COLORADO DIVISION
R. L. BEEM—Division Superintendent, Denver

Assistant Superintendents

I. C. LEHR	Assistant Superintendent Mechanical	Denver
C. G. PEGLOW	Asst. Supt. Roadway Maintenance	Denver
M. D. POTTHOFF	Chief Dispatcher	McCook
B. G. GILBERT	Chief Dispatcher	Fort Worth

Trainmasters

D. E. LOE	Trainmaster	Trinidad
R. L. STUEBER	Trainmaster	Cheyenne
R. M. HODGSON	Trainmaster, Agent	Golden
E. R. TORRENCE	Trainmaster	Denver

Road Foreman

J. B. MURRAY	General Road Foreman	Denver
J. W. FENTON	Road Foreman	Trinidad

BURLINGTON NORTHERN INC.

COLORADO AND SOUTHERN RAILWAY COMPANY

COLORADO DIVISION

TIME TABLE

AND

SPECIAL INSTRUCTIONS

4

IN EFFECT AT 12:01 A.M.
Mountain Standard Time

Sunday, July 15, 1979

President **G. F. DEFIEL**	Gen. Manager-Operations **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	Line Segment	Mile Post Location	Distance from Denver, U.D.	MAIN LINE Colorado Divn STATIONS Telegraph Offices and Calls		
BOK PRYWQ		40788		FWD 452.92	348.6	Z	**TEXLINE**	
							1.2	
Y		40790		347.10	347.4		**SIXELA**	
							9.6	
POQ	2960	40799		337.62	337.8	CY	**CLAYTON**	
							7.3	
P	8808	40807		330.35	330.5		**ROYCE**	
							14.7	
P	8484	40821		315.63	315.8		**GRENVILLE**	
							15.0	
P	8280	40837		300.11	300.8		**GRANDE**	
							8.1	
OPQWR	2340	40844		292.45	292.7	MS	**DES MOINES**	
							7.9	
P	7300	40852		284.50	284.8		**NEW FOLSOM**	
							.4	
P	3805	40854		282.13	282.4		**FOLSOM**	
							11.4	
P	4085	40865		271.60	271.0		**ALPS**	
							19.7	
CBKOPQ	8665	40886		251.03	251.3		**TRINCHERE**	
							15.8	
P	8767	40901		235.24	235.5		**BARELA**	
							14.6	
P	8516	40917		220.16	220.9		**BESHOAR**	
							9.0	
PBCFKW IQRYZ	6993	40924		211.76	211.9	DA	**TRINIDAD**	ABS
							13.7	
P	4211	40939		197.99	198.2		**LUDLOW**	ABS
							8.1	
P	8365	40946	**477**	191.01	190.1		**LYNN**	ABS
							9.7	
P	8017	40957		180.09	180.4		**MAYNE**	ABS
							8.6	
CQWJ YPX	6100	40965		171.58	171.8	WN	**WALSENBURG**	Double Track
							16.7	
PX	E2965 W2965	40981		155.21	155.1		**LASCAR**	Double Track
							11.4	
PX	E3065 W3115	40993		143.72	143.7		**CEDARWOOD**	Double Track
							19.1	
JPYXR	4530	41013		124.35	124.6		**SOUTHERN JCT.**	Double Track
							1.9	
PY	4235	41014		122.48	122.7	MQ	**MINNEQUA**	Double Track
							4.0	

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

Q		41020	**477**	118.50	118.8	R	**PUEBLO**
							114.4

TRAINS BETWEEN SOUTH DENVER AND PUEBLO ARE GOVERNED BY THE JOINT AT&SF-D&RGW TIME TABLE

MIYZ		41134	**477**	4.05	4.1		**SOUTH DENVER**	D.T.
							1.9	

TRAINS BETWEEN S. DENVER AND DUT ARE GOVERNED BY RULES, TIME TABLE AND SPECIAL INSTRUCTIONS OF BN AND C&S.

XYJ				2.17	2.2		**SOUTH PARK JCT.**	D.T.
							1.1	
WFBCIK PQRTYZ			**477**	1.08	1.1	FX	**RICE YARD**	CTC
							1.1	
BK YMU		41137		0.00	0.0	GN	**DENVER U. D.**	CTC

BN Radio Channel No. 1 in service.

SECOND SUBDIVISION

WESTWARD

EASTWARD

Rule 6(A) Signs	Length of Siding in Feet	Station Numbers	Line Segment	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.**	D.T.
							1.4	D.T.
JCRYPQ		41138		1.03	1.0	CX	**PROSPECT**	D.T.
							1.4	D.T.
JPRTY		41139		1.09	2.4		**JERSEY CUT OFF**	D.T.
							1.0	D.T.
IPY		41140		3.36	3.4		**UTAH JCT.**	D.T.
							5.6	
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**	
							6.8	
P	2195	41175		38.15	34.9		**NIWOT**	
							5.9	
MCTYPQ RBJW	4345	41180		43.62	40.3	MN	**LONGMONT**	
							5.9	
P	1910	41186		49.23	46.0		**HIGHLAND**	
							5.2	
P	2515	41191		54.48	51.2		**BERTHOUD**	
							6.2	
BOTYPRJ	3950	41197		60.69	57.4	S	**LOVELAND**	
							10.5	
P	3735	41208		71.19	67.9		**OMEGA**	
							3.2	
WBKPRQ JMTYZO		41211	**476**	74.35	71.1	FO	**FT. COLLINS**	
							2.2	
PY	4806	41213		76.52	73.3		**NORTH YARD**	
							0.7	
JPY		41214		77.17	73.9		**BLACK HOLLOW JCT.**	
							8.5	
P	3800	41222		85.67	82.4		**WELLINGTON**	
							6.0	
P	4535	41228		91.69	88.4		**BULGER**	
							8.0	
P	4860	41236		99.62	96.4		**NORFOLK**	
							13.3	
P	3820	41249		112.95	109.7		**SPEER**	
							6.4	
PBKCQ URTYZWJ		41256		119.40	116.1	DI	**CHEYENNE**	
							19.7	
P	8428	41276		138.81	135.8		**FEDERAL**	
							13.3	
PWQ	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	159.4		**FARTHING**	
							5.8	
P	3895	41307		170.05	166.8		**LAMBERT**	
							18.6	
WOTPQ	8351	41325		188.66	185.4	UW	**CHUGWATER**	
							13.9	
P	3830	41339		202.58	199.3		**BORDEAUX**	
							11.9	
TRBO WPYQ	5760	41351		214.33	211.2	ND	**WHEATLAND**	
							1.4	
TPJ		41352		215.86	212.6		**SIBYLEE**	
							4.6	
PRYJ		41357		220.47	217.2		**MOSA**	
							10.5	
P	4520	41367		230.55	227.7		**DWYER**	
							9.8	
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	Line Segment	Mile Post Location	Distance from Prospect	BRANCH LINE Colorado Divn STATIONS Telegraph Offices and Calls
JCRYPQ		41138	482	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			482	4.87	3.8	C. & S. JCT.
					2.7	
Y		89307		7.62	6.6	ARVADA
					4.0	
JY		89311		11.80	10.6	TERRILL JCT.
					4.8	
BKQYJ		89316		14.37	15.4	GOLDEN

FOURTH SUBDIVISION

WESTWARD — EASTWARD

Rule 6(A) Signs	Capacity of Sidings	Station Numbers	Line Segment	Mile Post Location	Distance from Greeley	BRANCH LINE Colorado Divn STATIONS Telegraph Offices and Calls
JORYTZ		89525	481	98.85	0.0	HG GREELEY
					5.4	
Y		89519		93.43	5.4	FARMERS
					6.9	
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	Line Segment	Mile Post Location	Distance from Ft. Collins	BRANCH LINE Colorado Divn STATIONS Telegraph Offices and Calls
PJRTOB KMYZWQ		41211	480	74.35	0.0	FO FT. COLLINS
					4.0	
Y		89604		78.31	4.0	LA PORTE
					3.7	
Y		84607		82.04	7.7	FILTER
					0.6	
Y		89608		82.67	8.3	ROBERTS
					7.6	
Y		89616		90.29	15.9	OWL CANYON
					2.0	
Y		89618		92.29	17.9	REX

SIXTH SUBDIVISION

WESTWARD — EASTWARD

Rule 6(A) Signs	Capacity of Sidings	Station Numbers	Line Segment	Mile Post Location	Distance from Leadville	BRANCH LINE Colorado Divn STATIONS Telegraph Offices and Calls
OJBKTYWQ		89150	479	151.27	0.0	LEADVILLE
					14.1	
TY		89164		137.17	14.1	CLIMAX

BN Radio Channel No. 1 in service.

