

BURLINGTON NORTHERN INC.

**COLORADO AND SOUTHERN
RAILWAY COMPANY**

COLORADO DIVISION

COLORADO DIVISION

R. L. BEEM—Division Superintendent, Denver

Assistant Superintendents

F. D. SMITH	Assistant Superintendent	Denver
I. C. LEHR	Assistant Superintendent Mechanical	Denver
C. G. PEGLOW	Asst. Supt. Roadway Maintenance	Denver
W. F. THOMPSON	Chief Dispatcher	McCook
B. G. GILBERT	Chief Dispatcher	Fort Worth

Trainmasters

J. M. DALTON	Trainmaster, General Road Foreman	Trinidad
R. L. STUBER	Trainmaster	Cheyenne
R. HODGSON	Trainmaster, Agent	Golden
P. D. McKENNON	Trainmaster	Pueblo

Road Foreman

J. B. MURRAY	General Road Foreman	Denver
R. E. CHRISTENSEN	Road Foreman	Trinidad

TIME TABLE AND SPECIAL INSTRUCTIONS 3

**IN EFFECT AT 2:00 A.M.
Mountain Standard Time**

Sunday, October 31, 1976

**President
G.F. DEFIEL**

**Gen. Superintendent
R.E. ANDERSON**

**Dir. Transportation
W.C. DONEY**

**Asst. Dir. Transportation
F.F. STAKE**

FIRST SUBDIVISION **WESTWARD** **EASTWARD**

Rule 6(A) Signs	Length of Siding in Feet	Station Numbers	Mile Post Location	Distance from Denver U. D.	MAIN LINE Colorado Divn STATIONS Telegraph Offices and Calls
BOK PRYW		40788	FWD 452.92	348.6	Z TEXLINE 1.2
Y		40790	347.14	347.4	SIXELA 9.6
POQ	2960	40799	337.62	337.8	CY CLAYTON 7.7
P	8905	40807	329.93	330.1	ROYCE 30.4
P	8280	40837	299.77	299.7	GRANDE 10.3
OPQW	2340	40844	292.45	292.7	MS DES MOINES 10.6
P	3805	40854	282.13	282.4	FOLSOM 21.4
P	4085	40865	271.60	271.0	ALPS 30.5
P	8005	40886	250.38	250.6	TRINGHERE 7.5
P	3825	40917	219.35	220.1	BESHOAR 14.5
PBOFKW IQRTYZ		40924	212.41	212.6	DA TRINIDAD 7.1
P		40939	197.90	198.1	LUDLOW 11.0
P	4210	40946	190.60	191.0	LYNN 8.2
P	3805	40957	179.72	180.0	MAYNE 16.7
WJORYPX	4145	40965	171.58	171.8	WN WALSENBURG 11.4
PX	E2965 W2965	40981	155.22	155.1	LASCAR 19.1
PX	E3065 W3115	40993	143.72	143.7	CEDARWOOD 1.9
JPYX		41013	124.35	124.6	SOUTHERN JCT. 4.0
PROY		41014	122.48	122.7	MQ MINNEQUA

TRAINS BETWEEN PUEBLO AND MINNEQUA ARE GOVERNED
BY RULES AND TIME TABLE OF A.T. & S.F. RY.

	41020	118.50	118.8	R	PUEBLO 114.4
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TRAINS BETWEEN SOUTH DENVER AND PUEBLO ARE
GOVERNED BY THE JOINT AT&SF-D&RGW TIME TABLE

MIYZ	41134	4.05	4.1	SOUTH DENVER 1.9	D.T.
XYJ		2.19	2.2	SOUTH PARK JCT. 1.1	
WFBCIK PQRTYZ		1.08	1.1	FX RICE YARD 1.1	
BK YMU	41137	0.00	0.0	GN DENVER U. D.	

BN Radio Channel No. 1 in service.

SECOND SUBDIVISION **WESTWARD** **EASTWARD**

Rule 6(A) Signs	Length of Siding in Feet	Station Numbers	Mile Post Location	Distance from Denver U. D.	MAIN LINE Colorado Divn STATIONS Telegraph Offices and Calls
BK MRYU		41137	0.00	0.0	GN DENVER U. D. 1.0
JCRYPQ		41138	1.03	1.0	CX PROSPECT 2.3
IPY		41140	3.36	3.4	UTAH JCT. 5.7
P	3800	41146	9.01	9.0	SEMPER 5.0
JROP	5005	41151	14.03	14.0	OM BROOMFIELD 14.1
MOPY	3825	41168	31.35	28.1	BR BOULDER 6.7
P	2195	41175	38.06	34.8	NIWOT 5.5
MCTYPQ RBJW	4345	41180	43.62	40.8	MN LONGMONT 5.6
P	1910	41186	49.24	46.0	HIGHLAND 5.0
P	2515	41191	54.27	51.0	BERTHOUD 6.4
BOTYPJR	3950	41197	60.69	57.4	S LOVELAND 10.5
P	3735	41208	71.19	67.9	OMEGA 3.2
WBKPRQ JMTYZO		41211	74.35	71.1	FO FT. COLLINS 2.2
PY	4812	41213	76.52	73.3	NORTH YARD 0.7
JPY		41214	77.17	73.9	BLACK HOLLOW JCT. 8.1
P	3800	41222	85.28	82.0	WELLINGTON 6.4
P	4535	41228	91.69	88.4	BULGER 8.0
P	4860	41236	99.62	96.4	NORFOLK 12.9
P	3820	41249	112.56	109.3	SPEED 6.8
PBKCCQ URTYZWJ		41256	119.40	116.1	DI CHEYENNE 20.0
P	8500	41276	139.15	136.1	FEDERAL 13.0
PYWQ	3795	41289	152.40	149.1	HORSE CREEK 4.6
P	4518	41294	156.95	153.7	ALTUS 7.3
PW	2945	41299	162.72	159.44	FARTHING 5.8
P	3895	41307	170.05	166.8	LAMBERT 18.6
WOTPDQ	8600	41325	188.66	185.4	UW CHUGWATER 13.5
P	3830	41339	202.58	199.3	BORDEAUX 11.5
RBOVYQ	5760	41351	213.97	210.8	ND WHEATLAND 16.8
P	4520	41367	230.45	227.6	DWYER 9.9
JPRTY	1385	32137	240.80	237.5	WENDOVER

BN Radio Channel No. 1 in service.

THIRD SUBDIVISION

WESTWARD

EASTWARD

Rule 6(A) Signs	Capacity of Sidings	Station Numbers	Mile Post Location	Distance from Prospect	BRANCH LINE Colorado Divn	
					STATIONS	
					Telegraph Offices and Calls	
JCRYPQ		41138	1.03	0.0	CX	PROSPECT 3.8

BETWEEN PROSPECT AND C. & S. JCT., C. & S. TRAINS AND
ENGINES OPERATE OVER D. & R.G.W. TRACKS AND ARE
GOVERNED BY RULES AND TIME TABLE OF D. & R.G.W.

