must not exceed 5 MPH through other than main track turnouts.

3(I). GTTX Equipment

All GTTX cars are restricted to rear end only unless the train consists entirely of GTTX equipment. No more than 25 GTTX cars may be handled in any train unless the train consists entirely of GTTX equipment.

3(J). AMGX Equipment Restrictions

Gondola cars in series AMGX that are solid drawbar connected must be placed as rear end cars only and are restricted to 50 MPH. For the purpose of this rule these cars may be placed in the rear five cars of the train. Solid blocks of this equipment may extend up to 20 cars from the rear of the train if the trailing car of the block is in the rear five cars.

4. Geometry Test Car Instructions

Engine(s) handling geometry test car(s) 80/81 and 85/86 may observe passenger train speed on curves not to exceed 70 MPH as shown in individual subdivision special instruction 1(A) provided the purpose of train is to test track structure.

Geometry test cars 80/81 and 85/86 must move in train by themselves and are not required to have an ETD at the rear of the car when the car is occupied.

GCOR Rule 7.3 and 7.9 must be used when switching and geometry test cars must not be cut off in motion or struck by any car moving under its own momentum. They must not be coupled with more force than is necessary to complete the coupling, not exceeding coupling speed of 2 MPH. These cars must receive careful handling at all times.

When not on a train, cars must be protected as prescribed by GCOR Rule 5.12 or 5.13. These cars are considered to be occupied at all times.

Geometry Test Cars 81 and 85 are equipped with Hot Bearing Simulators. If a hot bearing is indicated by a Trackside Warning Device (TWD), conductor will contact geometry car operator to determine if indicated axle is equipped with Hot Bearing Simulator, if equipped, inspection will not be required.

5. Car Restrictions

Item 2 of the individual subdivision special instructions indicates a maximum gross weight of car and a letter restriction (A through H).

The maximum gross weight of car restriction is applicable only to four-axle cars with a coupled length of 49 feet 6 inches or greater. The maximum gross weight of car restriction for cars shorter than 49 feet 6 inches, six-axle cars, eight-axle cars or other specialty cars can be obtained from Table 5 by cross referencing the car length and the letter restriction for the subdivision.

Example: Item 2, Individual Subdivision Special Instruction of subdivision XXX indicates a maximum gross weight of car of 143 tons, Restriction E.

- for hoppers 53' long, the maximum gross weight/car = 143 tons from Item 2 (or by looking at line 8, column E)
- for tank car 43' long, the maximum gross weight/car = 136 tons (line 6, column E)

Cars that do not meet the weight limits specified in Table 5 or in Item 2 of the individual subdivision special instructions or in any part of the following paragraphs are not permitted without authority of System Structures Department or BNSF Clearance Bureau. 35-ft. cars (BNSF 601090-601179) loaded to 143 tons may operate only on the Hibtac, Casco, Lakes

(between Superior and Gunn) and Allouez Subdivisions. These cars must comply with weight limits indicated in Table 5 when operating on all other subdivisions.

Actual car weight may exceed the maximums by up to one ton due to weighing tolerances. Weight and length restrictions indicated in this section and in Item 2 of the individual subdivision special instructions do not apply to multiple-unit double stack well cars or locomotive cranes.

When single car movements apply to the movement of cars weighing over 143 tons and up to 157.5 tons as specified in Table 5 for '143X', single car movements shall denote that the car shall be separated from the locomotive and from other cars weighing more than 143 tons by at least one car weighing no greater than 143 tons. One train may contain up to ten '143X' cars weighing over 143 tons and up to 157.5 tons with separation meeting the single car movement definition noted above.

Car Restrictions										
Line No.	No/Axles and/or Car Length	Typical Car Types & Partial Listing of Representative Car Number Series	Maximum Weight of Car (Tons) Based on Car Restrictions Class A through H							
			A	B	C	D	E	F	G	H
1	4 axles & length less than 35'0"	Hopper	89	NP	89	NP	NP	NP	NP	NP
2	4 axles & length 35'0" to 36'11"	Hopper, tank cars BN 99000-99949, BN 98000-98189, BNSF 601090-601179	134	117	134	117	110	110	110	110
3	4 axles & length 37'0" to 38'11"	Hopper, tank cars ATSF 82056-82990, 176900-177861	141	123	141	123	117	117	117	117
4	4 axles & length 39'0" to 40'11"	Hopper, tank cars BN 435500-435999	143	131.5	143	131.5	123	123	123	123
5	4 axles & length 41'0" to 42'11"	Hopper, tank cars BN 476000-476019	143	143	143	143	134	134	134	131.5
6	4 axles & length 43'0" to 44'10"	Hopper, tank cars	143	143	143	143	136	136	134	131.5
7	4 axles & length 44'11" to 49'5"	Hopper, gondola, tank cars BN 686000-686054 COILCARE	143	143	143	143	143	136	134	131.5

Car Restrictions										
Line No.	No/Axles and/or Car Length	Typical Car Types & Partial Listing of Representative Car Number Series	Maximum Weight of Car (Tons) Based on Car Restrictions Class A through H							
			A	B	C	D	E	F	G	H
8	4 axles & length greater than or equal to 49'6"	Hoppers, flats, gondolas, tank cars	143X	143X	143	143	143	136	134	131.5
9	278'	13-unit trough car BN 552000-552022	930	930	930	930	884	884	871	NP
10a	6 axles	ACFX 88348-88373, CELX 6400-6458, CELX 10400-10438, DODX 40000-40573, DUPX 29400-29439, 29600-29666, HCMX 4402, KCS 700002-700053, KRL 600908-600910 NS 185541-185542,	197	197	197	197	197	197	185	NP
10b	6 axles	DODX 39810-39832, KRL 600430	197	197	185	185	185	178	175	NP
11	6 axles	Others	185	185	170	170	170	165	160	NP
12a	8 axles & length greater than or equal to 80'0"	ATSF 90001-90004, 90006-90007, ATSF 90011-90016, BN 631021	263	263	263	263	263	235	235	NP
12b	8 axles & length greater than or equal to 55'0" and less than 80'0"		263	255	263	255	235	235	235	NP
13	8 axles & length less than 55'0"	ATSF 90020-90023	220	195	220	195	180	180	180	NP

6. Work Order: Instructions for Reporting Work

Conductors and engine foremen are responsible for documenting and reporting all scheduled and nonscheduled work performed during their tour of duty. Timely reporting by radio communication, telephone, cellular phones, and electronic devices such as computers is key to maintaining current inventory, accurate records and a successful operation.

Unless otherwise designated by the division, all trains except work trains and those trains currently reporting via the Work Order Reporting System will be required to use the Voice Train Reporting System to report arrivals, departures, pickups and setouts that were previously reported enroute or at the completion of their trips.

Communication between the train and the VTR System will be by MRAS/PBX radio and telephone.

When reporting by Voice Train Reporting and Work Order Reporting are not possible, conductors and engine foremen are expected to contact the Customer Support Specialist promptly after completion of work performed at each station.

Work orders issued to train and switch jobs will list all scheduled work.

Conductors and engine foremen must know the track numbers where they report work. Refer to the TKLIST command in TSS for track numbers at a station or on a subdivision.

Train Work Order Package includes the following documents:

- Train list and profile
- FRA 215.9 Mechanical Defective Cars List (if applicable)
- Hazardous manifest (if train contains hazardous materials)
- Work order for each station
- Track list of each track to be worked
- Supplemental Work Order Form

The following reporting codes will be used to report work performed:

Reporting Codes	
Code	Not Done Codes and Definitions
AC	Work was already accomplished.
BE	Car is ordered/billed to wrong customer, wrong zone/track/spot.
BO	Car ordered to spot/pull is bad ordered, derailed or behind derailed equipment.
CM	Car is physically missing from track or is lost.
CN	Car is not ready to be pulled on account of hoses attached, ramps in doorways, plug door open, hazardous placards missing or wrong.
FR	Car is not pulled/spotted on account of customer request directed to crew, rejected by customer, or to be held for reloading.
FS	Full spot, no room to spot car.
HS	Could not perform switch on account of Hours of Service.
ID	Instructions from dispatcher.
IS	Instructions from supervisor.
MA	Mutual agreement with the customer.
NA	Could not perform switch as requested on account of another industry's track or a yard track blocked, obstructed, or out of service. Car is located in wrong switching zone or location.
NT	No overtime/short on time.
OW	Work should be part of another job's assignment.
PR	Locomotive power restricted from operation on yard/industry track, engine failure, excess tonnage, train make-up compliance (hazardous or operating).
RT	Work done on return trip or in other direction.
SA	Substituted another car in place of ordered equipment.
TB	Could not perform switch as requested on account of industry track being blocked, obstructed, out of service, or poor track conditions.
TS	Could not complete work on account of train turned short.
UC	Unsafe conditions caused by debris, weeds, footing, high water, snow/ice/storm.
XX	Work not performed as scheduled for unknown reasons or no listed reason applicable.

Reporting Codes	
Reporting Instructions for Scheduled/Unscheduled Work	
Code	
MO	MOVE - (Code, date, time, station name, zone/track/spot). Use only to reposition a placed car to correct customer inventory.
SP	SPOT - (Code, date, time, zone/track/spot) When cars are spotted to an industry track and no spot number is provided, use "01" as a spot number.
PU	PULL - (Code, date, pull time, station name, zone/track where cars are pulled from. Also include date, time station, zone/track where cars were left.)
IP	INTRA-PLANT SWITCH - (Code, date, time, zone/track/spot)
RS	RESPOT - (Code, date, time, zone/track spot)
PK	PICKUP - (Code, date, time, station name, track, location in train) Display train location using one of the following codes (HE-Head End, RE-Rear End, FB-Fill Behind). When filling behind cars in the train, enter the initial/number of the car the pickup will follow in standing order.
RR	CARS RECEIVED IN INTERCHANGE - (Code, date, time, station name, zone/track, and name of road)
SO	SETOUT - (Code, date, time, station name, zone, track, timetable direction and standing order) When track length will not hold all cars to be set out, enter first car initial/number and track where remaining cars were moved. If cars are set out on an interchange track, refer to reporting code DD.
TU	CARS TURNED ON WYE OR TURNTABLE - (Code, date, time, station name, zone/track/spot)
OF	CARS OFFERED OR NEEDING OFFERED TO A CONNECTING ROAD - (Code, date, time, station name, zone/track, name of road and person's name refusing cars)
DD	CARS DELIVERED IN INTERCHANGE - (Code, date, time, station name, zone/track, and name of road)
CC	CARRIERS CONVENIENCE - (Code, date, time, station name, zone, track where cars were left) Cars left on an industry track for carrier convenience must not include a spot number.
ND	NOT DONE - (When ND code is used, enter ND explanation code or a full written explanation.)

Reporting Methods

Radio – With the exception of trains using the Work Order Reporting system or when reporting work trains, Voice Train Reporting using the MRAS/PBX system is the preferred method of reporting work. Conductors and engine foremen are expected to report as soon as possible after work is performed at each station. If Voice Train Reporting (VTR) or Work Order Reporting System (WORS) is used to report, it is not necessary to call Customer Support.

Telephone or Cellular Phones – Telephone or cellular phones assigned to conductors and engine foremen may be used when MRAS/PBX or radio communication is unavailable or radio is congested in order to provide timely reporting in the field.

Electronic Device – Computer reporting will not require any written documentation to be forwarded.

Conductors and engine foremen are required to call their designated Customer Support Specialist anytime there are questions or problems with work order information or work to be performed during their tour of duty.

Work Order Codes

There are three types of work order codes that appear on work orders: Request Codes, Status Codes and Hold Codes.

Request Codes	
Code	Displays Work to Be Performed
SP	SPOT - Customer request to spot car for loading/unloading.
PU	PULL - Customer request to move a car from an industry track to another track or scheduled destination.
IP	INTRA-PLANT SWITCH - Customer request to move a car originally spotted correctly to another spot or track within the industry. Cars are commonly moved per this request to complete loading, for inspection, etc. This switch is chargeable to the customer.
RS	RESPOT - This switch is not chargeable to the customer and should be used only when correcting a railroad error. Customer request to move a car to a different track or spot within the industry after being placed incorrectly.
TU	CARS TURNED ON WYE OR TURNABLE - Request to turn a car previously spotted and re-spot.
PK	PICKUP - Cars available to be picked up by train, local, road switcher at station.
SO	SETOUT - Cars scheduled to be set out by train, local, road switcher at station.
Status Codes	
Displays Current Status of Cars (Does not require any work to be performed)	
Code	
PL	PLACED - Car on spot. (Displays car status and not a request.)
CP	CP - Constructive placement. (Condition between carrier and customer.)
OF	CARS OFFERED OR NEEDING OFFER TO A CONNECTING ROAD - Displays to the carrier, cars normally delivered in interchange cannot be delivered due to connecting road's inability or unwillingness to accept cars.
DD	CARS DELIVERED IN INTERCHANGE - Displays cars scheduled for interchange delivery to a connecting road.
Hold Codes	
Carrier/Customer Instructions Have Not Been Provided	
Code	
HOLD MT	Car not scheduled for outbound train. (Hold code appears in the Scheduled Train field.)
HOLD NI	Car has no instructions for spotting. (Hold code appears in the Scheduled Train field.)
HOLD HL	Car is HIWIDE and has not been scheduled to a train. (Hold code appears in the Scheduled Train field.)
HOLD LS	Car is on floating lease. (Hold code appears in the Scheduled Train field.)
HOLD ED	Car to be held for equipment distribution. (Hold code appears in the Scheduled Train field.)
HOLD WH	Car is to be held for weighing. (Hold code appears in the Scheduled Train field.)
HOLD OT	Car is to be held for local order. (Hold code appears in the Scheduled Train field.)
HOLD ME	Car is to be held for mechanical inspection. (Hold code appears in the Scheduled Train field.)
HOLD EH	Car is to be held for embargo. (Hold code appears in the Scheduled Train field.)
NC *	Non-credit customer. DO NOT SPOT. (Code appears in the SCHI field.)
DO *	Written delivery order. DO NOT SPOT. (Code appears in the SCHI field.)
SO *	Car billed shipper's order. DO NOT SPOT. (Code appears in the SCHI field.)
Zn Tk Sp * 00 00 00	* Do not spot cars with '00 00 00' in the ZNTKSP field or cars with NC, DO or SO in the SCHI field. (Cars may be pulled or picked up and moved to a location for further disposition when these codes are displayed.)

Work order documents will display work order codes as outlined by customer or carrier for specific instructions to conductors or engine foremen. They will be located in the Special Car Handling Instructions (SCHI) column or in the Scheduled Train column.

Hours of Service

Conductors or engine foremen should plan ahead and report scheduled and unscheduled work before hours of service expire. Conductors and engine foremen who relieve crews whose hours of service have expired will be responsible for reporting work performed during their tour of duty. If a crew's hours of service expire and they are unable to report scheduled or unscheduled work, the information must be passed on to the relieving conductor, engine foreman or supervisor who will be responsible to report work for the previous job.

Pick Up in Block

When picking up cars, enroute, trains must pick up in block unless otherwise advised by train dispatcher or in conflict with current train make-up instructions.

7. Dimensional and Special Shipment Restrictions

All employees involved in handling dimensional or special shipments must be familiar with and are governed by these instructions.

Note: Dimensional loads on BNSF are defined as wider than 11' and/or higher than 17' ATR and/or longer than the length of the car.

- a. Any dimensional and/or oversize car or special shipment must be accompanied by one of the following: message included with train's work order, track bulletin or message issued by BNSF Clearance Bureau.
- b. Before a dimensional or special shipment can be moved in a train, yard forces or employee in charge of station where no yard forces on duty, must obtain permission from the train dispatcher. This does not relieve conductor from complying with Rule 1.47 of the General Code of Operating Rules. When yard supervisors are notified of expected arrival of wide cars, precautions must be taken to safeguard employees in yard.
- c. Before a dimensional shipment is picked up on line, conductor must obtain permission from the train dispatcher. When dimensional or special shipment is set out on line, conductor must promptly notify the train dispatcher.
- d. Train dispatcher must issue appropriate track warrant, track bulletin or message when dimensional shipment restricts opposing train and confirm message received.
- e. Train with dimensional shipment must not pass or be passed by a train in the same direction unless authorized by the train dispatcher or proper safeguards taken.
- f. To provide for close observation enroute, all dimensional shipments must be placed in a block next to the lead locomotive consist and Boeing dimensional shipments identified as having contents ACFTEQ on the train list, if any, must be ahead of all other dimensional shipments. Only 10 dimensional Boeing loads/empties contents of ACFTEQ may be placed in a train.

Note: In the application of the above, FTTX flatcars and autoveyors (car kind M3E and M3F) are not considered dimensional shipments. (See Item 46)

Exceptions:

1. On trains destined to or operating in the state of California, and train room permits, dimensional shipments must be no closer than the 6th car or platform from the lead locomotive consist.
2. Dimensional shipments, including idler cars moving

with dimensional shipments, must be placed in compliance with minimum weight requirements outlined in train make up rules. However, placement of dimensional shipments must otherwise be as close to lead locomotive as possible.

3. Trains received from foreign railroads with dimensional shipment placement other than described above, may proceed to a location specified by train dispatcher to correct the condition.
 4. When dimensional shipment is found to be a shiftable load, GCOR Rule 1.37 will apply.
- g. Employees are prohibited from riding excessive dimension cars.
- h. Train crews handling dimensional and/or oversize car or special shipment car(s) approaching locations in CTC, interlocking or double track territory where these car(s) are restricted should communicate with the dispatcher and jointly determine if a meet or pass of any other equipment at the restricting location(s) can be accomplished safely.
- i. When the dimensional message indicates "Stop, Proceed on Hand Signals" at a bridge in conductor only operations, the following will apply:
- Stop the train before entering the bridge.
 - Conductor will check the dimensional load for shifted contents.
 - Engineer will protect his side of the train through the mirror.
 - Conductor will protect the other side of the train.
 - Move through the bridge not exceeding 5 MPH until the dimensional shipment clears the bridge.

8. Trackside Warning Devices (TWD)

8(A). Description

Trackside warning devices (TWD) inspect passing trains for defects or monitor for unusual trackside conditions that could adversely affect the safe and efficient movement of trains.

Examples of such devices include the following:

- Overheated journal bearings (hot box) (HBD)
- Hot wheels
- Dragging equipment detector (DED)
- High/Wide/Shifted load (SLD)
- High water detector
- Earth/Rock slide fence

Individual subdivision special instructions identify the following:

- Detector location
- Detector type

Unless otherwise stated, protection will be hot journal and dragging equipment with bidirectional operation.

Exceptions will be shown as follows:

- Northward direction only (NWD)
- Southward direction only (SWD)
- Eastward direction only (EWD)
- Westward direction only (WWD)
- Dragging equipment only (DED)
- Shifted load only (SLD)
- Radio tone only detectors
- Detectors that protect bridges, tunnels or other structures
- Exception Reporting detector

When a shifted load or dragging equipment detector is actuated at a point where an adjacent main track or controlled siding may be obstructed, crew must provide protection as prescribed by Rule 6.23.

8(B). Detector Radio Message

A message "You have a defect" will be transmitted during train passage if a defect is detected. When this message is received from a TWD, immediately reduce train speed to less than 30 MPH, utilizing train handling methods that minimize in-train forces. After train passes the detector, a radio message will be transmitted (unless defined as "Exception Reporting" or "Failure Reporting" in Item 5(B) of the individual division timetables).

This message will indicate "no defects" or will state any "alarms" or "integrity failures" that were detected during train passage.

The detector message is not complete until "Out" is received.

Train Approaching Detector

Except in emergency, when approaching train is within 150 feet of a TWD, DO NOT make a radio transmission until the entire train has passed the TWD.

8(C). Detector Message and Train Crew Action

Use the following table to determine crew requirements when a detector message is received. If detector indicates more than one detector message or circumstance, comply with each train crew action shown. Radios at Exception Reporting detectors will only transmit a message when an alarm is present. Do not report a failure to transmit to the train dispatcher as is required with other types of detectors.

Note: 5(A) indicates detectors that protect bridges, tunnels or other structures. 5(B) indicates other TWD locations.

Type Detector	Non-Alarm Message	Train Crew Action	Additional Instructions
5(A) or 5(B)	When detector announces "...no defects", "Maintenance Required" or when advised by signal maintainer or train dispatcher that there are no defects.	Proceed.	Report "Maintenance Required" to the train dispatcher, unless "Train Too Slow" is transmitted in the same message. Then, no report to the train dispatcher is required.
5(A)	"Integrity failure"	Stop, Make a walking inspection of both sides of entire train before reaching bridge, tunnel, or structure being protected.	Report integrity failure to train dispatcher.
5(A)	"Train too slow" or Crew is notified by train dispatcher or signal maintainer that TWD is out of service.	Proceed.	None
5(B)	"Train too slow" or "Integrity Failure" or "Maintenance Required" or Crew is notified by train dispatcher or signal maintainer that TWD is out of service.	Proceed.	Report "Integrity Failure" or "Maintenance Required" to the train dispatcher unless "Train Too Slow" is transmitted in the same message. Then, no report to the train dispatcher is required.

Table No. 2 - 8(C) Alarm Message

Type Detector	Alarm Message	Train Crew Action	Additional Instructions
5(A) or 5(B)	"First hot box right/left side axle XXX" or "First dragging equipment near axle XXX" or "First hot wheel right/left from axle XXX to axle XXX" or "First wide load right/left side near axle XXX" or "Shifted load right/left side near axle XXX"	<ol style="list-style-type: none"> 1. As soon as message "...you have a defect" is received, immediately reduce train speed to less than 30 MPH. 2. Stop the train. 3. inspect the indicated axle(s). 4. If no defect is found, inspect 12 axles forward and 12 axles to the rear of the indicated axle regardless of whether a defect is found before reaching the 12th axle. 5. Report findings to the train dispatcher. 6. When defective car(s) are set out or continue in train, notify the train dispatcher and Mechanical Help desk. 	<p>Detector alarm message may identify more than one defect. Inspect train for all reported defects before proceeding.</p> <p>If detector alarm message does not include axle designation, inspect both sides of entire train.</p>
5(A) or 5(B)	"Excessive Alarms"	<ol style="list-style-type: none"> 1. As soon as message "... you have a defect" is received, immediately reduce train speed to less than 30 MPH. 2. Stop the train. 3. inspect the indicated axle(s). 4. If no defect is found, inspect 12 axles forward and 12 axles to the rear of the indicated axle regardless of whether a defect is found before reaching the 12th axle. 5. Inspect both sides of the remainder of the train from the last reported defect. 6. Report findings to the train dispatcher. 7. When defective car(s) are set out or continue in train, notify the train dispatcher and Mechanical Help desk. 	<p>Detector alarm message may identify more than one defect. Inspect train for all reported defects before proceeding.</p> <p>If detector alarm message does not include axle designation, inspect both sides of entire train.</p>

Table No. 3 - 8(C) Other Circumstances

Type Detector	Circumstance	Train Crew Action	Additional Instructions
5(A) or 5(B)	Total axle count transmitted varies by more than 16 axles from total axle count transmitted from a previous detector or Speed varies by more than 10 MPH from actual speed.	<ol style="list-style-type: none"> 1. Stop the train. 2. Make a walking inspection both sides of entire train. 3. Report findings to train dispatcher. 	None
5(B) - with recall code	No message or Incomplete message is transmitted.	<ol style="list-style-type: none"> 1. Enter recall code and be governed by message. 2. If still no message or incomplete message, proceed. 	Report no message or incomplete message to train dispatcher.
5(A) - with recall code	No message or Incomplete message is transmitted.	<ol style="list-style-type: none"> 1. Enter recall code and be governed by message. 2. If still no message or incomplete message, stop the train. 3. Make a walking inspection of both sides of entire train. 	Report no message or incomplete message to train dispatcher.
5(B) - without recall code	No message or Incomplete message is transmitted.	Proceed	Report no message or incomplete message to train dispatcher.
5(B) - Exception Reporting	No Message	Proceed	Do Not Report "No Message" to Train Dispatcher
5(B) - with recall code Exception Reporting	Incomplete Message is Transmitted	<ol style="list-style-type: none"> 1. Enter recall code and be governed by message. 2. If still no message or incomplete message, stop the train. 3. Make a walking inspection of both sides of train. 	Report incomplete message to train dispatcher.
5(B) - without recall code Exception Reporting	Incomplete Message is Transmitted	<ol style="list-style-type: none"> 1. Stop the train. 2. Make a walking inspection of both sides of entire train. 	Report incomplete message to train dispatcher.

Note: Detector message followed by the word "Out" indicates a complete message. Total axle count is not required for a complete message.

8(D). Train Inspection

When alarm message requires inspection, inspect the side of the train in the message. The reference to defect locations will be from HEAD END of train, and references to LEFT or RIGHT side are to engineer's left or right side in the direction of travel.

Determine the location of the indicated axle by physically counting axles from the HEAD END of the train, including

locomotive axles. DO NOT depend on wheel report information for correct axle count.

When alarm message requires, inspect indicated axle(s). If inspection does not reveal a defect, inspect 12 axles forward and 12 axles to the rear of the indicated axle.

When this is necessary, inspect all 12 axles in each direction regardless of whether a defect is found before reaching the twelfth axle.

Dragging Equipment/Shifted Load Inspection

When a dragging equipment or shifted load alarm message is received, make a walking (trackside) inspection of the train until the inspection is complete or until an obstruction (bridge without a walkway) prevents further inspection. When obstruction prevents completion of inspection, move train at no more than 5 MPH to complete the inspection per Rule 6.29.2. The train may proceed only after walking inspection confirms there is no dragging equipment or shifted load(s), defective car(s) are repaired or permission is received from the train dispatcher or manager to move the defective equipment.

Overheated Equipment Inspection

When an overheated equipment alarm is received, follow this procedure to inspect equipment:

- Crew member positioned on the ground must count axles.
- Move train at no more than 10 MPH until the indicated axle is near crew member or until inspection is complete.

When a train is stopped by a trackside warning device for a hot box or hot wheel, train may not depart location until crew reports the following to the train dispatcher:

1. The axles were physically counted
2. A heat-indicating crayon or infrared device was used at the indicated axle, and
3. If inspection does not reveal a defect, that 12 axles forward and to the rear of the indicated axle have been inspected.

If a heat-indicating crayon or infrared device is not available, set out the indicated car.

Freight Trains

If no defect is found, train may continue, but crew members must closely observe indicated equipment for the next 25 miles or until inspection by hot bearing detector.

When a train actuates a wayside hot box detector before a crew change location, the relieving crew will be advised of the equipment that activated the detector so that they can inspect the car and follow the above procedure if the equipment actuates a subsequent detector enroute.

Exception: If indicated axle is on a loaded, placarded, non-intermodal car containing hazardous material, set out the loaded, placarded, non-intermodal car. (For Key Train instructions see US Hazardous Material Instructions for Rail, Section VII, Key Trains.)

Passenger Trains

If no defect is found after inspecting 12 axles forward and 12 axles to the rear of the indicated axle, inspect both sides of the entire train.

If no defect is found, train may continue, but crew must closely observe indicated equipment for the next 25 miles or until next inspection by hot bearing detector.

8(E). Testing Bearing Temperature

Use a heat-indicating crayon or handheld infrared device to test bearing temperature. Test bearing temperature by stroking the heat indicating crayon on the bearing cup. A liquid smear will remain on an overheated bearing. (Determine if the bearing is hot by using a Dual Temp. 163 degree - 200 degree

Fahrenheit, Mark All Thermal Melt, Millennium ordering reference no. 458304011.)

When ambient temperature is 32 degrees Fahrenheit or above, use a 200-degree Fahrenheit heat-indicating crayon to test bearing temperature.

When ambient temperature is below 32 degrees Fahrenheit, use a 163-degree Fahrenheit heat-indicating crayon to test bearing temperature.

Set out equipment with overheated bearings.

If it is safe to move equipment, set out car with an overheated bearing at a location accessible to repair personnel.

8(F). Consecutive Alarm Messages

If the same equipment is indicated by two (2) successive hot bearing alarm messages, set out the indicated equipment.

When a train actuates a wayside hot box detector before a crew change location, the crew being relieved will advise the relieving crew of the equipment that activated the detector. If the same equipment is indicated by the next detector with a hot bearing alarm message after departing the crew change location, set out the indicated equipment.

8(G). Alarms Indicated on Locomotive or Caboose

When unable to locate a defect indicated on a locomotive or caboose, notify the following:

- Connecting crew members
- Mechanical personnel
- Supervisor

Do not set out a caboose with a generator belt attached to the indicated axle unless a hot bearing, hot wheel or dragging equipment is found.

8(H). Special Conditions

When a hot bearing is found within 25 miles of TWD equipment, a crew member must notify the train dispatcher. The train dispatcher must notify the signal maintainer and request the TWD equipment be inspected.

When blowing or swirling snow conditions may prevent detectors from making a proper inspection, crew members must reduce train speed to **no more than 30 MPH** to minimize this condition.