ALL SUBDIVISIONS

1. **Speed Restrictions—** Maximum Speeds Permitted

All speeds are subject to modification by speed restrictions indicated under each subdivision.

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

Freight trains up to 100 Tons/O.B.* . . . . . 60 MPH.

Freight trains over 100 Tons/O.B.* . . . . . 50 MPH.

*Tons per operative brake (Tons/O.B.) is defined as the gross trailing tonnage of the train divided by the total number of cars having operative brakes.

To determine if train exceeds 100 tons per operative brake, add two zeros to the number of cars having operative brakes. If train has greater trailing tonnage than the resulting figure, train exceeds 100 tons per operative brake. Example: 85 cars with operative brakes plus two zeros equal 8500. An 85 car train with 9182 tons would exceed 8500 and hence would exceed 100 tons per operative brake.

Unless otherwise provided—

Loaded unit ore, ballast and potash trains . . . . . 40 MPH.

Loaded unit coal trains. . . . . 45 MPH.

Empty unit coal trains . . . . . 50 MPH.

Engines running light or with caboose only. . . . . 50 MPH.

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

When temperatures are below zero degrees fahrenheit the following speed restrictions apply:

	Psgr. Trains	Freight Trains
Zero degrees to 10 below zero	65 MPH.	50 MPH.
11 degrees below zero and colder	60 MPH.	45 MPH.

Equipment—	Main Line	Branch Line
Loaded BN ownership C2-covered hoppers (less than 2200 cubic capacity) .	50 MPH.	
Ore cars.	45 MPH.	20 MPH.
Scale test cars except WO-3, 4, 5	35 MPH.	20 MPH.
Air dump cars (loaded).	35 MPH.	20 MPH.
Wedge plow or dozer (dead in tow). . . .	35 MPH.	20 MPH.
Rotary plow, wrecking derrick, loco crane, pile driver, clamshell, shovel, Jordan spreader.	30 MPH	15 MPH.
Log cars not equipped with permanent steel side stakes.	30 MPH.	15 MPH.
Ribbon rail cars (loaded).	35 MPH.	25 MPH.

Except on Main Lines as shown in timetables, diesel engines, wrecking cranes and other types of heavy work equipment must not be operated on any subdivision unless authorized by Chief Dispatcher and Roadmaster or covered by specific instructions.

Maximum Speed Diesel Units Dead in Tow—

Switcher units with friction bearings . . . . . 35 MPH.

Switcher units with roller bearings . . . . . 50 MPH.

Road switcher and other units . . . . . 60 MPH.

1A. Control of Harmonic Rocking—

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 restrictions will apply:

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

2. Restrictions on Diesel Units—

The number of diesel units coupled together in train operation, either working, idle, or dead in tow, must not exceed seven. When the operating diesel units on head end of train exceed 18 powered axles, Individual Subdivision Special Instructions or bulletin must be referred to in determining if any restrictions are in effect governing trailing tonnage. Maximum tonnages expressed in Individual Subdivision Special Instructions for head end power are extreme limits under ideal conditions and superintendents will establish lower limites as required.

In the event diesel units in excess of the above restrictions are to be handled dead in train, such units must be placed not less than 5 cars or more than 15 cars behind the lead 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.

Exception—Trains of 5 cars or less may handle not more than three such diesel units coupled dead in tow to the working consist.

When an engine consist of more than 3 units in service includes 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.

Diesel units NOT equipped with alignment control couplers:

All switcher units
Road and road switcher diesel units: 600-995, 1350-1355, 1357-1365, 1524-1576, 1578-1585, 1587-1601, 1603-1612, 1614, 1616-1619, 1621, 1700-1775, 1777-1875, 1877-1936, 1938-1958, 1960-1966, 1968-1998, 4000-4197, 6000-6255, 9900-9925
FW&D 605-610, 700-703, 850-859
C&S 150-842

3. Remote Control (RCE-1) Operation—

Locomotives not equipped with alignment control coupler 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:
C30-7, F-45, SD-40, SD-45, U-25C, U-28C, U-33C, U-30C

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 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.

3A. Manned Helper Operations—

Locomotives not equipped with alignment control couplers (See item 2) must not be operated in manned helper consists unless equipped with bolster stops.

The following units, not equipped with alignment control couplers, are equipped with bolster stops:

602-644, 653, 675, 682, 702, 704-707, 710-714, 720, 724-735, 738-785, 788, 794-819, 824-825, 827-829, 831-847, 986-989,

1353, 1355, 1357-1360, 1362, 1365, 1524-1542, 1545, 1551-1552, 1555-1563, 1569-1571, 1573, 1575-1576, 1578, 1580-1584, 1587, 1590, 1592-1600, 1610, 1614, 1616-1618, 1621-1622, 1626-1643, 1700-1775, 1777-1799, 1802-1812, 1814, 1816-1817, 1819-1820, 1822, 1824-1833, 1835-1866, 1868-1875, 1877-1882, 1887-1889, 1892, 1894-1901, 1903-1904, 1906, 1908-1909, 1914-1926, 1928, 1930, 1932-1933, 1941-1952, 1955-1958, 1960-1965, 1971, 1975, 1978, 1990-1997
FW&D 700-703

Exception—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 are handled at rear of train, manned helper must be cut in ahead of such cars. When helper is cut in ahead of such cars, or immediately ahead of the caboose, the helper will be considered as operating at the rear of the train.

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.

Head end consists in helper trains which are unit trains consisting entirely of Grade E steel couplers may have up to 36 powered axles. Helpers up to 24 powered axles may shove on the rear of trains so equipped.

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.

When restrictions governing trailing tonnage with head end power are provided by Individual Subdivision Special Instructions or bulletin, helper may be operated on head end, providing the combined head end and helper units do not exceed seven.

Exceptions to Item 3A—Helpers of six powered axles or less are not restricted by any of the provisions of this item.

3B. Diesel Unit Weights

This chart is to be used in conjunction with any weight restrictions in items 1 or 2, Individual Subdivisions.
Groups VII thru X are 6 axle units.