JPY			4.87	3.8		C. & S. JCT. 2.7
Y		89307	7.62	6.5		ARVADA 4.1
JY		89311	11.80	10.6		TERRILL JCT. 4.2
BKQYJ		89316	15.86	14.8		GOLDEN

FOURTH SUBDIVISION

WESTWARD

EASTWARD

Rule 6(A) Signs	Capacity of Sidings	Station Numbers	Mile Post Location	Distance from Greeley	BRANCH LINE Colorado Divn	
					STATIONS	
					Telegraph Offices and Calls	
JORYTZ		89525	98.85	0.0	HG	GREELEY 5.4
Y		89519	93.43	5.4		FARMERS 0.9
OYUJW		89512	86.57	12.3	WR	WINDSOR 3.0
Y		89509	83.61	15.2		KERNS 2.4
Y		89507	81.20	17.7		TIMNATH 7.1
TWRYMB JKZPOQ		41211	74.35	24.7	FO	FT. COLLINS

FIFTH SUBDIVISION

WESTWARD

EASTWARD

Rule 6(A) Signs	Capacity of Sidings	Station Numbers	Mile Post Location	Distance from Ft. Collins	BRANCH LINE Colorado Divn	
					STATIONS	
					Telegraph Offices and Calls	
PJRTOR KMYZWQ		41211	74.35	0.0	FO	FT. COLLINS 4.0
Y		89804	78.31	4.0		LA PORTE 3.7
Y		84607	82.04	7.7		FILTER 0.6
Y		89808	82.67	8.3		ROBERTS 7.8
Y		89816	90.29	15.9		OWL CANYON 2.0
Y		89818	92.29	17.9		REX

SIXTH SUBDIVISION

WESTWARD

EASTWARD

Rule 6(A) Signs	Capacity of Sidings	Station Numbers	Mile Post Location	Distance from Leadville	BRANCH LINE Colorado Divn	
					STATIONS	
					Telegraph Offices and Calls	
JBKTYW		89150	151.27	0.0		LEADVILLE 14.1
TY		89164	137.17	14.1		CLIMAX

BN Radio Channel No. 1 in service on these subdivisions except on 6th subdivision.

SPECIAL INSTRUCTIONS

ALL SUBDIVISIONS

1. **Speed Restrictions—** Maximum Speeds Permitted
 Freight trains 40 MPH.
 Unit coal trains (loaded and empty) 35 MPH.

The above speeds are subject to modification under speed restrictions indicated under each subdivision special instructions or by wayside speed signs.

All trains and engines through turnouts and gantlets except as specified in special instructions or where fixed signals indicate otherwise 12 MPH.

Under certain conditions, operation of trains between 13 and 21 miles per hour can cause derailments due to harmonic rocking of cars. Where specified by individual subdivision special instructions or bulletin, the following restriction will apply:

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

Equipment	Main Line	Branch Line
Ore cars	40 MPH.	20 MPH.
Scale test cars	35 MPH.	20 MPH.
Air dump cars (loaded).	35 MPH.	20 MPH.
Wedge plows and dozers	35 MPH.	20 MPH.
Rotary plows	30 MPH.	20 MPH.
Wrecking derricks	30 MPH.	15 MPH.
Locomotive cranes.	30 MPH.	15 MPH.
Pile drivers	30 MPH.	15 MPH.
Clamshells and shovels	30 MPH.	15 MPH.
Jordan spreaders	30 MPH.	15 MPH.

Maximum Speed Diesel Units Dead in Tow—

Switcher Units—1 through 4, 100	30 MPH.
Switcher Units—C&S 150 through 160	30 MPH.
Switcher Units—FW&D 605 through 610	40 MPH.
Road Switchers and other units	40 MPH.

2. Movement of Diesel Units—

Diesel units not equipped with alignment control couplers when dead in tow in freight trains must be handled singly, not in groups and not less than 5 cars or more than 15 cars from the road engine.

When a locomotive consist of more than 3 units in service includes a diesel unit or units not equipped with alignment control couplers, only the three rear units will be allowed to work power when the train is to make a back-up movement. Other units must be isolated.

BN Diesel units not equipped with alignment control coupler:

All switcher units

Road and Road Switcher Diesel units

600- 995 inclusive

1556-1623 inclusive

1955-1974 inclusive

4000-4197 inclusive

6000-6255 inclusive

9707-9794 inclusive

9900-9976 inclusive

FW&D—C&S Diesel units not equipped with alignment control coupler:

FW&D 605-610 inclusive

FW&D 850-859 inclusive

C&S 150-842 inclusive

The following units, not equipped with alignment control couplers, are equipped with bolster stops (see Item 5A, All Subdivisions):

626, 668-702, 720-732, 735, 738-744, 752-758, 767-770, 774-785, 788, 790, 796, 800-819, 824, 825, 827-829, 831-840, 843, 849-853, 989.

1556-1563, 1569-1571, 1573, 1576, 1578, 1580-1584, 1587, 1592, 1593, 1595-1597, 1599, 1610, 1613-1615, 1617, 1620-1622, 1955-1965, 1967, 1971.

9707-9794.

No C&S or FW&D units not equipped with alignment control coupler have bolster stops.

3. Number of Units to be Used on a Train and Handling of Units Dead in Tow—

At no time can more than seven high-horsepower units be coupled together as one consist (high-horsepower units include those with 3,000 horsepower or over).

On units with less than 3,000 horsepower, the number of units in any one consist will not exceed eight.

In the event Diesel units in excess of the above restrictions are to be handled dead in train, such units must be placed at least five cars, but not further than 15 cars, behind the lead units.

The speed restrictions for freight and road switcher units must be observed to avoid damage to traction motors.

4. Restrictions on Placing Cars in Trains—

Following equipment, loaded or empty, must be on rear of trains, except in work trains or when otherwise provided by authority of chief dispatcher:

Outfit cars

Tie flats (GNX 4410, GNX 4800 to 4971)

Log flats (NP 117201 to 117871, BN 633504 to 633523)

Air dump cars

Scale test cars (next ahead of caboose)

Wrecking derricks

Pile drivers

Locomotive cranes

Rotary snow plows, wedge plows, dozers

Jordan spreaders

Rear end only cars

FW&D tank cars in 15000 series to be handled toward rear of train.

Handling 80-Foot or Longer Cars—

During either throttling, or braking, trailing tonnage may cause lateral force sufficient for derailment, where cars 80 feet or longer are coupled to cars 50 feet or shorter, when grade and curvature exceed certain limitations. To avoid creating such conditions, trains of 8,000 or greater trailing tons must handle empty cars 80 feet or longer in the rear 8,000 tons, unless otherwise provided in Individual Subdivision Special Instructions.

Where the total tonnage of cars 80 feet or longer is so large that it is impossible to comply with Individual Subdivision Special Instructions, the train consist must instead be so arranged that all cars less than 80 feet are handled in the required rear tonnage, thus placing all long-car to short-car couplings in the safe tonnage area.

In applying these limits, the following 80-foot or longer loaded cars must be regarded the same as an empty 80-foot or longer car:

Cars weighing less than 50 tons, gross weight

Flat cars with one loaded trailer

Flat cars with empty trailers

Flat cars with either loaded or empty containers

Locations where other restrictions are in effect are listed under individual subdivisions.

5. Remote Control Equipment (RCE-1) Operation—

Locomotives not equipped with alignment control couplers or bolster stops (see Item 2) must not be operated in RCE-1 consists.

Locomotive units in RCE-1 operations which will be coupled to cars, must be equipped with alignment control couplers.

Master and remote consists in RCE-1 operation must be confined to the following classes of locomotives:

F-45, SD-40, SD-45, SDP-45, U-25C, U-30C, U-28C, U-33C

Exception—When necessary to operate other classes of locomotives in RCE-1 trains they must be confined to master consist only.

Unless otherwise provided in Individual Subdivision Special Instructions, remote controlled locomotives must be placed in train approximately two-thirds back from master consist by car count.

In all RCE-1 trains, the number of master consist powered axles must equal or exceed the number of remote consist powered axles, but in no case may the excess be greater than six powered axles. The master consist must have a minimum of twelve powered axles and a maximum of twenty-four powered axles. The remote consist must have a minimum of six powered axles and a maximum of twenty-four powered axles.