8(I). High Water Detectors

High water detectors have been placed under certain bridges and in areas where high water might occur.

A. When train is notified of high water by rotating red lights, radio message, signal indication or at a radio readout and no response is received, crew must not proceed over bridge or track until trackside examination by crew member has been made to determine the following:

- The track has not lost its normal alignment,
- The track or bridge does not have sagging surface,
- There is no shoulder ballast or ballast between the ties missing or water running through the tie cribs, and
- Water is not over the rail.

If determination cannot be made, contact train dispatcher for instructions before proceeding.

B. Trains moving against the current of traffic must approach all locations protected by high water detectors prepared to stop unless:

- The track has not lost its normal alignment,
- The track or bridge does not have sagging surface,

- There is no shoulder ballast or ballast between the ties missing or water running through the tie cribs, and
 - Water is not over the rail.
- If determination cannot be made, contact train dispatcher for instructions before proceeding.
- Note: When moving against the current of traffic and the location is protected by rotating red light or radio response, be governed by Item A above.

8(J). Slide Detectors

Slide detectors have been placed in certain areas where earth/rock slides might occur.

When a rock slide is indicated by rotating red light or radio message, trains must proceed at restricted speed AND be prepared to stop short of any obstruction through the entire slide detector area.

When train is stopped or moving at restricted speed because of signal indication governing movement through a slide detector, train must ALSO be prepared to stop short of any obstruction through the slide detector area.

Train dispatcher must be promptly notified if slide conditions are observed.

At locations equipped with Radio Readout type detectors, if no response is received, trains must proceed at restricted speed until track at this location is known to be clear of any obstruction. Train dispatcher must be promptly notified if slide conditions are observed.

8(K). Warm Journal Detectors

When a train stop is indicated, the NOC mechanical warm bearing desk will utilize the information that is currently only provided to the NOC, evaluate the severity of the potential failure indicated and will then contact the chief dispatcher who will advise the train dispatcher to contact train crews via radio with instructions on the action required.

Train crews are to contact the NOC Mechanical Warm Bearing Desk. When a running set and release is indicated the warm bearing desk will contact the train crew directly.

Since this is only a potential failure condition that is being predicted well in advance of any actual failure, when notified to take action relative to a "warm" bearing/journal, train may be moved without any additional speed restriction to a convenient location to inspect or set out as directed by the dispatcher in order to minimize the impact on operations. In addition, walking the train is not required and train may also be moved to expedite the inspection and/or set out. These instructions for cars identified with only warm bearings do not supercede any guidelines for handling hot journals or defective cars identified by Trackside Warning Devices or from other visual inspections.

Action required may include:

1. Perform a Set and Release of the Air Brakes:
Perform a set and release of the air brakes (minimum of 10 psi brake pipe reduction) in an attempt to release any sticking brakes at the first convenient location and consistent with good train handling. A "running release" may be performed if engineer determines conditions will allow as per ABTH Rule 103.3, Item C.
2. Stop and Inspect a Specified Car:
Stop to inspect specified car and be governed by specific inspection instructions given in each case.
3. Set Out a Specified Car:
Set out specified car at location as directed by dispatcher.

9. Amtrak Instructions

Dispatcher must be immediately notified when train does not maintain maximum track speed.

Equipment

Unless otherwise provided, equipment that cannot be safely operated at maximum speed must be set out at first available location unless train can arrive at final destination in less time than would be required to make the set out.

- Maximum speed for freight locomotives in Amtrak service is 70 MPH.
- Movement with locomotives between cars is prohibited. Double stretch is required after pick up or set out of cars or locomotives.
- Required hand tools and supplies must be available on locomotive.
- Required switch keys must be in possession of Engineer and Conductor.
- Amtrak may not exchange or discharge passengers between trains except at stations.
- Amtrak may not exchange supplies between trains except at stations unless authorized by train dispatcher
- Amtrak train garbage/refuse to be off loaded must be loaded into approved containers and only at stations that have assigned Amtrak employees or caretakers.
- Amtrak toilets must be discharged into appropriate containers. Dumping of toilets from Amtrak trains on BNSF right of way is prohibited.

Head End Power (HEP) Requirements

- Departure from originating station with HEP cables short looped is prohibited.
- In the event of HEP failure, crew members must determine if train may be handled safely and every effort made to ... advance train to the next siding or scheduled stop before repairs are made.
- All HEP cables must be secured with approved tie-downs.
- Air hoses and HEP cables must be secured no less than 4 inches above top of rail.

BNSF Crews Operating Amtrak Trains

When a BNSF crew relieves or helps an Amtrak crew, a freight locomotive must be used to handle Amtrak trains. When Amtrak crews are being relieved or helped by BNSF crews Amtrak personnel must handle all 480-volt AC power and set up Amtrak locomotives in the trail position. The speed in which the train will operate is the maximum speed allowed on that territory for freight train service. BNSF crews are prohibited from handling, adjusting or performing work between or under cars when Head End Power (HEP) 480 volt AC is energized.

Amtrak-Qualified BNSF Engineers Operating Amtrak Trains

Addition of a freight locomotive will not be necessary when one or both of the following apply:

- When the BNSF engineer who is to relieve or help an Amtrak crew is Amtrak qualified.
- When a BNSF engineer is accompanied by an Amtrak qualified engineer or qualified Amtrak supervisor. The locomotives need not be set up in the trail position. All other requirements as listed in the section "BNSF Crews Operating Amtrak Trains" will still be in effect.

BNSF Mechanical Assistance

- When mechanical problems develop or mechanical assistance is needed the BNSF NOC Mechanical Desk and Train Dispatcher must be notified immediately as described in System Special Instructions item #45. The delay for mechanical problem must be documented properly on the delay report.

Delay Reports

The delay report is an essential document to both Amtrak and BNSF and both companies rely on this document to calculate performance.

Prior to tie-up, engineer or conductor must furnish the train dispatcher's office with official, legible and accurate delay report. The BNSF Passenger Operations Desk must also receive a copy of the delay report (Fax 800-423-9551).

Such delay reports will include:

- All delays reported in order of occurrence, all time lost due to the actual train delay and station dwells.
- Explanation of delay that must be brief, specific, and worded in such a way so as not to be misconstrued or misunderstood.
- Reasons for delay over dwell times and all other time lost (i.e. passengers, baggage, slow order, hot/cold weather restriction, locomotive malfunctions, etc.). Each individual reason for delay must be separate from other types of delay. For example, do not list time lost due to a slow order and locomotive malfunction together, do not combine time to copy the bulletin with the time lost for the restriction, and separate form "A" restrictions from form "B" restrictions.
- Delays associated with field equipment detectors. These delays require that specific information be given, even if no defect is found. Information as to the location of the defect, Car/Locomotive initial and number, axle and journal if applicable, and reason for inspection and defect, if any found.
- Amtrak instructions regarding authorization to hold or delay train, including reason.
- Delays caused by operating with one engineer.
- Delays over allotted dwell times. Dispatcher must be notified as soon as possible when it is known that train may be delayed over allotted station dwell and notation must be made on delay report.
- Delays caused by late General Track Bulletins. Dispatcher must be notified as soon as possible when it is determined late General Track Bulletins will cause a delay to scheduled departure and notation must be made on delay report.

Signal Awareness Forms

Passenger train conductors and crew members are exempt from special instructions Item 43 unless they are in the controlling unit or the cab room of the controlling cab car and there is more than one crew member in the controlling unit or cab room of the controlling cab.

10. Storage of Cars Within Yard Limits In Non-Signaled Territory

Within yard limits in non-signaled territory, the main track must not be used as a storage track except in case of emergency. When it becomes necessary to leave cars on main track in such territory, they must be protected by track warrant or track bulletin. This does not modify requirements of Rule 6.13.

11. Shunting the Track**Commodities Insulating Track In CTC And ABS**

Employees should be alert for insulating commodities such as clay, chips, oil, etc., on top of rails. This condition could possibly insulate the track and cause loss of train shunt. Such conditions should be promptly reported and trains protected per rules while in CTC and ABS territory.

Single Unit Light Engine

When a train sets out all cars enroute and becomes a single unit light engine within CTC, manual interlocking, or ABS territory, the train dispatcher/control operator must be notified.

Movements Consisting of Less Than 12 Axles

Train, engine and other such movements consisting of less than 12 axles must approach road crossings at grade equipped with automatic crossing warning devices prepared to stop until it is determined that the warning devices are operating properly.

12. Turnouts Equipped with Two Switch Machines (Moveable Point Frogs/Swing Nose Frogs)

Locations where turnouts are equipped with two switch machines will be identified under individual subdivision special instructions.

When dual control switches equipped with two switch machines are operated by hand, the switch machine which operates the switch points and the switch machine which operates the moveable point (swing nose) frog must both be placed in hand operation.

When turnouts are equipped with crank operated machines, the hand crank must be turned an additional 10 revolutions after the switch points are in the desired position to insure sufficient closure tension at the switch points.

Rule 9.13.1 applies at all locations where turnouts are equipped with two switch machines (moveable point frogs/swing nose frog).

13. In Effect on Burlington Northern Santa Fe Railway

- General Code of Operating Rules, FOURTH EDITION, in effect April 2, 2000.
- Maintenance of Way Operating Rules, in effect October 31, 2004.
- Air Brake and Train Handling Rules, in effect July 13, 2003, with revised pages.
- Train Dispatcher's, Operator's and Control Operator's Manual, in effect July 13, 2003.
- TY&E Safety Supplement, in effect April 1, 1998, with revised pages.
- Maintenance of Way Safety Rules, in effect January 31, 1999, with revised pages.
- Employee Safety Rules, in effect October 31, 2004.
- Mechanical Safety Rules, in effect October 31, 2004.
- 2000 North American Emergency Response Guidebook
- Canadian Rail Operating Rules, in effect March 1, 2002. (For use in Canada only.)
- Rules for the Protection of Track Units and Track Work, in effect April 1, 1999. (For use in Canada only.)

14. General Code of Operating Rules, Changes and Additions

The following rules apply only on Burlington Northern Santa Fe Railway:

Rule 1.2.1 Care for Injured—is changed to read: When passengers or employees are injured, do everything reasonable to care for them.

Rule 1.2.3 Equipment Inspection—the 2nd paragraph is changed to read:

The person in charge must secure and maintain custody of the equipment involved, until the Claims Department is contacted and determines disposition.

Rule 1.6 Conduct—the following paragraph added:

Any act of hostility, misconduct, or willful disregard or negligence affecting the interest of the Company or its employees is cause for dismissal and must be reported. Indifference to duty, or to the performance of duty, will not be tolerated.

Rule 1.6.1 Motor Vehicle Driving Records, the last paragraph is changed to read:

An employee must report any conviction to an employee assistance representative within 48 hours after the employee receives notice of the conviction.

Rule 1.6.2 Notification of Felony Conviction—new rule added:

The conduct of any employee leading to conviction of any felony is prohibited. Any employee convicted of a felony must notify the proper authority of that fact within 48 hours after the employee receives notice of the conviction.

Rule 1.6.3 Notification of Deteriorating Vision or Hearing— new rule added:

Any locomotive engineer who has knowledge that their hearing or vision has deteriorated and cannot be corrected to the minimum acceptable requirement as outlined in federal regulations (20/40 distant visual acuity, 70 degree field of vision, ability to recognize/distinguish between railroad color signals, hearing loss no greater than 40 decibels), must report that fact immediately to the proper authority or the medical department.

Rule 1.10 games, Reading or Electronic Devices, the following is added:

Crew members using cell phones/laptop computers while on duty are governed as follows:

- * All crew members are prohibited from using cell phones/laptop computers when their train or engine is moving. (Electronic work order reporting devices and handheld PDA devices are to be considered as laptop computers in the application of this rule).
- * Crew members may use a cell phone when their train or engine is stopped provided its use does not interfere with required duties such as train inspections or switching activities.
- * If necessary for conductor to report work using a cell phone, this must be done while the train or engine is stopped.

Exception: Crew members of passenger trains may use a cell phone or PDA device for business purposes while the train is moving provided they are not in the controlling unit or the cab room of the controlling cab car.

Rule 1.15 Duty-Reporting or Absence, the following sentence is added:

Continued failure by employees to protect their employment will be cause for dismissal.

Rule 1.47 Duties of Trainmen and Enginemen—is amended in its entirety to read:

The conductor and the engineer are responsible for the safety and protection of their train and observance of the rules. They must ensure that their subordinates are familiar with their duties, determine the extent of their experience and knowledge of the rules, and instruct them, when necessary, how to perform their work properly and safely. If any conditions are not covered by the rules, they must take precautions to provide protection.

A. Conductor Responsibilities

1. The conductor supervises the operation and administration of the train (if trains are combined with more than one conductor on board, the conductor with the most seniority takes charge). All persons employed on the train must obey the conductor's instructions, unless the instructions endanger the train's safety or violate rules. If any doubts arise concerning the authority for proceeding or safety, the conductor must consult with the engineer who will be equally responsible for the safety and proper handling of the train.

2. The conductor must advise the engineer and train dispatcher of any restriction placed on equipment being handled.

3. The conductor must remind the engineer that the train is approaching an area restricted by:

- Limits of authority
- Track warrant
- Track bulletin
- or
- Radio speed restriction.

The conductor must inform the engineer after the train passes the last station, but at least 2 miles from the restriction.

4. When the conductor is not present, other crew members must obey the instructions of the engineer concerning rules, safety, and protection of the train.
5. Freight conductors are responsible for the freight carried by their train. They are also responsible for ensuring that the freight is delivered with any accompanying documents to its destination or terminals. Freight conductors must maintain any required records.

B. Engineer Responsibilities

1. The engineer is responsible for safely and efficiently operating the engine. Crew members must obey the engineer's instructions that concern operating the engine. A student engineer or other qualified employee may operate the engine under close supervision of the engineer. Any employee that operates an engine must have a current certificate in his possession.
2. The engineer must check with the conductor to determine if any cars or units in the train require special handling.

C. All Crew Members' Responsibilities

1. To ensure the train is operated safely and rules are observed, all crew members, must act responsibly to prevent accidents or rule violations. Crew members in the engine control compartment must communicate to each other any restrictions or other known conditions that affects the safe operation of their train sufficiently in advance of such condition to allow the engineer to take proper action. If proper action is not being taken, crew members must remind engineer of such condition and required action.
2. Crew members in the engine control compartment must be alert for signals. As soon as signals become visible or audible, crew members must communicate clearly to each other the name of signals affecting their train. They must continue to observe signals and announce any change of aspect until the train passes the signal. If the signal is not complied with promptly, crew members must remind the engineer and/or conductor of the rule requirement. Crew members must not use binoculars or similar devices to determine the position, aspect, or indication displayed by a fixed signal.
3. When the engineer and/or conductor fail to comply with a signal indication or take proper action to comply with a restriction or rule, crew members must immediately take action to ensure safety, using the emergency brake valve to stop the train, if necessary.

Rule 2.10 Emergency Calls—the first paragraph is amended to read:

Emergency calls will begin with the words "Emergency," "Emergency," "Emergency." These calls will be used to cover initial reports of hazardous conditions which could result in death or injury, damage to property or serious disruption of railroad operations such as:

- derailments
- collisions
- storms

- washouts
- fires
- track obstructions
or
- emergency brake applications

In addition, emergency calls must be made for the following:

- overrunning limits of authority
or
- overrunning Stop indications.

Emergency calls must contain as much complete information on the incident as possible.

Rule 5.2.2 Signals Used by Employees—Items A and B, No. 3 is changed to read:

3. Flagman providing protection as outlined in Rule 6.19 (Flag Protection) must have a red flag and six red fuses.

The following sentence is added:

Locomotive flagging kits on BNSF must be equipped with a red flag and six fuses.

Rule 5.3.5 Acknowledge Stop Signal—is amended to read:

Except when switching, acknowledge hand signal to stop a train. When flagged, the engineer must obtain a thorough explanation from the flagman before proceeding.

Rule 5.4.2 Display of Yellow Flag, the paragraph “Once the Train Reaches the Restricted Area” is changed to read:

The speed specified by track warrant, track bulletin, general order or radio speed restriction must not be exceeded until the rear of the train clears the restricted area.

Rule 5.4.3 Display of Yellow-Red Flags—Item B, Restriction is Not Specified in Writing, Item 2a is changed to read:

A crew member has received permission from the employee in charge. Maintenance of Way employees may display yellow-red flags from one hour before to one hour after the time a Form B track bulletin is in effect. During that time, trains may accept the foreman's verbal permission as outlined in Rule 15.2 (Protection by Track Bulletin Form B).

Rule 5.4.6 Display of Flags Within Current of Traffic—this rule is canceled in its entirety.

Rule 5.4.7 Display of Red Flag or Red Light—the third paragraph is changed to read:

Displayed Between Rails. When a red flag or red light is displayed between the rails of a track, the train must stop and not proceed until the flag or light has been removed by an employee of the class that placed it.

Rule 5.4.8 Flag Location—the first paragraph is changed to read:

Flags will be displayed on all main tracks and sidings leading to the track affected.

The second paragraph is changed to read:

Flags must be displayed to the right of the track as viewed from an approaching train, except red flags or red lights may be displayed between the rails as outlined in Rule 5.4.7 (Display of Red Flag or Red Light). In multiple main track territory or where sidings are adjacent to main track(s), they will be placed on the field side of outside tracks. Flags will be placed in this manner unless otherwise specified by track bulletin, track warrant, special instructions or general order.

Rule 5.8.1 Ringing Engine Bell—4th bullet changed to read:

Approaching public crossings at grade with the engine in front, start signal at the crossing sign. If no sign, or if movement begins between sign and crossing, start signal soon enough before crossing to provide warning. Continue ringing bell until the crossing is occupied.

Rule 5.8.2 Sounding Whistle—Item 1, Succession of Short Sounds, is changed to read:

Use when persons or livestock are on the track at other than road crossings at grade. In addition, use to warn railroad employees when an emergency exists, such as a derailment. When crews on other trains hear this signal, they must stop until it is safe to proceed.

Rule 5.8.2 Sounding Whistle—whistle signal 11 is changed to read:

Approaching public crossings at grade with the engine in front, start signal at the crossing sign. If no sign, or if movement begins between sign and crossing, start signal soon enough before the crossing to provide warning. Prolong or repeat signal until engine occupies the crossing.

Use this signal initially to warn employees when:

- Approaching men or equipment on or near the track, regardless of any whistle prohibitions.
or
- View is obstructed.

After this initial warning, train will continue to intermittently sound whistle signal 4 (2 shorts) until head end of train has passed the work location.

Rule 5.9.1 Dimming Headlight—add the following as the 1st two sentences to the 1st paragraph:

Approaching public crossings at grade with engine in front, the headlight must be on bright at the crossing sign. If no sign, or if movement begins between sign and crossing, the headlight must be on bright soon enough before the crossing to provide warning.

Rule 5.9.1 Dimming Headlight—Item 4 is changed to read:

4. When approaching and passing the head end of a train on the adjacent track at night.

Rule 5.11 Engine Identifying Number—the following exception is added:

Exception:

- On track bulletins that advise about excessive dimension equipment, trains may be identified by train symbol.
- On track bulletins and on track warrants that do not convey movement authority, passenger trains may be identified by train symbol.

Rule 5.13B, How to Provide Protection—Item 1 is changed to read:

Each manually operated switch, including any facing point crossover switch that provides direct access must be lined against movement onto the track and secured by an effective locking device. A blue signal must be placed at or near each such switch.

Rule 5.13C Blue Signal Readily Visible to Engineer—Item 2 is changed to read as follows:

2. A blue signal must be visible to the engineer or employee controlling the engine. On engines equipped for Remote Control Operations, the Remote/Manual switch must be in Manual and a blue tag placed on or near the Remote/Manual switch.

Rule 5.13C Blue Signal Readily Visible to Engineer—Item 3 is changed to read:

3. The engine must not be moved. The controls must not be changed unless directed by individuals who placed the blue signal protection.

Rule 5.16 Observe and Call Signals—is deleted in its entirety. (See amendment to Rule 1.47)

Rule 6.2 Initiating Movement—the first bullet is changed to read:

Receive a track warrant or general track bulletin.

Rule 6.3 Main Track Authorization—the following is added:
Overlapping Limits

When a train receives track and time, track warrant or track permit authority joint with an employee or OCS permission joint with an employee, the train must not occupy the overlapping limits until permission is received to enter the overlapping limits from the employees listed on the authority or on the OCS permission.

Rule 6.3.1(E), Train Coordination - OCS territory—new rule is added:

Employees may use a train's permission in OCS territory in the same manner as using a train's authority. Working limits may be established within a train's OCS limits as follows:

1. With a train having permission to move in either direction that is not joint.
or
2. With a train having permission to move in one direction only, working limits must not be established:
 - Behind the train.
 - More than one block in advance of the train or beyond any location that a train or engine could enter the track between the employee in charge of the working limits and the train.

Rule 6.4 Reverse Movements—is changed to read:

Make reverse movements on any main track, controlled siding, or on any track where CTC is in effect at restricted speed and only within the limits a train has authority to occupy the track.

Rule 6.4.1 Permission for Reverse Movements—the following is added as new last paragraph:

When a train or engine is advised that working limits have been established behind their train, obtain permission from the employee in charge to make any reverse movements, including within the same signaled block.

Rule 6.5 Handling Cars Ahead of Engine—is changed in its entirety to read:

When cars or engines are shoved and conditions require, a crew member must take an easily seen position on the leading car or engine, or be ahead of the movement, to provide protection. Cars or engines must not be shoved until the engineer knows who is protecting the point of the movement and how protection will be provided. Cars or engines must not be shoved to block other tracks until it is safe to do so.

When cars are shoved on a main track or controlled siding in the direction authorized, movement must not exceed:

- 20 MPH for freight trains.
- 30 MPH for passenger trains.
- Maximum timetable speed for snow service unless a higher speed is authorized by the employee in charge.

Note: When plowing snow and all employees are on the equipment, one common authority may be used by both maintenance of way employees and the train crew.

Rule 6.6 Picking Up Crew Member—

Item 1(a) is changed to read:

Another authority is not in effect within the same or overlapping limits unless conflicting movements are protected.

The following paragraph is added after Item 5:

Before a crew requests and makes a move under this rule, a job safety briefing between crew members must be conducted that includes:

- Confirmation of authority limits
- Location of nearest affected road crossings in direction of movement
- Distance to be shoved
- Confirmation that train is intact, verified either visually or by determining that brake pipe continuity exists using end-of-train device or distributed power telemetry.

The last paragraph is changed to read:

When movement is made, restricted speed does not apply. Trains backing up under the provisions of this rule may pass signals indicating Stop and Proceed, without stopping.

Rule 6.10 Calling Attention to Restrictions—is deleted in its entirety. (See amendment to Rule 1.47)

Rule 6.11 Spacing Trains—is deleted in its entirety.

Rule 6.13 Yard Limits—the first paragraph is changed to read:

Within yard limits, trains or engines are authorized to use the main track not protecting against other trains or engines, only after obtaining a general track bulletin or track warrant, listing all track bulletins that affect their movement. Engines must give way as soon as possible to trains as they approach. Engines must keep posted as to the arrival of passenger trains and must not delay them.

Rule 6.14 Restricted Limits—the first sentence is changed to read:

Between designated points specified by signs and in the special instructions, trains or engines are authorized to use the main track not protecting against other trains or engines, only after obtaining a general track bulletin or track warrant, listing all track bulletins that affect their movement.

Rule 6.23 Emergency Stop or Severe Slack Action—is amended by adding:

The train must not proceed until it has been determined that it is safe to do so by visual inspection of the train or by knowledge that the brake pipe pressure has been restored by observing the caboose gauge, end-of-train device (ETD) control head, or by ascertaining that air pressure is present in the brake pipe by using the following procedure:

- A. After air brakes have had sufficient time to release following an emergency application, make a 20-psi brake pipe reduction, and;
- B. After brake pipe exhaust ceases, place the automatic brake valve cutout valve in the OUT position. If brake pipe pressure rapidly reduces to zero psi, the entire train must be inspected. If air pressure is present in the brake pipe, the train may proceed.

Exception: If the train exceeds 5,000 tons, it must be visually inspected, unless emergency application of the brakes occurs at a speed above 30 MPH, and it can be ascertained that the brake pipe is continuous by observing pressure being restored on the rear car after the emergency application is released, or by performing steps A and B above.

All trains: Trains must be visually inspected before proceeding if unusual slack action was experienced when stopping or if excessive power is required to start the train. If excessive power is not required to start the train, and physical characteristics prevent a complete walking train inspection, inspect as much of the train as possible. The train may then be moved, but may not exceed 5 MPH for the distance necessary to complete the inspection, and must be stopped immediately if excessive power is required to keep the train moving.

The last paragraph under the heading "Train on Adjacent Track" is amended to read: A train on an adjacent track that

receives radio notification must approach the location at restricted speed and stop short of any obstruction or flagman. When advised that the track is clear and that it is safe to proceed, these restrictions no longer apply.

Rule 6.25 Movement Against the Current of Traffic—the following bullet is added:

- Rule 9.17.1 (Signal Protection in ABS by Lining Switch)

Rule 6.27 Movement at Restricted Speed—is changed to read:

When required to move at restricted speed, movement must be made at a speed that allows stopping within half the range of vision short of:

- Train
- Engine
- Railroad car
- Men or equipment fouling the track
- Stop signal
- or
- Derail or switch lined improperly

When a train or engine is required to move at restricted speed, the crew must keep a lookout for broken rail and not exceed 20 MPH.

Comply with these requirements until the leading wheels reach a point where movement at restricted speed is no longer required.

Rule 6.29.1 Inspecting Passing Trains—the paragraph “Ground Inspections” is changed to read:

When a train is stopped and is met or passed by another train, crew members must inspect the passing train. The trainman’s inspection must be made from the ground if there is a safe location. If safe to do so, a trainman must cross the track and inspect the side of the passing train opposite the stopped train. However, during snow and icy conditions, crew members may remain in the locomotive cab when inspecting passing trains.

Rule 6.30 Receiving or Discharging Passengers— is changed in its entirety to read:

A. Passenger Crew Responsibilities

When approaching a station to receive or discharge passengers, determine if the train is routed on the track nearest the station platform. If other trains could pass on a main track or controlled siding between the passenger train and the station platform:

- Communicate with the train dispatcher to determine whether any trains are approaching between the train and the station platform.
- Do not make the station stop until assured that trains will not pass between the train and the station platform.

If unable to communicate with the train dispatcher, the station stop may be made after the crew determines that no trains are approaching on the track between the train and the station platform. Before making the station stop, the conductor must assign crewmember responsibilities to ensure passenger safety. If during the station stop a train is seen or heard approaching, crewmembers must take action to keep passengers from fouling the affected track.

B. Responsibilities of Approaching Movements

When notified that a passenger train will be at a station, do not pass between station platform and a passenger train until assured that all passengers and employees have cleared the track between the passenger train and the station platform. Movement may then pass when preceded by an employee walking ahead of the movement.

C. Other than Main Track Movements

A movement must not pass between a passenger train and the station platform being used unless safeguards are provided.

Rule 6.31.1 Permanent Speed Restrictions—new rule added:

Permanent speed restrictions must not be exceeded until the rear of the train clears the limits of the restriction, unless otherwise specified.

Rule 6.32.2 Automatic Crossing Devices—the title of the rule is changed to “**Automatic Warning Devices**”.

The second paragraph and the three bullets are changed as follows:

Under any of the following conditions, a movement must not foul a crossing equipped with automatic warning devices until the device has been operating long enough to provide warning and the crossing gates, if equipped, are fully lowered:

- Movement has stopped within 3,000 feet of the crossing.
- Movement is within 3,000 feet of the crossing and speed has increased by more than 5 MPH.
- Movement is closely following another movement.
- Movement is on other than the main track or siding. or
- Movement enters a main track or siding within 3,000 feet of the crossing.

Item A, Automatic Warning Devices Malfunctioning, the table is changed as follows:

Movement When Notified that Automatic Warning Devices have an Activation Failure, are Disabled or Malfunctioning	
If.....	Then...
The crew is notified that the crossing warning system has an activation failure or that the crossing warning system has been disabled, and an equipped flagger is not at the crossing to provide warning.	Stop before occupying the crossing. After a crew member is on the ground at the crossing to warn highway traffic, proceed over the crossing on hand signals from that crew member. Then proceed at normal speed.
The crew is notified that the crossing warning system is malfunctioning and an equipped flagger is not at the crossing to provide warning.	Stop before occupying the crossing. After a crew member is on the ground at the crossing to warn highway traffic, proceed over the crossing on hand signals from that crew member, or If devices are seen to be working or when relieved by the train dispatcher, proceed over the crossing at 15 MPH without stopping until the head end of the train completely occupies the crossing. Then proceed at normal speed.
The crew is notified that the crossing has one equipped flagger who is unable to provide warning in all directions of approaching traffic.	Proceed over the crossing at 15 MPH without stopping until the head end of the train completely occupies the crossing. Then proceed at normal speed.
The crew is notified that the crossing has one or more equipped flaggers who are able to provide warning in all directions of approaching traffic.	Proceed over the crossing at normal speed without stopping.
NOTE: An equipped flagger is a person other than a crew member who is equipped with an orange vest, orange shirt or orange jacket. At night, the vest, shirt or jacket must be fluorescent. The flagger must have a red flag or stop paddle by day and a light at night.	