Group	Types	Unit Numbers	Weight (000)
I	SW-1	80-97	198-200
II	NW-5	986-995	217
III	SW-1-12, NW-2-12	1-14, 98-250, 375-595	232-255
	SW-12, NW-2	C&S 150-153, 156-160	246-250
	" "	FWD 605-610	" "
	F7-9	602-853	232-250
	GP-5	1350-1365	243
	GP-7	1510-1623, 1633, 1643	246-250
	"	FWD 700-703	" "
	GP-9	1723-1760, 1808-1830	246-251
	"	1884-1891, 1902-1972	" "
	GP-18	1990-1998	248
IV	SW-15	300-324	255-262
V	GP-7	1625-1632, 1634-1642	254
	GP-9	1700-1722, 1761-1807	255-259
	"	1831-1883, 1973-1980	" "
	GP-10	1400-1436	257
	GP-20-30-35-38	2000-2545	257-267
	A415-424, ARS-3-11	4010-4246	245-258
VI	GP-40	3000-3039	275
	A-425	4252-4264	271
	U25B-28B-30B	5400-5484	269-275
	SW-7	C&S 154	274
VII	SD-7	6048-6059	298
VIII	SD-7-9	6023-6047, 6127-6206	316-326
	"	C&S 810-842, FWD-850-859	" "
IX	SD-7-9-24	6000-6022, 6100-6126	344-346
	"	6240-6255	" "
X	A636	4360-4369	393
	U23C-25C-28C	5200-5208, 5600-5677	370-392
	U30C, C30-7	5300-5394, 5500-5566	410-417
	" " "	C&S 890-893	" "
	U30C-33C	5700-5765, 5800-5944	388-411
	SD40-45, F-45	6300-7074, 8000-8029	369-416
	SD40-45	C&S 868-887, C&S 900-996	382-416
	"	C&S 7832-7868	" "

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
Scale test cars (next ahead of caboose) except WO-3, 4, 5
Pile drivers
Locomotive cranes
Rotary snowplows, wedge plows, dozers
Jordan spreaders
Rear end only cars.

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 80 foot or longer empty 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, unless the car is designated with a letter "Q" in the YHC column of the wheel report.

Locations where other restrictions are in effect are listed under Individual Subdivisions.

Exception—Trains consisting entirely of cars 80 foot and longer, except caboose, are not restricted by this provision; however, any helper locomotive at rear of train must be cut in ahead of caboose on such trains.

5. Repeater Relay Air Car Operation—

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

6. 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:

a. A freight car with any defect that makes it unsafe for movement shall be corrected or set out of train.

b. 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.

c. Open top loads, including trailers and containers on flat cars, must be safely loaded.

d. Where width or height appears close to clearance lines, it must be known that the movement has been cleared with the proper authority.

e. Freight cars carrying bad order tags, that are safe for movement, may be taken in train to the point where repairs can be made.

7. Hazardous Materials—

Holders of the Consolidated Code of Operating Rules must have BN Form 15784, "Handling Placarded Cars In Railroad Transportation," in their possession and be familiar with its contents.

All carloads of chlorine and anhydrous ammonia must not be cut off while in motion and no car(s) moving under its own momentum shall be allowed to strike these cars, nor shall such cars be coupled to with more force than is necessary to complete the coupling. Employees must be informed of the presence of these cars and instructed to handle them in accordance with the above requirements.

F.R.A. Emergency Order No. 5—

(a) DOT specification tank cars 112A and 114A that are not equipped with head shields required by 49CFR 179.100-23, transporting flammable gas requiring Flammable Gas placards, shall not be cut off in motion. No car moving under its own momentum shall be allowed to strike any DOT 112A or 114A tank car containing flammable gas placarded Flammable Gas, that is not equipped with head shields required by 49CFR 179.100-23, nor shall any such car be coupled into with more force than is necessary to complete the coupling.

(b) The shipping papers required by 49 CFR 172.203(g)(2), 174.25(a), for DOT specification tank cars 112A and 114A containing flammable gas, placarded Flammable Gas, and not equipped with head shields must carry the notations "DOT 112A" or "DOT 114A" and either "must be handled in accordance with FRA E.O. No. 5" or "shove to rest per E.O. No. 5."

(c) Railroad employees must be informed of the presence of these cars and instructed to handle them in accordance with the requirements of this order.

Note: For complete information on these regulations, consult R.M. Graziano's Tariff or B.E. Pamphlet 20.

When derailment or incident occurs involving hazardous materials:

a. Except to effect rescue, keep everyone, including employees, at a safe distance pending determination of chemicals involved.

b. Notify train dispatcher (yardmaster in terminal areas) advising portion of train or cars involved. From waybills, consist or other documents which may be available, determine special precautions to take when making inspection, i.e., protective clothing, breathing apparatus, etc.

c. If flammable liquids or gases are involved and personal safety allows, remove or extinguish all sources of ignition in the area.

d. When personal safety allows, take necessary action to prevent spilled material from entering lakes, streams or sewers, if possible.

e. Remain at the scene, in close contact with the train dispatcher (yardmaster in terminals) and be readily accessible to advise emergency response forces of suspected dangers, contents and condition of cars. Furnish them all emergency response information available. This position should be maintained until relieved by an officer on the scene or emergency is corrected.

NOTE: Computer generated data does not indicate hazardous materials in TOFC/COFC shipments, certain mixed loads or residue remaining in empty tank cars. Such cars in a derailment may be as dangerous as other shipments. Information for such cars must be obtained from the waybill.

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 yard speed as required in Rule 93.

9. 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 failed equipment detector is out of service or may be ineffective account blowing snow, freight trains will reduce speed to the extent required, stopping if necessary, to make train inspection. Conductors will determine frequency of inspections depending on visibility conditions and/or inspections by employees on the ground. Inspection intervals must not exceed 35 miles. Crews will examine train in advance of inoperative failed equipment detector which protects bridge, tunnel or other structure.

When a hot box detector is out of service, the requirements of Operating Rules or instructions will be suspended for defective equipment indicator associated with such hot box detector.

Whenever a car is set out for a hot bearing discovered within 25 miles of an in-service hot box detector, the conductor will make a wire report to the superintendent and chief dispatcher indicating date, train, and location of hot box detector which failed to detect the hot journal, with a copy of the wire to AVP Engineering, St. Paul. Dispatchers will arrange inspection of the detector by the signal maintainer in all such instances.

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.

Failed Equipment Detector Instructions—

This device must be observed by the crew on rear of train, and they must be governed by the information shown immediately after the rear of the train has passed.

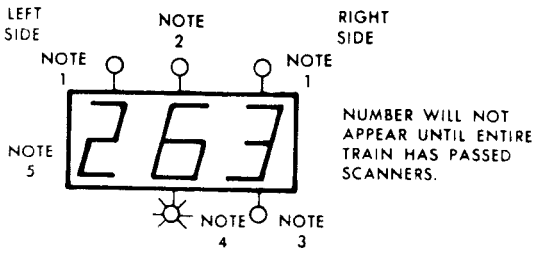
Enginemen must alert crew members on rear of train when approaching detector site.

Train must not move beyond failed equipment sign until authorization to proceed is received from rear of train.

When failed equipment is indicated engine crew must be notified to stop train for inspection. Advise dispatcher reason for delay by first available means of communication.

DEFECTIVE EQUIPMENT DISPLAY

AS VIEWED FROM APPROACHING TRAIN



Note: 1—Hot bearing indicator light. When illuminated hot bearing detected. The hot bearing is located on right side of train when

right light is illuminated, and on left side when left light is illuminated. Stop and inspect train.

Note: 2—Multiple hot bearing or dragging equipment indicator light. When illuminated inspect train for more than one hot bearing or dragging equipment.

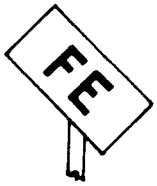
Note: 3—Dragging equipment indicator light. When illuminated dragging equipment has been detected, stop and inspect train as indicated. Advise dispatcher reason for delay by first available means of communication.

Note: 4—Flashing train inspection indicator light. When illuminated train is being checked for hot bearing and dragging equipment. If this light is not illuminated, stop and inspect train.

Note: 5—Journal number display panel. Number shown is axle count from rear of train to first hot bearing or dragging equipment detected. When making inspection, check at least four (4) axles both directions from indicated number.