Axles of cars numbered RCC 101 through RCC 112 must not be counted in determining the axle count of the remote consist.

RCE-1 equipment must not be used in trains handling empty equipment 80 feet and longer unless Individual Subdivision Special Instructions or bulletin are in effect to indicate the safe buffer between remote consist and such cars for that subdivision.

5A. Manned Helper Operations—

Locomotives not equipped with alignment control couplers or bolster stops (see Item 2) must not be operated in manned helper consists, except single non-equipped locomotives may be operated between locomotives equipped with alignment control couplers or bolster stops. Locomotive units, including trailing unit of head end consists, in manned helper operation, which will be coupled to cars must be equipped with alignment control couplers.

Where cars listed in first sentence of Item 4, All Subdivisions Special Instructions, are handled at rear of train, manned helper must be cut in ahead of such cars.

Unless otherwise provided in Individual Subdivision Special Instructions:

Helpers of twelve powered axles or less, may be operated at rear of train, ahead of or behind caboose, but must not be used on rear of trains handling empty equipment 80 feet and longer unless Individual Subdivision Special Instructions or bulletin are in effect to indicate the safe buffer between such cars and rear end helper for that subdivision.

Helpers will not exceed twenty-four powered axles. Head end consists in helper trains will not exceed twenty-four powered axles, except unit trains consisting entirely of Grade E steel couplers may have head end power up to thirty-six powered axles.

Helpers of more than twelve powered axles must be cut into train. Dispatcher will advise conductor of tonnage rating of helper so that conductor can determine proper location in train, arranging that tonnage trailing the helper approximately equals combined tonnage rating of helper locomotives.

Helper may be cut in ahead of less than its tonnage rating if restrictions for helper at rear of train regarding buffer for empty 80 feet and longer cars are observed.

Exceptions to Item 5A—Helpers of six powered axles or less are not restricted by any of the provisions of this item.

Helpers up to twenty-four powered axles may shove on rear of trains consisting entirely of Grade E steel couplers.

6. Repeater Relay Car Operation—

When repeater relay air car is to be operated, in train, it must be placed approximately in the middle of the train.

7. Instructions for Safety Inspection—

Each car placed in train, where personnel are not on duty for the primary purpose of inspecting freight cars, may be moved after receiving safety inspection in accordance with the following standards:

1. A freight car with any defect that makes it unsafe for movement shall be corrected or set out of train.
2. No part of the freight car, nor anything attached to the car, may be hanging low enough to foul a road crossing or track structure.
3. Open top loads, including trailers and containers on flat cars must be safely loaded.
4. Where width or height appears close to clearance lines, it must be known that the movement has been cleared with the proper authority.
5. Freight cars carrying bad order tags, that are safe for movement may be taken in train to the point where repairs are to be made.

7. Handling of Hazardous Material—

When derailment, collision, fire or unforeseen occurrence takes place involving hazardous materials (such as explosives, flammable liquids, flammable compressed gasses, radioactive or fissionable materials, poisons, poison gasses or any other commodity which might be hazardous when involved in fire, released or leaking from their packages, containers or tank cars), conductor or member of the crew must check the waybills to determine what materials are involved.

If in doubt about the commodity or it is not described for a placarded car, the shippers' and consignees' names and addresses should also be noted.

A list must be made of the commodities involved with shipping names and classifications along with any emergency phone numbers, radioing or telephoning by quickest means possible to chief dispatcher and be governed by his instructions. This information must be available to any emergency agencies responding *only* if necessary for them to handle the situation safely.

When hazardous material is involved, crew members must keep out of the danger area and guard against people entering the area until controlled by civil agencies.

FRA Emergency Order No. 5 issued October 27, 1974 requires that DOT specification 112A and 114A tank cars, not equipped with FRA approved head shields transporting *flammable compressed gases*, must not be cut off while in motion and no car moving under its own momentum shall be allowed to strike these cars. Such cars must not be coupled to with more force than is necessary to complete the coupling.

Shipping papers must carry the notation "DOT 112A (or DOT 114A) must be handled in accordance with FRA E.O. No. 5." Employees must be informed of the presence of these cars and instructed to handle them in accordance with the requirements of this order. All switch lists and train lists must be plainly marked to indicate when cars are loaded with *flammable compressed gas*.

8. Storage of Cars Within Yard Limits Non-ABS Territory—

Within yard limits in non-ABS 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 train order. This does not modify the requirement to move at reduced speed as required in Rule 93.

9. Use of Radios—

If radios are provided, a voice test of the radio in the control unit and caboose must be made to determine if the radio is working properly before a train leaves its starting point.

If radio is working properly, it must be turned on during entire trip with volume adjusted so calls may be received. Defective radio equipment must be reported to the chief dispatcher at first point of communication. The conductor and engineer will be equally responsible to see that these instructions are complied with.

10. Train Inspection and Failed Equipment Detector Instructions—

When blowing snow or other conditions restrict visibility to the point that proper running inspection cannot be made, or when notified that a hot box detector is out of service, freight trains will reduce speed to the extent required, stopping if necessary, to make train inspection.

Employees should be alert for insulating commodities such as clay, chips, oil, etc., getting 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.

11. Spring Switches—

Instructions for operation of spring switches are posted at or near the spring switch and must be complied with. Spring switches are identified by yellow sign with black letter "S" located on or near spring switch.

All spring switches are equipped with facing point locks except when identified as not having a facing lock in the Subdivision Special Instructions.

12. Railroad Crossings at Grades—

At a railroad crossing at grade protected by signals, trains, engines or cars must not be left standing between opposing absolute signals unless coupled to other equipment that extends beyond one of the absolute signals.

At automatic interlockings, in addition to complying with Rule 613, employees must be governed by instructions posted.

13. Rules Changes and Modifications—

Rule 26, as contained in the Consolidated Code of Operating Rules is amended as follows:

A blue signal displayed at one or both ends of an engine(s) and/or car(s) indicates that workmen are on, under or between the equipment; the equipment must not be coupled to nor moved. Other engine(s) and/or car(s) or other equipment must not be placed on the same track so as to block or reduce the view of the blue signals.

When a blue signal is displayed at any entrance to a track, engine(s) and/or car(s) must not be permitted to enter that track.

When workmen are working on, under or between an engine(s) and/or car(s) on a track other than a classification track of a hump yard, a blue signal must be displayed at each end of the equipment to which a coupling can be made, or at each entrance to the track.

When workmen are working on, under or between an engine(s) and/or car(s) coupled to an engine, a blue signal must be attached to the controlling unit of the engine at a location where it is readily visible to the engineer or operator at the controls of that engine.

Blue signals must be displayed by each class or group of workmen and may only be removed by the same class or group of workmen that placed them.

When emergency work is to be done on, under or between an engine(s) and/or car(s) coupled to an engine, and a blue signal is not available, the engineer or operator of engine must be notified by employee in charge of making the repairs and protection must be given those engaged in making the repairs. The engine or cars must not be moved nor air brakes applied or released until the engineer or operator at the controls of the engine has been notified by the same employee in charge that work has been completed and all employees are out from under or between engine(s) and car(s).

Note: "Blue Signal" means a clearly distinguishable blue flag or blue light by day and a blue light by night; blue light may be displayed either steady or flashing.

Rule 26A

When workmen are working on, under or between an engine and/or car(s) on a classification track of a hump yard, the following protection must be provided:

- (a) Each manually-operated switch, including crossover switches, providing access to the track must be lined for movement to another track and a blue signal displayed at or near each such switch; and each remotely-controlled switch providing access to the track must be lined against movement to the track and a locking device applied to the control for the switch.
- (b) The employee in charge of the workmen must ask for and receive from the operator of the remotely-controlled switches the required protection before the work is begun.