Rule 6.32.4 Clear of Crossings and Signal Circuits—the 2nd paragraph is changed to read:

When practical, avoid leaving cars, engines, or equipment standing closer than 250 feet from a road crossing when there is an adjacent track.

Rule 6.32.6 Blocking Public Crossings—is changed to read: When practical, a standing train or switching movement must avoid blocking a public crossing longer than 10 minutes.

Rule 7.6 Securing Cars or Engines—the first paragraph is amended to read:

Do not depend on air brakes to hold a train, engine or cars in place when left unattended. Engineer and conductor are jointly responsible, through job briefing, to ensure equipment left unattended is properly secured and a sufficient number of

hand brakes are applied to prevent movement. If handbrakes are not adequate, block the wheels.

Rule 7.7 Kicking or Dropping Cars—is amended to read: Kicking cars is permitted only when it will not endanger employees, equipment or content of cars. Dropping cars is permitted only on territory where specifically authorized by individual subdivision special instructions.

Before dropping cars, crew members must fully understand the intended movement. They must verify that the track is sufficiently clear and that switches and hand brakes are in working order. If possible, the engine must run on a straight track.

Rule 8.3 Main Track Switches—the following bullet is added:

- Within ABS-TWC, ABS DTC or Rule 9.14 (Movement with the Current of Traffic) territory at the entering switch of a siding after the following has been done:
 1. Communication has been established between crews of trains meeting or passing.
 2. An understanding has been reached that the train on the main track will stop and restore the switch to the normal position. A crew member must not report clear of the limits until it is known the switch is lined and locked in normal position.

Rule 8.16 Damaged or Defective Switches—is changed to read:

Report a switch that is damaged or defective to the train dispatcher, yardmaster or supervisor in charge. Tag the switch, spike the switch if it is necessary unless the trackman or other competent employee takes charge. If the switch cannot be made safe, provide protection at once.

Rule 8.19 Automatic Switches—following paragraph added:

In non-signaled territory, where both ends of a siding are equipped with automatic switches, facing point movements beyond signal displaying stop indication must be made prepared to stop at the next signal at that station.

Rule 8.19 Automatic Switches, the paragraph "On Siding" is cancelled. (Be governed by Rule 9.21, Overlap Circuits).

Rule 8.20 Derail Location and Position—the following is added:

Derails dedicated for use in conjunction with Rule 5.12 (Protection of Occupied Outfit Cars), Rule 5.13 (Blue Signal Protection of Workmen), and roadway worker protection must be in the derailing position only when their use is required for such protection. When their use is not required for protection:

- Remove portable details
or
- Lock fixed derails in non-derailing position with an effective locking device.

Rule 9.8 Next Governing Signal—the 2nd sentence is changed to read:

This does not apply when a rule or previous signal indication requires train to be prepared to stop at the next signal or move at restricted speed.

Rule 9.15 Track Permits—is changed to read:

On tracks designated in the timetable, a track permit will authorize a train, track car, machine or employee to occupy the main track or tracks between specific points. The track permit must be issued by a designated control operator under the direction of the train dispatcher. Within these limits, movements may be made in either direction according to signal indication.

Limits designated by a switch extend only to the signal governing movement over the switch unless otherwise designated.

A train must obtain authority to pass a controlled signal displaying Stop indication to enter track permit limits. Within track permit limits a train, after stopping, may pass a signal displaying Stop indication at restricted speed without further authority, except when signal governs movement at an interlocking.

Rule 9.15.2 Clearing Track Permits—the following is added: Employees reporting clear of track permit authority must state:

- Their name or other identification
- Track permit number being released
- Limits being released.

Rule 9.17.1 Signal Protection in ABS by Lining Switch—the following is added:

In addition, before crossing over or fouling a main track, trains must comply with the following:

- a. Do not move until 5 minutes after lining the switch.
- b. Locate the block signal that protects the switch against trains moving with the current of traffic. To move against the current of traffic past that signal, pull the leading engine or car 100 feet beyond the signal. Wait 10 minutes before moving any further against the current of traffic. Then proceed at restricted speed.
- c. To move against the current of traffic beyond any further signals, obtain authority as outlined in Rule 14.6 (Movement Against the Current of Traffic) or Rule 15.3 (Authorizing Movement Against the Current of Traffic).

Rule 9.21 Overlap Circuits—the following is added:

Unless otherwise instructed by the train dispatcher, a train on a siding at a meeting or passing point must not pass an overlap sign location until authorized to leave the siding.

Rule 10.1 Authority to Enter CTC Limits—the two paragraphs under the heading "Signal Governing Movement Over a Hand-Operated Switch" are changed to read:

If a signal governs movement over a hand-operated switch that is not electrically locked, the control operator must authorize the train to enter the main track or controlled siding before the switch is opened. After the switch is opened, if the signal does not display a proceed indication, a crew member must wait 5 minutes at the switch. After the 5 minute wait if the signal does not display a proceed indication, move the train at restricted speed and notify the control operator.

However, if the block to be entered is occupied by its own standing train or when the hand-operated switch remains open, the movement may, after stopping, pass an absolute signal displaying a Stop indication without waiting 5 minutes and without contacting the control operator.

Rule 10.3 Track and Time—the last sentence of the 1st paragraph is changed to read:

The train may use the track in either direction within the specified limits according to signal indication until the limits are verbally released.

Rule 10.3 Track and Time—the instructions inside the box are changed to read:

Track and time does not authorize trains to occupy the main track within automatic interlocking limits.

Rule 10.3A(1) Passing Signal Displaying Stop or Stop and Proceed Indication—the following is added to Item 1: The train must move at restricted speed.

Rule 14.7 Reporting Clear of Limits—the following is added: Employees reporting clear of track warrant authority must state:

- Their name or other identification
- Track warrant number being released
- Limits being released.
- Position of switch (if switch is used to clear the main track).

Rule 14.9(A) Transmitting Track Warrants—is changed in it's entirety to read:

A. Transmitting Track Warrants

1. The train dispatcher will transmit the track warrant, followed by a summary of the total number of boxes and individual box numbers included by stating:
"This warrant has (total number) boxes marked: (Individual box numbers)."
2. An employee will enter all of the information transmitted by the train dispatcher, except the summary. As the summary is transmitted, the employee will check the total number of boxes and individual box numbers copied to ensure all items are included.
3. The employee will repeat the information to the train dispatcher, followed by a summary of the total number of boxes and individual box numbers included by stating:
"This warrant has (total number) boxes marked: (Individual box numbers)."
4. The train dispatcher will check the repeat and, if all information including the summary is correct, will state the following:
"Warrant (number) OK (time) (dispatcher initials)".
The employee will enter the OK time and the train dispatcher's initials on the track warrant and repeat them to the train dispatcher.
or
If the track warrant includes Box 7, "Not in Effect Until After Arrival of _____ at _____", the dispatcher will state the following:
"Warrant (Number) with after arrival of (train) at (location) OK (time) (dispatcher initials)." The employee will enter the OK time and the train dispatcher's initials on the track warrant and repeat the "After Arrival" information, OK time and dispatcher's initials to the train dispatcher.

Note: The summary information in Items 1, 2 and 3 above will be exempt from pronouncing and spelling numbers as indicated in supplement to GCOR 6.1, Repeating Instructions.

Rule 15.1 Track Bulletins—under the heading "Receipt and Comparison of Track Bulletins", the last sentence of the 1st paragraph is changed to read:

The conductor and engineer must have copies of all track bulletins listed and other instructions required. Each crew member must read and understand them.

The following is added:

All crew members are responsible for complying with the requirements of track bulletins and reminding each other of those requirements.

At locations where track warrants listing track bulletins are received by printer or fax, crew members must verify that route description, if printed, covers the intended route of their train. If it does not, contact the train dispatcher and determine if the track warrant is valid. Also, crew members must check the date and "OK" time on the track warrant and if the track warrant is over 4 hours old, contact the train dispatcher and determine if additional track bulletins are needed.

Rule 15.1.1 Changing Address of Track Warrants or Track Bulletins—is changed to read:

If the address must be changed on a track warrant or a track bulletin that does not grant authority, the train dispatcher may

change the train symbol, engine number, direction, or date verbally.

Rule 15.2(A) Verbal Permission—the 2nd bullet of Item 2 and the paragraph following the 2nd bullet are changed to read as follows:

- (Train) may proceed through the limits at _____ MPH (or maximum authorized speed) but not exceeding _____ MPH between/at (specifying location) (specifying track when necessary)."

Unless otherwise restricted, the train may proceed at the speeds specified. Not more than two speeds may be authorized.

Rule 15.12 Relief of Engineer or Conductor During Trip—the first three paragraphs are changed to read:

When a conductor, engineer, or both are relieved before trip is finished, they must contact the train dispatcher and comply with instructions concerning the handling of their track warrants, track bulletins, and other instructions.

When crew members are called to relieve a train at other than the initial station, crew members must contact the train dispatcher before leaving the initial station and determine if any track warrants, track bulletins, or other instructions must be obtained.

Rule 15.13.1 Voiding General Track Bulletins or Restrictions—the following new rule is added:

To void a bulletin restriction or an entire general track bulletin, train dispatcher may do the following:

1. "Restriction (number) _____ is void."

An employee must repeat this information to the train dispatcher. If the information is correct, the employee must write "Void" in the margin to the left of the restriction made void.

2. "General track bulletin No. _____ is void."

An employee must repeat this information to the train dispatcher. If the information is correct, the employee must write "Void" across the first page of the general track bulletin being voided.

Rule 18.0 Occupancy Control System (OCS)

Rule 18.1 OCS for Trains and Engines

In addition to GCOR Rule 6.13 (Yard Limits), the following also applies at locations designated under the individual subdivision special instructions:

Occupy the Main Track

Before occupying the main track, trains or engines must receive one of the following permissions from the train dispatcher.

- Written OCS.
- Proceed indication on a controlled signal.
or
- Verbal permission.

Individual subdivision special instructions or general order will designate locations where permission is granted by:

- Controlled Signal Indication. (Movements against the current of traffic may be authorized by controlled signal indication.)
- Verbal Permission. (Movements against the current of traffic may be authorized by verbal permission.)

Written OCS must be used when permission is joint with Maintenance of Way.

OCS does not relieve a train or engine from complying with restricted speed in nonsignaled territory.

The employee requesting OCS will state name, occupation, location and train or other identification. The employee will repeat the permission granted. Written OCS must be copied on

the prescribed form. If the permission is repeated correctly, the train dispatcher will acknowledge. The train must not move until the engineer understands the OCS granted. Written OCS record must be retained until OCS is released.

Employees must advise the train dispatcher when they are clear of the limits. Exception: Trains or engines clearing OCS limits at a control point are not required to report clear.

Employees releasing OCS must state the following:

- Their name.
- The OCS number being released, if applicable.
- The track limits being released.
- The time OCS limits released.

Designated Limits

OCS limits must be designated by specifying track, where required, and exact points such as switches, mile posts, or other identifiable points.

Direction of Movement

When trains or engines receive permission to proceed from one point to another, they must move only in the direction specified.

When trains or engines receive permission to work between two specific points, they may move in either direction between those points.

Same Limits with a Train or Engine

Before a train or engine receives permission to occupy the same limits with a train or engine working between two locations, a crew member of each train or engine must be notified. When notified, all movements must be made at restricted speed.

Same Limits with Men or Equipment

Before a train or engine receives permission to occupy the same limits with men or equipment, the maintenance of way employee in charge and a crew member of the train or engine must be notified. When notified, all movements must be made at restricted speed.

Permission Expired

When unable to contact the train dispatcher and OCS permission expires, permission is extended until the train dispatcher can be contacted.

OCS Form

The following is an example of the OCS form:

“OCS” Occupancy Control System

No. _____ 19 _____
 To: _____
 At: _____
 A. OCS No. _____ is cancelled.
 B1. Proceed from _____ to _____ on _____ track.
 B2. Proceed from _____ to _____ on _____ track.
 C. Work between _____ and _____ on _____ track.
 D. Do not proceed until _____ arrives at _____.
 E. Following _____.
 F. Limits occupied by train or engine between _____ and _____.
 G. Limits occupied by men or equipment between _____ and _____.
 J. This permission expires at _____.
 K. Do not exceed _____ MPH between _____ and _____.
 L. Other specific instructions: _____
 OK _____ Issued by _____ Limits reported clear at _____.
 (Mark X in box of each item instructed.)

Glossary—the following abbreviations are added:

- AS Absolute Signal
- CNT Connection
- EBCS Eastbound Controlled Signal
- EE East End

- NA Not Applicable
- NBCS Northbound Controlled Signal
- NE North End
- RESTRN Restriction
- RL Restricted Limits
- SBCS Southbound Controlled Signal
- SE South End
- SS Station Sign
- WBCS Westbound Controlled Signal
- WE West End

Glossary—New glossary terms are added:

General Track Bulletin—A notice containing track bulletin restrictions and other conditions affecting train movement.

Remote Control Operator (RCO)—Trainman operating Remote Control Locomotive (RCL) equipment.

Men and Equipment—A term referring to Engineering Department employees and their related equipment.

The term “Conductor” is changed to read:

Employee in charge of train or yard movement. (See also Remote Control Operator).

The term “Engineer” is changed to read:

Also includes student engineers, fireman, and hostlers. (See also Remote Control Operator).

Crossover—is changed to read: A combination of two switches that connect two adjacent tracks.

15. General Code of Operating Rules and Maintenance of Way Operating Rules, Supplemental Instructions

Several rules in the General Code of Operating Rules and the Maintenance of Way Operating Rules allow and/or require that supplemental instructions be carried in the timetable or special instructions. The following are supplemental instructions that apply to Burlington Northern Santa Fe Railway.

GCOR Rule 1.17—Apply the following when reporting Hours of Service: Time spent waiting for deadhead transportation must not be counted when determining time on duty for hours of service purposes when relieved of all duties as outlined in GCOR Rule 1.17.

GCOR and MWOR Rule 3.3 Time Signals—Dial 8-998-8463 (8-WWV-TIME) or 8-435-6000 to obtain coordinated universal time signal.

GCOR Rule 4.3 Timetable Characters

- A Automatic Interlocking
- B General orders, notices, and circulars
- C Radio communication
- g Gate, normal position against conflicting route
- G Gate, normal position against this subdivision
- J Junction
- M Manual interlocking
- P Telephone
- R Restricted Limits
- S Railroad crossing protected by permanent stop sign
- T Turning facility
- U Railroad crossing not protected by signals or gates
- X Crossover
- X(2) ... Multiple crossovers
- Y Yard Limits

GCOR and MWOR Rule 5.5 Permanent Speed Signs—the following paragraphs are added:

Reduced speed limits may be designated by Advance Warning sign (diagonally upward), Reduce Speed sign (rectangle) and Resume Speed sign (vertical).

The Advance Warning sign will be placed two miles in advance

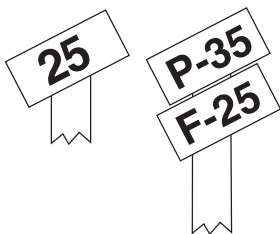
of the location where the lower speed takes effect. At the point where the reduced speed applies, a speed sign will repeat the permissible speed. The lower speed will be in effect until a Resume Speed sign or another Speed sign is displayed.

At the end of a reduced speed zone, a train or engine will be governed by a Speed sign displaying a higher speed or a Resume Speed sign which will authorize the maximum permissible speed on that subdivision. In either case, the speed must not be increased until the entire train has passed the sign displayed or has cleared the limits of the restriction.

Locations where reduced speeds are required, but which are not indicated by signs, are listed in the special instructions for each subdivision.

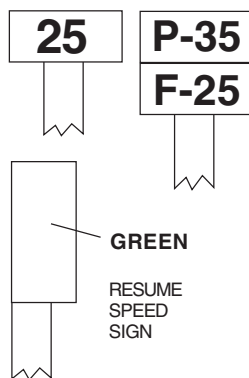
Permanent speed signs will not be placed for trains moving against the current of traffic unless otherwise indicated.

ADVANCE WARNING SIGN



Note:
Advance Warning Sign and Speed Sign have yellow background and black letters and/or numbers, except signs for TALGO operations have black backgrounds and yellow letters and numbers (not shown).

SPEED SIGN



These signs, as illustrated, apply to train and engine movements as follows:

Figures preceded by letter P apply to passenger trains, except TALGO, if there is a TALGO sign.

Figures preceded by letter F apply to freight trains.

Figures preceded by letter T apply to TALGO passenger trains.

Figures not preceded by a letter apply to all trains.

GCOR and MWOR Rule 5.11 Engine Identification

Number—the following supplemental instruction is added:

Engines with the following initials stenciled on the side of the locomotive will be identified as NS engines:

SOU, NW, PRR, CG, INT, GSF, AGS, CRCX and CR (ConRail).

Engines with the following stenciled on the side of the locomotive will be identified as CSXT engines:

CSXT, CSX and CSX Transportation.

GCOR Rule 6.1 Repeat Instructions—the following supplemental instruction is added:

When issuing or repeating track and time, track warrants, track bulletins, track permits and OCS, observe the following guidelines:

Directions—Directions (North, South, East, West) must be pronounced, then spelled.

Numbers—When the figure has more than one number:

1. State the number in words. (Example: Three-hundred sixty-five)
2. State each figure in the number. (Example: Three, six, five)

When the figure has only one number:

1. State the number. (Example: Three)
2. Spell the word. (Example: T, H, R, E, E)

GCOR Rule 6.26 Use of Multiple Main Tracks—the following supplemental instruction is added:

Unless otherwise indicated in the individual subdivision special instructions, when using main tracks in westward or southward timetable direction, they will be numbered consecutively from right to left beginning from Main 1. When using in eastward or northward timetable direction, they will be numbered from left to right beginning with Main 1.

GCOR 6.32.2—the following supplemental instruction is added:

In the application of this rule, a crossing having a broken gate(s) is to be considered as having working devices when the balance of the automatic warning devices are seen to be working. Movement may proceed over the crossing at 15 MPH without stopping.

GCOR and MWOR Rule 15.1 Track Bulletins—the following supplemental instruction is added:

BNSF Railway may use a general track bulletin instead of a track warrant to deliver track bulletin restrictions. All rules that apply to track bulletins apply to general track bulletins. Additionally, conductor and engineer may receive a general track bulletin instead of a track warrant listing all restrictions affecting their train movement.

GCOR Rule 15.2A Verbal Permission—the following supplemental instruction is added:

Rule 15.2A, Verbal Permission, when General Track Bulletins are used, the 1st paragraph is changed to read:

When granting verbal permission, begin the communication using the following words:

“Foreman (name and/or Gang No.) _____ using Form B Restriction No. _____ between MP _____ and MP _____ (specifying subdivision when necessary).”

Track and Time—the following supplemental instructions are added:

The employee requesting track and time will state name, occupation, exact location and train or other identification. The employee will copy the authority granted on the form provided for that purpose, and repeat from the form the authority granted. If the authority is repeated correctly, the control operator will acknowledge with “That is correct.” The train must not move until the engineer understands the track and time granted.

The employee who requests track and time must retain the written track and time record until track and time is released.

When requesting track and time, if communication is lost or an incomplete message is received while the control operator is issuing track and time, or if after repeating the authority to the control operator, the employee does not hear the response from the control operator “That is correct,” the employee must not occupy the track. The employee requesting track and time must contact the control operator as soon as possible and confirm with the control operator that the track and time was not received.

Track Warrants—the following supplemental instructions are added:

Track warrants issued mechanically through printer or fax print only items checked. The item numbers checked will be listed on the bottom of the track warrant. Notify the dispatcher if:

- The track warrant does not contain all items listed on the bottom.
- Computer generated line on the bottom listing the items checked is missing.
- or
- Track warrant is missing text or is otherwise not legible.

When contacted, train dispatchers will arrange to provide crews with complete, legible copies and report incident to their supervisor.

When track warrant requires "Not in Effect Until After the Arrival of _____," the limits must not be occupied until the train to be met has been identified by engine number and the rear end marker has passed the point of restriction.

In non-signaled territory, a train may only be granted a Box 7 "Not in Effect Until After the Arrival of _____" track warrant, after the following requirements have been completed:

1. Dispatcher advises the train that will receive the Box 7 track warrant of the identification of train(s) that will be listed in Box 7 (by initials, engine number and direction).
2. The train that will receive the Box 7 track warrant establishes the location of the train(s) that will be listed in Box 7 (by initials, engine number and direction), advising the dispatcher that direct communication has been made and the location of the train(s) contacted.

3. The train to receive the Box 7 track warrant has stopped at the meeting point and has notified the dispatcher that they are stopped.

(Note: A train stopped short of the meeting point for topographical reasons, i.e., road crossings, grade considerations, etc., may be considered as stopped at the meeting point for application of this process).

In non-signaled territory after the meet has occurred, the train with Box 7 must establish positive radio contact with the train listed in Box 7 to confirm the identity of the passing train.

If radio communication cannot be established, the train dispatcher must be contacted to provide the required confirmation. The train identification, time passed, location passed, or current time and location must be written on the track warrant form by both the conductor and engineer of the train being so restricted.

In non-signaled TWC territory, when a train is approximately 2 miles in advance of a siding or junction, a crew member must transmit the following by radio:

"Train identification (initials, engine number and direction) is approaching (location name) at (speed) MPH."

At the completion of each trip, all track warrants reported clear or made void must be turned in with the signal awareness form as directed by the Division General Manager.

Reporting Clear/Releasing Track Warrants

Before reporting past a specific location or reporting clear of a track warrant, crew members will be governed as follows:

Engineer and conductor are jointly responsible, through job briefing, to ascertain and agree on the exact location that their entire train has passed.

When reporting past a specific location:

- Engineer will communicate with the train dispatcher in the following format: "Locomotive Initial, Number, (Direction), Engineer (Name) and Conductor (Name) verify that our entire train has passed (Location) - Over."

Mechanically Transmitted Track Bulletins—Mechanically transmitted track bulletins from TSS provide summary information indicating the total number of lines or restrictions issued. Employees who receive these documents must cross reference the summary with the document to ensure all items are listed.

16. Maintenance of Way Operating Rules, Changes and Additions

Rules listed in Item 4, General Code of Operating Rules Items, of the individual subdivision timetables are in effect for employees governed by the Maintenance of Way Operating Rules when applicable.

17. Air Brake and Train Handling Rules, Changes and Additions

The following revised pages are in effect July 11, 2004: Title page, 2, 3, 4, 9, 10, 13, 14, 15, 16, 19, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 32, 35, 36, 37, 38, 43, 44, 45, 46, 51, 52, 53, 54, 55, 56, 63, 64, 75, 76, 89, 90, 93, 94.

ABTH Rule 101.2(B), Conducting a Locomotive Daily Inspection, Control Compartment/Locomotive Cab, new Item 12 is added:

12. A Sanitary Toilet Facility

Note: Toilet facilities are not required on locomotives used in switching or transfer service on which employees have railroad-provided sanitation facilities outside the locomotive that meet sanitation standards at frequent intervals during the course of their work shift. However, toilet facilities on any locomotives must be part of the locomotive daily inspection and defect reporting.

In addition, unoccupied locomotives in trail position on through freight trains are not required to have operative or sanitary toilets. However, any locomotive toilet found defective or unsanitary, whether required or not, are to be reported as defective.

Locomotive with defective or unsanitary toilet may not be used as lead unit, unless:

- 1) No other suitable locomotives are available for use
- 2) It is not possible to switch another locomotive into lead position
- 3) Location is not equipped to clean the sanitation compartment, if unsanitary, or repair the toilet facility if defective.

ABTH Rule 101.10.1, Cab Signal Equipment-Foreign Locomotives—new rule is added:

Cab signal equipment on foreign locomotives operating on BNSF may inadvertently activate and cause a penalty application if no action is taken by the engineer. These false activations are often related to the additional electrical current in the rails when train is near road crossings equipped with automatic warning devices.

When operating a foreign locomotive equipped with cab signal equipment that cannot be cut out, should cab signal equipment inadvertently activate, depressing the button labeled "Cab Signal Acknowledge" during the warning period will prevent a penalty application. If a penalty application has occurred from the Cab Signal System it will be necessary to depress the "Cab Signal Acknowledge" button before moving the automatic brake valve from suppression position to recover from the penalty brake application.

ABTH Rule 102.12.6, Distributed Power/Helper Limitations and Placement, DP/Helper Train Make Up Restrictions, under Item 1, new Item E added:

e. Multiplatform (2 unit), solid drawbar-connected gondola cars with initials AMGX.

ABTH Rule 104.14, Determining Number of Hand Brakes— the chart on page 64 is changed to read:

>1000 (greater than 1000) is changed to read <1000 (less than 1000).

New ABTH Glossary Term added - Off Air:

Off Air - Off air means when it is known that a brake system has not been connected to a continuous source of compressed air of at least 60 pounds per square inch (psi) for a period of 4 hours or more. The "source" of compressed air is brake pipe pressure being supplied at the locomotive(s) or yard air connection to the brake system. If brake pipe gradient is observed, no minimum brake pipe pressure at the opposite end of a brake system is required as long as 60 psi or more is being maintained at the charging end of the brake system.

18. Safety Rules, Changes and Additions
Maintenance of Way Safety Rules

The following pages are revised effective October 10, 1999: Title page, 2, 3, 4, 17, 18, 29, 30, 53, 54, 75, 76, 77, 78.

MW Rule S-1.1 Job Safety briefing—the following paragraph is added: Employees Fouling the Track

Employees must always be alert and expect the movement of trains, engines, cars or other moveable equipment at any time, on any track and in either direction. Before fouling any track, employees have an individual responsibility to determine it is safe to do so. If the track is occupied by rail equipment, employees must insure appropriate protection has been provided for the task to be performed as indicated in the following rules:

Safety Rule S-13.1.3 - Tracks (Crossing tracks, stepping on rails and fouling tracks)

Safety Rule S-13.1.11 - Installing or Removing Marker

Safety Rule S-13.2 - Coupling/Uncoupling Rail Equipment

Safety Rule S-13.3 - Air Hoses and Angle Cocks

Safety Rule S-13.4 - Crossing Over Rail Equipment

Safety Rule S-13.6 - Operating Hand Brakes

Safety Rule S-13.7 - Operating Switches and Derails

MWOR Rule 5.13 - Blue Signal Protection of Workmen

MW Safety Rule 1.2.11- Medical Conditions, new rule added:

All employees are responsible to ensure their personal medical condition do not interfere with their ability to safely perform their duties.

Employees with medical conditions that may adversely (such as uncontrolled diabetes, high blood pressure, sleep disorders including apnea, visual impairment, hearing impairment, etc) affect their ability to work safely must inform their medical practitioner of their job duties.

The medical provider must determine that any prescribed treatment including medication will not impair the employee from safely performing their job duties. The employee must notify their physician/medical provider if prescribed treatment and/or medication is affecting their ability to safely perform their job duties.

MW Rule S-1.4.5 On and Off Moving Equipment—is deleted in its entirety.

MW Rule S-1.5.3, Footing—the following sentence is added: Except in emergency, running is not permitted in the performance of duty.

MW Rule S-6.1 Area Protection—is changed to read: Clear all combustible material or rubbish 35 feet away from the area where welding or cutting will be performed. Where relocation is impracticable, combustibles shall be protected with flameproof covers or curtains.

MW Rule S-6.7.2 Welding Hoses—is changed to read: Use only grade "T", 3/8-inch twin hoses for gas welding, cutting, and heating operations.

MW Rule S-7.3 Precautions During Use—the sentence reading:

"When using tools such as knives, chisels, and screwdrivers, direct sharp edges away from your body or hands." is deleted.

MW Rule S-7.3.2 Jacks (Other Than Track Jacks)—the following new rule added:

Use cushioning material of appropriate construction and thickness between jack and equipment to prevent slippage. Do not allow metal-to-metal contact.

MW Rule S-7.3.3 Tools With Sharp Edges/Blades—new rule added:

- Pocket knives are not to be used to perform work tasks.
- When using hand tools that have sharp edges/blades, direct cutting edges away from the body, including the hands.
- When using hand tools that have sharp edges/blades, wear cut-resistant gloves.
- Where utility knives are determined as the tool of choice for a task, use utility knives that have self-retracting blades.

MW Rule S-7.8.7 One-Man Tie Tongs—the 1st paragraph is changed to read:

One-man tie tongs are to be used for the spacing, alignment, sliding or positioning of track ties, which are not fastened to or bound by rail or other material.