All journals on the train must be inspected whenever hot bearing indicator light, dragging equipment indicator light, multiple hot bearing or dragging equipment indicator light is illuminated and there is no count shown on defective equipment display panel or when digital readout displays false indication such as numbers totaling more than train axle count.

FAILED EQUIPMENT SIGN



Failed (F.E.) signs are located 13,500 feet beyond the defective equipment detector site.

10. 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 point lock in the Subdivision Special Instructions.

11. Railroad Crossings at Grade—

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.

12. Automatic Interlockings—

When a train or engine is stopped by a stop indication of an automatic interlocking signal and no immediate conflicting train or engine movement is evident, in addition to complying with Consolidated Code Rule 613, employees must be governed by instructions posted in the release box.

13. Rules Changes and Modifications—

Consolidated Code Rule M and BN Safety Rule 94—

BN Safety Rule 94 and the second, third, and fourth paragraphs of Consolidated Code Rule M are cancelled and 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.

Consolidated Code Rules 12 and 14—

On Burlington Northern and affiliated lines, Consolidated Code Rules 12 and 14 are modified to include:

"In the absence of a green flag, when crew of train is positive that their entire train has passed the restriction as indicated in train order, unless other speed restrictions govern, normal speed may be resumed."

These instructions in no way modify the requirement for trackmen to display flags as required by maintenance of way rules.

Consolidated Code Rule 26—

BLUE SIGNAL PROTECTION OF WORKMEN

Definitions—

"Workmen" means railroad employees assigned to inspect, test, repair or service railroad rolling equipment, or their components, including brake systems. Train and yard crews are excluded, except when assigned to perform such work on railroad rolling equipment that is not part of the train or yard movement they have been called to operate.

"Rolling equipment" means engines and railroad cars.

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

"Effective locking device" when used in relation to a manually operated switch or derail means a lock which may be locked and unlocked only by the class or craft of employee applying that lock.

RULE 26

A blue signal indicates that workmen are on, under, or between rolling equipment, and that the equipment must not be coupled to or moved. Other equipment must not be placed on the same track so as to block or reduce the view of the blue signal, except on engine service tracks or when a derail is used to divide a track into separate working areas.

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

RULE 26(A)

Workmen may not work on, under or between rolling equipment on any track unless:

Each manually operated switch providing access to that track is lined against movement to that track, secured by an effective locking device, and a blue signal is placed at or near each manually operated switch; or

A derail capable of restricting access to that portion of a track on which such equipment is located is placed at least 150 feet from the end of the rolling equipment, and locked with an effective locking device in the derailing position. A blue signal must be displayed at each derail.

Whenever one switch of a crossover is located beneath rolling equipment which is under blue signal protection, the next switch of the crossover must be lined and locked against movement to that crossover. A blue signal need not be displayed at either crossover switch.

When workman are working on, or under or between an engine or rolling equipment coupled to an engine, a blue signal must be displayed on the controlling unit at a location where it is readily visible to the engineer or operator at the controls of that engine.

When emergency repair work is to be done on, under or between the engine, or cars coupled to an engine, and a blue signal is not available, the engineer must be notified by a member of the crew, or workman, and protection given those engaged in making the repairs. Engine or cars must not be moved, nor air brakes applied or released, until all employees are clear and the engineer so advised by the same employee.

RULE 26(B)

Engine Servicing Facilities—

An engine may not be moved onto or off a designated engine servicing track under the exclusive control of mechanical forces unless the blue signal is first removed:

From the entrance switch to the service track, and the engine which is placed on the track is stopped short of coupling to another engine or

From the controlling unit to be moved and from the service track departure switch, before the engine is removed from the track;

An engine protected by blue signals may be moved on a track within the designated engine servicing area under the exclusive control of mechanical forces, when operated by an authorized employee under the direction of the employee in charge of the workmen, after the blue signal has been removed from the controlling engine to be repositioned, and the workmen on the track have been notified and are clear of the movement.

RULE 26(C)

Car Shop or Repair Track Protection—

A blue signal must be placed at the entrance switch to a repair track or a car shop when workmen are working on, under or between rolling equipment. Each manually operated switch providing access to the track must be lined against movement to the track and secured with an effective locking device.

Rolling equipment protected by blue signals on car shop or repair tracks which are under exclusive control of car department forces, may be repositioned with a car mover when operated by an authorized employee, under the direction of the employee in charge of the workmen, after the workmen on the track have been notified and are clear of the movement.

Rolling equipment must not be placed on repair tracks or in car shops until it is known that all employees are clear of the track on which the movement is to be made.

RULE 26(D)

Hump Yard Tracks and Tracks with Remotely Controlled Switches—

Workmen may not work on, under or between rolling equipment unless the person in charge of the workmen has notified the operator of the remotely controlled switches of the work to be performed, and has been informed by the operator that protection has been provided. Before the operator of the remotely controlled switches informs the employee in charge of the work that protection has been provided, each remotely controlled switch providing access to the track must be lined against movement to that track, and locked by applying an effective blocking device to the lever, button or other device controlling the switch.

The operator may not remove the locking device unless he has been informed by the person in charge of the workmen that it is safe to do so.

The operator must maintain for 30 days a written record of each notification which contains the following information:

The date and time he received notification of work to be performed;

The name and craft of the employee in charge who provided the notification.

The number or other designation of the track involved;

The date and time he notified the employee in charge that protection has been provided; and

The date and time he was informed that the work had been completed, and the name and craft of the employee in charge who provided this information.

Each manually operated switch providing access to that track must be protected per Rule 26(A).

Consolidated Code Rule 34—

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 signal 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 movement 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.

Consolidated Code Rule 93—

Yard limits will be indicated by yard limit signs. Stations where yard limits are in effect will be designated by timetable, train order, bulletin, general order or special instructions.

The main track(s) within yard limits may be used clearing the time of first class trains when due to leave the last station where time is shown. In non-ABS territory, in case of failure to clear the time of first class trains, protection must be provided as prescribed by Rule 99. Protection against second and third class trains, extra trains and engines is not required.

Trains must clear other trains which are superior as prescribed by Rules 86 and S-87.

All trains and engines, except first class trains must move within yard limits prepared to stop within one-half the range of vision but not exceeding 20 MPH, unless main track is known to be clear by block signal indication. When moving against the current of traffic or on portion of double or two or more tracks used as a single track within yard limits, all trains including first class trains must move prepared to stop within one-half the range of vision but not exceeding 20 MPH.

Movements against the current of traffic within yard limits must not be made unless authorized by train order or protected by yardmaster or other authorized employee.

In yard limits in ABS territory, protection as prescribed by Rule 99 is not required in case of failure to clear the time of first class trains. Information on delayed first class trains may be issued by the train dispatcher either verbally or by message to yardmaster or member of a crew.

Consolidated Code Rule 99—

When a train is moving on a main track at less than one-half the maximum speed for that territory, flag protection against following trains on the same track must be provided by a crew member dropping off single lighted fusees at intervals that do not exceed the burning time of the fusee.

When a train is moving on a main track at more than one-half the maximum speed for that territory, under circumstances in which it may be overtaken by a following train, crew members responsible for providing protection will take into consideration the grade, curvature of track, weather conditions, sight distance, and relative speed of their train to a following train and will be governed accordingly in the use of fusees to protect their train.

When a train stops on a main track and flag protection against following trains on the same track must be provided, a crew member with flagman's signals must immediately go back at least the distance prescribed by timetable or other instructions for that territory, place two torpedoes on the rail not less than 150 feet apart and display one lighted fusee. He may then return one-half of the distance to his train where he must remain until he has stopped a following train or is recalled or relieved. When recalled he must

leave one lighted fusee, and while returning to his train, he must also place single lighted fusees at intervals that do not exceed the burning time of the fusee. When train departs, a crew member must leave one lighted fusee and until the train resumes a speed not less than one-half the maximum speed for that territory, he must drop off single lighted fusees at intervals that do not exceed the burning time of the fusee.