- (c) The operator of the remotely-controlled switches will provide the protection before informing the employee in charge of the workmen that it is being provided. He will not remove the locking device until notified by the employee in charge of the workmen that the work is completed.

- (d) The operator will record on a prescribed form and retain for 30 days information as to the date and time he received request for track protection; name and craft of employee in charge who requested the protection; the number or other designation of the track involved; the date and time he notified the employee in charge that the protection had been provided; the date and time he was informed the work had been completed and the name and craft of the employee in charge who provided this information.

Rule 34 as contained in the Consolidated Code of Operating Rules does not apply on Colorado Southern; the following rule applies:

Employees located in the cab of engine must communicate to each other in an audible and clear manner the name or aspect of each signal affecting movement of their train or engine, as soon as the signal is clearly visible or audible. It is the responsibility of the engineer to have each employee comply with these requirements, including himself.

It is the engineer's responsibility to have each employee located in the cab of engine maintain a vigilant lookout for signals and conditions along the track which affect the movement of the engine or train.

If a crew member becomes aware that the engineer has become incapacitated or should the engineer fail to operate or control the engine or train in accordance with the signal indications or other conditions requiring speed to be reduced, other members of the crew must communicate with the crew member controlling the movements at once, and if he fails to properly control the speed of the train or engine, other members of the crew must take action necessary to ensure the safety of the train or engine, including operating the emergency valve.

Rule 103(C) and 103(E) as contained in the Consolidated Code of Operating Rules is modified as follows:

Rule 103(C)

Cars on any track must be left clear of crossing and so as to not actuate crossing signals, and a clear passageway must be left to the station. When necessary to spot cars in the vicinity of public or private crossings, they must, if practicable, be left not less than 200 feet from crossing. When it can be avoided, engines must not stand within 200 feet of public crossings.

Rule 103(E)

Cars must not be handled ahead of engine between stations outside of yard limits except when necessary to take cars to or from spur track, or in work train service, or when it is necessary for a train to make a back-up movement. Such movements must be for no greater distance than necessary, and air brakes on such cars must be cut in and operative.

Rules 200 and 83(B) and other rules pertaining to authority for, and signature on train orders and clearances are modified to permit them to be issued by the authority and over the signature of the chief dispatcher.

In CTC territory, before using any electrically locked switch, permission must be obtained from the control operator. Rule 281 is amended accordingly.

Burlington Northern Signal Aspects and Indications as contained in pamphlet Form 15307 dated January 1, 1976 is in effect.

Block and Interlocking Signal Aspects and Indications shown on pages 94 through 117 also on page 124 of the Consolidated Code do not apply on Colorado Southern.

The second, third and fourth paragraphs of Consolidated Code Rule M, and the entire BN Safety Rule 94, referring to employees being on the roofs of cars are cancelled. The following rule applies to all employees:

Train, engine and yard service employees must not occupy the roof of a freight car or caboose under any circumstances. Other employees whose duties require them to occupy the roof of a freight car or caboose may do so only when equipment is standing.

BN Safety Rule 144 is cancelled and new Safety Rules 144(A) and 144(B) are in effect and read as follows:

Rule 144(A)

When air hoses are uncoupled on passenger equipment, engines, or when uncoupling air hoses from yard air supply:

- (a) Have both angle cocks closed. When disconnecting yard air line, valve must be closed.
- (b) Take firm grip on hose coupling and apply upward pressure.
- (c) Break connection gradually to release pressure in hose.
- (d) Turn face away from air hose connection as pressure is released.
- (e) When practicable, keep one foot outside of rail.

Rule 144(B)

When air hoses uncoupled on freight cars by trainmen and yardmen:

- (a) Have both angle cocks closed.
- (b) Operate uncoupling lever and signal for movement.
- (c) Allow air hoses to part by themselves, keeping all parts of body fully in the clear.

Burlington Northern Air Brake and Train Handling Rules Form 15338 are in effect. Employees whose duties are in any way affected by these rules must have a copy of this book available while on duty.

14. Flat Spots on Wheels of Passenger Trains or Engines—

Should flat spots on wheels develop on passenger train cars or any engine, conductor or engineer will immediately advise chief dispatcher and be governed by his instructions.

15. Mountain Grade Operation—

Mountain Grade Territory is defined as grades of one and eight tenths (1.8) percent or greater.

First Subdivision—between Pueblo and Southern Junction—Milepost 120.7 and Milepost 122.6 eastward.

Second Subdivision—between Valmont and Louisville—Milepost 23.6 and Milepost 21.4 eastward.

Tons Per Operative Brake is defined as the gross tonnage of the train divided by the total number of cars having operative brakes. For example, total train weight 6,000 tons, total cars 100, all brakes operating—divide 6,000 by 100 and there are 60-tons per operative brake.

Employees will be governed in mountain grade operation by instruction contained in Air Brake Rule Book.

16. BN-C&S crews will be governed by Burlington Northern Inc. Operating Rules while operating on D&RGW tracks, except the following D&RGW rules are more restrictive and will apply:

D&RGW Definitions

Restricted speed—A speed that will permit stopping short of another train or obstruction, but not exceeding 15 MPH.

Positive ABS—An automatic block signal designated by the letter "P".

D&RGW Rule No. 105

Unless otherwise provided, a train or locomotive using a siding or any track other than a main track, must move at reduced speed, but not to exceed 30 MPH.

D&RGW Rule No. 509

When a train or locomotive is stopped by a stop and proceed ABS, it may proceed at once at restricted speed to the next ABS, expecting to find a train in the block, broken rail, slide warning device plug pulled out, or switch not properly lined. It must be known that all facing point switches are properly lined for the route to be used.

D&RGW Rule 509 A

When a train or locomotive is stopped by a positive stop ABS, it may proceed when the ABS is cleared or when it is authorized to proceed by permissive card showing proper form if the positive ABS governs entrance to a diverging route, permissive card must show on which track train or locomotive must proceed. If it is possible for an opposing train or locomotive to be in the block, the train dispatcher will authorize the train or locomotive to proceed by issuing permissive form "A".

Form "A"—Proceed on _____ track under flag protection and according to Rule 509.

When the train dispatcher positively knows there is no opposing train or locomotive between the communicating points, permissive Form "B" will be issued.

Form "B"—Proceed on _____ track, at restricted speed, according to Rule 509.

In case a work train is in the block, permissive Form "C" will be issued.

Form "C"—Proceed on _____ track at restricted speed, according to Rule 509, looking out for work extra _____ in the block.

If movement is to enter siding, Form "D" will be issued.

Form "D"—Proceed into _____ siding, at restricted speed, according to Rule 509.

COLORADO DIVISION

FIRST SUBDIVISION

(Texline - Denver UD)

1. Speed Restrictions—	Maximum Speeds Permitted
Zone—Between	Freight
Texline and Denver	40 MPH.
The following speed limits apply to trains and engines operating under the conditions outlined, unless rules or conditions require a further reduction.	
Location	Freight Trains
Trains, engines, and switch movements entering or departing Rice yard, Denver	5 MPH.
Between the east interlocking limits of Denver U.D. and South Denver interlocking.	15 MPH.
South Denver Interlocking	
Normal route	30 MPH.
Reverse movements or movements other than normal route.	10 MPH.
South Broadway and Kentucky Avenue, South Denver.	6 MPH.
MP 122.48 to MP 124.35	20 MPH.
Spring Switches—Southern Junction	10 MPH.
Between MP 124.4 and 169.7—eastward track.	40 MPH.
Between MP 171.53 and 172.48.	20 MPH.
Between MP 172.48 and 173.32.	25 MPH.
Entire train over street crossings between MP 210.80 and MP 212.64 at Trinidad	10 MPH.
Between MP 224.83 and MP 227.93	35 MPH.