The following exception is added after the 1st paragraph:

Exception: Two personnel, each equipped with a set of one-man tie tongs, may use one-man tie tongs for the spacing, alignment, sliding or positioning of switch ties. This would only be done, however, when mechanical lifting means are not available, or when regarding a specific job, it is determined through risk assessment that the use of one-man tie tongs is the preferred method for the spacing, alignment, sliding or positioning of switch ties.

MW Rule S-7.8.16, Spike Lifter—the following new rule is added:

Spike lifters must be equipped with:

- A deflector plate at the point-of-operation.
- A rubber chip guard or Rhino liner coating around the striking face.

MW Rule S-8.0, Intermodal/Automotive Facility Safety, new rule added:

MW Rule S-8.0, Intermodal/Automotive Facility Safety
MW Rule S-8.1 Core Intermodal/Automotive Facility Safety Rules

- Establish proper track protection before performing work.
- Vehicles must not STOP on, PARK on, or FOUL tracks, without proper protection.
- Do not drive or park on lift equipment lanes, under lift equipment, or impede lift equipment movement.
- Obey all posted safety signs, signals, and painted markings.
- All vehicles must turn on headlights and use turn signals.
- Never place any part of your body in a pinch point position (i.e. when removing IBC with container suspended, standing between containers, trailers, chassis, or area where hitch is to collapse), or walk under equipment being lifted.
- Maintain three-point contact when getting on and off equipment.

MW Rule S-8.2 Track Protection

In addition to BNSF on track protection procedures used for work group protection the intermodal hub operations manual identifies procedures for BNSF intermodal employees and contractors. The intermodal ramp coordinator is responsible for ensuring that protection is provided for ramp personnel performing functions on or in the vicinity of intermodal tracks, for properly locking out any track(s) to be worked on, and for

properly removing track protection, in accordance with the Intermodal Hubs Operations Track Protect Section.

MW Rule S-8.3 Vehicles Within Intermodal Facility

MW Rule S-8.3.1 Vehicle Requirements

Required safety equipment on yard vehicles must be functioning and used when vehicle is operated on the facility. This includes strobes or oscillating lights, headlights, tail lights, and brake lights, turn indicators, and windshield wipers. In addition, all yard pickup trucks, crew vans, trailer repair, tire repair and other vehicles permanently assigned to the facility must be equipped with chassis deflector bars.

MW Rule S-8.3.2 Vehicle Operations

- Stop for flares and flashing lights at crossings.
- Yield to trains, yard equipment and pedestrians.
- Cross only at designated crossings.

MW Rule S-8.4 Check Point Ingate / Outgate Procedures

All vehicles entering or departing through checkpoint must comply with the following procedures:

(1) An area has been establish 35 feet from the inspection lane, and is declared the safe clearance zone between trucks and inspection lane. A three foot wide area is painted RED across each lane.

Exceptions: *South Seattle, Billings, Shelby, Dilworth* - (No safe zone required not manned)

St. Paul, Spokane, Portland - (15 feet from the inspection lane)

San Bernardino - (KIOSK outgate 15 feet from the inspection lane)

Rancho East & West - (10 feet from the inspection lane)

(2) Stop signs are posted at this area in each check lane and the ground stenciled with the word STOP (painted in WHITE) across the lane.

(3) Mounted on the pole below the stop sign is a white sign with black lettering stating: "WAIT FOR SIGNAL TO MOVE FORWARD".

(4) Cones with a height of 48 inches will be placed in the middle of each check lane and removed only by the inspector that signals a vehicle to pull forward. When the vehicle is stopped the inspector will replace the cone back into the middle of the check lane. This procedure is repeated each time an inspection is to be performed.

(5) The cone shall remain in the middle of a clear check lane until the inspector removes the cone and signals the vehicle to pull forward.

MW Rule S-12.1.2 Speed Limits—is cancelled in it's entirety. (Rule S-12.1.1 will govern concerning speed limits).

MW Rule S-12.5 Seat Belts—is amended by adding the following exception:

Exception: Seat belts are not required when employees are operating vehicles while performing train inspections or coupling air hoses. When operating the vehicle in travel to and from such work activities, seat belts must be worn.

MW Rule S-13.1.1 Going Between Cars or Locomotives Coupled to Locomotives—is deleted in its entirety.

MW Rule S-13.1.3 (A) Crossing Tracks—the first bullet is changed to read:

Do not cross within 25 feet of the end of standing equipment.

MW Rule S-13.1.5 (B) Riding In or On Cars—is amended as follows:

Change first bullet to read:

Do not ride on the crossover platform or end ladder of any car other than tank cars as specified in this rule.

Add new 8th bullet reading:

Tank Cars: If so equipped, employees may ride on the outer

portion of the crossover platform, positioned outside the nearest rail. When riding on a tank car crossover platform, face the direction of movement, and:

1. When riding the trailing end, face the horizontal hand hold, maintaining three-point contact.
2. When riding the leading end, with your back against the horizontal hand hold, loop your arm closest to the center of car around the horizontal hand hold."

MW Rule S-13.1.9 Chocking Cars, item 4 is changed to read:

4. Use only a sound wooden chock, metal chock or chock made from plastic or composite material designed for chocking cars. Do not use a track spike.

MW Rule S-13.5.1 Getting On Moving Equipment —the first line is changed to read:

In an emergency, or when it is authorized to get on moving equipment:

MW Rule S-13.5.2 (B) Moving Equipment—the first line is changed to read:

In an emergency, or when it is authorized to get off moving equipment:

MW Rule S-13.6.3 Position to Operate—is amended by adding the new Item E:

E. Vertical wheel hand brakes may be operated without getting on the railcar if:

1. The car remains stationary.
2. Both feet remain flat on the ground and outside the rail.
3. Elbows are slightly bent during operation.
4. One hand can hold onto the grab iron while the other hand is used to operate the brake wheel.

MW Rule S-13.7.2 Operating Ground Throw or "Flop Over" Switch—add the following to Item 2:

Use two hands when operating the switch.

MW Rule S-13.7.5 Switch Heaters—is changed to read:

When working around burning switch heaters, avoid contact with heaters or switch rails.

MW Safety Rule S-14.1.2, Seat Belts—is changed to read:

Wear seatbelts while operating or riding in equipment or vehicles that are equipped with them. Seatbelts may be removed when:

- * Approaching highway grade crossings and the field of view is obstructed, or
- * Employees are operating cranes that require being seated in the upper rotating structure, (e.g. Locomotive Cranes, Truck Cranes, Rail Bound Track Cranes, etc.).

MW Rule S-15.1 Storing Gas Cylinders—Item 3, the 2nd sentence is deleted reading:

No more than three cylinders may be chained together.

MW Rule 16.8 Gloves—is deleted in its entirety.

MW Rule S-16.24, Fouling Machinery—new rule added:

Before fouling the potential reach or turning radius of any part of a machine, a job briefing must be held with the operator.

MW Rule S-17.2.5 Power Line Clearance—the distance chart is changed to read:

Power Line Voltage	Distance from Power Line
50 kV or below	10 feet
50 kV - 200 kV	15 feet
200 kV - 350 kV	20 feet
350 kV - 500 kV	25 feet
500 kV - 750 kV	35 feet
750 kV - 1000 kV	45 feet

The following chart is added:

Clearances for Cranes or Other Equipment in Transit Near Power Lines

Power Line Voltage	Distances From Power Line
0.75 kV or below	4 feet
0.75 kV - 50 kV	6 feet
over 50 kV - 345 kV	10 feet
over 345 kV - 750 kV	16 feet
over 750 kV - 1000 kV	20 feet

Note: 1 kV = 1,000 Volts

MW Rule S-17.5.1 Working Near Equipment—the 1st sentence is changed to read:

Do not walk, stand, or work under a suspended load. When possible, avoid walking, standing, or working under crane booms, or in close proximity to pile driver leads.

MW Rule S-21.2.3 Protective Gloves—replace first sentence with the following:

Appropriate hand protection is required to be worn when actively engaged in work activities, except:

- when performing office activities;
- when operating highway vehicles;
- where manual dexterity is required, and there is no potential for exposure to energized electrical systems, sharp projections, hot surfaces, or corrosive chemicals, or
- when working in close proximity to machinery/equipment, where there is the possibility of gloves becoming entangled in moving parts.

MW Rule S-21.30, Personal Protective Equipment and Clothing Chart (PPE)—In the “Electrical Hazard” row, the “Remarks/Special Requirements” box is changed to read: Gloves of proper classification are to be worn when working with 50 volts and over.

MW Rule S-21.30 PPE and Clothing Chart—the following is modified:

Under the section “Chain saw, chop saw” remove the “X” under spats, leggings. Under the special remarks add “chaps required”.

MW Rule S-21.32 Work Glove Chart—the following is added: Add entry to the matrix entitled “Spike Keg Handling”. Show an “X” in the column entitled “Cut Resistant”.

MW Rule S-21.32, Work Glove Chart (PPE)—In the “Banding Material” row, add an “X” in the “Leather Palm” box.

Add new row: “Switching”. Letter “O” will be in the following boxes:

Brown Jersey, Canvas, Grip, Leather Palm, Vinyl-Coated Knit-Lined, Leather Driver’s, and Cut Resistant.

MW Rule S-25.2 Stretches, is changed in its entirety to read:

Overview

Check with your physician before beginning a new exercise program, or if you have had recent joint trouble, muscle problems, or surgery.

- Don’t bounce.
- Keep the stretch mild and comfortable.
- Relax muscles as you stretch.
- BREATHE, don’t hold your breath.
- Hold your stretch until tension releases, and then go further into another mild stretch.
- You should NEVER feel pain during or after a stretch.
- Stretch before you work, before any physical exertion and periodically to relieve muscle tension.
- A good rule of thumb is to stretch every 20 to 30 minutes.
- Don’t forget to stretch both sides of the body when stretching.

- Tension for the initial stretch should release within 60 seconds. If it doesn’t, reduce the intensity of the stretch slightly.

Benefits

- Increases range of motion, reducing risk of injury near joint limits.
- Warms muscles, reduces internal friction, and “resets” discs prior to activity.
- “Pre-fuels” muscles with oxygen before activity.
- Helps muscles relax and reduces soreness after activity.

BACK OF LEG

- Put one foot forward, on heel.
- Bend back knee slightly.
- Bend forward at hips with straight back.
- Support upper body with hands on your bent knee.
- Arch your back slightly.
- Gently move your butt straight back to put tension on the back of leg.
- Using chair for support, bend at the hips and keep the three natural curves of your back.
- Continue to bend forward at the hips until you feel mild tension in the muscles at the back of the leg.

FRONT OF THE HIP

- Place one foot forward.
- Keep your feet parallel to each other.
- Do not arch your back.
- Rotate your butt under until you feel mild tension in the front of hip of the straight leg.

UPPER BACK

- Cup your hands together in front of you.
- With elbows slightly bent, move your cupped hands down.
- Move your cupped hands away from your body until you feel mild tension.

FOREARM

- Slowly bend or extend your wrist.
- You can do this either with or without a gentle pull from the opposite hand.
- Stretch until you feel mild tension in the forearms.

SHOULDER AND ARM

- Let your arms hang comfortably at your sides.
- Slowly rotate your hand and arm outward until you feel mild tension.
- Rotate your arm and hand in the other direction until you feel mild tension.
- Repeat 5 times.

BACK OF NECK

- Stretch up as tall as you can through your spine.
- Tuck chin into neck.
- Lower your chin slightly until a mild stretch is felt.
- Hold until tension goes away.

SIDE OF NECK

- Stand or sit up with “Tall” posture.
- Tip ear toward shoulder. Hold mild stretch until tension goes away.
- Keep head tipped and rotate chin down towards shoulder. Hold until tension goes away.
- Lower chin towards shoulder. Hold until tension goes away.

CHEST

- Slowly round your shoulders and arms forward and back. Do 5 to 10 times each.
- Hold mild stretch in either position until stretch releases (up to 60 seconds).

UPPER ARM AND LOW BACK

- Stand up tall, stretching rib cage away from hips.

- Stretch your elbow upwards. Hold your stretch until tension goes away.
- Bend SLIGHTLY to opposite side, if needed, to increase stretch.

The last paragraph, Tips for People Leading Stretches, is unchanged.

TY&E Safety Supplement

The following pages are added effective October 30, 1998: 4a, 4b.

The following pages are revised effective January 31, 1999: 3, 4, 5, 6, 9, 10, 21, 22, 25, 26, 29, 30, 33, 34.

The following pages are revised effective October 10, 1999: Title page, 2, 7, 8.

TY&E Rule S-1.1 Job Safety briefing—the following paragraph is added:

Employees Fouling the Track

Employees must always be alert and expect the movement of trains, engines, cars or other moveable equipment at any time, on any track and in either direction. Before fouling any track, employees have an individual responsibility to determine it is safe to do so. If the track is occupied by rail equipment, employees must insure appropriate protection has been provided for the task to be performed as indicated in the following rules:

Safety Rule S-13.1.1 - Going between or Working on the End of Rail equipment

Safety Rule S-13.1.3 - Tracks (Crossing tracks, stepping on rails and fouling tracks)

Safety Rule S-13.1.11 - Installing or Removing Marker

Safety Rule S-13.2 - Coupling/Uncoupling Rail Equipment

Safety Rule S-13.3 - Air Hoses and Angle Cocks

Safety Rule S-13.4 - Crossing Over Rail Equipment

Safety Rule S-13.6 - Operating Hand Brakes

Safety Rule S-13.7 - Operating Switches and Derails

GCOR Rule 5.13 - Blue Signal Protection of Workmen

GCOR Rule 7.2 - Communication Between Crews Switching

GCOR Rule 7.13 - Protection of Employees in Bowl Track

TY&E Rule S-1.2.10 “Bill of Rights” Relative to Employees Riding in Transport Vehicles—Right 1 is changed to read:

Expect transport vehicles to be properly serviced, maintained, and in good working order. In addition, contract vans must be clean with all seat belts and all safety appliances working.

TY&E Rule S-1.2.11- Medical Conditions, new rule added:

All employees are responsible to ensure their personal medical condition do not interfere with their ability to safely perform their duties.

Employees with medical conditions that may adversely (such as uncontrolled diabetes, high blood pressure, sleep disorders including apnea, visual impairment, hearing impairment, etc) affect their ability to work safely must inform their medical practitioner of their job duties.

The medical provider must determine that any prescribed treatment including medication will not impair the employee from safely performing their job duties. The employee must notify their physician/medical provider if prescribed treatment and/or medication is affecting their ability to safely perform their job duties.

TY&E Rule S-1.5.3, Footing—the following sentence is added:

Except in emergency, running is not permitted in the performance of duty.

TY&E Rule S-8.0, Intermodal/Automotive Facility Safety, new rule added:

TY&E Rule S-8.0, Intermodal/Automotive Facility Safety
TY&E Rule S-8.1 Core Intermodal/Automotive Facility Safety Rules

- Establish proper track protection before performing work.
- Vehicles must not STOP on, PARK on, or FOUL tracks, without proper protection.
- Do not drive or park on lift equipment lanes, under lift equipment, or impede lift equipment movement.
- Obey all posted safety signs, signals, and painted markings.
- All vehicles must turn on headlights and use turn signals.
- Never place any part of your body in a pinch point position (i.e. when removing IBC with container suspended, standing between containers, trailers, chassis, or area where hitch is to collapse), or walk under equipment being lifted.
- Maintain three-point contact when getting on and off equipment.

TY&E Rule S-8.2 Track Protection

In addition to BNSF on track protection procedures used for work group protection the intermodal hub operations manual identifies procedures for BNSF intermodal employees and contractors. The intermodal ramp coordinator is responsible for ensuring that protection is provided for ramp personnel performing functions on or in the vicinity of intermodal tracks, for properly locking out any track(s) to be worked on, and for properly removing track protection, in accordance with the Intermodal Hubs Operations Track Protect Section.

TY&E Rule S-8.3 Vehicles Within Intermodal Facility

TY&E Rule S-8.3.1 Vehicle Requirements

- Required safety equipment on yard vehicles must be functioning and used when vehicle is operated on the facility. This includes strobes or oscillating lights, headlights, tail lights, and brake lights, turn indicators, and windshield wipers. In addition, all yard pickup trucks, crew vans, trailer repair, tire repair and other vehicles permanently assigned to the facility must be equipped with chassis deflector bars.

TY&E Rule S-8.3.2 Vehicle Operations

- Stop for flares and flashing lights at crossings.
- Yield to trains, yard equipment and pedestrians.
- Cross only at designated crossings.

TY&E Rule S-8.4 Check Point Ingate / Outgate Procedures

All vehicles entering or departing through checkpoint must comply with the following procedures:

(1) An area has been establish 35 feet from the inspection lane, and is declared the safe clearance zone between trucks and inspection lane. A three foot wide area is painted RED across each lane.

Exceptions: *South Seattle, Billings, Shelby, Dilworth* - (No safe zone required not manned)

St. Paul, Spokane, Portland - (15 feet from the inspection lane)

San Bernardino - (KIOSK outgate 15 feet from the inspection lane)

Rancho East & West - (10 feet from the inspection lane)

(2) Stop signs are posted at this area in each check lane and the ground stenciled with the word STOP (painted in WHITE) across the lane.

(3) Mounted on the pole below the stop sign is a white sign with black lettering stating: “WAIT FOR SIGNAL TO MOVE FORWARD”.

(4) Cones with a height of 48 inches will be placed in the middle of each check lane and removed only by the inspector that signals a vehicle to pull forward. When the vehicle is

stopped the inspector will replace the cone back into the middle of the check lane. This procedure is repeated each time an inspection is to be performed.

(5) The cone shall remain in the middle of a clear check lane until the inspector removes the cone and signals the vehicle to pull forward.

TY&E Rule S-12.1.2 Speed Limits—is cancelled in its entirety. (Rule S-12.1.1 will govern concerning speed limits).

TY&E Rule S-12.5 Seat Belts—is amended by adding the following exception:

Exception: Seat belts are not required when employees are operating vehicles while performing train inspections or coupling air hoses. When operating the vehicle in travel to and from such work activities, seat belts must be worn.

TY&E S-13.1.1 Going Between or Working on the End of Rail Equipment—is changed to read:

Going between or working on the end of rail equipment means an employee has placed all or part of his body where it could be struck by rail equipment if it were to move. Operating an uncoupling lever is not considered going between rail equipment.

Before crew members may go between or work on the end of rail equipment they must wait for movement to stop, slack to adjust, and ensure that all members of the crew have a clear understanding of the work to be performed. Unless another form of protection has been established, the following steps must be taken:

If a locomotive is not coupled to the rail equipment:

1. By radio or hand signal, notify all members of the crew who could affect movement in that track.
2. Crew members who could affect any movement of the equipment in that track must acknowledge that they understand a crew member will be going between or working on the end of rail equipment.

If a locomotive is coupled to the rail equipment:

1. Announce by radio "going between" or give the prescribed hand signal.
2. The crew member at the controls of the locomotive must fully apply the independent brakes, center the reverser, and then acknowledge by radio response "set and centered" if radio is being used or sound whistle signal "one long" if hand signals are being used. If no crew member is at the controls of the locomotive, another form of protection must be established.
3. The brakes must remain applied and the reverser centered until the crew member requesting protection gives a radio or hand signal to move or announces by radio "in the clear".

Prescribed hand signals to indicate "going between":

1. By day, give a stop signal. Raise arm farthest from the rail equipment straight above the head. Point the arm nearest the rail equipment at a 90-degree angle toward the rail equipment.
2. By night give a stop signal. With the arm extended forward parallel to the ground, move the light from left to right.

When stepping from between rail equipment, be alert for movement on adjacent tracks or vehicles moving on the walkway or roadway.

Do not go between uncoupled locomotives or cars when clearance between them is less than 50 feet.

TY&E Rule S-13.1.3 (A) Crossing Tracks—the first bullet is changed to read:

Do not cross within 25 feet of the end of standing equipment.

TY&E Rule 13.1.5 (B) Riding In or On Cars—is amended as follows:

Change first bullet to read:

Do not ride on the crossover platform or end ladder of any car other than tank cars as specified in this rule.

Add new 8th bullet reading:

Tank Cars: If so equipped, employees may ride on the outer portion of the crossover platform, positioned outside the nearest rail. When riding on a tank car crossover platform, face the direction of movement, and:

1. When riding the trailing end, face the horizontal hand hold, maintaining three-point contact.
2. When riding the leading end, with your back against the horizontal hand hold, loop your arm closest to the center of car around the horizontal hand hold.

TY&E Rule S-13.1.9 Chocking Cars, item 4 is changed to read:

4. Use only a sound wooden chock, metal chock or chock made from plastic or composite material designed for chocking cars. Do not use a track spike.

TY&E Rule S-13.6.3 Position to Operate—is amended by adding the new Item E:

E. Vertical wheel hand brakes may be operated without getting on the railcar if:

1. The car remains stationary.
2. Both feet remain flat on the ground and outside the rail.
3. Elbows are slightly bent during operation.
4. One hand can hold onto the grab iron while the other hand is used to operate the brake wheel.

TY&E Rule S-13.6.9 Brake Stick—new rule added:

When using a Brake Stick, the following will apply:

- All crew members must comply with the requirements of Safety Rule S-13.1.1, when using the brake stick.
- Never walk backwards when using a brake stick.
- Work from a location to the outside rather than between adjacent track when possible.
- The long handle can easily foul an adjacent track so be alert to keep clear of moving equipment.
- Never operate a quick release brake by the handle.
- Be sure the indicator ring is flush with the bottom of the locking mechanism to insure the brake stick is both aligned with an extension notch and fully engaged.
- Never place the butt of the brake stick against your body. Keep it at the side to ensure, in the unlikely event of a kick back, the end will not strike you.
- Pass the brake stick through equipment. Do not climb or cross equipment with the brake stick in your hand.
- The brake stick can be hung from the ladder or structure of a car to transport.
- Place the hook to the outside of the wheel not inside between the wheel and the car to avoid the hook from accidentally being caught.

TY&E Rule S-13.7.2, Operating Ground Throw or "Flop Over" Switch—add the following to Item 2:

Use two hands when operating the switch.

TY&E Rule S-13.7.5, Switch Heaters—is changed to read:

When working around burning switch heaters, avoid contact with heaters or switch rails.

TY&E Rule S-21.0, Personal Protective Equipment and Clothing Chart (PPE)—In the "Electrical Hazard" row, the "Remarks/Special Requirements" box is changed to read:

Gloves of proper classification are to be worn when working with 50 volts and over.

TY&E Rule S-21.0, Work Glove Chart (PPE)—In the "Banding Material" row, add an "X" in the "Leather Palm" box.

Add new row: "Switching". Letter "O" will be in the following boxes:

Brown Jersey, Canvas, Grip, Leather Palm, Vinyl-Coated Knit-Lined, Leather Driver's, and Cut Resistant.

TY&E Rule S-21.30, Personal Protective Equipment and Clothing Chart (PPE)—In the "Electrical Hazard" row, the "Remarks/Special Requirements" box is changed to read: Gloves of proper classification are to be worn when working with 50 volts and over.

TY&E Rule S-25.2 Stretches, is changed in its entirety to read:

Overview

Check with your physician before beginning a new exercise program, or if you have had recent joint trouble, muscle problems, or surgery.

- Don't bounce.
- Keep the stretch mild and comfortable.
- Relax muscles as you stretch.
- BREATHE, don't hold your breath.
- Hold your stretch until tension releases, and then go further into another mild stretch.
- You should NEVER feel pain during or after a stretch.
- Stretch before you work, before any physical exertion and periodically to relieve muscle tension.
- A good rule of thumb is to stretch every 20 to 30 minutes.
- Don't forget to stretch both sides of the body when stretching.
- Tension for the initial stretch should release within 60 seconds. If it doesn't, reduce the intensity of the stretch slightly.

Benefits

- Increases range of motion, reducing risk of injury near joint limits.
- Warms muscles, reduces internal friction, and "resets" discs prior to activity.
- "Pre-fuels" muscles with oxygen before activity.
- Helps muscles relax and reduces soreness after activity.

BACK OF LEG

- Put one foot forward, on heel.
- Bend back knee slightly.
- Bend forward at hips with straight back.
- Support upper body with hands on your bent knee.
- Arch your back slightly.
- Gently move your butt straight back to put tension on the back of leg.
- Using chair for support, bend at the hips and keep the three natural curves of your back.
- Continue to bend forward at the hips until you feel mild tension in the muscles at the back of the leg.

FRONT OF THE HIP

- Place one foot forward.
- Keep your feet parallel to each other.
- Do not arch your back.
- Rotate your butt under until you feel mild tension in the front of hip of the straight leg.

UPPER BACK

- Cup your hands together in front of you.
- With elbows slightly bent, move your cupped hands down.
- Move your cupped hands away from your body until you feel mild tension.

FOREARM

- Slowly bend or extend your wrist.
- You can do this either with or without a gentle pull from the opposite hand.
- Stretch until you feel mild tension in the forearms.

SHOULDER AND ARM

- Let your arms hang comfortably at your sides.
- Slowly rotate your hand and arm outward until you feel mild tension.
- Rotate your arm and hand in the other direction until you feel mild tension.
- Repeat 5 times.

BACK OF NECK

- Stretch up as tall as you can through your spine.
- Tuck chin into neck.
- Lower your chin slightly until a mild stretch is felt.
- Hold until tension goes away.

SIDE OF NECK

- Stand or sit up with "Tall" posture.
- Tip ear toward shoulder. Hold mild stretch until tension goes away.
- Keep head tipped and rotate chin down towards shoulder. Hold until tension goes away.
- Lower chin towards shoulder. Hold until tension goes away.

CHEST

- Slowly round your shoulders and arms forward and back. Do 5 to 10 times each.
- Hold mild stretch in either position until stretch releases (up to 60 seconds).

UPPER ARM AND LOW BACK

- Stand up tall, stretching rib cage away from hips.
- Stretch your elbow upwards. Hold your stretch until tension goes away.
- Bend SLIGHTLY to opposite side, if needed, to increase stretch.

The last paragraph, Tips for People Leading Stretches, is unchanged.

19. Train Dispatcher's, Operator's and Control Operator's Manual, Changes and Additions

Rule 40.4.8, Crossing Warning/Power Off Indicators—is changed in its entirety to read:

Rule 40.4.8 Crossing Warning/Power Off Indicators Restrict Access/Record of Notification

Restrict access to affected crossings and make record of notification of affected trains as follows for:

- * accidents at equipped crossings
- * reports of malfunctioning crossing warning
- * reports of crossing warning activation failure / disabled
- * reports of damaged or missing crossbucks or
- * reports of damaged or malfunctioning pedestrian crossing warning.

Restrict access to the crossing until all affected trains are notified, as follows:

- * When available, apply a restrictive label.
- * When restrictive label is not available, use a quick block, signal block or track block.
- * When using CTWC, enter a temporary speed restriction (TSR) using the crossing location for both MP entries and 0 (zero) as speed, and indicate on the comments line the reported condition. Do not actually issue this TSR to a train. However, do not edit out the TSR unless notification will occur in Box 17 of that track warrant or the train has already been notified. (Note: If Box 17 is used as notification, transcribe the address, location, OK time, DS initials and track warrant number to a crossing warning notification form.)

Fill out, retain and archive a crossing warning notification form for each incident unless notification is accomplished by Form C restriction.

ACCIDENTS AT CROSSINGS

When an accident occurs at a crossing equipped with an automatic warning device (flashers or gates), promptly contact the signal call desk and request signal maintainer notification. Protect as outlined below for "Crossing Warning Activation Failure / Disabled" until or unless otherwise instructed by signal personnel.

MALFUNCTIONING CROSSING WARNING

When notified that crossing warning is malfunctioning (flashers or gates), do the following:

- * Notify all affected trains as follows: "Crossing warning system malfunctioning at (MP). Protect per Rule 6.32.2."
- * Notify the signal call desk if original notification is from another source.

Do not consider the warning devices to be functioning properly until so notified by a signal department employee.

NOTE: Unless "stop and protect" is specifically requested by the signal call desk, all reports of crossing warning malfunctions from the signal call desk are to be handled as "Malfunctioning Crossing Warning" as outlined above. If "stop and protect" is specifically requested by the signal call desk, handle as "Crossing Warning Activation Failure/Disabled" as outlined below.

CROSSING WARNING ACTIVATION FAILURE/DISABLED

When notified by a Signal Supervisor (or their designee) that crossing warning system has an activation failure or has been disabled, do the following:

- * Notify all affected trains as follows: "Crossing warning system at (MP) (has an activation failure)/(has been disabled). Stop and protect movement over crossing even if devices are seen to be working."

NOTE: If initial notification of disabling is by a signal maintainer, verify that a Signal Supervisor or their designee has approved the disabling.

NOTE: If notified by an authorized employee, such as a signal maintainer or maintenance foreman, that the crossing will be blocked off from use by vehicular traffic, this notification will not be necessary and trains may operate normally over this crossing.

Maintain this process until a signal department employee advises the crossing warning signals are back in service.

