GREAT NORTHERN RAILWAY COMPANY

BUTTE DIVISION

Special Instructions No. 2

**EFFECTIVE 12:01 A. M.
MOUNTAIN TIME**

Tuesday, January 1, 1946

These Instructions constitute a part of the Time-Table currently in effect. Employes whose duties are in any way affected by the Time-Table must have a copy of the Current Special Instructions and Current Time-Table with them on duty.

**H. M. SHAPLEIGH, Superintendent
I. E. MANION, General Manager
J. B. SMITH, General Superintendent of Transportation**

FIRST SUBDIVISION

(MAIN LINE)

1. **MAXIMUM SPEED FOR TRAINS.**

Between	Passenger	Freight
Williston and Glasgow	60 MPH	50 MPH
except N-3	35 MPH	35 MPH
F-8, G-3, R-1, R-2	40 MPH	40 MPH

2. **SPEED RESTRICTIONS.**
Snowden, eastward trains entering double track..... 35 MPH

3. **ENGINE RESTRICTIONS ON INDUSTRY TRACKS.**
Wolf Point, heavier than O-3 engines not permitted on industry track between underpass and depot. If necessary to set out or pick up from this track hold on to enough cars as reachers.

4. **CROSSOVERS ON DOUBLE TRACK.**
Facing points, at Snowden, Fort Buford and Trenton.

5. Glasgow, first track south of main track, capacity 140 cars will be known as "South Track No. 1". First track north of main track, capacity 249 cars, will be known as "North Track No. 1". These tracks must be kept clear for meeting and passing of trains. Westward trains use South No. 1, eastward trains use North No. 1.

6. **SPRING SWITCHES WITH FACING POINT LOCK.**
Poplar, east and west siding switch.
Wolf Point, west switch westward siding.
Glasgow, west switch north track No. 1.
Normal position is for main track.

7. **SWITCH INDICATORS.**
Snowden, indicator is located near east wye switch.
Wiota, indicator is located near east siding switch.
Push buttons and instructions for their operation are in the iron box locked with a switch lock.
The member of the crew who is to line switches must first operate push button "R" for route desired and hold a few seconds. Both the trainman and the engineer must observe and be governed by the indicator before lining switch or fouling main track. If the indicator displays a yellow light when push button "R" is operated, switch may be lined and movement made immediately without waiting as prescribed by Rule 513. The yellow light will be extinguished by the lining of main track switch.
If a yellow light is not displayed in the indicator when push button "R" is operated, every precaution, consistent with train rights and operating rules, must be taken before lining switch or fouling main track. If push button "R" is operated and the intended movement is not made or main track switch is not lined, push button "N" must be operated to restore signal system to normal condition to avoid delays to trains on main track. Push button "N" must never be operated after push button "R" if the intended movement is to be made.
Push button boxes must be kept closed and locked except as required to be open for immediate use.

SECOND SUBDIVISION

(MAIN LINE)

1. **MAXIMUM SPEED FOR TRAINS.**

Between	Passenger	Freight
Glasgow and Havre	60 MPH	50 MPH
except N-3	50 MPH	50 MPH
F-8, G-3, R-1, R-2	40 MPH	40 MPH

2. **SPEED RESTRICTIONS.**
Havre, passenger trains over lead and crossover switches westward main track opposite freight house platform..... 8 MPH

3. **RESTRICTED CLEARANCES.**
Havre, Montana, Central tracks at car department service station laid close centers and will not clear man between tracks.
Saco, Malta, Harlem, Chinook, platform on house track will not clear dozer.

4. **CROSSOVERS ON DOUBLE TRACK.**
Facing point, At Lohman, 1 mile west of end of double track.
Trailing Point—At Toledo, just west of MP 424.

5. Glasgow—First track south of main track, capacity 140 cars, will be known as "South Track No. 1". First track north of main track, capacity 249 cars, will be known as "North Track No. 1". These tracks must be kept clear for meeting and passing of trains. Westward trains use South No. 1, eastward trains use North No. 1.

6. Havre, stock yard lead switch near scale track is connected with block signal system and must be left lined for stock yard lead when not in use.

7. **SPRING SWITCHES WITH FACING POINT LOCK.**
Glasgow, west switch north track No. 1.
Havre, west lead switch to westward main track.
Malta, west switch of siding.
Normal position is for main track.

8. **AUTOMATIC INTERLOCKINGS.**
Lohman—end of double track.