Location	Freight Trains
Between MP 272.82 and MP 273.80	35 MPH.
Between MP 273.80 and MP 274.40	25 MPH.
Between MP 281.20 and MP 281.90	25 MPH.
Between MP 281.90 and MP 282.50	35 MPH.
Between MP 285.25 and MP 290.75	35 MPH.
Engine or leading car over Main Street crossing, Clayton, MP 337.66	15 MPH.

2. Bridge, Engine and Heavy Car Restrictions—

Cars heavier than the following not permitted without authority of Superintendent:

40 ft. or less in length.	220,000 lbs.
Over 50 ft. long.	263,000 lbs.

Cars having a gross weight in excess of 210,000 pounds must not be handled on the Remaco spur.

3. Train Register Exceptions—

Minnequa—All trains register by ticket, when operator on duty. Operator on duty from 7:00 a.m. to 3:00 p.m. and 4:00 p.m. to 11:59 p.m.

Walsenburg—Trains will register when instructed by train order.

4. Clearance Provisions and Exceptions Rule 83(B)—

C&S-AT&SF eastward trains originating at Rice yard must receive numbered ATSF Clearance Card Form 902. C&S clearance not required.

Minnequa—When train order signal indicates stop, two C&S clearances will be required, one over signature of D&RGW and one over signature of C&S chief dispatcher.

Pueblo, Trinidad—Train must receive clearance.

Walsenburg—Trains must have clearance when operator on duty, from 7:30 a.m. to 12:01 p.m. and 1:00 p.m. to 4:30 p.m., Monday through Friday.

5. Spring Switches—

Following spring switches not equipped with facing point lock:

Southern Jct. crossover switch MP 124.41.
Walsenburg end of double track MP 171.69.

6. Interlocking, South Denver—

D&RGW train dispatcher, Denver, will control interlocking signals and dual controlled switches within the interlocking limits.

C&S-ATSF Switch Movements—

Switching movements may enter and pass through the interlocking limits on signal indication or as verbally authorized by D&RGW train dispatcher. These movements may be made without Clearance Card, being governed by instructions from D&RGW train dispatcher relative to clearing trains. Before D&RGW train dispatcher clears signals or verbally authorizes switch movements to C&S-ATSF Rice yard, he must contact C&S yardmaster, Rice yard, and be governed by his instructions.

C&S-ATSF Westward Joint Line Trains—

When westward signal indicates proceed and route is lined, or when verbally authorized by D&RGW train dispatcher, such trains may proceed through South Denver interlocking. Prior to clearing signals or verbally authorizing such movements, D&RGW train dispatcher must advise C&S yardmaster, Rice yard, of such movement and be governed by his instructions. This also confers authority for movement against the current of traffic from South Denver to Rice yard.

7. Interlocking, Trinidad—

Trinidad—Interlocking at AT&SF crossing is remotely controlled by AT&SF train dispatcher at La Junta, Colorado. Interlocking rules are in effect.

8. Denver—Trains or engines using Denver Union Terminal Railway Company's tracks must provide themselves with copy of and be governed by general and interlocking rules of that Company.

All trains or engines at highways or street intersections with railroad tracks where official traffic control devices are installed must start movement into street intersection or highway only on clear (green light) traffic signal. When the train or engine has entered the crossing or intersection on proper traffic signal indication it may then proceed without regard to other indications which the traffic signal may subsequently display.

At railroad crossing MP 0.48 where BN and D&RGW tracks cross C&S main track, trains, engines or cars must not be left standing on C&S main track at railroad crossing unless length of consist extends 200 feet beyond crossing.

9. Rice Yard and South Denver—Movements of train and engines with or against the current of traffic between west limits Rice yard interlocking and South Denver will be made on authority of yardmaster, Rice yard.

10. Double track between Southern Jct. and D&RGW Jct. Walsenburg used jointly by D&RGW and C&S. Westward track is under C&S operating jurisdiction. Eastward track is under D&RGW operating jurisdiction. C&S timetable and rules of the Operating Department govern train operation on both tracks. C&S form of train orders and clearance will be used and issued over signature of D&RGW chief dispatcher on eastward track.

11. D&RGW trains and engines while on C&S trackage will be governed by C&S rules, timetable and special instructions.

12. Minnequa—No. 4 track extending from office of communication Minnequa to crossover east end of Minnequa yard, is known as "Minnequa siding".

13. Southern Jct.—Track just south of main track extending from MP 124.20 to crossover east end Minnequa yard, is Southern Jct. siding.

Eastward trains will not use Southern Jct. siding without special instructions.

Westward trains must secure permission from ATSF Pueblo yardmaster to use main track, Southern Jct. to Minnequa.

14. Walsenburg—Spring switch at end of C&S double track is protected by signals. When the governing signal is red, stop must be made. If route is not occupied by another movement, operate the switch key time release located instrument cases, 203 feet east of spring switch for westward movement and 328 feet west of spring switch for eastward movement. If after waiting 90 seconds the governing signal does not clear, comply with Rule 104H. Rule 104 applies to D&RGW Jct.

Signal governing trailing movement through hand throw D&RGW junction switch is normally red and stop must be made. After stop is made, train or enginemen will proceed to instrument case located adjacent to switch and observe indicator light. If indicator light is on, reverse hand throw switch and governing signal will clear. If indicator light is not lit and route is not occupied by another movement, operate switch key time release located on instrument cases, 203 feet east of spring switch for a westward movement and 328 feet west of spring switch for eastward movement. If after waiting 30 seconds the governing signal does not clear or indicator light does not light, hand throw switch for the movement complying with Rule 104 and 104H."

15. D&RGW markers may display yellow instead of green discs, and such yellow discs will be considered the same indication as green.

16. Clamshell spur has an overhead clearance of 16 feet 6 inches from top of rail when the conveyor belt is not loading ballast.

17. Twin Mountain Industry track has an overhead clearance of 16 feet 6 inches from top of rail when the conveyor belt is not loading ballast. When conveyor belt is in loading position, it has a clearance of 13 feet from top of rail. The load tracks have an overhead clearance of 15 feet 6 inches from top of rail when the conveyor belt is not loading ballast. When conveyor belt is in loading position, it has a clearance of 12 feet 6 inches from top of rail.

18. Handling 80 Foot or Longer Cars—

During either throttling or braking trailing tonnage may cause lateral force sufficient for derailment, where cars 80 feet or longer are coupled to cars 50 feet or shorter, when grade and curvature exceed certain limitations.

To avoid creating such conditions, following restrictions are in effect:

Between Pueblo and Minnequa—

Trains of greater than 3600 trailing tons must handle empty cars, 80 feet and longer in the rear 3600 tons.

Trains greater than 5600 trailing tons must handle loaded cars, 80 feet and longer in the rear 5600 tons, except 80 feet and longer cars in excess of 100 gross tons will have no restriction on location in train.

Between Minnequa and Trinidad—

Trains of greater than 7000 trailing tons must handle empty cars, 80 feet and longer in the rear 7000 tons.

Between Trinidad and Texline—

Trains of greater than 5300 trailing tons must handle empty cars 80 feet and longer in the rear 5300 tons.