When required by the rules, a crew member with flagman's signals must protect front of train against opposing movements by immediately going forward at least the distance prescribed by timetable or other instructions for that territory, placing two torpedoes on the rail not less than 150 feet apart, displaying a lighted fusee, and remaining at that location until recalled or relieved.

When a train is seen or heard approaching before the crew member has reached the prescribed distance, he must immediately place torpedoes and continue toward the approaching train, giving stop signals.

Crew members providing flag protection must not permit other duties to interfere with the protection of their train. The conductor and engineer are responsible for the protection of their train.

When a train requires protection the engineer must immediately sound signal 15(c) or 15(f). Inability to hear these signals does not relieve members of the crew from protecting the train.

Flag protection against following trains on the same track is not required under the following conditions:

a) In ABS territory, when rear of train is protected by at least two block signals.

b) When rear of train is protected by an absolute block (Absolute block means a block in which no train is permitted to enter while it is occupied by another train.).

c) When rear of train is within interlocking limits.

d) When a train order or special instructions provides that flag protection is not required.

NOTE: These provisions do not apply to any unit of equipment which does not actuate the block or cab signals or to a work extra.

Flagman's signals:

Day Signals—A red flag not less than *ten* torpedoes and *six* red fusees.

Night Signals—A white light, not less than *ten* torpedoes and *six* red fusees.

Consolidated Code Rule 103 (C)—

103(C): Cars on any track must be left clear of crossings and so as not to 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.

Consolidated Code Rule 103 (E)—

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.

Consolidated Code Rules 200 and 83 (B)—

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.

Consolidated Code Rule 211—

At stations designated by the division superintendent, duplication of slow and cautionary orders may be done mechanically on copier machine.

Consolidated Code Rule 213—

A set of train orders will be furnished the rear trainman on all passenger trains.

Consolidated Code Rule 214—

The following paragraphs are added to Consolidated Code Rule 214:

When a train and/or engine crew are relieved on line account hours of service or for other reasons, if the train orders, clearances and messages can not be personally delivered to the relieving crew, unless otherwise instructed, conductor will leave all train orders, clearances and messages in envelope on caboose desk and engineer will leave same in envelope on engine. Both conductor and engineer will show correct designation of train, date, location and signature on front of envelope.

Conductor of relieving crew must compare order numbers with engineer and unless otherwise instructed, conductor must contact train dispatcher before proceeding.

If the train dispatcher annuls the train orders by operator or directly to a member of the crew of the train or trains involved, all train orders and clearances must be removed from the engine and caboose by the crew being relieved.

The train dispatcher must instruct the relieving crew, before they leave their terminal, of the location where they will pick up train orders (including slow and cautionary orders).

Form H Train Orders—

When a work extra has been instructed to clear or protect against an extra train after a specified time and it is desired to extend such time, the following may be used:

"Work extra_____(clear or protect against) Extra _____(direction) after_____M instead of_____M."

The above example must be used to extend clearing time and may be used to extend protecting time.

When a work extra has been instructed to protect against an extra train after a specified time and it is desired to extend such time, if intended for other trains to use the additional time, Form E Example (3) order may be used and applied to extra trains.

If intended to extend such time only to the work extra, Form S-E Example (1) order must be used and applied to extra trains.

Necessary identification of a work extra by a train when required by Rule 89 must include confirmation by the Conductor of the work extra that their entire train has arrived.

Form W Train Orders—

Examples 4, 5 and 6 of Form W train order as contained in the Consolidated Code of Operating Rules are modified as follows. These examples will show the train order number as well as the date.

Examples

(4) Extra 37 West register at C on Order No._____of _____(Date).

(5) Extra 38 East may check register at C against Extra 37 West on Order No._____of_____(Date).

(6) No. 2 may check register at C against Extra 37 West on Order No._____of_____(Date).

When used in this manner, it will not be necessary that the train authorized to check the train register have a copy of the train order instructing an extra train to register.

The train instructed to register will insert the train order number and date of train order in the column of train register captioned "Signals."

The train authorized to check the register will check the column captioned "Signals" for the train order number and date to ascertain that it is the same as the train order number and date shown on their train order authorizing them to check the register.

Consolidated Code Rule 281—

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

Railroad Radio Rules—

Consolidated Code of Operating Rules 650 through 663 and BN Safety Rules 685 through 696 are cancelled. The following Radio Rules as promulgated by the FRA are in effect:

400. The following rules and requirements cover use of railroad radio systems and govern employees using such systems.

401. All employees, except those specifically authorized by the Federal Communications Commission (FCC) are prohibited from making any internal adjustments to a railroad radio. Employees so authorized must carry their FCC operator license or verification card when on duty.

402. No employee shall knowingly transmit any false emergency communication, any unnecessary, irrelevant or unidentified communication, nor utter any obscene, indecent, or profane language via radio. No employee shall divulge or publish the existence, contents, purport, effect or meaning of any communications (emergency communications excluded) except to the person for whom the communication is intended or to another employee of the railroad whose duties may require knowledge of the communication. The above applies either to communications received direct or to any that may be intercepted.

403. An emergency call will be preceded by the word "Emergency" repeated three times. Such calls shall be used only to cover initial reports of derailments, collisions, storms, washouts, fires, obstructions to track, or other matters which would cause serious delay to traffic, damage to property, injury to employees or the traveling public, and shall contain as complete information thereon as possible. All employees shall give absolute priority to communication from a station in distress, and except in answering or aiding that station shall refrain from sending any communication until there is assurance that no interference will result.

404. Any employee shall permit inspection of the radio equipment in his charge and all FCC documents pertaining thereto, by a duly accredited representative of the FCC at any reasonable time.

405. The location of radio base and wayside stations, time such stations are attended, and assigned channels, will be designated by timetable or other instructions.

406. Before transmitting, an employee operating a radio must listen a sufficient interval to be sure the channel is not already in use, give required identification, listen for acknowledgement from the employee to whom he intends to transmit, and must not proceed with transmission until such acknowledgement is received.

407. Employees transmitting or receiving a radio communication must begin with the required identification, and must include the following in the order listed below:

A. BASE OR WAYSIDE STATIONS:

1. Name or initials of the railroad.
2. Name of office or other unique designation of the station, and location of station.

B. MOBILE UNITS:

1. Name or initials of the railroad.
2. Train name (number), engine number, or words that identify the precise mobile unit.

If an exchange of communication continues without substantial interruption, identification must be repeated each 15 minutes. After positive identification has been made in connection with switching, classification and similar operations wholly within a yard, fixed and mobile units may use short identification after the initial transmission and acknowledgement.

408. An employee receiving a radio call must not delay acknowledgement; unless it would interfere with duties relating to safety.

409. An employee who receives a transmission must repeat it to the transmitting party except when the communication:

A. Relates to yard switching operations.

B. Is a recorded message from an automatic alarm device.

C. Is general in nature and does not contain any information, instruction or advice which could affect the safety of a railroad operation.

410. To indicate to the receiving employee the transmission is ended and that a response is expected, the transmitting employee must say the word "over".

411. To indicate to the receiving employee the exchange of transmissions is complete and that no response is expected, the transmitting employee must say the word "out".

412. When base and wayside stations or mobile units are manned, the radio must be turned on to the appropriate channel with volume adjusted to receive communications.

413. Radio communication must not be used to avoid compliance with any operating rule.

414. Any radio communication which is not understood or completed in accordance with these rules, must not be acted upon and must be treated as though not sent. Exception: If any information is received which would affect the safety of employees, the public, or damage to property; the safe course must be taken, and, if necessary, movement stopped until an understanding has been reached.