THIRD SUBDIVISION

(HAVRE LINE)

1. **MAXIMUM SPEED FOR TRAINS.**

Between	Gas-Electric	Steam	
	Passenger	Passenger	Freight
Havre and Pacific Jct.	60 MPH	60 MPH	45 MPH
except F-8, G-3	.....	.....	40 MPH
Pacific Jct. and Rainbow	55 MPH	55 MPH	40 MPH
Rainbow and Great Falls	45 MPH	45 MPH	25 MPH

2. **SPEED RESTRICTIONS.**
Great Falls, all trains on curve at passenger station.....10 MPH
Trains will run at restricted speed at points where slides or falling rock are likely to be encountered and run carefully through tunnels.

3. **RESTRICTED CLEARANCES.**
Stranahan Spur, Big Sandy, loading platform will not clear man on side of car.
Great Falls, passenger station platform will not clear dozer.

4. Great Falls, normal position of switch east end Missouri River bridge No. 119.4, is for Fifth Subdivision.

5. **EMERGENCY TELEPHONES.**
Big Sandy Pit switch, telephone booth.
Watchman cabin, 2600 feet west MP 71.
Watchman cabin, 3700 feet west MP 72.
Watchman cabin, 265 feet west MP 74.
Watchman cabin, 1400 feet west MP 116.
Telephone booth, 1000 feet west MP 118.

6. **SPRING SWITCHES WITH FACING POINT LOCK.**
Havre, west lead switch to westward main track. Normal position is for main track.

7. **SEMI-AUTOMATIC INTERLOCKINGS.**
Pacific Jct. .....Junction of Kalispell and Butte Divisions
Pacific Jct., switches operate automatically for all movements with the current of traffic and for westward Kalispell division trains when running against the current of traffic, except for westward trains destined Great Falls with the current of traffic switches are controlled from depot, Havre.

Switches must be operated by hand for other movements. When an eastward train on the Great Falls Line receives a proceed indication at home signal and is required to wait for the arrival of an eastward Kalispell division train, trainmen shall operate push button "R" located in iron box at eastward home signal which will permit route to be changed to avoid delay to eastward Kalispell division train. When Push Button "R" has been operated and no train movement made, route may be reset for eastward train on Great Falls Line by operation of push button "N". Push button box must be locked after using.

FOURTH SUBDIVISION

(BUTTE LINE)

1. **MAXIMUM SPEED FOR TRAINS.**

Between	Passenger	Freight
Great Falls and Clancy	45 MPH	30 MPH
Clancy and Butte	40 MPH	25 MPH

2. **SPEED RESTRICTIONS.**

Bridge 120.8 Great Falls, M, O	20 MPH
Bridge 159.9 Midcanon, M, O	20 MPH
Bridge 162.1 Midcanon	10 MPH
Bridge 228.1 Clancy, M, O	20 MPH
Bridge 236.2 Corbin	10 MPH
Bridge 265.4 Elk Park	10 MPH
Bridge 283.3 Butte	10 MPH
Bridge 284.1 Butte	10 MPH
Helena, through city limits, all trains	15 MPH
Helena, trains backing in or out of passenger station	10 MPH
Butte, through city limits, Passenger trains	8 MPH
Freight trains	6 MPH
Tunnel No. 1, Hardy, through tunnel, freight trains	10 MPH
Tunnel No. 6, between Portal and Amazon, through tunnel, passenger trains	14 MPH
freight trains	8 MPH
Between Home Signals of interlockings at Helena and Butte	20 MPH

Trains will run at restricted speed at points where slides or falling rock are likely to be encountered and run carefully through tunnels.

3. **ENGINE RESTRICTIONS.**
Butte, Largey Spur and track leading to passenger station, O-4 engines prohibited account No. 7 turnout.
Between Great Falls and Butte, account insufficient tunnel clearance, N-2, O-7, P-2, Q, R, S engines prohibited.

4. **ENGINE RESTRICTIONS ON INDUSTRY TRACKS.**
Amazon, O-1, diesel engines.
Fuller, O-4.
These engines not permitted on spur track at these stations. If necessary to set out or pick up hold on to enough cars as reachers.

5. **TRAIN REGISTER EXCEPTIONS.**
West Side Jct., first and second class trains will not register.
Helena, register only for trains originating and terminating.

6. **RESTRICTED CLEARANCES.**
Helena, Main Street overhead bridge will not clear man on top of car.
Great Falls, Helena, Butte, passenger station platform will not clear dozer.
Great Falls, Helena, Butte, cars destined to points on Butte Line or picked up at intermediate stations, loaded with poles, pipe or other lading that has close tunnel clearance must be placed next behind engine. Train and enginemen must closely observe such lading to see if in safe condition before passing through tunnels.