Trains of greater than 8300 trailing tons must handle loaded cars, 80 feet and longer in the rear 8300 tons, except 80 feet and longer cars in excess of 100 gross tons will have no restriction on location in train.

In applying restrictions in this item, the following 80 feet or longer cars must be regarded the same as an empty 80 feet or longer car:

Cars weighing less than 50 ton, gross weight

Flat cars with 1 loaded trailer

Flat cars with empty trailers

Flat cars with either loaded or empty containers.

Between MP 43.2 and MP 44.5	10 MPH.
Between MP 54.00 and MP 54.77	20 MPH.
Between MP 58.36 and MP 60.5	25 MPH.
Between MP 60.5 and MP 61.4	20 MPH.
Between MP 61.4 and MP 63.8	25 MPH.
Between MP 71.78 and MP 72.78	30 MPH.
Westward trains from Prospect Street MP 72.78 until entire train has passed North College Avenue MP 74.74	15 MPH.
Eastward trains from MP 74.74 until lead unit has passed Prospect Street 72.78	15 MPH.
Between MP 74.74 and MP 75.91	30 MPH.
Between MP 75.91 and MP 77.48	35 MPH.
Between MP 110.20 and MP 110.75	35 MPH.
Between MP 119.04 and MP 120.50	10 MPH.
Between MP 120.50 and MP 120.90	25 MPH.
Between MP 206.87 and MP 211.34	35 MPH.
Between MP 213.34 and MP 214.35	20 MPH.
Between MP 240.55 and MP 240.80	15 MPH.

2. Bridge, Engine and Heavy Car Restrictions—

Cars heavier than the following not permitted without authority of Superintendent:

40 ft. or less in length 220,000 lbs.

Over 40 ft. long 263,000 lbs.

EXCEPT on business tracks—Sinnard and Sibylee . . . 177,000 lbs.

SD-24, SD-45, U25C, U28C, GP-40, SD-40, U30C and U33C engines must not operate on following tracks: IBM, Sibylee, and Black Hollow.

3. Train Register Exceptions—

Prospect—Trains will register by register ticket.

Broomfield, Longmont, Loveland, Ft. Collins, Wheatland, Wendover—Trains will register when directed by train order.

4. Clearance Provisions and Exceptions Rule 83(B)—

Prospect—Westward trains must receive clearance. C&S engines, except Denver yard engines, moving from Prospect to C&S Jct. via the D&RGW and who will occupy the Third Subdivision track beyond C&S Jct. must receive C&S clearance at Prospect.

Fort Collins—Trains must receive clearance when operator on duty. Operator hours are continuous except as follows: Saturday—3:30 p.m. to 11:30 p.m., Sunday—3:30 p.m. to 11:30 p.m.

Cheyenne—Trains must receive clearance.

Wendover—Clearance received at Guernsey in care of conductor over the signature of the chief dispatcher at McCook clears the train at Wendover on the Second Subdivision.

Clearance received at Cheyenne over the signature of the chief dispatcher at McCook also clears the train at Wendover on the Eighth Subdivision of the Alliance Division for movement to Guernsey.

5. Spring Switches—

Without Facing Point Lock—Utah Jct., end of double track.

6. Manual Interlockings—

D&RGW crossing, Utah Jct. remotely controlled by D&RGW train dispatcher at Denver.

7. Railroad Crossings Protected by Gates not Indicated at Station—

Normal position of gates protecting railroad crossings at following locations:

19. Telephones—

Mustang — MP 50.125	Ballast Pit — MP 286.90
Barela — MP 233.40	Staunton — MP 307.47
Branson — MP 262.26	Grenville — MP 311.10
Oak Canyon — MP 274.10	Mount Dora — MP 319.82

COLORADO DIVISION SECOND SUBDIVISION (Denver UD - Wendover)

1. Speed Restrictions—	Maximum Speeds Permitted
Zone—Between	Freight
Denver and Wendover	40 MPH.
Trains, engines, and switch movements entering or departing Rice yard, Denver	5 MPH.
Approaching and entering street crossing at 19th and Chestnut Streets, Denver	10 MPH.
Prospect MP 1.03 through Utah Jct. MP 3.43	35 MPH.
Within interlocking limits, Utah Jct.	20 MPH.
Between MP 5.70 and MP 8.42	20 MPH.
Between MP 17.36 and MP 17.52	30 MPH.
Between MP 19.41 and MP 20.42	30 MPH.
Between MP 20.42 and MP 26.35	35 MPH.
Between MP 26.35 and MP 32.05	15 MPH.
Between MP 42.17 and MP 46.82	20 MPH.

- MP 0.5, 11th Street against D&RGW and BN
 C&S Jersey cut-off,
 Denver Union Stockyard. against Pepper Pkg. Co. track
 Sloss against C&S
 Boulder against UP
 Longmont against BN
 Ft. Collins against Fourth Subdivision
 Ft. Collins against UP
8. **Denver**—Trains or engines using Denver Union Terminal Railway Company's tracks must provide themselves with copy of and be governed by General and Interlocking rules of that company.
9. **Prospect**—
 All trains or engines must stop to clear junction switch or cross-overs 200 feet, except trains or engines may, when given a proceed signal by operator with a yellow flag by day or yellow light by night, proceed at reduced speed without stopping.
 Yard crews will not handle switches except when given permission by operator.
 Train or engine movements against current of traffic between Prospect and Utah Jct. may be made on authority of operator at Prospect.
 Positive block against through opposing movement will be maintained by operator at Prospect and tower man at Tower, Denver U.D. C&S freight trains and yard engines will use C&S freight lead between Rice yard and Prospect. Normal position of switches is for freight lead.
 All C&S trains operating between Denver and Golden will operate over D&RGW tracks between Prospect and C&S Jct. in accordance with D&RGW rules.
 Gates at the American Smelting and Refining Company plant will be locked at 51st Street across sewage disposal lead, and at Washington Street across sewage disposal lead.
 BN trains use C&S track between Prospect MP 1.0 and east siding switch, Broomfield and C&S siding, Broomfield, to BN connection at MP 14.7.
10. **Sloss**—
 Near end of industry track, ore loading dock has been constructed and is served by a depressed track measuring 402 feet from clearance point to end of track. Dock apron, when in loading position, presents close clearance. Care must be used in switching at this location.
11. **Boulder**—
 Siding located MP 27.3 east of UP crossing MP 27.9.
 UP trains use C&S yard tracks.
 IBM industrial spur, 4.6 miles west of Boulder, Colorado of the Denver Division, traffic signals in service on Highway 119 crossing of track entering IBM plant.
 Normally, traffic signals will display a red aspect for rail movements, which will require movement to stop short of Highway 119. Upon approach of train or engine movement, traffic signals should display green aspect on traffic signals paralleling track for movement over Highway 119.
 Absence of light in all traffic signals, and when unable to obtain green aspect for movement over Highway 119, will require movement to be protected by a member of crew and occurrence should be reported to the superintendent.
12. **Loveland**—
 Auto dock on north side of G. W. Ry. No. 1 interchange track will not clear man on side of car.
13. **Cheyenne**—
 Yard and engine movements over the following avenues will be preceded by flagman: Capitol, Warren, House and Pioneer.
14. **Murke Quarry Tracks**—
 Loading dock on west track at rock quarry will not clear engine or box car.
 Loading tipple will not clear engine.
15. **Telephones**—MP 4, MP 6.2, MP 25.25, MP 26.9, MP 47.68, MP 41.70, MP 57.26, MP 117.2, MP 131.18, MP 123.90, MP 143.49, MP 162.72, MP 177.45, MP 183.67, MP 215.67.
16. **Handling 80 Foot or Longer Cars**—
 During either throttling or braking trailing tonnage may cause lateral force sufficient for derailment, where cars 80 feet or longer are coupled to cars 50 feet or shorter, when grade and curvature exceed certain limitations.
 To avoid creating such conditions, following restrictions are in effect:
Between Wendover and Cheyenne—
Between Boulder and Louisville—
 Trains of greater than 5900 trailing tons must handle empty cars 80 feet and longer in the rear 5900 tons.
 Trains of greater than 9100 tons must handle loaded cars 80 feet and longer in the last 9100 tons, except 80 feet and longer cars in excess of 100 gross tons will have no restriction on location in train.
 In applying restrictions in this item, the following 80 feet or longer cars must be regarded the same as an empty 80 feet or longer car:
 Cars weighing less than 50 ton, gross weight
 Flat cars with 1 loaded trailer
 Flat cars with empty trailers
 Flat cars with either loaded or empty containers.