DAMAGED OR MISSING CROSSBUCKS

When notified that crossbucks are damaged or missing at crossings not equipped with automatic warning devices, do the following:

- * Notify all affected trains as follows: "Crossbucks damaged or missing. Do not exceed 15 MPH at (MP) until movement completely occupies crossing."
- * Provide notification in order for Maintenance of Way personnel to investigate and repair the crossbucks.

DAMAGED OR MALFUNCTIONING PEDESTRIAN CROSSING WARNING

When notified that pedestrian crossing warning, whether associated with motorist crossing or stand-alone, is damaged or malfunctioning, do the following:

- * Notify all affected trains as follows: "Crossing warning system malfunctioning at (MP). Protect per Rule 6.32.2."
- * Notify the signal call desk if original notification is from another source.

Do not consider the warning devices to be functioning properly until so notified by a signal department employee.

POWER OFF INDICATORS

When notified that the lights are not illuminated on the Power Off Indicators installed on the side of signal housings at highway crossings, promptly notify the signal call desk. (Protection is not required in this circumstance, however this indicates commercial power has been lost.)

Rule 40.23, On Duty - Dispatchers and Probationary Dispatchers—is amended by adding the following new last paragraph:

Dispatchers are to:

- * have clear, concise and professional communications
- * refrain from hints of rule circumvention
- * refrain from derogatory remarks or comments
- * not frequent unoccupied work areas or work areas not pertinent to duties
- * ensure non-work related activities do not interfere with performance of duties.

Rule 42.22.1, Contingent Authorities, first bullet point is amended to read as follows:

- * Use Box 9 "Do not foul limits ahead of" to instruct the employee that authority is granted behind the train movement(s) for a following movement in the same direction. However, if train(s) listed in Box 9 reports clear of track warrant limits prior to reaching the end point of its authority and the MW authority extends beyond the train's clearing point, reissue the MW track warrant without a Box 9 before the MW movement passes the train's clearing location.

Rule 43.10.1 Switches Included in CTC, is changed to read: When Form B track bulletin restriction limits contain a dual control switch(es), a job briefing must be held with the employee in charge to determine if switches need to be blocked.

Ascertain the following:

- What track(s) will be occupied or fouled,
- Which, if any, of the dual control switch(es) in the limits will be occupied or fouled,
- What, if any, routing restrictions exist for movements through the limits,
- What, if any, MW activity will be affected by the change of position of any dual control switch within the Form B limits.

If the employee in charge informs the control operator of MW activity that will be affected by the change of position of any dual control switches, those switches must have blocking or marking devices applied during the effective time of the Form B Track Bulletin restriction.

Routing restrictions must be protected by blocking dual control switches away from the restricted route or by applying restrictive labels in restricted area during the effective time of the Form B track bulletin restriction.

Do not operate these blocked switches without first notifying the employee in charge of the Form B track bulletin restriction and determining it is safe to do so. Maintain record of time blocking is placed and removed. Include in your transfer any blocking or marking devices in use for this purpose.

Rule 53.2, Weather Monitors, Notified of Adverse Weather Conditions, has last sentence revised and note added to read as follows:

Once notified, the train dispatcher must isolate the affected area and communicate the warning to all affected trains and those MW employees holding authority within the affected area. Note: For wind warnings, in addition to notifying all trains and MW authority holders in the area and giving the time and limits of the expected high winds, the train dispatcher is to

refer the train crews to the local weather conditions exception in the Excessive Wind Instructions portion of System Special Instructions Item 33.

Rule 55.14.1, Failure of Signal—is changed in its entirety to read:

Immediately report to the signal call desk when any of the following fail or are missing:

- * Crossing warning
- * Fixed signals
- * Signal appliances
- * CTC
- or
- * Interlocking

In addition, notify the train dispatcher.

RESTRICT ACCESS/RECORD OF NOTIFICATION

Restrict access to affected crossings and make record of notification of affected trains as follows for:

- * accidents at equipped crossings
- * reports of malfunctioning crossing warning
- * reports of crossing warning activation failure/disabled
- * reports of damaged or missing crossbucks
- or
- * reports of damaged or malfunctioning pedestrian crossing warning.

Restrict access to the crossing until all affected trains are notified, as follows:

- * When available, apply a restrictive label.
- * When restrictive label is not available, use a quick block, signal block or track block.

Fill out, retain and archive a crossing warning notification form for each incident.

ACCIDENTS AT CROSSINGS

When an accident occurs at a crossing equipped with an automatic warning device (flashers or gates), promptly contact the signal call desk and request signal maintainer notification. Protect as outlined below for "Crossing Warning Activation Failure/Disabled" until or unless otherwise instructed by signal personnel.

MALFUNCTIONING CROSSING WARNING

When notified that crossing warning is malfunctioning (flashers or gates), do the following:

- * Notify all affected trains as follows: "Crossing warning system malfunctioning at (MP). Protect per Rule 6.32.2."
- * Notify the signal call desk if original notification is from another source.

Do not consider the warning devices to be functioning properly until so notified by a signal department employee.

NOTE: Unless "stop and protect" is specifically requested by the signal call desk, all reports of crossing warning malfunctions from the signal call desk are to be handled as "Malfunctioning Crossing Warning" as outlined above. If "stop and protect" is specifically requested by the signal call desk, handle as "Crossing Warning Activation Failure/Disabled" as outlined below.

CROSSING WARNING ACTIVATION FAILURE/DISABLED

When notified by a Signal Supervisor (or their designee) that crossing warning system has an activation failure or has been disabled, do the following:

- * Notify all affected trains as follows: "Crossing warning system at (MP) (has an activation failure) / (has been disabled). Stop and protect movement over crossing even if devices are seen to be working."

(NOTE: If initial notification of disabling is by a signal maintainer, verify that a Signal Supervisor or their designee has approved the disabling.)

(NOTE: If notified by an authorized employee, such as a signal maintainer or maintenance foreman, that the crossing will be blocked off from use by vehicular traffic, this notification will not be necessary and trains may operate normally over this crossing.)

Maintain this process until a signal department employee advises the crossing warning signals are back in service.

DAMAGED OR MISSING CROSSBUCKS

When notified that crossbucks are damaged or missing at crossings not equipped with automatic warning devices, do the following:

- * Notify all affected trains as follows: "Crossbucks damaged or missing. Do not exceed 15 MPH at (MP) until movement completely occupies crossing."
- * Provide notification in order for Maintenance of Way personnel to investigate and repair the crossbucks.

DAMAGED OR MALFUNCTIONING PEDESTRIAN CROSSING WARNING

When notified that pedestrian crossing warning, whether associated with motorist crossing or stand-alone, is damaged or malfunctioning, do the following:

- * Notify all affected trains as follows: "Crossing warning system malfunctioning at (MP). Protect per Rule 6.32.2."
- * Notify the signal call desk if original notification is from another source.

Do not consider the warning devices to be functioning properly until so notified by a signal department employee.

POWER OFF INDICATORS

When notified that the lights are not illuminated on the Power Off Indicators installed on the side of signal housings at highway crossings, promptly notify the signal call desk. (Protection is not required in this circumstance, however this indicates commercial power has been lost.)

20. Hazardous Material Instructions, Changes and Additions Page 8, Figure 1. Shipping Description Entries—add the following to the bottom box: Note: The identification number (e) may be found either before the proper shipping name (c) or after the hazard class (d).

Page 9, b. Total Quantity Notation—change (2) to read:

For non-bulk packaging, the total quantity is given by both:

(a) weight or volume (including the unit of measure); for example, "100 lbs.", "55 gal.", "5 kg", or "208 L"; and

(b) number and type of packages; for example "12 drums", "12 boxes" or "12 UN1A1".

Page 10, g. Emergency Response Telephone Number—

add the following under Exceptions: (9) vehicle, flammable gas powered or vehicle, flammable liquid powered .

Page 13, 11. Handling Hazardous Waste Shipping Papers and Manifests—add the following:

d. When accepting or delivering a shipment of hazardous waste from the hazardous waste generator:

- (1) Sign the hazardous waste manifest as requested.
- (2) Return a copy of the hazardous waste manifest to the person requesting the signature.
- (3) Mail the remaining copies of the hazardous waste manifest to the Revenue Prerate Waybill in Topeka, Kansas.

Figure 10, Switching Chart—under the heading

"Instructions", the 3rd bullet is changed to read:

- Coupled into with more force than needed to make the coupling.

Figure 10, Switching Chart—the sentence in the lower right hand corner after the * is changed to read:

* Only pertains to placarded flatcars carrying placarded freight containers, trailers, portable tanks, tote bins, intermodal portable tanks, or UN portable tanks.

Figure 10, SWITCHING CHART—is changed as follows: Add the following note under Radioactive Material placard (SCHI RM) in GROUP C column:

NOTE: Applies only to cask cars with spent nuclear fuel or high level radioactive waste.

Add Radioactive Material placard (SCHI RM) to placards listed under GROUP E column.

Delete Keep Away From Food placard (SCHI NF) from placards listed under GROUP F column.

Figure 11, POSITION IN TRAIN CHART—is changed as follows:

Delete Keep Away From Food placard (SCHI NF) from placards listed under GROUP E column.

Under INSTRUCTIONS add the following note to 5:

5) NOTE: Does not apply to cryogenic refrigerated equipment.

Change 6 to read:

6) Must not be next to any placarded car in another placarding group, except it may be next to a placarded car containing residue or any car placarded or marked as in GROUP E.

Add the following note to the right margin:

NOTE: A rail car placarded in Division 1.1 or 1.2; Division 2.3 (Hazard Zone A; Poisonous Gas) or Division 6.1 (PG I, Hazard Zone A; Poisonous Liquid) in a moving or standing train must be next to and ahead of any car occupied by the guards or technical escorts accompanying the placarded rail car. However, if a rail occupied by the guards or technical escorts has temperature control equipment in operation, it must be the fourth car behind any car requiring Division 1.1 or 1.2 placards.

21. Hy-Rail Limits Compliance System (HLCS)

On-track equipment equipped with Hy-rail Limits Compliance System (HLCS) must use the system if operational. When problems are experienced with HLCS, tracking issues, radio problems etc., or the system is not operational, contact telecommunications at (817) 593-5900, choose option 1, and then option 2 to open a trouble ticket. If you receive an exceed alarm (red warning light) immediately contact the dispatcher for that territory.

22. Automatic Cab Signals

Cab signal equipment must be cut out except on suburban equipment on the Chicago Subdivision.

23. Remote Control Operations

23(A) Remote Control Operating Instructions

a. Employees assigned to a remote control crew are governed by these instructions and must have a current copy accessible while on duty.

Remote Control Operators (RCO) will be issued an Operator's Manual, which governs the operation of a Remote Control System.

All rules or instructions contained in other company publications will remain in effect unless specifically exempted in these instructions.

b. Prior to operating a Remote Control Transmitter (RCT), a job safety briefing must be held among all crew members. All remote control crew members must be informed and clearly understand which crew member will be controlling

the movement. Before the control of the Remote Control Transmitter is transferred from one crew member to another, the receiving Remote Control Operator must be notified and acknowledge that he/she is in a position to assume control.

- c. A crew member must not go between or work on the end of rail equipment coupled to a remote control locomotive or when a remote control locomotive is on the same track until each member of the crew has been informed of the work to be performed. The Remote Control Operator must ensure that the Remote Control Transmitter's speed control is in the STOP position and the directional control is in neutral. The primary Remote Control Operator must acknowledge that he/she understands that another employee will be going between equipment by announcing via radio "set and centered." The speed and direction controls must not be repositioned or control of the Remote Control Transmitter transferred to another operator until each crew member has advised the Remote Control Operator that they are "in the clear."
- d. Each Remote Control Operator must have in their possession an operative holstered hand-held radio equipped with a microphone.
- e. Except when the primary Remote Control Operator is riding the leading locomotive, remote control movements are to be considered "shoving" movements, regardless of direction or position of remote control locomotive.
- f. Each remote control locomotive must have a tag placed on the control stand indicating the locomotive is being used in a remote control mode. The tag must be removed and secured with the Remote Control Transmitter when the locomotive is placed in manual mode.

23(B) Setup and Testing

Prior to operating a Remote Control System, the Remote Control Operator must ensure the equipment is properly setup and tested in accordance with prescribed procedures. If two Remote Control Transmitters are to be utilized in a "shared" or "pitch and catch" operation, both must be tested.

23(C) Operating the Equipment

- a. Only qualified operators or students who have been trained in remote control operations may operate a Remote Control Transmitter.
- b. A Remote Control Operator shall control only one locomotive consist at a time with a Remote Control Transmitter and shall not operate simultaneously any other locomotive.
- c. When using "shared" or "pitch and catch" operations, the procedure for changing operators is specified in the operators' manual.
- d. Operation of the Remote Control Transmitter must not be performed from a moving motorized vehicle.
- e. Dropping of cars is prohibited during remote control operations except at locations specifically authorized by special instructions.
- f. When using a remote control locomotive in "shared" or "pitch and catch" operations to make a coupling, the Remote Control Operator located at the coupling must be the primary operator.

23(D) Securing Equipment

- a. Remote control locomotives and Remote Control Transmitters must not be left unattended unless secured and/or disabled. For remote control system purposes, "unattended" means remote control locomotive is not set up

(linked) to an operating Remote Control Transmitter in the possession of a crew member.

When leaving equipment for meal period, break, etc., the Remote Control Operator will secure remote control locomotive as required and turn the Remote Control Transmitter power off.

When ending tour of duty, the Remote Control Operator must place the locomotive in the MANUAL mode unless being relieved by another Remote Control Operator. If another Remote Control Operator is relieving a Remote Control Operator, a job/safety briefing must be held between the employees.

- b. Spare Remote Control Transmitters must be stored with power off and battery removed.

23(E) Remote Control Area

- a. Division Timetable Special Instructions will designate areas of remote control operations. Signs advising that remote control operations may be in effect will be posted at access locations to Remote Control Areas.
- b. The Remote Control Operator in control of a remote control locomotive must be notified of any track removed from service or working limits established for the protection of another craft. The Remote Control Operator must conduct a job/safety briefing with all members of the crew.

23(F) Remote Control Zone (RCZ)

- a. Special Instructions will designate limits of Remote Control Zones. Signs advising that Remote Control Zones may be in effect will be posted at access locations to Remote Control Zones. Only the Remote Control Operator may activate a Remote Control Zone. Remote Control Zone limits do not include tracks within CTC or interlocking limits (CTC or interlocking rules apply).
- b. When a Remote Control Zone is activated, the Remote Control Operators are relieved of point protection for pullout movements (locomotive on leading end) only. Rule 6.28 requirement to stop within half the range of vision is waived. After Remote Control Zone is activated, Remote Control Operator must ascertain that switches/derails are properly lined and track(s) within zone are clear of trains, engines, railroad cars and men or equipment fouling track before initial pullout movement. This process must be repeated each time the Remote Control Zone is activated.
- c. When Remote Control Operator ends the tour of duty:
 - The Remote Control Zone must be deactivated.
 - The Remote Control Zone may remain active if a job safety briefing is conducted with the relieving Remote Control Operator.
 - or
 - The Remote Control Zone may remain active if the subdivision special instructions specify the hours the Remote Control Zone is active.
- d. Before entering a Remote Control Zone, all employees that are not part of the remote control crew must determine whether the zone is activated. Employees may receive this information from the Remote Control Operator or from the supervisor in charge of yard movements. When the Remote Control Zone is activated, track(s) within the zone must not be fouled with equipment, occupied or switches operated until the Remote Control Zone has been deactivated.

23(G) RCO Terms

Remote Control Area - Area designated by special instructions for remote control operations.

Remote Control Operator (RCO) - A certified Remote Control Operator who may operate a locomotive with or without cars by means of a Remote Control Transmitter.

Remote Control Transmitter (RCT) - Hand operated device that gives operator speed and braking control of remote control locomotive.

Remote Control Zone (RCZ) - Track(s) identified within a Remote Control Area where Remote Control Operators are relieved of point protection during pullout movements when Remote Control Zone is activated.

“Shared” or “Pitch and Catch” - Process used for changing primary control of Remote Control Transmitters between crew members. Change of control may only be performed while remote control locomotive is stopped.

24. Switch Tender Instructions

The train dispatcher and switch tender are required to have a job briefing before a switch tender acts on instructions from the train dispatcher. Following a shift change, another briefing is required between the train dispatcher and switch tender, which will include discussion of pending instructions and determination if the instructions are still correct.

When communicating concerning approaching train movements, use engine initials and number and direction. Do not use only train symbols or blanket terms such as “westbound or eastbound trains.”

The dispatcher will issue specific instructions to the switch tender. The switch tender must repeat the instructions to the train dispatcher and receive confirmation of being correct, before acting on the instructions.

For example: After confirming with the train dispatcher that BNSF 1234 West will be the next train to line from Main Track 1 to Main Track 2 at Robinson Spur, the switch tender is then to call the BNSF 1234 West and verify the train has authority from Main Track 1 to Main Track 2 at Robinson Spur. After verification has been received from the BNSF 1234 West, and after the switch tender has visually identified the BNSF 1234 West, the switch tender will line the route for the movement. After the movement is clear of the switch, the switch must be lined and locked in the normal position.

When necessary for the train dispatcher to change routing instructions to the switch tender after authority has been granted to a train, it is the responsibility of the dispatcher to communicate directly with the switch tender. Another authority over the switch that the tender is in charge of cannot be issued until the dispatcher has informed the switch tender of the change.

When a switch tender is at a remote location, away from a depot and/or base station radio, the switch tender must check with dispatcher when arriving at such location to confirm they can clearly communicate. If the switch tender becomes aware of any radio communication problems, the train dispatcher must be notified. The chief dispatcher will make particular arrangements when communication problems are evident.

While in charge of a switch, the switch tender must not leave the switch unattended unless it is lined and locked for normal movement.

The train dispatcher’s transfer must include switch tender locations and pending instructions from the train dispatcher to the switch tender.

25. FRA Random Drug Testing

TY&E employees selected for FRA Random Drug Testing must show the start time of the Random Drug Test (RDT) in the remarks column of their timeslip. Start time of RDT begins

when a supervisor notifies the employee that they are selected for RDT. A stop time on RDT is necessary only if different from their off-duty time.

26. Verification of Rules Examination

Employees required to pass rules examination must have a current rules examination card when issued, or engineer's certificate in their possession while on duty.

27. Cars Set Out Bad Order

When a car is set out between terminals account bad order, it should, if possible, be left where it can be driven to by truck for making repairs. If the car setout is a military shipment, immediately contact the Resource Operation Center, Ft Worth at (817) 234-7200 or (800) 832-5452, Option 3.

28. Grade Crossing Accidents

The following information is designed to serve as post grade crossing accident guidelines. It is designed to provide the utmost in safety for you and your crew.

After the accident has occurred and the train is stopped:

- A. Ensure the safety of crew members, accident victims, and the public.
- B. Meet the requirements of GCOR Rule 6.23.
- C. Contact the dispatcher or any other available radio contact and advise:
 1. Exact location; and
 2. What emergency services are needed. Be sure to include alternate routes for the emergency vehicles if your train is blocking road crossings.
- D. Assess the damage to the vehicle and train to determine if there is any danger to your crew or the public.
- E. Assign a crew member to monitor a radio to provide further information for emergency assistance.
- F. If it is safe, render assistance to accident victims. It is important not to move the victim unless a life threatening situation exists.
- G. Turn "off" the vehicle's ignition and inform the investigating officer you did so. Otherwise, do not disturb the accident scene. Do not move the train unless it presents a safety problem, such as emergency vehicles needing to get to the accident through a blocked crossing, etc.
- H. Only give information to :
 1. The investigating officer; or,
 2. Authorized company managers.

Cooperate with the investigating officer. Answer the officer's questions and provide as much information as you can recall.

Record the badge number and name of the investigating police officer at the scene. Witness with the officer that the headlight is on, and that the whistle and bell on lead unit are in proper working order. Also, note that the crossing warning devices are functioning.
- I. Assign a crew member to verify the accuracy of the train list. Save all train lists, track warrants, track condition messages, and other pertinent documents for the proper BNSF managers.
- J. Ascertain that no part of your train is derailed and that it will be safe to proceed once released by the investigating officer.
- K. Personal counseling will be available to any crew member who might experience post-accident trauma.

29. System Work Train Policy

The conductor is in charge of and will be responsible for all work train movements. The safety of the overall train operation is the responsibility of the entire train crew. The engineer shall

receive train movement instructions only from a member of the train crew except in cases of emergency.

When Maintenance of Way, Signal, Structures, Mechanical or other work groups are involved with the activities of the work train, a coordinator from such group must be designated. The train crew will communicate with the designated coordinator concerning all train movements and work activities.

An initial job briefing will be conducted before commencing work and additional job briefings must be held at intervals not to exceed four (4) hours until the end of the tour of duty. In addition, when there is a change in assignment or a significant delay in activities has occurred, a job briefing must be conducted prior to commencing work. Employees who subsequently work in the vicinity of a work train after such job briefings have been held, must not commence work until they have received a job briefing from the designated coordinator regardless of authority received to occupy the area. The conductor is responsible to ensure that no work activity begins until the required job briefings are complete.

Job briefings must include applicable operating rules, safety rules, special instructions and any other work-specific information. The designated coordinator is responsible for communicating impending train movements to the work groups under his control.

All employees assigned to a work train and/or its activities are responsible to be on the lookout for train or track car movements at all times. Lookouts will be utilized when necessary and all movements must be fully protected.

30. Track Condition Messages

Track condition messages may be issued by train dispatchers to cover restrictions on or near tracks.

Restrictions shown on a track condition message may be cancelled verbally by the Train Dispatcher.

Authority can be given by a Train Dispatcher or supervisor to enter a track shown to be out of service on a track condition message.

When a track warrant indicates a track condition or train message is to be received, conductor is responsible for securing those messages necessary for movement of their train. Track condition messages must be retained and complied with on all trips made during the tour of duty on which they were received.

31. Securing Track Warrants/General Track Bulletins

When reporting for duty at initial terminal, a crew member will secure track warrants, track bulletins, and track condition messages or general track bulletin, unless otherwise instructed. A relief crew member must contact the dispatcher before departing to determine if additional documents are required, and advise if all crew members are present and ready to depart.

At locations where track warrants or general track bulletins are received by printer or fax, crew members must verify that the route description, if printed, covers the intended route of their train. If it does not, contact the train dispatcher. Also, crew members must check the date and "OK" time and if over four (4) hours old, contact the train dispatcher.

If the identifying unit is not shown correctly on the address line, contact the train dispatcher and correct the address line before departing the initial station.

32. Engineer Training Assistance Hotline

For questions concerning Engineer Training, locomotive

equipment or air brake systems, call BNSF Technical Training Center in Overland Park—(913) 319-3996.

33. Excessive Wind, Tornado, Flash Flood, Cold Weather and Earthquake Instructions

Excessive Wind Instructions

When weather warnings of winds in excess of 55 MPH are received, the train dispatcher will notify all trains and employees with movement authority in the area, giving the time and limits of the expected high winds.

When notified that winds are forecast to be in excess of 55 MPH, all trains and equipment, except light engines and loaded unit type trains handling coal, grain, ore, taconite, ballast, molten sulfur or potash must stop during the time and within the limits stated.

Exception: If employees or a crew on a train, other than those listed above, observes that local weather conditions are not as severe as the weather warning and would not impact their safety or that of the train, they may proceed, advising the train dispatcher as soon as possible.

Tornado Watch and Warning Instructions

Tornadoes are the most violent of all storms. Paths of destruction range from a few hundred feet in width to more than a mile and extend the length of a city block to 300 miles. The greatest potential for such storms usually exists from April through September.

A “tornado watch” means atmospheric conditions are such that tornadoes may develop. A tornado watch is generally issued 4-6 hours before the conditions may occur.

During a tornado watch, all train movements and yard activities will continue, keeping alert for any signs of weather change. The danger signs to look for are severe thunderstorms, hail, roaring noise, a funnel cloud, or combination of the above. When a crew knows they are in a watch area, the radio on a locomotive or a pakset should be used to monitor instructions and information to and from the train dispatcher. In the event a crew spots a funnel cloud, the train dispatcher should be immediately notified, consistent with the crew’s safety.

If a train or yard assignment has an occupied caboose, upon being notified of a tornado watch, the occupants of the caboose should immediately move to the locomotive consist. While in the process of moving to the locomotive, if the tornado watch turns into a “tornado warning,” or a funnel cloud is spotted, those affected should seek shelter in a nearby ditch, ravine, culvert or in a depression. If none of these are available, lie face down on the ground with hands over the head away from the caboose or cars in the train.

A “tornado warning” means a tornado has been sighted or verified by the National Weather Service or by persons associated with official weather spotters. The train dispatcher will keep trains and crews apprised of limits of tornado warnings. Train crews are to follow instructions as follows: During a tornado warning, all train movements and yard activities must stop. Any train enroute will stop and employees should seek appropriate shelter consistent with the safety of all involved, avoiding the stopping of a train on a high bridge, across railroad and highway crossing at grade, or anywhere the presence of a train could be a hindrance.

After the tornado warning has expired:

- If determination is made that the path of the tornado crossed the tracks at the location or in the immediate vicinity of the train, crew members must inspect their train before moving to determine if any damage or derailment has occurred to the train or if the track structure has been damaged.

- All trains within or entering the tornado warning limits may proceed, prepared to stop when approaching bridges, culverts, or other points likely to be affected until relieved by the dispatcher. The train dispatcher must be advised immediately of damage or unexpected conditions.
- The train dispatcher must restrict trains as prescribed in the second bullet, until an inspection has been completed by division employees or all of the limits of the tornado warning have been traversed by a train and it is confirmed by the train crew(s) that no damage or unexpected conditions were observed.

Flash Flood Warnings

Weather information received by BNSF from WeatherData, Incorporated, is categorized as a “Warning” when it describes conditions that require immediate action by the train dispatcher to notify train crews of imminent danger. These warnings are immediately distributed to the relevant train dispatchers.

When WeatherData, Incorporated, issues a “Flash Flood Warning,” the dispatching center will immediately advise all involved trains of the specific conditions. When crews of these trains are so advised and are not operating through areas which have been designated by the Division Engineer as being “critical,” passenger-carrying trains will be operated at a maximum of 50 MPH through the limits identified in the warning, and freight trains will be operated at a maximum of 40 MPH through those limits. These restrictions will remain in effect until the track has been inspected.

Division Engineers will identify “critical” areas by subdivision, segmented by milepost locations based upon their susceptibility to flooding or their history of being prone to washouts or side-scour wash. In identifying these locations, consideration should be given to shallow-foundation bridges, availability of operable culverts, and other conditions as necessary.

If the “Flash Flood Warning” limits include locations identified as being “critical,” all trains will be further limited to restricted speed until the track structure has been inspected on a priority basis at the request of the dispatching center. These temporary speed restrictions must remain in place until the track has been inspected and local personnel have assessed the need for modifications to the speed restrictions as conditions warrant.

Local Observations

When local maintenance personnel become aware of current conditions that might produce flash flooding that could result in damage to BNSF track or structures, they will:

- Immediately place the speed restriction described above on the affected route.
- Inspect the track for washouts, side-scour wash, surface irregularities, and/or water over the rail.
- Carefully inspect bridge foundations and drainage structures, with careful attention to bridges with mud sills, for erosion behind dump planks and head walls, erosion around piers and footings, and obstructions from drift and debris.
- If water level, turbulence, or other conditions make a thorough inspection impossible at the site of such a bridge, operations of all trains will be reduced to no more than restricted speed until it is possible to make a proper inspection.
- If, during the initial track inspection, there is any doubt about the safety of train operations over bridges, a qualified Structures employee must be called at once, and any speed restrictions that have been placed on bridges will not be lifted until authorized by the Structures employee.
- Track and bridge foremen must continue to patrol past their

respective territories if an adjoining territory is likely to have been damaged, and such damage might not have been discovered.

COLD WEATHER RESTRICTIONS:

The correlations that exist between rail service failures, temperature, train axle load, track and equipment conditions, and train speed are complex and involve many factors including equipment and track component design and material properties, their relative wear conditions, and the rail/wheel interaction for various traffic mixes and operating conditions. In order to maximize safety with regard to extreme temperatures and temperature changes, rail laying temperatures and weather extremities across our railroad have been considered. In that effort, the railroad has been divided into two regions as follows:

Region 1 contains the following divisions: Northern California, Southern California, Southwest, Kansas, Springfield, Texas, Gulf, Northwest, and Chicago.

Region 2 contains the following divisions: Twin Cities, Montana, Powder River, and Nebraska.

Cold Weather Train Speeds:

The Engineering Department has identified two factors which require Cold Weather Train Speeds, as follows:

Low Temperature Threshold:

In Region 1, this threshold is 0 degrees Fahrenheit. In Region 2, this threshold is -20 degrees Fahrenheit.

Temperature Differential Threshold:

In Region 1, this is any temperature of 50 degrees Fahrenheit or warmer that falls to 10 degrees Fahrenheit or colder within 24 or fewer hours.