415. Radios used in train operation, outside yard limits, must be tested at the point where the train is originally made up.

416. Engineers and conductors must test the radio at least once during each tour of duty to ensure the radios are working on the engine and caboose.

417. Radio tests must consist of an exchange of voice transmissions with another radio and the quality and readability of its transmission must be ascertained.

418. A malfunctioning radio must not be used, and each crew member of the train and the train dispatcher or other designated employee must be notified by any alternate means of communication available as soon as practicable.

419. Radio must not be used to give information to a train or engine crew about the position, aspect, name or indication displayed by a fixed signal, except between members of the same crew.

420. When radio is being used in lieu of hand signals both the direction and distance to be travelled must be given. Movement must be stopped in one-half the distance specified unless additional instructions are received.

421. When train orders are transmitted by radio they must be transmitted in accordance with applicable operating rules, and the following:

A. The train dispatcher or operator shall call the addressees of the train order and state his intention to transmit the train order.

B. Before the train order is transmitted the employee to receive and copy the train order shall state his name, identification or call sign, location, and that he is prepared to receive a train order. Train orders may not be received and copied by an employee operating the controls on an engine of a moving train. Train orders may not be transmitted to the crew of a moving train when, in the judgment of either the conductor, the engineer, or the train dispatcher, the train order cannot be received and copied without impairing the safe operation of their train.

C. Train orders shall be copied in writing by the receiving employee in the format prescribed in the operating rules.

D. After the train order has been received and copied, it shall be immediately repeated in its entirety. After verifying

the accuracy of the repeated train order, train dispatcher shall then state "complete", the time, and the initials of the employee designated by the railroad. Employees copying train orders must then acknowledge by repeating "complete" and the time.

E. Except as provided by Rule 414 before a train order is acted upon, both the conductor and engineer must have a written copy of the train order and make certain that the train order is read and understood by other members of the crew.

F. Except as provided by Rule 414 a train order transmitted by radio which has not been made complete may not be acted upon and must be treated as though not sent. Rule 209 will not apply. "Complete" must not be given to a radio transmitted train order for other trains until response "complete" has been acknowledged by the train being restricted.

G. Information contained in a train order may not be acted upon by persons other than those to whom the train order is addressed.

422. Radio transmitters must not be operated when located less than 250 feet from blasting operations.

423. The railroad company is required to answer an official notice of violation of the terms of the Communications Act of 1934, as amended, within ten days from receipt of notice and any employee receiving inquiry concerning any violation shall answer such inquiry within 24 hours after receipt of notice.

424. Citizens band radios must not be used for railroad operating purposes.

Note: If necessary for clarity, a phonetic alphabet shall be used to pronounce any letter used as an initial, except initials of railroads.

A word which needs to be spelled for precision or clarity shall first be prounounced, and the word shall then be spelled. If necessary, the word shall be spelled again, using a phonetic alphabet.

Consolidated Code Rule 729—

Employees must familiarize themselves with the Department of Transportation regulations governing the handling and transportation of hazardous materials, and be governed thereby. When handling cars containing hazardous materials, it must be known that they are in proper place in the train.

Consolidated Code Rule 957—

At stations designated by the Division Superintendent, duplication of train location lineups may be done mechanically on copier machines.

BN Safety Rule 144—

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

144(A) When air hoses are to be 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.

144(B) When air hoses are to be uncoupled on freight cars by trainmen and yardmen:

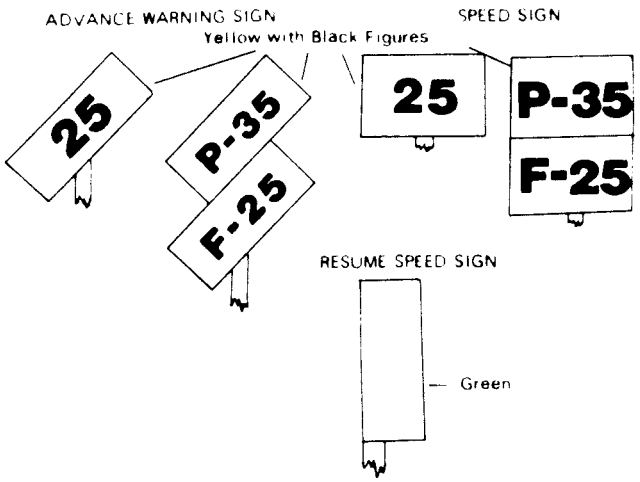
a) Have both angle cocks closed.
b) Operate uncoupling lever and signal for movement.
c) Allow air hoses to part by themselves, keeping all parts of body fully in the clear.

BN Air Brake and Train Handling Rule 202 and BN Safety Rule 217—
have been modified to include a second paragraph which reads:

"When necessary to work under cars in trains where inadvertent movement of the car being worked on could occur, sufficient hand brakes must be applied adjacent to the car to prevent such movement."

BN Speed Signs—

On subdivisions specified by bulletin, existing speed signs have been replaced by BN speed signs as illustrated below; Rule 240W and instructions on pages 126 and 127 of the Consolidated Code are changed accordingly.



These signs, as illustrated, apply to train and engine movements as follows:
Figures preceded by letter P apply to passenger trains.
Figures preceded by letter F apply to freight trains.
Figures not preceded by a letter apply to all train and engine movements.

When Speed Is To Be Reduced

An "Advance Warning" sign is 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. This lower speed is effective until a "Resume Speed" sign or another "Speed Sign" is displayed.

When Speed Is To Be Increased

At the end of a Reduce Speed zone, a train or engine will be governed by one of the following signs:

1. A "Speed Sign" displaying a higher speed.
2. 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.

14. **Air Brake and Train Handling Rules—**

BN Air Brake and Train Handling Rules, Form 15338-11-76, 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.

15. **Automatic Cab Signals—**

Cab signals on any engine unit, so equipped, must not be used on any other portion of Burlington Northern except on suburban equipment only on Chicago Division, First Subdivision.

16. **Signal Aspects and Indications—**

BN signal aspects and indications as contained in pamphlet Form 15307 dated 2-1-77 are in effect. Special signal aspects and indications as shown for Burlington lines on pages 118, 119, 120, and 121 in the Consolidated Code of Operating Rules, remain in effect.

COLORADO DIVISION

FIRST SUBDIVISION

(Texline - Denver UD)

1. Speed Restrictions— Maximum Speeds Permitted

Zone—Between	Freight
Texline and Denver	40 MPH.
Unit coal trains (loaded and empty)	35 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.
Spring Switches—Southern Junction	10 MPH.
Dual Control Switch—Walsenburg	20 MPH.
Entire train over street crossings between MP 210.80 and MP 212.64 at Trinidad	10 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—**

Des Moines and Southeran Jct—Trains will register when directed 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.

Pueblo—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.

5. **Spring Switches—**

Following spring switches not equipped with facing point lock:

Southern Jct. crossover switch MP 124.41.

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**—Train and engine crews 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 superintendent 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 MP 124.21 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. Automatic dual control switch, Walsenburg, MP 171.69. Dual control switch at the end of double track is automatically operated. Normal position of switch is for the westward track.

15. 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

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.

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.

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

20. Rule 99—When flagging is required, the distance will be as follows:

Denver U.D. to South Denver	.5 Miles
Pueblo to Texline	2.0 Miles

COLORADO DIVISION

SECOND SUBDIVISION

(Denver UD - Wendover)

1. Speed Restrictions—

Zone—Between	Maximum Speeds Permitted Freight
Denver and Wendover	40 MPH.
Unit coal trains (loaded and empty)	35 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.
Pepper Packing Plant, railroad crossing on Jersey Cut Off in Denver Yard	5 MPH.
Between MP 42.17 and MP 46.82	20 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 MP 72.78	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.