COLORADO DIVISION

THIRD SUBDIVISION (Prospect - Golden) FOURTH SUBDIVISION (Ft. Collins - Greeley) FIFTH SUBDIVISION (Ft. Collins - Rex) SIXTH SUBDIVISION (Leadville - Climax)

1. **Speed Restrictions**—
- | Zone—Between | Maximum Speeds Permitted |
|--|--------------------------|
| C&S Jct. and Golden | Freight 25 MPH. |
| MP 7.7—Wadsworth Avenue Arvada | 10 MPH. |
| MP 14.2 to MP 15.0 | 5 MPH. |
| Ft. Collins and Greeley | 15 MPH. |
| Ft. Collins and Rex | 15 MPH. |
| Leadville and Climax | 15 MPH. |
2. **Bridge, Engine and Heavy Car Restrictions**—
 Wrecking cranes 250-ton Not Permitted
 U25C, U28C, U33C, SD24, SD40, SD45,
 U30-C, GP40 engines Not Permitted
 Cars heavier than the following not permitted without authority of Superintendent:
 40 ft. or less in length 220,000 lbs.
 Over 40 ft. long 263,000 lbs.
 EXCEPT on Fifth Subdivision 177,000 lbs.
- Exception—Third Subdivision**—
 Will not apply to car loaded with soda ash for Columbine Glass. These cars are to have a mechanical inspection and light cars to be placed on each end of any car containing soda ash exceeding 263,000 pounds gross weight.

3. Clearance Provisions and Exceptions Rule 83(B)—

Trains must receive clearances at Prospect.

Third, Fourth, Fifth and Sixth Subdivisions are continuous yard limits. Rule 93 applies.

4. Third Subdivision—

Ramp on business track Mt. Olivet will not clear man on side of car. Apron on this ramp will not clear engine.

Look out for gates, side platforms and doors into buildings at Jeffco and Boise Cascade which will not clear man on side of car.

5. Fourth Subdivision—

Normal position of stop gate to protect UP crossing MP 74.6 will be against UP trains.

At Greeley, trains, engines or cars moving over any street or avenue must not exceed a speed of 10 MPH. when engine in forward motion and no cars being shoved ahead of engine, and a speed of 5 MPH. when in backward motion or when cars are shoved ahead of engine. When engine in backward motion or when cars are shoved ahead of engine, trainman must precede movement and act as crossing watchman except when such crossings are protected by crossing watchman on duty.

All forward and back up movements over 14th, 11th and 9th Avenue, and 13th, 8th and 5th Street crossings will be preceded by a member of train crew, who will protect crossing.

**PERFORM SWITCHING IN A MANNER
WHICH WILL AVOID DAMAGE TO
CONTENTS OF CARS AND EQUIPMENT**

Safe Coupling Speed (MPH)	Impact Force
1	1
2	4
3	9
4	16
Damaging Coupling Speed (MPH)	Damaging Force
5	25
6	36
7	49
8	64
9	81
10	100

SPEED TABLE

Time Per Mile		Miles Per Hour	Time Per Mile		Miles Per Hour
Minutes	Second		Minutes	Second	
1	12	50	2	40	22.5
1	15	48	2	45	21.8
1	20	45	2	50	21.2
1	25	42.3	3	....	20
1	30	40	3	9	19
1	40	36	3	20	18
1	45	34.3	3	31	17
1	50	32.7	3	45	16
2	....	30	4	....	15
2	10	27.6	5	....	12
2	15	26.6	6	....	10
2	20	25.7	7	30	8
2	30	24	10	....	6

**MAINTENANCE OF WAY
CONDITIONAL STOP**

(Form Y Train Order)

The following forms of oral authorization by the Foreman and acknowledgment of understanding by the engineer are to be used to permit trains to pass a red flag without stopping within the limits of a Form Y train order.

Foreman will state: "C&S Railway Foreman calling Extra 232 East about Order No. (Form Y Train Order No.)"

Engineer must respond, identifying his train as: "This is C&S engineer, Extra 232 East."

When engineer has answered as above, the foreman will state: "Extra 232 East may pass red signal at (Location) without stopping."

The foreman may also authorize a different speed from that shown in the Form Y train order by adding to his instructions: "Proceed at _____ MPH," or "Proceed at normal speed."

The engineer must repeat back to the foreman the instructions that are given him.

COLORADO DIVISION

INDUSTRIAL TRACKS AND OTHER TRACKS NOT SHOWN AS STATIONS ON TIME TABLE

Name	Location	Length in Feet	Switch Opens	Name	Location	Length in Feet	Switch Opens
First Subdivision				41257 Warren Missile Base	2.3 miles west of Cheyenne	3000	East
40874 Branson	9.4 miles west of Alps	2975	Both	41268 Silver Crown	11.8 miles west of Cheyenne	3500	Both
40850 Twin Mountain	5.5 miles west of Des Moines	7070	Both	89753 Murke Spur	0.5 miles west of Horse Creek	4982	East
Second Subdivision				41334 Slaton	9.0 miles west of Chugwater	1145	Both
Clear Creek (Western Paving)	1.1 miles west of Utah Jct.	2500	Both	41352 Sibylee	1.5 miles west of Wheatland	34655	Both
41142 Homestead House	1.9 miles west of Utah Jct.	280	East	89904 Wilson	4.3 miles west of Sibylee Jct.	660	Both
41143 A&K Trailer	2.4 miles west of Utah Jct.	280	West	89907 Hightower	6.3 miles west of Sibylee Jct.	1000	East
41143 Westminster	2.8 miles west of Utah Jct.	620	Both	41353 Curtis	2.4 miles west of Wheatland	1300	West
41156 Louisville	5.7 miles west of Broomfield	325	Both	Third Subdivision			
41161 Valmont	11.5 miles west of Broomfield	300	West	89306 Blue River Contractors	1.5 miles west of C&S Jct.	775	West
41162 Sloss Jct.	11.8 miles west of Broomfield	1180	West	89309 Horton (Columbine Glass & Container Systems)	1.9 miles west of Arvada	1095	East
41163 Atwell	12.4 miles west of Broomfield	790	West	89310 Sweetners	1.9 miles west of Arvada	1280	East
41172 IBM	4.6 miles west of Boulder	3885	East	89311 Mount Olivet	2.9 miles west of Arvada	870	East
41175 Dominion	3.6 miles west of Niwot	1620	East	89315 Terrill Junction	3.4 miles west of Arvada	930	East
41192 Small	1.5 miles west of Berthoud	840	East	89315 Terrill Junction	4.2 miles west of Arvada		East
41194 Campion	3.0 miles west of Berthoud	555	East	89313 Boise	5.0 miles west of Arvada	720	West
41207 Wickes	9.4 miles west of Loveland	540	West	89313 Ball Metals	5.10 miles west of Arvada	515	West
41207 McClellands	9.2 miles west of Loveland	270	West	Coors Bulk Plant	5.54 miles west of Arvada	870	West
41209 Drakes	0.9 miles west of Omega	620	Both	Coors End Plant	5.35 miles west of Arvada	1840	West
41211 Union Mfg. Co.	1.3 miles west of Ft. Collins	1872	West	89316 Golden Depot	14.8 miles west of Prospect	8310	Both
41216 Giddings	1.2 miles west of Black Hollow Jct.	2375	West	Fourth Subdivision			
41224 Dixon	2.2 miles west of Wellington	2890	East	89515 Kodak	2.5 miles east of Windsor	1735	East
41254 Wyco	4.7 miles west of Speer	2540	West	89503 Schumacher	3.9 miles west of Timnath	355	West
				89507 U.S. Steel	1.0 miles east of Timnath	425	West