In Region 2, this is any temperature of 40 degrees Fahrenheit or warmer that falls to 0 degrees Fahrenheit or colder within 24 or fewer hours.

Low Temperature Threshold:

Unless further restricted by individual subdivision Special Instructions, be governed by the following: When ambient (air) temperature drops below the Low Temperature Threshold (0 degrees Fahrenheit in Region 1 and -20 degrees Fahrenheit in Region 2), trains must not exceed the following speeds:

In non-signalized territory:
40 MPH for all trains.

In block signal system limits:
40 MPH for trains exceeding 100 tons per operative brake and key trains.

50 MPH for trains less than 100 tons per operative brake.
65 MPH for passenger trains, Z-symbol intermodal trains, or single-level loaded intermodal trains.

If in doubt as to the temperature, contact the train dispatcher. Notify the train dispatcher when your train is restricted due to this requirement.

These restrictions remain in effect until the ambient (air) temperatures rise above the Low Temperature Threshold.

Temperature Differential Threshold:

The train dispatcher will make notification to trains that temperature has exceeded the Temperature Differential Threshold. When so notified, trains must observe Cold Weather Train Speeds, by Region, as shown above. The Engineering Department will perform a track inspection, reporting results to the train dispatcher. If no further restrictions result from the track inspection, the train dispatcher will verbally notify the trains affected. Be aware that Cold Weather Train Speeds may still be required

due to Low Temperature Threshold. In other words, once track inspection is completed following a Temperature Differential Threshold, the ambient (air) temperature may still be below the Low Temperature Threshold, requiring that Cold Weather Train Speeds must still be observed.

However, if the ambient (air) temperature is above the Low Temperature Threshold and no further restrictions resulted from track inspections, observance of Cold Weather Train Speeds is not required.

Earthquake Instructions

When an earthquake is reported, the train dispatcher will do the following:

1. If the magnitude or epicenter are unknown, instruct all trains within 150 miles of the reporting location to "proceed at restricted speed due to earthquake conditions." An acknowledgment must be obtained from each train or engine receiving these instructions.
2. Once magnitude and epicenter are known, the following inspection criteria will apply:
 - If magnitude is less than 5.0, no inspection is required.
 - If magnitude is 5.0 or greater, response will depend on the group of states and provinces within which the epicenter is located and the following criteria will apply within the designated radius from the epicenter.

Magnitude Range	Criteria for Response	Group 1 Radius	Group 2 Radius	Group 3 Radius	Group 4 Radius
Less than 5.0	No Inspection Required	N/A	N/A	N/A	N/A
5.0 to 5.49	Trains proceed at restricted speed until signals have been inspected.	30 Miles	40 Miles	70 Miles	70 Miles
5.5 to 5.99	Trains proceed at restricted speed until signals, track and bridges have been inspected.	30 Miles	40 Miles	70 Miles	70 Miles
6.0 to 6.49	Trains proceed at restricted speed until signals, track and bridges have been inspected.	N/A	N/A	N/A	150 Miles
	Trains stop until signals, track and bridges have been inspected.	50 Miles	80 Miles	150 Miles	80 Miles
6.5 to 6.99	Trains proceed at restricted speed until signals, track and bridges have been inspected.	N/A	N/A	N/A	220 Miles
	Trains stop until signals, track and bridges have been inspected.	70 Miles	140 Miles	220 Miles	140 Miles
7.0 to 7.49	Trains proceed at restricted speed until signals, track and bridges have been inspected.	N/A	N/A	N/A	400 Miles
	Trains stop until signals, track and bridges have been inspected.	100 Miles	300 Miles	400 Miles	300 Miles
7.5 and above	Trains stop until instructed to proceed after inspection of track, signals and bridges completed.	As Directed*	As Directed*	As Directed*	As Directed*

* Radius at discretion of command center but not less than for magnitude 7.0 to 7.49

- Group 1:** California and Baja California, Mexico
- Group 2:** Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming; Alberta, Canada; and Sonora and Chihuahua, Mexico
- Group 3:** Area east of Group 2
- Group 4:** Oregon, Washington and British Columbia, Canada

34. Duplicate Mile Posts

On subdivisions where duplicate mile posts exist, an alpha suffix has been added (i.e. MP 345X, MP 420Z). This alpha character may not be on the physical mile post sign at this time. When the alpha suffix is indicated in track warrant, track

bulletins and other documents, reference must be made to the individual subdivision's timetable for station locations of the mile posts indicated.

35. Handling Business Cars and Passenger Equipment in Train

Business car and passenger equipment placement in train is governed by the following criteria, with preference given to Item 1, placement on rear of train. Business car and passenger equipment placement other than on rear of train must be approved by the General Superintendent of Transportation and communicated through issuance of track bulletin.

1. The following placement "rear of train" should be followed in priority order:
 - a. Articulated train not exceeding 75 cars, excluding business cars and passenger equipment.
 - b. 3 cars or less on conventional intermodal or vehicle trains in restricted corridors (check with NOC) and not exceeding 5,000 feet, excluding business cars and passenger equipment.
 - c. 4 or 5 cars on conventional trains not exceeding 4,000 feet, excluding business cars and passenger equipment.
 - d. 3 cars or less on conventional intermodal trains in restricted corridors (check with NOC) not exceeding 2,500 feet, excluding business cars and passenger equipment.
Note: When cars are rear-of-train, adhere to Air Brake and Train Handling rules concerning Stretch Braking.
2. All equipment classified "Heavy Weight" or "Light Weight" style equipment (includes business cars, business support cars and railway service cars) may be handled at the head-end of a freight train, "next behind road power," with the General Superintendent of Transportation's approval provided the train does not exceed 3,500 trailing tons or 45 cars, whichever is less. Note: Research and Test Cars BNSF 82 (former Kootenai River) and BNSF 83 are exempted from these rules at the direction of Technical Research and Development as required by testing parameters. These two cars can be placed "next behind road power" in any train operation.
3. Non BNSF Passenger Equipment—Business cars of Amtrak, other railroads and private car owners are also covered by this policy.
4. Business Car Moves—The following instructions will be complied with in regard to movement of these cars:
 - a. Cars are to be considered occupied at all times whether they are moving in the train or sitting on a yard track. Please ensure cars are protected as such and General Code of Operating rules concerning occupied cars is complied with.
 - b. If temperatures are expected to go below zero degrees along the trip route, continuation of the trip must be authorized by Asst. Vice President, Passenger car Services. If canceled and cars are already enroute, please make arrangements to move cars to the nearest heated facility if possible.
 - c. Provide suitable mechanical and Resource Protection Team coverage. Resource Protection Hot Line number is 1-800-832-5452 or company line 8-234-7200. Please report any suspicious or illegal activity as soon as possible.
5. Train Handling—If business cars are moved in other than solid articulated equipment, the train may be handled as outlined in Air Brake and Train Handling rules concerning Stretch Braking.

6. Switching Business Cars—The following instructions will be complied with in regard to movement of these cars in other than assembled trains. Business cars must be handled as outlined in accordance with General Code of Operating Rules 7.3 and 7.9.
 - a. Air Brakes—The business car air brake system must be connected to the locomotive and the automatic air brake used in controlling movement during switching.
 - b. Coupling—When coupling into business cars, business car equipment or when it is coupled to other equipment, the movement must be stopped approximately 50 feet from point at which the coupling will be made. All movements to accomplish coupling must be governed by a crew member on the ground using hand signals. Business cars must not be cut off while in motion and no car moving under its own momentum should be allowed to couple to them.
 - c. After Coupling—Once the coupling is made to the business car, the couplers must be fully compressed and stretched to know the couplers are locked before making air, electrical or communications connections.

36. Instructions for Handling Continuous Rail

(excluding articulated loads of 80 ft. length rail or less)
Rail trains loaded with continuous welded rail must not be kicked, nor allowed to be struck by other kicked cars; and, must be handled through all turnouts with extreme care. Before a switching move is made, an air brake inspection and test as prescribed by Rule 100.11 must be performed.

Switching movements must be made using automatic air brakes to control slack in either a bunched or stretched condition. Extreme care must be used when stopping movements to avoid injury to employees or damage to equipment. Use of locomotive brake must be avoided, when possible, to stop the movement. When exceeding 12 rated axles of power during shoving movements, use only the minimum amount of tractive effort necessary to begin movement.

Except during necessary switching moves and train makeup, or when moving as a work train under supervision of maintenance of way, suitable cars must be placed at each end of the "rail" cars to act as a buffer and idler. Rail cars equipped with barrier plates or cars labeled "Buffer/Idler" in addition to other cars taller than the height of the top rails on a loaded train meet this requirement. Tunnel cars equipped with barrier doors eliminate the need for buffer cars if doors are closed and secured. (Tunnel cars numbered BN 961964, BN 961965, and BNSF 920147 through BNSF 920173 have these barrier doors). Trains handling rail trains should not be required to make setouts or pickups enroute. Two loaded rail trains must not be moved together in same train, unless authorized by the manager of the rail facility or his representative. When a two loaded rail train movement is authorized, the maintenance representative will designate which rail train will be placed at the head end. The other rail train must then be positioned in the train immediately at the rear of the first or head end of rail train separated by a suitable buffer car.

Full-length rail strings, when loaded, will have their lengths constructed so that the ends will fall between the green stripes painted on end ramp cars. When the rail train is stretched or bunched, and during transit, rail ends must be between the red stripes painted on end ramp cars, or else the train must be held until released by the general roadmaster or his representative. A white stripe will be applied across top of all

rails between tie-down stands on center car of the rail train so it can be determined at inspection points whether rail has slipped or shifted.

Loaded Rail Trains

1. Trains without Rail Movement Detectors (RMD):
 - must be handled in special service.
 - must not be required to make setouts and pickups en route.
 - must have suitable cars placed at each end of loaded rail train to act as buffer and idlers except during necessary switching moves and train makeup, or when moving as a work train under the supervision of maintenance of way.
2. Trains with Rail Movement Detectors (RMD)
May be handled in trains other than special service under the following conditions:
 - Rail train must be on head end.
 - Train length limited to 64 cars.
 - Should not be required to make setouts and pickups enroute.
 - Suitable cars placed at each end of loaded rail train to act as buffer and idlers.
 - If cars other than loaded rail train are included in movement, and RMD (i.e. strobe lights) becomes inoperative en route, a maintenance representative (a rider) must accompany each train during transit, unless rail train is then moved in special service. When the RMD is inoperative, each time the train stops, the rider must inspect the cars carrying the continuous welded rail for shifted, bowed, or broken rail, and to ensure that each base clamp (tie-down block) is tight. Defective strobe lights must be reported to the train dispatcher, who will notify the manager of rail facility so that the problems can be documented and repairs can be arranged as soon as possible.
 - Strobe lights at each end ramp car must be observed frequently en route. When strobe lights are observed to be flashing, the train must be stopped and all cars carrying continuous welded rail must be inspected to determine any rail movement. If movement is found, observe and complete the following:
 - a) If adjacent track or standard clearances are not fouled, train may be moved to clear main track not exceeding speed of 10 MPH.
 - b) If adjacent track or standard clearances are fouled, protection must be provided and train must not be moved until inspected by proper personnel.

If no movement is found, cancel flashing strobe lights by depressing the reset button at the control box for three seconds. The train may proceed at authorized speed.

The RMD consists of electrically activated screens/gates, four amber-colored strobe lights, and associated controls. There are two 12-volt absolute batteries, charged by an array of solar cells mounted between the tunnel stand strobe lights, to power the system. RMDs are installed on all rail train ramp cars, which are placed at each end of a rail train. If a rail string becomes loose and makes contact with the screen, strobe lights will commence flashing. The strobe lights are mounted on the ramp cars, positioned at the uppermost corners toward each end. Two are mounted on each side of the adjustable ramp stand, and the other two are mounted on each side of the tunnel stand.

The "ramp or tunnel" strobe lights operate in a parallel mode with a common activation (redundancy); thus each

set will flash independently.

To check that strobe lights are operational, use a metal rod, bare wire or other metal object to make simultaneous contact between the screen and any rail in the load or other metal ground. After observing the lights flash, depress the reset button, which is located on the control box, for three seconds to turn off and conserve batteries. The lights should flash approximately 60 times per minute; and fully charged batteries will operate them for about sixteen hours.

The RMD system is inspected and tested at rail complexes before rail trains are released for movement. When second-hand welded rail is picked up and loaded in the field, the RMD system will be inspected and tested by the rail train supervisor before train is released for movement.

Routing of rail trains from the Rail Welding Facility, Pueblo, CO, to points west should be via Amarillo, TX, instead of the northern route through Raton, NM; unless train has stop(s) to deliver rail between La Junta, CO, and Belen, NM. When a rail train is to be routed via the northern route, loading parameters of welded rail strings will be held more restrictive to allow a greater degree of safety for movement through tight curves and mountains.

Unless under special service, the 6x12 rail train (center tie-down car number ATSF 187023, ordinarily consisting of 32 cars rail and 2 buffers) should always be routed through Amarillo, TX, because of its greater amount of slack due to the increased number of cars and limited ramp car length.

At designated intermediate inspection points, make mechanical inspection of cars in compliance with FRA requirements. Manager Rail Complex in Laurel, Pueblo, or Springfield must be advised if any mechanical repairs are needed.

Open End Gondola Consist (Any Ownership)

Maximum authorized speed for trains handling short lengths of continuous welded rail in open end gondola consist is 45 MPH.

Open end gondola consist loaded with continuous rail must not be kicked; nor allowed to be struck by other kicked cars.

Loaded open end gondola consist should be handled within 25 cars of the head end of trains. Loading of rail into open end gondola consist shall comply with the following instructions:

1. Continuous lengths of welded rail will not be loaded more than one layer high.
2. Width of layer will not exceed 67 percent of the inside width of the narrowest gondola.
3. Rail will be centered width wise in open end gondola consist. If practical, spikes, cleats or blocks will be driven into bearing timbers (raised fashion) to prevent walking of load near sides. Rail lengths will be spotted lengthwise from outboard ends of open end gondola consist to allow sufficient distance to exist for clearance (i.e. to exceed the amount of coupling slack). Amount will be determined by number of cars in consist.
4. Continuous lengths of rail will be supported upon timbers with a minimum size of 4" x 4" hardwood. These timbers will be spaced equally throughout load in sufficient number to prevent rail from contacting floor of cars or bottom flanges used for gondola end retention, and provide friction necessary to limit rail shifting.
5. Couplers of cars will be gagged and locked to prevent accidental opening.
6. Outboard ends of open end gondola consist will have ends installed or stacked timbers arranged into a

barricade with a minimum height that exceeds the height of rail.

7. Continuous welded rail lengths will be loosely banded (to allow the required linear movement of the individual lengths of rail when consist is negotiating a curve) to keep all pieces grouped together.

Empty Rail Train Blocks (Any Ownership)

When handling empty 'rail train' blocks, all cars weighing 50 tons or less, by car count, must be placed behind all cars weighing more than 50 tons per car

37. Handling of FRA Track Geometry Inspection Cars

Federal Railroad Administration (FRA), Office of Safety manages high-speed railbound track geometry inspection cars (identified as either the FRA T-16 Geometry Car or the FRA T-2000 Geometry Car) that measure track geometry for compliance with the Federal Track Safety Standards nationwide. The T-2000 may be operated self propelled. The T-16 must be towed. Hereafter the term FRA Geometry Car refers to both vehicles except where otherwise specified.

1. Each train dispatcher and train crew or pilot will be governed by these instructions.
2. Prior to each day's survey, the Survey Director will conduct a safety briefing to all occupants of the FRA Geometry Car on general safety, applicable operating and protection procedures.
3. Whenever the T-2000 FRA Geometry Car is operated, including through a designated "yard or restricted" limits and 'other than main track' territories, the railroad will provide either a Locomotive Engineer/Pilot, Traveling Engineer or Road Foreman to pilot the vehicle. The T-2000 Geometry Car will be governed by applicable operating rules when operating in either signal or non-signal system territories (except that auto routing and automatic clearing features will not be used and all dual control switches will be blocked). Absolute block protection or alternate protection methods, controls or authority (including within "yard or restricted" limit territory), will be applied to protect the T-2000 Geometry Car against following and opposing trains or on-track equipment. The absolute block will not be required for the T-16 when being towed and operating as a train.
4. FRA T-2000 Geometry Car will operate as a train. Authorization will not be issued to the FRA T-2000 Geometry Car within the same or overlapping limits of another train or on-track equipment, except to facilitate the FRA T-2000 Geometry Car's disabled movement, if necessary, and in accordance with the railroad's operating rules. The FRA T-2000 Geometry Car will not be operated by lineup, movement of track cars or similar on-track equipment authorities.
5. The Survey Director, prior to the FRA Geometry Car operation, will communicate directly with the train dispatcher and train crew or pilot, to insure that all operating rules, in effect on the route to be traveled, are understood and confirm the FRA Geometry Car is being dispatched as a train. Reference to applicable operating documents will be made to confirm such information, prior to departure. The Survey Director will be stationed in the immediate vicinity where the FRA Geometry Car method of operation, procedures and movement can be monitored.
6. All mandatory directives will be transmitted and received in compliance with railroad rules and instructions. For purposes of this instruction, all references to assigned crewmember apply only to the train crew or pilot. The FRA Geometry Car operator relies on the train crew or pilot to identify relevant railroad physical characteristics,

movement authority limits and authorized speeds, a sufficient distance in advance.

7. In automatic block signal system or traffic control system territory, the FRA Geometry Car should not be stopped on sand or other similar rail surface conditions affecting the shunting of the track circuit. If such a stop cannot be avoided, the FRA Geometry Car will be moved immediately a sufficient distance to clear that affected portion of the rail.
8. Interlocking machines will be operated manually for the FRA Geometry Car movements (automatic clearing and routing features will not be used). The control machine operator will be kept informed of the progress of the FRA Geometry Car from one control point to another. An interlocking control operator will not change the position of any switch or indication of any signal, until informed that the FRA Geometry Car is clear of the interlocking or a section thereof. Where provided, electrical or mechanical blocking devices will be used on switch and signal controls. If the FRA Geometry Car is stopped within the limits of any interlocking, the control operator or dispatcher will be notified of the stop and the precise location. The FRA Geometry Car will not be stopped within the limits of automatic interlocking or a non-interlocked, at grade, railroad crossing.
9. The FRA T-2000 Geometry Car is equipped with operating controls at either end. When appropriate, instructions will be given to the FRA Geometry Car operator to change ends and operate from the rear of the FRA Geometry Car. Any reverse movement will be conducted, in accordance with the railroad's operating rules.
10. In the event the FRA T-2000 Geometry Car operator is to be relieved for any reason, the Locomotive Engineer/Pilot may be utilized (if agreeable) to continue FRA Geometry Car operations to the day's final tie-up point. If the Locomotive Engineer/Pilot is not willing or prohibited from operating the FRA Geometry Car, the survey should be stopped at a suitable point short of the scheduled tie-up or a locomotive will be requisitioned for tow-in. This contingency is one that will be addressed at the beginning of the survey to allow for ample planning.
11. The FRA Geometry Car will approach all highway-rail grade crossings equipped with automatic warning devices prepared to stop, until it is determined that the warning devices activate and the FRA Geometry Car occupies the crossing. On ground protection against highway vehicles will be provided when automatic warning devices fail to fully activate, the FRA Geometry Car interferes with the normal function, or when prescribed by railroad rules or instructions.
12. The maximum operating speed of the T-2000 is 90 MPH when self-propelled, and 110 mph when towed by a locomotive. The vehicle is not equipped with automatic cab signal, automatic train stop, or automatic train control systems. FRA T-2000 Geometry Car cannot negotiate curves greater than 20-degrees. Additionally, due to truck center length, the center of car swing-out clearance is limited on curves greater than 13-degrees, therefore may restrict safe movement. The maximum authorized speed of the T-16 is 125 MPH and is not restricted by special track work.
13. Neither FRA nor contractor employees will operate a railroad switch or derail and will rely upon a railroad employee to perform that function. Protective devices (*i.e.*, blue signal, derails and locking devices, owned by

FRA) will be applied by contractor employees after receiving authority for placement from the appropriate railroad representative. A 'blue signal' will be displayed on or near the FRA Geometry Car control stand at a readily visible location and the 'key' removed when on ground instrument verification (i-v's) checks are made. Similarly, positive protection (brakes placed in emergency position and surrendering of the locomotive reverser) will be imposed by FRA when the FRA Geometry Car is towed by a locomotive.

14. Except within a locomotive servicing area or car shop area, the FRA Geometry Car may be repositioned by the FRA at anytime on a track or portion of a track that is exclusively occupied by the FRA Geometry Car and protected by FRA owned devices. Within a locomotive servicing area or car shop area, a 'railroad's blue signal rules' will be in place and complied with, to protect 'anyone' on, under or about the FRA Geometry Car. The FRA Geometry Car may be repositioned, only after the movement is authorized by the railroad employee-in-charge of the workmen and approved by the FRA.
15. When unoccupied and at the request of FRA, FRA Geometry Car protection will be provided by the railroad. Additionally, the FRA Geometry Car will not be relocated or coupled to other rolling equipment without permission by the FRA. To prevent undesirable access, a remotely controlled or manually operated switch providing entrance to the track occupied by the FRA Geometry Car, will be aligned against movement to that track. Where provided, electrical or mechanical blocking devices will be used on the switch and signal controls. Additionally, the switch will be secured with an effective locking device, exclusive to FRA. The switch stand's operating mechanism will be equipped with a visible all-weather display tag warning any users, "**Out of Service-Do Not Operate.**" If a switch cannot be aligned and locked, as described, derails capable of restricting access will be used instead of an effective locking device. The placement (Protective devices, owned by FRA, will be placed not less than 150-feet from each end of the FRA Geometry Car, where appropriate) of front and rear "portable train control" signs will be displayed in the center of the track, adjacent to derails, marking the presence of the FRA Geometry Car. The warning sign will consist of 16x24-inch red placard, signifying rolling equipment cannot pass. A FRA Geometry Car wheel will be securely chocked to prohibit movement on its own.

38. Rail Detector Cars

Sperry Rail Bound detector cars with 100 series numbers will be utilized for rail flaw detection. These units are self-contained rail cars which cannot be depended upon to continuously actuate the block signal circuits and crossing warning devices. When deadheading to a work location, they will require an engineer pilot; when working to detect rail flaws, they will be accompanied by a MW supervisor.

These units should be authorized and protected in the following manner:

CTC Territory

When the equipment is working to detect rail flaws, it will be authorized and protected by track and time, Rule 10.3. When being deadheaded to a work location, the equipment will operate by signal indication and must report to the control operator when it has passed each control point. The control operator will apply blocking devices on the control machine behind this equipment as soon as progress report is received.

TWC Territory

When the equipment is working to detect rail flaws, it may be authorized and protected by Form B track bulletin under the provisions of Rule 15.2.1. This type of protection may also be afforded when deadheading the equipment in TWC territory. (Rule 15.2.1 may only be used on divisions where authorized by timetable or general order). Where Rule 15.2.1 is not allowed, track warrant protection may be used for authority.

Exception: Track warrant protection must not be used inside of yard limits in ABS territory since the equipment cannot be depended upon to continuously actuate the block signal system.

Track Permit Territory

The equipment will be authorized and protected by track permit under the provisions of Rule 9.15. At automatic interlockings, the units will be handled accordingly to the instructions in the equipment release box and not by the train release box instructions. At manual interlockings, the control operator will follow instructions for handling track cars rather than trains. These units must approach all grade crossings equipped with automatic crossing warning devices prepared to stop until it is determined that crossing warning device is operating properly.

39. Rule of the Week

All employees must review the requirements of the Rule of the Week. Please direct any questions you may have to your immediate supervisor. You should be prepared to discuss the requirements of the "Rule of the Week" with your supervisor. "Rule of the Week" will be included in the field testing (Operations Testing) procedures.

40. Rear End Restricted Cars

Cars restricted to "rear end only" may be in train up to five cars ahead of rear car. Certain cars may require extreme rear end movement because of mechanical deficiencies.

41. Car Identification B-End

Conventional Equipment: The "B" end of the car is the end where the hand brake is located. Face the "B" end of the car. The left side of the car is to your left and the right side of the car is to your right as you face the "B" end. Count axles from the "B" end beginning with No. 1 being closest to you and No. 4 being farthest away. If the defective journal or wheel is the third axle away from the "B" end of the car on the left side as you face the equipment you will report it as "L3."

Articulated Equipment: The important thing is to locate the "B" end of the car. Each segment or unit of such cars is identified by a letter. This letter and the car number are shown on small badge plates located on each segment or unit of the car. The end segments are designated "A" and "B." The interior segments or units are designed (beginning at the "B" end) by the letters "C" through "E" on the five unit or segment cars. Locate the "B" end of the car as indicated by the stencil. Do not rely on the location of the hand brake. Many of these cars are equipped with a hand brake on each end.

Face the "B" end of the equipment. The left side of the car is to your left and the right side of the car is to your right as you face the "B" end of the equipment.

Count axles from the "B" end beginning with No. 1 being closest to you. The axles on this type of equipment are numbered consecutively from No. 1 through No. 9 and then by the alphabet with axle "10" identified by the letter "Z," axle "11" by the letter "Y," axle "12" by the letter "X," etc., going backwards through the alphabet.

If the defective journal or wheel is the ninth axle away from the “B” end of the car on the right side as you face the equipment, you will report it as “R9.” If it is the fourteenth axle away from the “B” end of the car on the right side as you face the equipment, you would report it as “RV.” Remember, on this equipment, axles “1” through “9” are identified numerically. Axles “10” through “14” are identified alphabetically beginning with the letter “Z” working backwards. Each axle is stenciled on most multi-segment or unit equipment on the truck side. Use the stencil when available to verify your identification.

42. Gravity Switch Moves

Unless otherwise restricted, a gravity switch move can be utilized where car(s) must be repositioned on the opposite end of the engine. Not more than five cars may be handled at one time in this manner, and only with sufficient hand brakes manned by crew member(s) to insure that the movement can be controlled. Riding the hand brake on shiftable loads must be avoided.

When making this move, the hand brake(s) to be used to control the movement must be tested to ensure proper operation. Hand brakes may then be released to allow car(s) to gravity roll into desired track. Crew member(s) must ride the car(s) and use the hand brake(s) to control speed and to stop. Such cars must not be allowed to couple to other equipment while this method of switching is being used. Other methods of handling such moves, historically referred to as “dropping of cars,” are prohibited, except at specific locations where authorized.

43. Signal Awareness Form

Subdivision-specific signal awareness forms are available at on-duty points. In addition to observing and calling signals as required by GCOR Rule 1.47, the conductor must fill out one of these forms in ink while operating on BNSF and foreign railroads. Foreign railroads operating on BNSF are allowed to use their own signal awareness forms when approved.

All block signal names or aspects and yellow or yellow/red flags must be recorded. With the exception of CLEAR signals, which only require the name or aspect to be recorded, information must include the location of each flag, the train speed, time the signal or flag is passed and name or aspect of the signal that was called. When speed indicator is not visible to the conductor, the engineer must call out the speed, in addition to the signal name or aspect, if other than CLEAR. Should the conductor be unable to record a signal aspect due to other activities, this fact must be noted on the form, including the reason.

When operating on an Approach or Diverging Approach signal indication, the engineer must notify the conductor when the train speed has reduced to the required speed. The conductor must note the time the train has reduced to the required speed on the Signal Awareness Form and repeat the time to the engineer. A job safety briefing between the conductor and engineer must confirm understanding that the train may be required to stop at the next signal.

In addition, the form must show the location of switches, switch point locks and derails returned to and locked in normal position in non-signaled territory (outside of restricted limits and non-signaled yard limits) and the time that the switch, switch point lock and derail were returned to normal position. The engineer must initial each switch/switch point lock/derail entry as a cross-check measure.

At the completion of each trip, the original form must be turned in as directed by the Division General Manager.

Standard forms:

Signal Awareness Form (Location to Location)										
Date: _____		Conductor: _____ <i>(print name)</i>				Signature: _____ <i>(signature)</i>				
Train Symbol: _____				Engineer: _____ <i>(print name)</i>						
Block System Limits										
Line No.	Signal and Location	Signal Name						*Speed	*Time	Flag Location and Name
		Clear (Mark X)	Approach Medium (Mark X)	Approach (Mark X)	Stop and Proceed (Mark X)	Stop (Mark X)	Other (Mark X)			
1										
2										
3										
4										
5										
6										

* It is not required to indicate speed and time for CLEAR signals.
The following abbreviations may be used: AL - Approach Limited, AA - Advance Approach, AR - Approach Restricting, DC - Diverging Clear, DAD - Diverging Approach Diverging, DAM - Diverging Approach Medium, DA - Diverging Approach, R - Restricting, Y - Yellow Flag, YR - Yellow/Red Flag

Non-Signaled Territory					
Flag Location	Flag Name	Speed	Time	Switches/Derails Normalized in Non-Signaled Territory	Engineer's Initials

The following abbreviations may be used: Y - Yellow Flag, YR - Yellow/Red Flag

44. Report of Unsafe Motorist/Trespasser

The Report of Unsafe Motorist/Trespasser Program is designed to capture information on near collisions between trains and vehicles, trespassers or pedestrians. When an incident occurs, employees must make a report by one of the following methods:

- Pre-addressed/Postage-paid postcard (Form SAF51680)
 - Fill in as much information as possible.
 - Fill in name and address if response is desired.
 - Place in mail.
- Call 1-800-697-6736.
 - Accident/Incident Reporting Center
 - Monday-Friday, 6 AM to midnight
 - Saturday-Sunday, 6 AM to 2:30 PM
 - Voice mail, all other times
 - Provide as much information as possible.
 - Provide name and address if response is desired.