Engines heavier than SD-9's and cars with a gross weight of more than 177,000 pounds must not be handled beyond 1000 feet from wye switch leading to Sibylee Branch.

3. Train Register Exceptions—

Prospect—Trains will register by register ticket.

Jersey Cut Off, Clear Creek, Broomfield, Longmont, Loveland, Ft. Collins, Wheatland, MOBA, Wendover—Trains will register when directed by train order.

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

Westward trains departing 31st Street via Jersey Cut Off will receive clearance and train orders at Prospect and will contact the operator of Prospect before entering the westbound main track at the Jersey Cut Off Junction.

Westward trains departing Rice Yard and 31st Street Yard via Prospect will receive clearance and train orders at Prospect.

Prospect—Westward trains, 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 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. D&RGW dispatcher's phone is located adjacent to the interlocking signal.

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

Normal position of gates protecting railroad crossings at following locations:

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—Train and engine crews 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 crossovers 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.

When delivery of cars from Burlington Northern 38th Street Yard is made to D&RGW North Yard, Denver, Burlington Northern yardmasters will first contact D&RGW North Yard Yardmaster to be in readiness to accept delivery. D&RGW train dispatcher will be notified by North Yard yardmaster as to movements to be made. Train, Yard and other locomotive movements between Prospect and

D&RGW North Yard will be governed by Centralized Traffic Control signal indications. At North Yard, Burlington Northern crews will be governed by instructions from the D&RGW yardmaster. C&S trains enroute to or from Golden are governed by CTC between Prospect and C&S Junction, unless routed through yard tracks North Yard, then be governed by Yardmaster instructions on yard tracks, and CTC rules where applicable.

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.

10. Prospect to Broomfield—

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.

11. Broomfield—

On Atlas Spur, curtains over and around unloading doors on outside track will not clear man on side of car.

12. 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.

13. 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.

14. Loveland—

Auto dock on north side of G. W. Ry. No. 1 interchange track will not clear man on side of car.

15. Cheyenne—

Yard and engine movements over the following avenues will be preceded by flagman: Capitol, Warren, House and Pioneer.

Look out for close clearance for tank car unloading rack on Cheyenne Light, Fuel and Power lead 100 feet east of switch leading to TOFC Track.

16. Murke Quarry Tracks—

Loading dock on west track at rock quarry will not clear engine or box car.

Loading tipple will not clear engine.

17. Telephones—MP 4, MP 6.2, MP 25.25, MP 26.9, MP 47.68, MP 41.70, MP 57.26, MP 131.18, MP 123.90, MP 143.49, MP 162.72, MP 177.45, MP 183.67, MP 215.67, MP 220.45.

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 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.

19. MOBA—At MOBA gate has been installed across MOBA lead 7282 feet from Main Track switch and 1035 feet from No. 1 Track switch.

    Advance warning sign reading 750 feet to gate across railroad has also been erected and is to be used for movement into the plant.

    Gate will have automatic gate keepers for reverse movement with dual padlocks, with switch lock being closed when not in use.

20. Rule 99—When flagging is required, the distance will be as follows:

Denver U.D. to MOBA	1.5 Miles
MOBA to Wendover	2.0 Miles

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 Freight
C&S Jct. and Golden	20 MPH.
MP 7.7—Wadsworth Avenue Arvada	10 MPH.
MP 14.2 to MP 15.0	5 MPH.
Ft. Collins and Greeley	20 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

Diesel Units in Group X not permitted, except 3rd Subdivision.

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—**

    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 preceded 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.

OTHER ROAD LINE SEGMENTS

Line Segments	Limits	Mileposts
478	Sibylee—Hightower	215.60 to 222.20
483	South Park Jct.—Sheridan	4.80 to 15.90
484	South Denver—Connors	4.00 to 8.60
495	Black Hollow Jct.—Black Hollow	77.10 to 86.10

YARD LINE SEGMENTS

494	Denver West Side Line
496	Jersey Cut Off

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

Name	Location	Length in Feet	Switch Opens
First Subdivision			
40874 Branson	9.4 miles west of Alps	2975	Both
40850 Twin Mountain	5.5 miles west of Des Moines	7070	Both
40946 Lynn	8.1 miles west of Ludlow	1753	East
Second Subdivision			
Clear Creek (Western Paving) Wye	1.1 miles west of Utah Jct.	2500	Both
41142 Homestead House	1.9 miles west of Utah Jct	560	East
41143 A&K Trailer	2.4 miles west of Utah Jct	400	West
41143 Westminster	2.8 miles west of Utah Jct	610	Both
41156 Louisville	5.7 miles west of Broomfield	325	West
41161 Valmont	11.5 miles west of Broomfield	300	West
41162 Sloss Jct.	11.8 miles west of Broomfield	1130	West
41163 Atwell	12.4 miles west of Broomfield	875	West
41172 IBM	4.6 miles west of Boulder	4505	East
41175 MKP Associates	3.4 miles west of Niwot	865	East
41192 Small	1.2 miles west of Berthoud	500	East
Champion Home Builders	1.3 miles west of Berthoud	340	East
41194 Campion	2.8 miles west of Berthoud	555	East
41207 Wickes	9.2 miles west of Loveland	540	West
41207 McClellands	9.2 miles west of Loveland	270	West
41209 Drakes	0.7 miles west of Omega	620	Both
41211 Union Mfg. Co.	1.3 miles west of Ft. Collins	1872	West
41216 Giddings	1.2 miles west of Ft. Collins	1109	West
41224 Dixon	1.8 miles west of Wellington	2890	East
41257 Warren Missle Base	2.4 miles west of Cheyenne	3000	East
89753 Murke Spur	0.5 mile west of Horse Creek	4982	East
41334 Slater	9.0 miles west of Chugwater	1145	Both
41352 Sibylee Wye	2.0 miles west of Wheatland	34655	Both
89904 Wilson	4.3 miles west of Sibylee Jct.	660	Both
89907 Hightower	6.3 miles west of Sibylee Jct.	1000	East
41353 Curtis	2.4 miles west of Wheatland	1300	West
41357 MOBA	5.8 miles west of Wheatland		
	Track No. 1	5200	Both
	Track No. 2	780	West
	Track No. 3	858	West
	Track No. 4	1700	East
	Track No. 5	1200	East
	Track No. 6	900	Both
	Track No. 7	1000	Both
	Track No. 8	400	West
	Track No. 9	1200	East
Third Subdivision			
89306 Blue River Contractors	1.5 miles west of C&S Jct	775	West
89309 Horton (Columbine Glass & Container Systems)	1.9 miles west of Arvada	1095	East
	1.9 miles west of Arvada	1280	East
89310 Sweetners	2.8 miles west of Arvada	870	East
89311 Mount Olivet	3.3 miles west of Arvada	892	Both
89313 Ball Metals	4.9 miles west of Arvada	515	West
89313 Boise	5.0 miles west of Arvada	720	West
Coors Bulk Plant	5.22 miles west of Arvada	870	West
Coors End Plant	5.48 miles west of Arvada	1475	West
89316 Golden Depot	14.4 miles west of Prospect	1993	Both
Fourth Subdivision			
89515 Kodak	2.4 miles west of Windsor	1735	West
89507 U.S. Steel	0.8 mile east of Timnath	425	East
89503 Schumacher	3.8 miles west of Timnath	355	East

RADIO INFORMATION

FIRST SUBDIVISION

Base Station	Channel	Hours in Service or Attended
Pueblo	1	24
Walsenburg	1	24
Trinidad	1	24
Trinchere	1	24
Des Moines	1	9:00 a.m.-6:00 p.m. Mon. thru Fri.
Clayton	1	8:00 a.m.-5:00 p.m. Mon. thru Fri.
Texline	1	24

SECOND SUBDIVISION

Base Station	Channel	Hours in Service or Attended
Denver	1	24
Prospect	1	24
Longmont	1	24
Ft. Collins	1	24 — Mon. thru Fri. plus 3:30 p.m.-11:30 p.m. Sat. & Sun.
Cheyenne	1	24
Chugwater	1	8:00 a.m.-5:00 p.m. Mon. thru Fri.
Wheatland	1	8:00 a.m.-11:59 p.m. Mon. thru Fri.
Horse Creek	1	Unattended

THIRD SUBDIVISION

Base Station	Channel	Hours in Service or Attended
Golden	1	24

FOURTH SUBDIVISION

Base Station	Channel	Hours in Service or Attended
Ft. Collins	1	(Same as Second Subdivision)

FIFTH SUBDIVISION

Base Station	Channel	Hours in Service or Attended
Ft. Collins	1	(Same as Second Subdivision)

SIXTH SUBDIVISION

Base Station	Channel	Hours in Service or Attended
Leadville	1	8:00 a.m.-5:00 p.m. Mon. thru Fri.