COLORADO AND SOUTHERN AUTHORIZED DOCTORS

Dr. Abbott Skinner, M.D., CHIEF SURGEON, St. Paul, Minnesota

Denver, Colo.	Dr. J. F. Prinzing	Surgeon & Examiner	Leadville, Colo.	Leadville Medical Center	Surgeons & Examiners
Denver, Colo.	Dr. L. Retallack	Surgeon & Examiner	Longmont, Colo.	Dr. J. Haley	Surgeon & Examiner
Denver, Colo.	Dr. S. Zalman	Surgeon & Examiner	Louisville, Colo.	Dr. L. Cassidy	Surgeon & Examiner
Denver, Colo.	Dr. M. Berrill	Dentist	Loveland, Colo.	Dr. J. I. Brown	Surgeon & Examiner
Denver, Colo.	Dr. A. Dumke	Dentist	Northglenn, Colo.	Drs. Fischer, Gregory & Cease	Surgeon & Examiner
Denver, Colo.	Dr. M. Sperling	Dentist	Pueblo, Colo.	Dr. R. Wexler	Surgeon & Examiner
Denver, Colo.	Drs. Shpall & Schlager	Physician	Pueblo, Colo.	Dr. W. Dardis	Oculist
Denver, Colo.	Dr. D. Weltman, M.D.	Ophthalmologist	Pueblo, Colo.	Dr. G. Murley	Surgeon & Examiner
Aurora, Colo.	Dr. N. Joseph	Surgeon & Examiner	Pueblo, Colo.	Dr. S. Nelson	Surgeon & Examiner
Berthoud, Colo.	Dr. D. Arndt	Surgeon & Examiner	Raton, N.M.	Dr. J. Lee	Ophthalmologist
Boulder, Colo.	Dr. C. Martin	Surgeon & Examiner	Raton, N.M.	Dr. A. T. Keil	Surgeon & Examiner
Cheyenne, Wyo.	Dr. P. Sharp	Surgeon & Examiner	Raton, N.M.	Dr. R. L. Barenberg	Surgeon & Examiner
Cheyenne, Wyo.	Dr. R. Kanard	Surgeon & Examiner	Trinidad, Colo.	Dr. S. H. Biber	Surgeon & Examiner
Cheyenne, Wyo.	Dr. J. Boyd	Surgeon & Examiner	Trinidad, Colo.	Dr. G. E. Jimenez	Surgeon & Examiner
Cheyenne, Wyo.	Dr. R. Williams	ENT	Trinidad, Colo.	Dr. H. Schwyzer	Surgeon & Examiner
Cheyenne, Wyo.	Dr. L. Stadnik	Oculist	Trinidad, Colo.	Dr. G. M. Skufca	Surgeon & Examiner
Cheyenne, Wyo.	Dr. W. Hickman	Dentist	Trinidad, Colo.	Dr. F. Visconti	Surgeon & Examiner
Clayton, N.M.	Dr. M. Donaldson	Surgeon & Examiner	Trinidad, Colo.	Dr. J. Cuaz	Dentist
Clayton, N.M.	Dr. A. Garza	Surgeon & Examiner	Trinidad, Colo.	Dr. R. Sanders	Dentist
Clayton, N.M.	Dr. R. Gordon	Surgeon & Examiner	Trinidad, Colo.	Dr. G. Sanders	Dentist
Clayton, N.M.	Dr. R. Glasgow	Dentist	Trinidad, Colo.	Dr. H. Holderness	Dentist
Colo. Springs, Colo.	Dr. J. Kennedy	Surgeon & Examiner	Trinidad, Colo.	Dr. G. H. Hagen	Ophthalmologist
Colo. Springs, Colo.	Dr. I. Humphrey	Surgeon & Examiner	Walsenburg, Colo.	Drs. Duris & Kessler	Surgeon & Examiner
Ft. Collins, Colo.	Drs. Humphrey, Pike & Basye	Surgeon & Examiner	Walsenburg, Colo.	Dr. F. A. Menghini	Dentist
Ft. Collins, Colo.	Dr. H. Thode	Surgeon & Examiner	Wheatland, Wyo.	Dr. W. Wilson	Surgeon & Examiner
Ft. Collins, Colo.	Dr. S. Cameron	Dentist	Wheatland, Wyo.	Dr. E. Howshar	Surgeon & Examiner
Golden, Colo.	Dr. L. Goad	Surgeon & Examiner	Wheatland, Wyo.	Dr. B. D. Harnish	Dentist
Greeley, Colo.	Dr. W. Mangum	Surgeon & Examiner	Windsor, Colo.	Dr. G. Sabin	Surgeon & Examiner
Greeley, Colo.	Dr. W. Ruthledge	Dentist	Windsor, Colo.	Dr. E. Kadlub	Surgeon & Examiner
Lafayette, Colo.	Dr. L. L. Gordon	Surgeon & Examiner			
Lakewood, Colo.	Dr. D. Roberts	Surgeon & Examiner			

**PERFORM SWITCHING IN A MANNER
WHICH WILL AVOID DAMAGE TO
CONTENTS OF CARS AND EQUIPMENT**

Safe Coupling Speed (MPH)	Impact Force
1	1
2	4
3	9
4	16
Damaging Coupling Speed (MPH)	Damaging Force
5	25
6	36
7	49
8	64
9	81
10	100

SPEED TABLE

Time Per Mile		Miles Per Hour	Time Per Mile		Miles Per Hour
Minutes	Second		Minutes	Second	
1	12	50	2	40	22.5
1	15	48	2	45	21.8
1	20	45	2	50	21.2
1	25	42.3	3	....	20
1	30	40	3	9	19
1	40	36	3	20	18
1	45	34.3	3	31	17
1	50	32.7	3	45	16
2	....	30	4	....	15
2	10	27.6	5	....	12
2	15	26.6	6	....	10
2	20	25.7	7	30	8
2	30	24	10	....	6

**MAINTENANCE OF WAY
CONDITIONAL STOP**

(Form Y Train Order)

The following forms of oral authorization by the Foreman and acknowledgment of understanding by the engineer are to be used to permit trains to pass a red flag without stopping within the limits of a Form Y train order.

Foreman will state: "C&S Railway Foreman calling Extra 232 East about Order No. (Form Y Train Order No.)"

Engineer must respond, identifying his train as: "This is C&S engineer, Extra 232 East."

When engineer has answered as above, the foreman will state: "Extra 232 East may pass red signal at (Location) without stopping."

The foreman may also authorize a different speed from that shown in the Form Y train order by adding to his instructions: "Proceed at _____ MPH," or "Proceed at normal speed."

The engineer must repeat back to the foreman the instructions that are given him.