Emergencies must not be reported on the Accident/Incident Reporting Center number. Emergencies must be reported as follows:

- Radio/telephone contact with train dispatcher.
- Radio/telephone/verbal contact with local BNSF resource protection personnel or to the Resource Protection Command Center at 1-800-832-5452

45. Network Operations Center Notification Requirements

BNSF timetable special instructions for individual subdivisions provide a table of radio call-in tones for contacting the Train Dispatcher, Mechanical Help Desk and Service Support. Tone call-in numbers may be a single digit or as many as three digits as outlined by timetable special instructions, depending on radio systems.

Procedures for Contacting Help Desks

- Train Dispatcher—Train crews should continue to contact the train dispatcher as required by current instructions for all delays. When reporting mechanical defects on locomotives,

cars, or other equipment such as an ETD, the dispatcher must be contacted initially in order to manage delays relative to these defects.

- Mechanical Help Desk—After initially recording and providing general information about defective locomotives, cars, or an ETD to the train dispatcher, the Mechanical Help Desk must be communicated with concerning the defect. Crew will report specific details concerning the defect and be governed by that supervisor's instructions concerning handling of the defect.

The Mechanical Help Desk may also be contacted by phone at:

Operations North—(817) 234-6258, Co. Line (8) 234-6258
 Operations South—(817) 234-2300, Co. Line (8) 234-2300

- Signal Desk—Signal Help Desk (SC) radio tone call-in references are no longer valid, and all signal defect/trouble reports should be reported directly to the train dispatcher.
- Service Support—In addition to reporting via radio to Service Support at Fort Worth, the following phone numbers and fax numbers may be used:

Train reporting
 BNSF company line—(8) 593-7610
 Toll-free line—(800) 549-4601
 BNSF fax line—(8) 593-7615
 Fax toll-free line—(800) 234-1341

Interchange reporting
 BNSF company line—(8) 593-7640
 Toll-free line—(800) 206-3846
 BNSF fax line—(8) 593-7645
 Fax toll-free line—(800) 223-6757

46. Special Car Handling Instructions

One or any combination of two of the following codes may be shown on train lists to designate special car handling requirements. These same codes may also appear in the Special Instruction Column of switch lists and yard inventories.

CODE DESCRIPTION

- AG Armed Guard Service
- AV Annual Volume
- BH Bad Order Home Shops
- BN If Bad Order Notify Shipper
- BT Bare Table Flat
- B1 Bad Order
- C Customer Chassis Required
- CA Moving on Equipment Instruction
- CC To Be Cleaned and Conditioned
- CD Condemned Car (See Note 1)
- CI Customs Inspection
- CS Customer Storage
- CU Customer Stage
- CY Certification That This Equipment is for Recycling
- DB Distributed Van Bad Ordered
- DH Do Not Hump
- DI Redistribute at Destination
- DN Shipper's Authority Required for Diversion
- DO Delivery Order Shipment
- DR Drop Yard
- DT Distributed Intermodal Equipment
- DU Do Not Uncouple
- DV Unit has been diverted
- EC Speed Restriction 55 MPH
- EH Embargo Hold
- EL Empty Container Mechanical Lock
- EM Hold for Equipment Management
- ER Return Empty Via Reverse Route

- ES Expedited Service
- EW Hold Early Warning
- FA Automobiles Headlights Facing A-End (Opp. of Brake End) of Autoveyor
- FB Automobiles Headlights Facing B (Brake End) of Autoveyor
- FM Fumigate Car Now
- FP Fumigation Placards Applied
- HA Cars Held for the Customer in Bond Pending Customs Authority
- HB Hold for Billing—Mini Waybill Indicating Industry to Bill
- HC Hold for FMC Redistribution
- HD Cars Held for Customer Diversion
- HE Head End Only
- HF Car Held for BNSF Rail Clearances (High Wides)
- HG Cars Held for BNSF Pending Customer File Information
- HH Cars Held for Overload Condition
- HI Hold for Inspection
- HJ Cars Held for a Foreign Railroad After Being Offered by BNSF for ICD
- HK Empty Non-Private Cars Held on BNSF Track and No Car Order Exists
- HL Excessive Dimension
- HN Cars Held for Specified Local Conditions, **Restricted Usage
- HO Cars Held for Consignee to Surrender Original BOL or Indemnity Bond
- HR Cars Held for Customer Furtherance Instructions After Arr at Dest
- HS Empty (Non-Private) Cars Held on BNSF Trackage Awaiting Placement
- HT Heat Car
- HV High Value Shipment
- HX Cars Held Waiting for Waybill Information from Connecting Carrier
- IB In BNSF Bond
- IC Inspection Requested at Port of Entry into Canada by Canadian Customs
- ID In Bond Beyond BNSF Destination
- IM Inspection was Requested by Mexican Customs at Port of Entry into Mexico
- IN Hold for Inspection
- IS In Shipper's Bond
- IU Inspection was Requested by US Customs at Port of Entry into USA
- L Tank Surveillance Required
- LC Car Trip Leased to Consignee
- LD Local Distribution Empty
- LG Loaded to Gallonage Capacity
- LO Local Orders
- LQ Loaded to Full Cubic Capacity
- LS Handle in Local Service Only
- LU Unload in Laredo proper
- LV Loaded to Full Visible Capacity
- LX Cleared for export via Laredo
- M Person in Charge of Car
- MB Make Bill of Lading
- MC Measure Car Now
- MD Mixed Destination Intermodal Units
- MI Requires mechanical inspection, do not move on train.
- MN 5 A running reefer unit set at -5 degrees Fahrenheit
- MR 28 A running reefer unit set at 28 degrees Fahrenheit
- NC Non-credit Patron
- ND Do Not Divert
- NH No Hit—Car Distribution

- NM Non Misc. Credit Patron—Car held account charges due
- NP No Placards Required
- NT Do Not Transfer Contents
- OI Oils Marine Pollutant
- ON Oil Notation
- PD Privately Owned Equipment Subject to Demurrage
- PH Hold for Pool Destination
- PJ Mechanical Project Job
- PR Prospective Loading Empty
- PT Hold for Pre-Trip
- QD Hold for Queue Demand
- RE Rear End Only
- RI Rail Inspection Service
- RJ Hold for Rejected
- RP Rail Controlled Private
- RS Rule 7 Reject Candidate
- SC Equipment Scrapped
- SD Car Sold
- SE Hold for Seasonal Storage
- SF Feed Now
- SO Shipper's Order
- SR Greater Security Service
- SS Surplus Storage
- ST Move on special train only, requires single car train movement.
- SW Switch Only Empty Furnished by Foreign Road
- TB Car Control Distributed Bad Order
- TG Transp. Code G—contaminated commodity service. Cars should not be placed at industry other than so designated.
- TS Transit Shipment
- TU Turn This Car Now
- UL Unload from left side of car. Left side of car determined by facing the "B" (brake) end of car.
- UP Unloaded as Placarded
- UR Unload from right side of car. Right side of car determined by facing the "B" (brake) end of car.
- VA Vehicle Headlights Facing A-End (Opp. of Brake-End) of Autoveyor
- VB Vehicles Headlights Facing B-End (Brake End) of Autoveyor
- UP Unload as Placarded
- WA Weigh After Spotted and Released
- WB Weigh This Car Both Before and After It Goes to Spot
- WH Weigh
- WI Waive Inspection
- WL Weigh Light
- XM Cleared to Cross from US to Mexico
- Y Mechanical Refrigeration
- Z Expeditor Train
- 25 25 MPH Speed Restriction (See Note 2)

Clean and Condition Codes for Empty Cars

CODE	DESCRIPTION
F1	Washed, Food Grade
F2	Cleaned (Swept), Food Grade
F3	Dirty, Food Grade
F4	Cond/Repairs, Food Grade
F5	"Not Observed", Food Grade
F6	Rinse, Food Grade
F7	Inspected, Food Grade
P1	Washed, Processor Grade
P2	Cleaned (Swept), Processor Grade
P3	Dirty, Processor Grade
P4	Cond/Repairs, Processor Grade
P5	"Not Observed", Processor Grade

- P6 Rinse, Processor Grade
- P7 Inspected, Processor Grade
- S1 Washed, Standard Grade
- S2 Cleaned (Swept), Standard Grade
- S3 Dirty, Standard Grade
- S4 Cond/Repairs, Standard Grade
- S5 "Not Observed", Standard Grade
- S6 Rinse, Standard Grade
- S7 Inspected, Standard Grade

Other Codes

There are a number of SCHI codes that begin with a number followed by alpha character which are used to identify alternate storage locations. Example:

- 1A Hold Storage Arkcity

Codes B1 through B9 mechanical codes reference the type of repairs needed for bad order cars.

Note 1. The 'CD' Condemned Car code will be inserted by the computer when the car is so registered in UMLER (Universal Machine Language Equipment Register). This does not relieve employees of the responsibility of reporting these codes when appropriate.

Note 2. Report numeric MPH speed restriction only, e.g., 25 for a car restricted to 25 MPH. Certain series of cars which have a permanent speed restriction will have the speed restriction code inserted by the computer. When such speed or speeds are shown, trains must not exceed the lowest speed so indicated. This does not relieve employees of the responsibility of reporting the proper code on work order(s) on all cars which for any reason have speed restrictions.

When cars are subject to two special handling instructions, both codes should be reported. If subject to move with more than two, report the two most restrictive and protect other special handling requirements by an administrative message to those offices and/or individuals to whom the train is addressed.

When a car on a train list has the "HL" Car Code, and no clearance wire is received, contact your local CS&S office and obtain a clearance wire for the car. If unable to obtain a clearance wire, the car must be set out.

Car kind codes M3E (Hi Tri-Levels) and M3F (articulated Hi Tri-Levels) must not be operated on any Branch Line or any location listed below:

- Barstow Subdivision—Barstow to Bettendorf via Crescent Bridge
- Beatrice Subdivision
- Bellingham Subdivision—USA Canada Border to Burlington
- Carlsbad Subdivision
- Carthage Subdivision
- Chicago Subdivision—BRC overpass between MP 6.70 and MP 6.73 (Handle on Mains 4 and 5 only)
- Columbia River Subdivision
- Gateway Subdivision
- Hannibal Subdivision—Burlington to West Quincy
- Helena Subdivision
- Hi Line Subdivision
(Exception: Car kind M3F may operate on this subdivision.)
- Kettle Falls Subdivision—Danville, WA, to San Poil
- Kootenai River Subdivision
(Exception: Car kind M3F may operate on this subdivision.)
- Laurel Subdivision
- Lester Subdivision
- New Westminster Subdivision
- Omaha Subdivision—Handle on Main 1 only at Omaha Depot
- O E Subdivision

- Oregon Trunk Subdivision—Fallbridge to Bend
- Raton Subdivision
- Rockford Subdivision
- Rustler Springs Subdivision
- Scenic Subdivision
- Silsbee Subdivision—Beaumont to Brooks
- Sioux City Subdivision
- Stampede Subdivision
- Stockton Subdivision—Port Chicago to Richmond
(Exception: Car kind M3F may operate on this subdivision).
- Mitchell Subdivision
- Topeka Subdivision—Topeka to Emporia
(Exception: Car kind M3F may operate on this subdivision).
- Wayzata Subdivision
- Wymore Subdivision—Table Rock to Wymore
- York Canyon Subdivision

Car kind M3E and M3F may operate over all other Main Line Subdivisions without clearance wire to protect movement even if car has "HL" code on the train list. (See Item 7[f])

Note 3. FTTX flatcars departing GM Plant, Oklahoma City destined for Kansas City (NS) may operate over Red Rock, Douglass, and Emporia Subdivisions without clearance wire to protect movement even if car has "HL" code on the train list. Mechanical inspection is not required on these cars at Oklahoma City.

47. Train Make-Up Instructions

Trailing Tonnage Restrictions:

1. The following cars must not be ahead of more than 2,500 trailing tons
 - All loaded or empty 2-axle cars (series TTOX and TTFX)
2. The following cars must not be ahead of more than 3,000 trailing tons (long car/short car)
 - Any car 80 ft or longer coupled to any car 45 ft or shorter.
Exception: Next to locomotive crane 45 ft. or less if coupled to boom car 80 ft. or longer.
Note: Item 2 does not apply to multi-platform cars except those with individual platforms exceeding 80 feet.
(Examples: Twin flat cars and Automax cars)
3. The following cars must not be ahead of more than 5,500 trailing tons
 - Multi-platform spine cars, regardless of how loaded.

Total Train Tonnage Restrictions:

4. Trains greater than 5,500 total tons -

The following cars must not be within the first 10 cars/platforms:

- Any conventional car (non-multi-platform) weighing less than 45 tons.
- Any 80 ft. or longer flat car with a single trailer/container, regardless of car weight.

Note: This includes twin flat cars (solid-drawbar connected flat cars TTEX & RTTX series) with a single trailer/container on either segment/platform.

- Multi-platform cars with any empty platforms.

Additional subdivision restrictions (excludes solid empty bulk commodity trains):

On Glorieta (MP 775.0 - MP 842.0) and Raton (MP 639.0 - MP 660.0) Subdivisions the following additional restrictions apply:

Trains greater than 2,500 tons and less than 3,000 tons, the cars listed above must not be within the first 10 cars/platforms. Trains 3,000 tons or greater, the cars listed above must not be within the first 15 cars/platforms.

On Cajon (Main 2, MP 56.6 - MP 62.8), Gateway (MP 178.0 - 188.0), Mojave (MP 331.3 - MP 381.3), Scenic (MP 1694.5

- MP 1731.3) and Stampede (MP 41.0 - MP 58.5), additional restrictions apply:

Trains greater than 3,500 tons and less than 4,000 tons, the cars listed above must not be within the first 10 cars/platforms. Trains 4,000 tons or greater, the cars listed above must not be within the first 15 cars/platforms.

Note: Unless otherwise authorized, all trains destined Cajon or Mojave Subdivisions will be made up in compliance with above guidelines for Cajon Subdivision (Main 2, MP 56.6 - MP 62.8) and Mojave Subdivision MP 331.3 - MP 381.3).

5. Trains greater than 7,000 tons -

- Rear 1/4 of the train must not weigh more than 1/3 of the total weight.

Exception: This does not apply to:

- trains made up entirely of cars weighing a minimum of 45 tons each.
- solid loaded or solid empty unit bulk commodity trains.
- trains made up entirely of intermodal equipment.

NOTE: If a train is determined to be out of compliance with these train make-up rules and maximum authorized speed exceeds 45 MPH, speed must immediately be reduced to 45 MPH and train dispatcher notified.

Train must not exceed a maximum speed of 45 MPH until it reaches the location specified by the train dispatcher to correct the condition.

Detoured Foreign Trains

If a foreign line train operating on the BNSF for purposes of detour is in compliance with BNSF train make-up instructions, the train may be operated at maximum speed that would be permitted if train was a BNSF train. If train does not comply with BNSF train make-up instructions, train is authorized to operate on BNSF at a maximum speed of 45 MPH.

Train Length

When complying with Special Instructions covering speed and other train restrictions where calculations of train length and/or tons per operating brake are involved, the locomotive consist should be excluded unless specifically stated otherwise.

Military Train

Unit military trains containing shipments on cars with end of car cushioning as shown on the train profile (EOC) shall have no more than total of 80 cars in the train. If train exceeds 60 cars, train is restricted to 45 MPH.

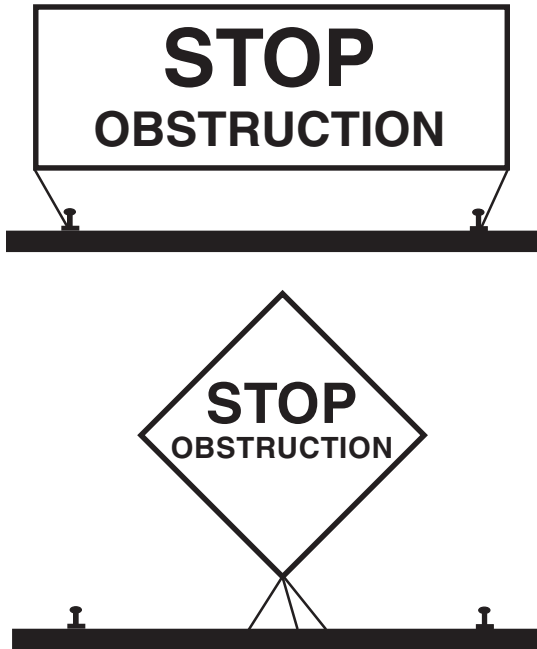
Exceptions

Trains which are exempt from the above train make-up instructions will be identified on Division General Order.

48. Operations Testing

When operations testing is performed to test for compliance with the following rules, a banner with red reflectorized border and lettering on a white background may be stretched across the track. It will display 'STOP' or 'STOP OBSTRUCTION.' In addition, a banner displayed square on point, colored high visibility orange or white and retroreflective with the words "STOP OBSTRUCTION" may be used. It will be placed between the rails of the track and is considered a STOP signal.

Example:



These banners are 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' or 'STOP OBSTRUCTION' banner.

Examples of operating rules where the 'STOP' or 'STOP OBSTRUCTION' banner may be used as a stop signal are:

- GCOR & MWOR Rule 6.27 Restricted Speed.
- GCOR Rule 6.28 Movement On Other Than Main Track.
- or
- MWOR Rule 6.50 Movement of On-Track Equipment.

Expect to find the "STOP" or "STOP OBSTRUCTION" banner erected at any location, or at any time the rules above restrict movement.

49. Engineer Responsibilities and Certification

(In the application of the following guidelines, the term engineer applies to Train Service Engineers, Student Engineers, Locomotive Servicing Engineers/Hostlers, Remote Control Operators (RCO), and Student Remote Control Operators.

1. General Responsibilities

Engineer certification must comply with these federal and company requirements:

- a. Engineers must be certified in the appropriate class of service to operate a locomotive.
- b. Engineers must certify according to federal regulations (49 CFR Part 240) and Burlington Northern Santa Fe (BNSF) certification requirements and programs.
- c. Engineers must possess their class of service certificate and display it at the request of a company manager or FRA representative while on duty.
- d. Engineers must report convictions for:
 - Operating a motor vehicle while under the influence or impaired by alcohol or a controlled substance.
 - Refusing to undergo testing by a law enforcement officer who wants to determine whether the engineer is operating a motor vehicle while under the influence of alcohol or a controlled substance. State-sponsored diversion programs, guilty pleas, and completed state

actions to cancel, revoke, suspend, or deny a driver's license are considered convictions under this rule.

- An engineer must report any conviction to his or her supervisor responsible for certification no later than 48 hours following the day the engineer receives notice of the motor vehicle conviction.

2. Engineer Certification Requirements for Operating Locomotives

Certified engineers may operate locomotives under the following conditions:

- a. A certified locomotive servicing engineer may not operate locomotives coupled to cars.
- b. A certified locomotive servicing engineer may operate locomotives within a yard or terminal area for hostling purposes.
- c. Only certified Train Service Engineers, Student Train Service Engineers, Remote Control Operators, and Student Remote Control Operators may operate locomotives coupled to cars.
- d. Certified student Engineers and Student Remote Control Operators utilizing a Remote Control Transmitter may operate locomotives within the limits of their class of service under the direct supervision of an Engineer Instructor or Remote Control Operator Instructor. Prior to operating a locomotive in a yard or over a road territory for the first time, a certified Engineer or Remote Control Operator must have made at least one trip observing the territory. Engineer Instructors must have a minimum of six months of experience on the road territory over which they are supervising Certified Student Engineers.
- e. Certified Student Remote Control Operators may operate a locomotive using a Remote Control Transmitter under the direct supervision of a Remote Control Operator Instructor.
Note: An RCO Instructor must have a minimum of 3 weeks experience as a Certified Remote Control Operator before training a student.

- f. Certified Train Service Engineers and Locomotive Servicing Engineers, including Train Service Engineers/ Locomotive Servicing Engineers that have been cutback to train service, and Remote Control Operators who have not had their evaluation and certificate signed prior to October 1 of each year, must advise their respective Road Foreman of Engines or Designated Supervisor of Remote Control Operators (DSRCO) of this fact. Should a new Road Foreman or DSRCO be assigned or a Engineer or Remote Control Operator change work locations after October 1; the Train Service Engineer/ Locomotive Servicing Engineer or Remote Control Operator must again report to the new Road Foreman of Engines or DSRCO that certification evaluation is due.

3. Maintaining Locomotive Engineer Proficiency for Skills, Route Familiarization and Special Equipment

A certified train service engineer must maintain proficiency as an engineer as it pertains to:

- Skills Proficiency
- Route familiarization (and/or yard familiarization as required by local instructions if RCO) and
- Special or unique equipment.

a. Skills Proficiency

An Engineer who has not operated a locomotive in the last six (6) months, including under the provisions of Rule 1.47, Item B, Engineer Responsibilities, of the General Code of Operating Rules, must inform crew management of this fact when called to perform service as an engineer

and that he/she may only be used as an Engineer if another qualified Engineer acts as a mentor (this includes a member of the crew who is qualified as an engineer or a supervisory engineer).

If seniority limitations or any situation results in a qualified locomotive Engineer not performing the skills of an Engineer for a period of six (6) months, that individual must immediately contact his/her Road Foreman of Engines or Supervisory Remote Control Operator (DSRCO) or other supervisor to determine the number of trips required, if any, and routes, for the purpose of maintaining the Engineer's skills proficiency. Exception: the Remote Control Operator is a qualified Train Service Locomotive Engineer, the timelimit is 12 months.

Exception:

A Remote Control Operator may only be used as a Remote Control Operator if another qualified Remote Control Operator acts as a mentor (this includes a member of the crew who is qualified as a Remote Control Operator or a supervisory Remote Control Operator).

b. Route Familiarization

Route familiarization is required in order to perform service as a certified train service engineer without the assistance of a pilot. Once initially qualified on a specific route by making the required number of familiarization trips as specified by the Road Foreman of Engines, route familiarization is maintained by observing the route when performing service in any capacity (engineer or trainman) every 12 months. Other methods of maintaining route familiarization may also be available as specified by the Road Foreman of Engines.

Exception: Route familiarization as outlined above on the heavy and/or mountain grades of the subdivisions listed below, in any capacity, is required every six (6) months: Cajon, Mojave, Gateway, Scenic, Stampede, Glorieta, Raton, Pikes Peak and Hi Line subdivisions. Train service engineers assigned to new routes or who become unqualified on current assigned routes due to lack of route familiarization are required to contact their Road Foreman of Engines (or other supervisor) who will advise the number of trips, if any, required to qualify or re-qualify on that route. If and when an engineer is qualified at the completion of these trips, the Road Foreman of Engines or other supervisor will then authorize the train service engineer to perform service on that route without a pilot.

Route familiarization (and the use of a pilot) is not required when the movement to be made does NOT include a section of track with an average grade of greater than 1% over 3 continuous miles and;

1. The train is on other than main track; or
2. The maximum distance the locomotive or train will be operated will not exceed one mile; or
3. The maximum authorized speed for any operation on the track does not exceed 20 MPH; or
4. Operations are conducted under operating rules that require all movements to proceed at a speed that permits stopping within one half the range of vision of the locomotive engineer.

Note: Remote Control Operators must check local yard instructions for yard familiarization requirements.

4. Special Equipment Proficiency

Distributed power and electronically controlled pneumatic brake systems require the engineer to have continued experience in order to maintain an adequate level of proficiency. If after the engineer is initially qualified on this equipment and a period of 12 months occurs without any experience operating this equipment (whether or not as assigned engineer), the Road Foreman of Engines or other supervisor must be contacted and the engineer must be governed by his/her instructions concerning requirements to become re-qualified on this equipment.

There are several systems of RC equipment; a certified RCO must receive initial training on unfamiliar equipment before operating it. Once initial training is received the operator only needs to maintain qualification as an RCO on any system.

5. Route Familiarization Pilots

A person acting as a route familiarization pilot may not be an assigned member of the crew. In addition,

a. Train Service Engineers

1. When a pilot is required account engineer has NO previous experience on the route, the pilot must be a certified train service engineer.
2. When a pilot is required account engineer requires re-familiarization on a route where previously qualified, any person with route familiarization may be used as a pilot.

b. Remote Control Operators

1. When a pilot is required account the Remote Control Operator has NO previous experience on the Main Track, the pilot must be a Remote Control Operator.
2. When a pilot is required account the Remote Control Operator requires re-familiarization on a Main Track where previously qualified, a Remote Control Operator member of the same crew with route familiarization may be used as a pilot. In addition this crew member must be positioned at the same location as the individual requiring re-familiarization.

Exception: A pilot is not required if the Remote Control Operator has operated over the territory in another certified class of service.

Note: The requirements for the sections 'Skills Proficiency, Route Familiarization, and Special Equipment Proficiency' do not apply to any individual restricted to yard service as a train service locomotive engineer or locomotive servicing engineer unless otherwise instructed.

Appendix A - Track Flagging Examples

The figures in the appendix provide examples for protecting temporary speed restrictions and people or equipment working on or near the track. When reviewing these examples, keep in mind the following:

- The examples provided do not cover every situation.
- The distances shown are those specified by the rule.

In multiple main track territory, when a restriction is placed on a crossover, no track flags will be displayed after the restriction is specified by track bulletin or track warrant. This information must be included on the track bulletin or track warrant.

Yellow and yellow-red flags will be placed 2 miles before each restriction with the exception of at foreign line junctions, areas where flags cannot be placed 2 miles in advance and in certain situations at crew change points.

In situations in multiple main track or at sidings, when a train passes a yellow or yellow-red flag and a restriction is specified 2 miles in advance on track bulletin or track warrant, if the train takes a different route from the restricted track, this will not be considered as an unspecified restriction. Crew members must determine the track affected by comparing the flag location with the information contained in the track bulletin.

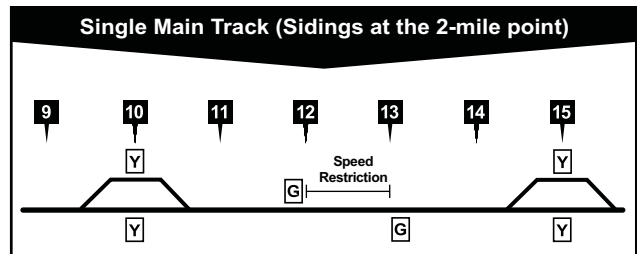
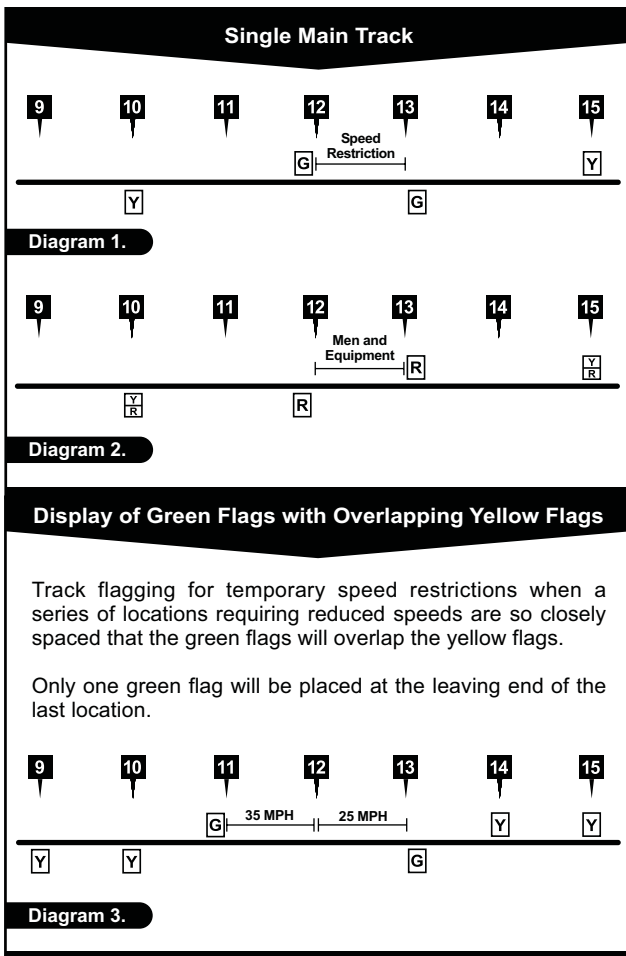


Diagram 4.