COLORADO AND SOUTHERN AUTHORIZED DOCTORS

Dr. Abbott Skinner, M.D., Chief Surgeon, St. Paul, Minnesota

DENVER, CO

J.F. Prinzing	M.D.	2005 Franklin St.
L. Retallack	M.D.	1801 High St.
Mohler, Paunovich & Walker	M.D.'s	7233 Lowell Blvd.
Shpall & Schlager	M.D.'s	4301 Lowell Blvd.
F. Hewlette	Cardiologist	3005 E. 16th Ave.
D. Weltman	Opthalmologist	526 Republic Bldg.
P. Dumke	Dentist	3120 W. 29th Ave.
M. Sperling	Dentist	240 St. Paul #200

BERTHOUD, CO

W. Hardesty	M.D.	344 Mtn. View Av

BOULDER, CO

C. Martin	M.D.	2750 Broadway
R. Willard	M.D.	2750 Broadway

CHEYENNE, WY

H.E. Lowe	M.D.	3100 Henderson #7
L. McGonigle	M.D.	800 E. 20th, #201
Sharp & Kanard	M.D.'s	800 E. 20th, #206
R. Williams	ENT.	414 E. 23rd
L. Stadnik	Opthalmologist	800 E. 20th, #203
W. Hickman	Dentist	2200 Logan

CLAYTON, NM

P.G. Gibbs	M.D.	612 Maple St.
R. Gordon	M.D.	315 N. 3rd Av
R. Glasgow	Dentist	Farmers & Stkmns Bank Bldg.

COLORADO SPRINGS, CO

J. Kennedy	M.D.	2808 W. Colorado Av
I. Schwab	M.D.	218 E. Williamette

FT. COLLINS, CO

Dr. Pike	M.D.	1025 LeMay #5
Dr. Humphrey	M.D.	1301 Riverside
H. Thode	M.D.	1217 E. Elizabeth

GOLDEN, CO

L. Goad	M.D.	1316 Washington Av

GREELEY, CO

W. Mangum	M.D.	2020 15th St.
W. Rutledge	Dentist	1014 12th St.

LAFAYETTE, CO

L.L. Gordon	M.D.	401 E. Cleveland

LEADVILLE, CO

J. Kehoe & G. McAnelly (Leadville Medical Center)	M.D.'s	825 W. 6th St.

LONGMONT, CO

J. Haley (Longmont Clinic)	M.D.	1925 Mtn View Av

LOUISVILLE, CO

L. Cassidy	M.D.	941 Garfield

LOVELAND, CO

J.T. Brown	M.D.	310 E. 5th St.

PUEBLO, CO

G. Murley	M.D.	1314 Grand
W. Dardis	Opthalmologist	830 W. Abriendo

TRINIDAD, CO

C.H. Raye	M.D.	406 Benedicta St.
S. Biber	M.D.	406 1st Natl Bank Bldg
G. Jiminez	M.D.	406 1st Natl Bank Bldg
F. Visconti	M.D.	1316 E. Main
R. Sanders	Dentist	McCormick Bldg
Sally Fabec	M.D.	406 Benedicta St.

WALSENBURG, CO

Dr. Duris	M.D.	622 So. Albert
J. Lamme	M.D.	124 W. 8th

WHEATLAND, WY

W. Wilson	M.D.	1356 Shiek
E. Howshar	M.D.	1356 Shiek

WINDSOR, CO

G. Sabin	M.D.	208 5th St.

POSITION IN FREIGHT TRAIN OF PLACARDED CARS

PLACARD APPLIED ON CAR	RESTRICTIONS	EXPLOSIVES - A	POISON GAS	LOADED PLACARDED TANK CARS (EXCEPT CARS PLACARDED POISON GAS OR COMBUSTIBLE)	EMPTY PLACARDED TANK CARS (EXCEPT COMBUSTIBLE)	RADIOACTIVE	COMBUSTIBLE	ALL OTHER PLACARDED CARS
	MUST NOT BE NEARER THAN THE SIXTH CAR FROM ENGINE OR CABOOSE. HOWEVER WHEN LENGTH OF TRAIN WILL NOT PERMIT CAR TO BE SO PLACED IT MUST BE PLACED NEAR MIDDLE OF TRAIN.	X	X	X				
PLACARDED CAR MUST NOT BE PLACED NEXT TO	ENGINE	X	X	X	X	X		
	OCCUPIED CABOOSE	X (4)	X (4)	X	X	X		
	LOADED FLAT CARS (1)	X	X	X (2)				
	OPEN TOP CARS (3)	X	X	X				
	CARS WITH ANY OF THE FOLLOWING OPERATING: AN ENGINE, LIGHTED HEATERS, STOVES OR LAMPS, AUTOMATIC REFRIGERATION UNITS	X	X	X				
	OCCUPIED CAR	X (4)	X (4)	X				
	EXPLOSIVES - A		X	X		X		X
	POISON GAS	X		X		X		X
	RADIOACTIVE	X	X	X				X
	UNDEVELOPED FILM					X		
	EMPTY PLACARDED TANK CARS							
	ANY LOADED PLACARDED CAR (EXCEPT COMBUSTIBLE)	X	X			X		

Effective 1-1-77

HOW TO USE THIS CHART

To determine the type of placard applied to car-follow vertical line down and note which lines apply by "X" shown in box

••• NOTE •••

Cars with same placards may be placed next to each other.

Footnotes:

(1) A flatcar equipped with permanently attached ends of rigid construction is considered to be an open-top car.

(2) A loaded flatcar, other than a specially equipped car in trailer-on-flatcar or container-on-flatcar service or a flatcar loaded with vehicles secured by means of a device designed for that purpose and permanently installed on the flatcar, and of a type generally accepted for handling in interchange between railroads. This exception for cars in trailer-on-flatcar service does not apply to loaded flatbed trucks, loaded flatbed trailers, loaded open-top trailers, or loaded trucks or trailers without securely closed doors.

(3) An open-top car when any of the lading protrudes beyond the car ends or when any of the lading extending above the car ends is liable to shift so as to protrude beyond the car ends.

(4) A rail car placarded "EXPLOSIVES A" or "POISON GAS" in a moving or standing train must be next to and ahead of any car occupied by the guards or technical escorts accompanying this car. However, if a car occupied by guards or technical escorts is equipped with a lighted heater or stove, it must be the fourth car behind any car requiring "EXPLOSIVES A" placards.

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 Minutes	Time Per Mile Second	Miles Per Hour	Time Per Mile Minutes	Time Per Mile Second	Miles Per Hour
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 (Milepost location and specify track involved)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.