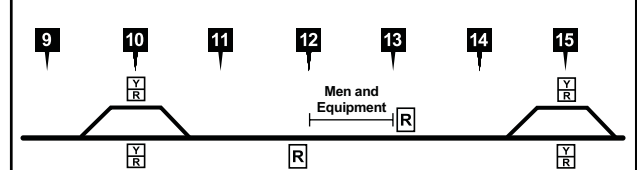


Diagram 5.

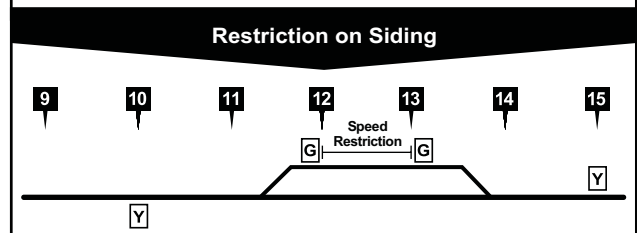


Diagram 6.

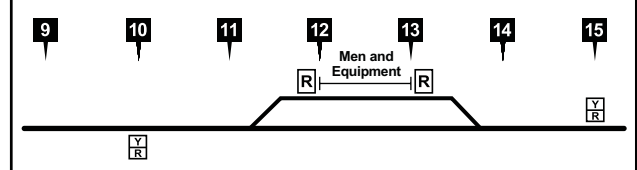


Diagram 7.

Train crews would determine the track affected by the information contained in their track bulletin.

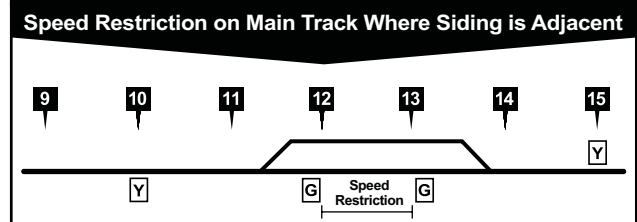


Diagram 8.

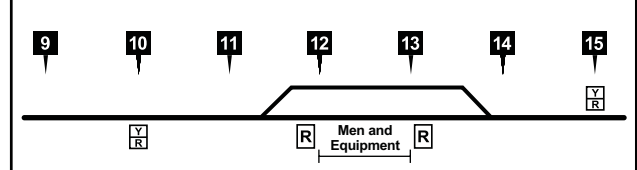


Diagram 9.

Train crews would determine the track affected by the information contained in their track bulletin.

Speed Restriction When Flag Cannot Be Placed 2 Miles in Advance

Location of short flag must be indicated in track bulletin or track warrant.

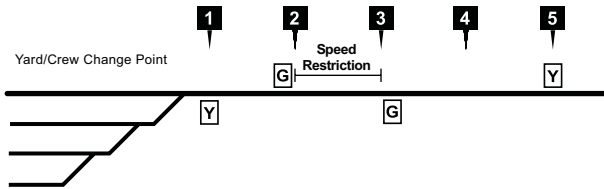


Diagram 10.

When Flag Cannot Be Placed 2 Miles in Advance of Men and Equipment

Location of short flag must be indicated in track bulletin or track warrant.

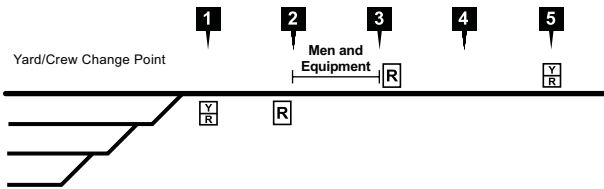


Diagram 11.

Speed Restriction at Foreign Line Junction

Location of short flag must be indicated in track bulletin or track warrant.

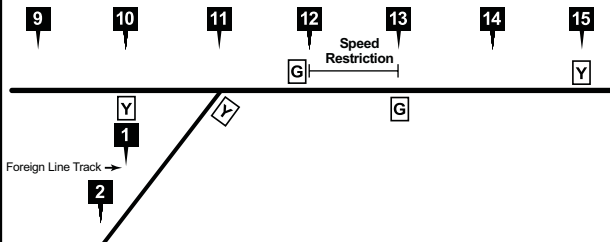


Diagram 12.

Foreign Line junction Near Men and Equipment

Location of short flag must be indicated in track bulletin or track warrant.

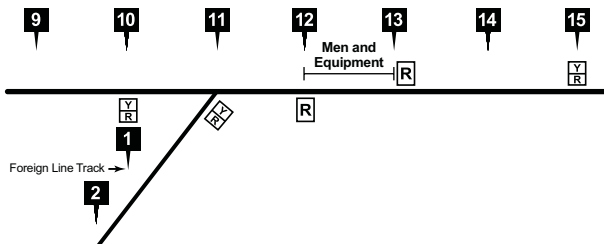


Diagram 13.

Speed Restriction at BNSF Junction

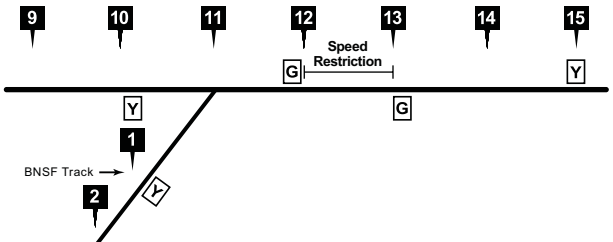


Diagram 14.

BNSF Junction Near Men and Equipment

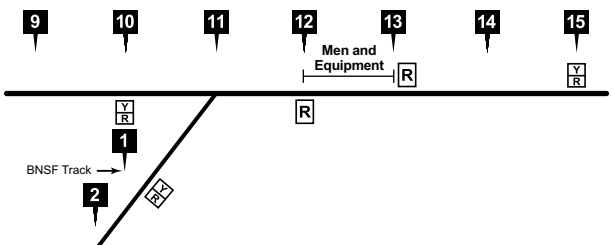


Diagram 15.

Speed Restriction Just Beyond Turnout to Third Main Track

Train crews would determine the track affected by the information contained in their track bulletin.

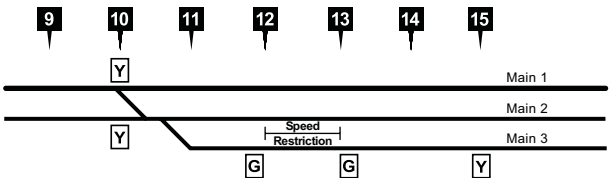


Diagram 16.

Men and Equipment just Beyond Turnout to Third Main Track

Train crews would determine the track affected by the information contained in their track bulletin.

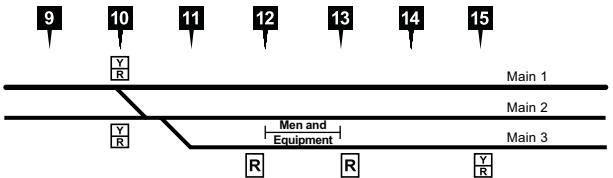


Diagram 17.

Speed Restriction Just Beyond Turnout to Main 1

Train crews would determine the track affected by the information contained in their track bulletin.

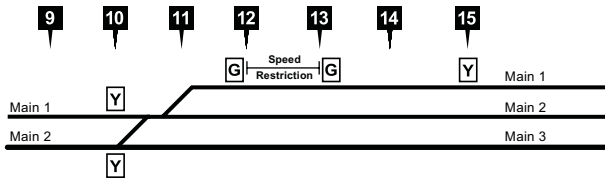


Diagram 18.

Men and Equipment Just Beyond Turnout to Main 1

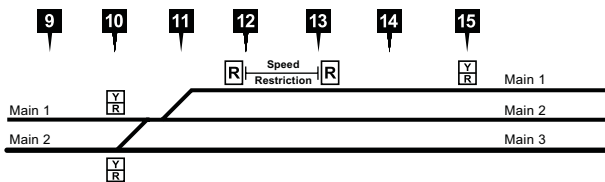


Diagram 19.

Speed Restriction on Multiple Main Track

Train crews would determine the track affected by the information contained in their track bulletin.

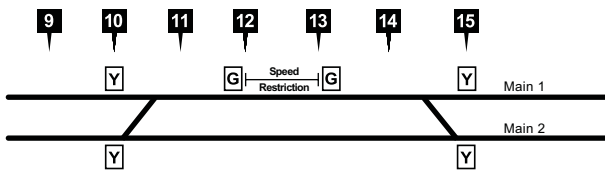


Diagram 20.

Men and Equipment on Multiple Main Track

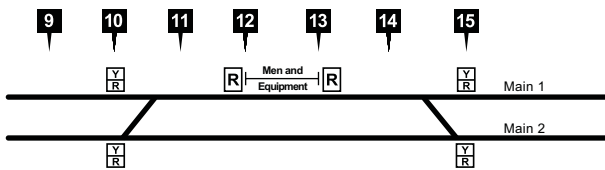


Diagram 21.

Speed Restriction on Main 1 (CTC Territory)

Yellow flags are placed 2 miles from the point of the restriction on both tracks because crews determine the track affected by comparing yellow flag with information on their track bulletin.

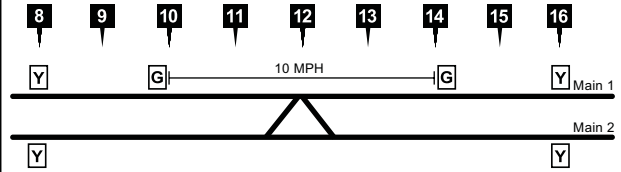


Diagram 22.

Speed Restriction on Main 1 (CTC and ABS Territory)

Yellow flags are placed 2 miles from the point of the restriction on both tracks. When a restriction, or flags placed for a restriction, includes both CTC and DT ABS, flags will be placed in accordance with rules for flag placement in multiple main track CTC.

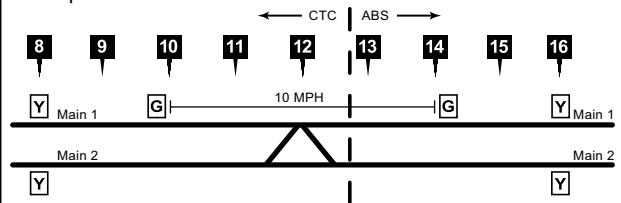


Diagram 23.

Speed Restriction on Multiple Main Tracks (3 or More Main Tracks)

Train crews would determine the track affected by the instruction contained in their track bulletin.

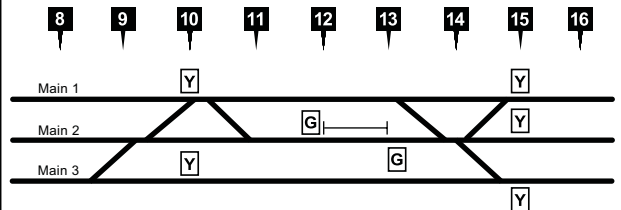


Diagram 24.

Men and Equipment on Multiple Main Tracks (3 or More Main Tracks)

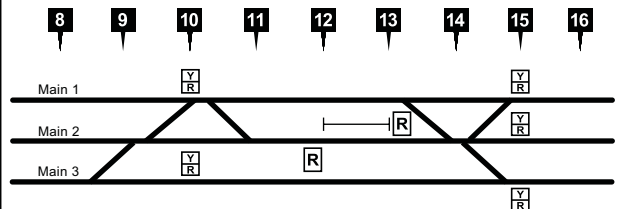
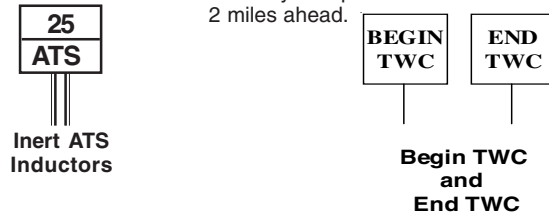
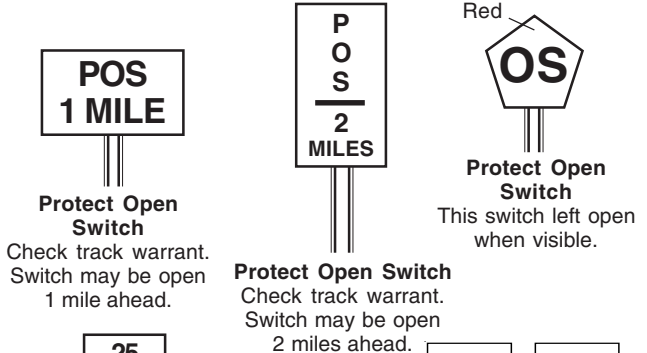
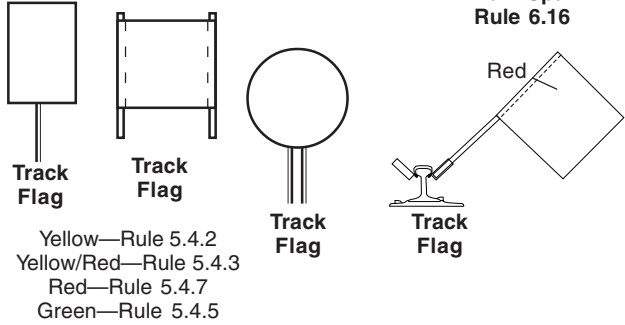
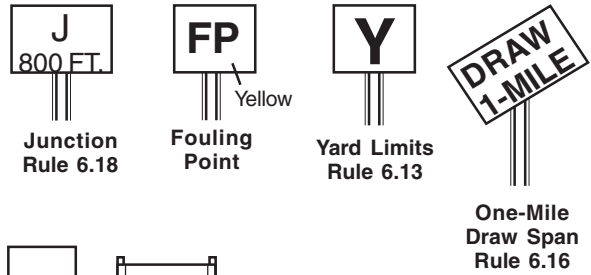
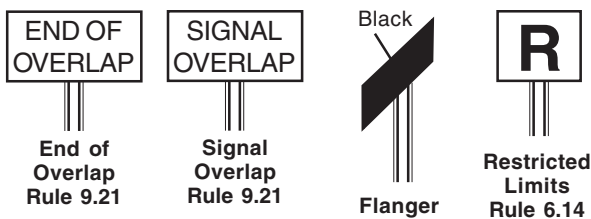
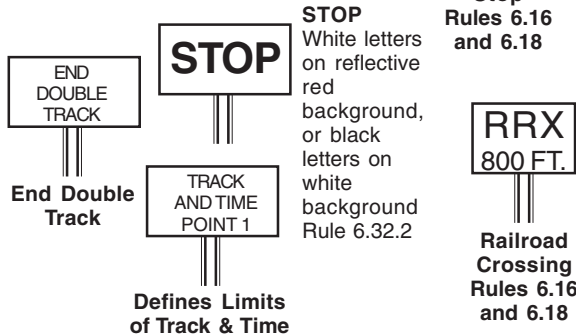
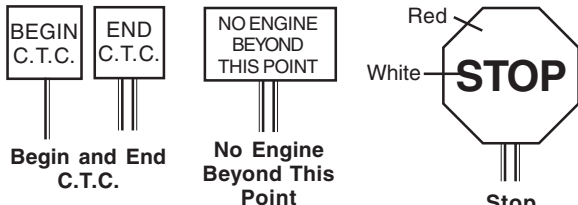
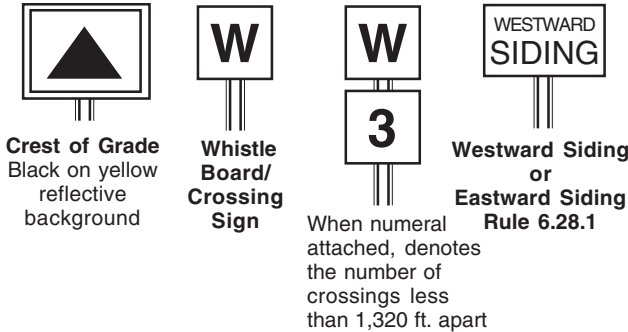
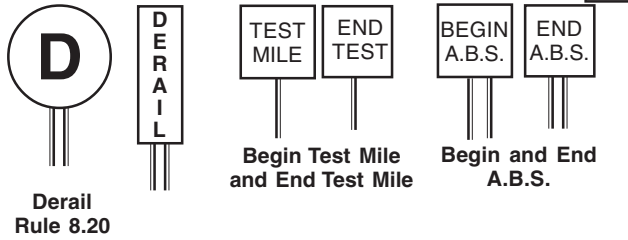
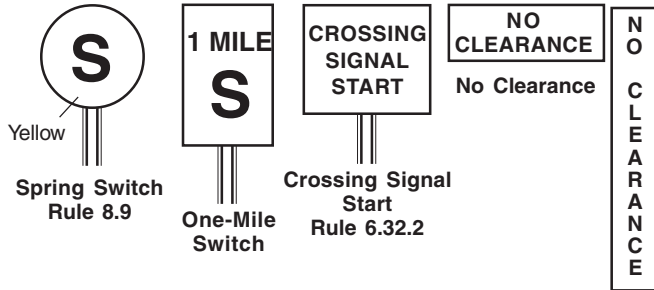


Diagram 25.

Appendix B - Roadway Signs

Except as shown, the following roadway signs have white backgrounds and black letters and/or numbers.



Appendix C - Division/Subdivision Index

Division Subdivisions

Chicago Aurora
 Barstow
 Brookfield
 Chicago
 Chillicothe
 La Salle
 Marceline
 Mendota
 Peoria
 St. Croix
 Thomas Hill

Gulf Bay City
 Conroe
 Galveston
 Houston
 Lafayette
 Lampasas
 Longview
 Mykawa
 Silsbee

Kansas Arkansas City
 Douglass
 Emporia
 Hereford
 La Junta
 Panhandle
 Plainview
 Slaton
 South Plains
 Strong City
 Topeka

Montana Big Horn
 Big Sandy
 Casper
 Choteau
 Circle
 Cody
 Colstrip
 Crosby
 Dickinson
 Dutch
 Fairfield
 Forsyth
 Ft. Benton
 Glasgow
 Grenora
 Helena
 Hettinger
 Hi Line
 Laurel
 Lewistown
 Milk River
 Niobe
 Sarpy Line
 Scobey
 Sidney Line
 Sweet Grass
 Valier

Nebraska Bayard
 Beatrice
 Bellwood
 Council Bluffs
 Creston
 Des Moines
 Giltner
 Hastings
 Imperial
 Lester
 Napier
 Neb City
 Omaha
 Ottumwa
 Ravenna
 Sioux City
 St. Joseph
 Wymore

Northern California Bakersfield
 Gateway
 Mojave
 Riverbank
 Stockton

Northwest Bellingham
 Burbank
 Cherry Point
 Coeur d'Alene
 Columbia River
 Eureka
 Fallbridge
 Granger
 Kalispell
 Kettle Falls
 Kootenai River
 Lakeside
 Newport
 New Westminster
 Oregon Trunk
 San Poil
 Scenic
 Seattle
 Spokane
 Stampede
 Sumas
 Woodinville
 Yakima Valley

Powder River Akron
 Angora
 Black Hills
 Boise City
 Brush
 Butte
 Campbell
 Canyon
 Dalhart
 Front Range
 Golden
 Orin
 Pikes Peak
 Pueblo
 Reno
 Sand Hills
 Spanish Peaks
 Twin Peaks
 Valley

Southern California	Alameda Corridor Cajon Harbor Lucerne Valley Needles San Bernardino San Diego
Southwest	Clovis Coronado Defiance El Paso Ennis Gallup Glorieta Lee Ranch Phoenix Raton Seligman Springerville
Springfield	Afton Amory Avard Beardstown Birmingham Cherokee Cuba Fort Scott Hannibal Lead Line River Thayer North Thayer South Yates City
Texas	BBRX Chickasha Creek DFW Ft. Worth Madill Red River Red Rock Sooner Venus Wichita Falls
Twin Cities	Aberdeen Allouez Appleton Brainerd Browns Valley Canton Casco Corson Devils Lake Drayton Glasston Grand Forks Hanley Falls Hannah Hib Tac Hillsboro Hinckley Hunter, Clifford Line & Warwick Jamestown KO Lakes Madison

Twin Cities	Marshall Mayville Midway Mitchell Mobridge Monticello Moorhead Morris Noyes P Line Prosper Rolla & Westhope Sarles Staples St. Paul Walhalla Watertown Wayzata Zap Line
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Subdivision Index

Subdivision	Division
Aberdeen	Twin Cities
Afton	Springfield
Akron	Powder River
Alameda Corridor	Southern California
Allouez	Twin Cities
Amory	Springfield
Angora	Powder River
Appleton	Twin Cities
Arkansas City	Kansas
Aurora	Chicago
Avard	Springfield
Bakersfield	Northern California
Barstow	Chicago
Bay City	Gulf
Bayard	Nebraska
BBRX	Texas
Beardstown	Springfield
Beatrice	Nebraska
Bellingham	Northwest
Bellwood	Nebraska
Big Horn	Montana
Big Sandy	Montana
Birmingham	Springfield
Black Hills	Powder River
Boise City	Powder River
Brainerd	Twin Cities
Brookfield	Chicago
Browns Valley	Twin Cities
Brush	Powder River
Burbank	Northwest
Butte	Powder River
Cajon	Southern California
Campbell	Powder River
Canton	Twin Cities
Canyon	Powder River
Casco	Twin Cities
Casper	Montana
Cherokee	Springfield
Cherry Point	Northwest
Chicago	Chicago
Chickasha	Texas
Chillicothe	Chicago
Choteau	Montana
Circle	Montana
Clifford Line	Twin Cities

Clovis	Southwest	Lakeside	Northwest
Cody	Montana	Lampasas	Gulf
Coeur d'Alene	Northwest	Laurel	Montana
Colstrip	Montana	Lead Line	Springfield
Columbia River	Northwest	Lee Ranch	Southwest
Conroe	Gulf	Lester	Nebraska
Coronado	Southwest	Lewistown	Montana
Corson	Twin Cities	Longview	Gulf
Council Bluffs	Nebraska	Lucerne Valley	Southern California
Creek	Texas	Madill	Texas
Creston	Nebraska	Madison	Twin Cities
Crosby	Montana	Marceline	Chicago
Cuba	Springfield	Marshall	Twin Cities
Dalhart	Powder River	Mayville	Twin Cities
Defiance	Southwest	Mendota	Chicago
Des Moines	Nebraska	Midway	Twin Cities
Devils Lake	Twin Cities	Milk River	Montana
DFW	Texas	Mitchell	Twin Cities
Dickinson	Montana	Mobridge	Twin Cities
Douglass	Kansas	Mojave	Northern California
Drayton	Twin Cities	Monticello	Twin Cities
Dutch	Montana	Moorhead	Twin Cities
El Paso	Southwest	Morris	Twin Cities
Emporia	Kansas	Mykawa	Gulf
Ennis	Southwest	Napier	Nebraska
Eureka	Northwest	Neb City	Nebraska
Fallbridge	Northwest	Needles	Southern California
Fairfield	Montana	Newport	Northwest
Forsyth	Montana	New Westminster	Northwest
Fort Scott	Springfield	Niobe	Montana
Front Range	Powder River	Noyes	Twin Cities
Ft. Benton	Montana	Omaha	Nebraska
Ft. Worth	Texas	Oregon Trunk	Northwest
Gallup	Southwest	Orin	Powder River
Galveston	Gulf	Ottumwa	Nebraska
Gateway	Northern California	P Line	Twin Cities
Giltner	Nebraska	Panhandle	Kansas
Glasgow	Montana	Peoria	Chicago
Glasston	Twin Cities	Phoenix	Southwest
Glorieta	Southwest	Pikes Peak	Powder River
Golden	Powder River	Plainview	Kansas
Grand Forks	Twin Cities	Prosper	Twin Cities
Granger	Northwest	Pueblo	Powder River
Grenora	Montana	Raton	Southwest
Hanley Falls	Twin Cities	Ravenna	Nebraska
Hannah	Twin Cities	Red River	Texas
Hannibal	Springfield	Red Rock	Texas
Harbor	Southern California	Reno	Powder River
Hastings	Nebraska	River	Springfield
Helena	Montana	Riverbank	Northern California
Hereford	Kansas	Rolla	Twin Cities
Hettinger	Montana	San Bernardino	Southern California
Hi Line	Montana	San Diego	Southern California
Hib Tac	Twin Cities	San Poil	Northwest
Hillsboro	Twin Cities	Sand Hills	Powder River
Hinckley	Twin Cities	Sarles	Twin Cities
Houston	Gulf	Sarpy Line	Montana
Hunter	Twin Cities	Scenic	Northwest
Imperial	Nebraska	Scobey	Montana
Jamestown	Twin Cities	Seattle	Northwest
Kalispell	Northwest	Seligman	Southwest
Kettle Falls	Northwest	Sidney Line	Montana
KO	Twin Cities	Silsbee	Gulf
Kootenai River	Northwest	Sioux City	Nebraska
La Junta	Kansas	Slaton	Kansas
La Salle	Chicago	Sooner	Texas
Lafayette	Gulf	South Plains	Kansas
Lakes	Twin Cities	Spanish Peaks	Powder River

Spokane	Northwest
Springerville	Southwest
St. Croix	Chicago
St. Joseph	Nebraska
St. Paul	Twin Cities
Stampede	Northwest
Staples	Minnesota
Stockton	Northern California
Strong City	Kansas
Sumas	Northwest
Sweet Grass	Montana
Thayer North	Springfield
Thayer South	Springfield
Thomas Hill	Chicago
Topeka	Kansas
Twin Peaks	Powder River
Valier	Montana
Valley	Powder River
Venus	Texas
Walhalla	Twin Cities
Warwick	Twin Cities
Watertown	Twin Cities
Wayzata	Twin Cities
Westhope	Twin Cities
Wichita Falls	Texas
Woodinville	Northwest
Wymore	Nebraska
Yakima Valley	Northwest
Yates City	Springfield
Zap Line	Twin Cities

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Track Bulletin Form B—Verbal Permission:

When granting verbal permission, begin the communication using the following words:

“Foreman (name and/or Gang No.) _____ using Form B Restriction No. _____ between MP _____ and MP _____ (specifying subdivision when necessary).”

1. To permit a train to pass a red flag (or red light) without stopping, add the following:
 - “(Train) may pass red flag (or red light) located at MP _____ without stopping (specifying track when necessary).”

Unless otherwise restricted, the train may pass the red flag (or red light) at restricted speed without stopping.

2. To permit a train to proceed at other than restricted speed, add one of the following:
 - “(Train) may proceed through the limits at _____ MPH (or at maximum authorized speed) (specifying track when necessary).”

Unless otherwise restricted, the train may proceed at speed specified.

- “(Train) may proceed through the limits at _____ MPH (or maximum authorized speed) but not exceeding _____ MPH between/at (specifying location) (specifying track when necessary).”

Unless otherwise restricted, the train may proceed at the speeds specified. Not more than two speeds may be authorized.

3. To require the train to move at restricted speed, but less than 20 MPH, add the following:
 - “(Train) must proceed at restricted speed but not exceeding _____ MPH (specifying distance and track when necessary).”

The above will apply when movement is to be made at restricted speed, but less than 20 MPH. Unless otherwise restricted, the train must proceed at restricted speed and not exceed the speed specified.

Speed Tables

SPEED TABLE								
Time Per Mile		Miles Per Hour	Time Per Mile		Miles Per Hour	Time Per Mile		Miles Per Hour
Min.	Sec.		Min.	Sec.		Min.	Sec.	
-	36	100	-	58	62.1	1	40	36.0
-	37	97.3	-	59	61.0	1	42	35.3
-	38	94.7	1	-	60.0	1	44	34.6
-	39	92.3	1	02	58.0	1	46	34.0
-	40	90.0	1	04	56.2	1	48	33.3
-	41	87.8	1	06	54.5	1	50	32.7
-	42	85.7	1	08	52.9	1	52	32.1
-	43	83.7	1	10	51.4	1	54	31.6
-	44	81.8	1	12	50.0	1	56	31.0
-	45	80.0	1	14	48.6	1	58	30.5
-	46	78.3	1	16	47.4	2	-	30.0
-	47	76.6	1	18	46.1	2	05	28.8
-	48	75.0	1	20	45.0	2	10	27.7
-	49	73.5	1	22	43.9	2	15	26.7
-	50	72.0	1	24	42.9	2	30	24.0
-	51	70.6	1	26	41.9	2	45	21.8
-	52	69.2	1	28	40.9	3	-	20.0
-	53	67.9	1	30	40.0	3	30	17.1
-	54	66.6	1	32	39.1	4	-	15.0
-	55	65.5	1	34	38.3	5	-	12.0
-	56	64.2	1	36	37.5	6	-	10.0
-	57	63.2	1	38	36.8	12	-	5.0

FEET	TENTHS OF A MILE
528	.1
1,056	.2
1,584	.3
2,112	.4
2,640	.5
3,168	.6
3,696	.7
4,224	.8
4,752	.9