7. Great Falls, normal position of switch east end Missouri River bridge 119.4 is for Fifth Subdivision.

8. West Side Jct., normal position of junction switch located in front of yard office is for Fourth Subdivision.

9. Tunnel No. 6 between Amazon and Portal, when signal displays Stop-indication Rule 509(A) governs.

10. Woodville, O-4 engines turning on wye must move very slowly and head in on west leg and back out on east leg account No. 7 turnout on tail track.

11. Mountain Spur, switch is protected for westward movements by automatic block signal 281.5 located approximately 1600 feet east.

12. Butte, between bridge 284.1 and N. P. Ry. crossing, automatic block signals control westward movements.

13. **EMERGENCY TELEPHONES.**
Hardy, watchman cabin 500 feet west tunnel No. 1.
Butte, Tramway mine, telephone booth.
Gore Hill, 3700 feet east of east switch Flood.

14. **MANUAL INTERLOCKINGS.**
Helena, 2.50 miles east of.....NP Ry crossing
Butte, 0.64 miles east of.....NP Ry crossing
Whistle signals for routes;
Helena, main track .....1 long
Butte, main track .....1 long
N. P. transfer track.....4 short

15. **RAILROAD CROSSINGS PROTECTED BY GATES.**
Helena, 1.77 miles east of.....N. P. Industry track
Normal position is clear for Great Northern.

FIFTH SUBDIVISION

(BILLINGS LINE)

1. **MAXIMUM SPEED FOR TRAINS.**

Between	Passenger	Freight
Great Falls and Mossmain	50 MPH	40 MPH

2. **SPEED RESTRICTIONS.**
Great Falls, passenger station, all trains on curve of Billings line ..... 10 MPH
All trains will run at restricted speed,
Rimrock, through cut one-half mile east of tunnel.
Wayne, between tunnel and MP 198, 2 miles east and at other points where slides or falling rock are likely to be encountered and run carefully through tunnels.

3. **TRAIN REGISTER EXCEPTIONS.**
Judith Gap, Moccasin, Gerber, register only for trains originating and terminating.
Mossmain, register for trains originating and terminating at Billings.

4. **RESTRICTED CLEARANCES.**
Great Falls, passenger station platform will not clear dozer.
Armington, Clay Spur loading dump will not clear man on side of car.

5. Gerber, normal position of junction switch is for Fifth Subdivision.

6. Moccasin, normal position of junction switch is for Fifth Subdivision.

7. Moccasin, tracks No. 2 and No. 3 have very close clearance, see cars are not left foul of these tracks.

8. Judith Gap, short No. 1 track must be kept clear.

9. Tunnel Q-1, between Shorey and Rimrock, automatic block signals control movement of trains.

10. **EMERGENCY TELEPHONES.**

Watchman cabin, 1200 feet west MP 199.
Watchman cabin, east end tunnel Q-1.
Watchman cabin, east end tunnel Q-2.

11. **MOSSMAIN, ELECTRIC SWITCH LOCKS.**

Automatic signal 12.8 located 1000 feet west of west wye switch controls eastward train movements on east leg of wye. Normal position of junction switches at Mossmain is for Northern Pacific main track.

The following switches and derails are equipped with electric switch locks;

Derail near signal 118 on east leg of wye.

Derail near signal 123 on west leg of wye.

Both switches of crossover between main tracks leading to west leg of wye.

West switch of crossover from yard to eastward main track near signal 124.

East switch of crossover east of Laurel Yard office.

Trainmen will be governed as follows in the operation of these electric switch locks;

Open door of Electric switch lock and if indicator shows Proceed, move lock lever to the left which will unlock switch. If indicator shows Stop and no conflicting train movement is evident, open door of release box and operate push button. This will start operation of clockwork release. After time interval of two minutes indicator will show Proceed and switch can be unlocked by moving lock lever to the left. Westward trains making crossover movement at signal 121 to the yard and eastward trains making crossover movement at signal 122 to west leg of wye must stop within 200 feet of the signal in order to unlock electric lock at far end of crossover. If stop is made more than 200 feet from signal, electric locks cannot be operated without use of the clockwork release.

After movement is completed, restore switches and lock levers to normal position locking door of electric locks and release boxes.

SIXTH SUBDIVISION

(SHELBY LINE)

1. **MAXIMUM SPEED FOR TRAINS.**

Between	Passenger	Freight
West Side Jct. and Shelby	50 MPH	35 MPH
Sweet Grass Line Jct. and Sweet Grass	35 MPH	20 MPH

2. **SPEED RESTRICTIONS.**

Sweet Grass Line Jct. to Sweet Grass, engines backing up ..... 15 MPH

Trains will run at restricted speed at points where slides or falling rock are likely to be encountered.

3. **TRAIN REGISTER EXCEPTIONS.**

Emerson Jct., Vaughn, Power, Conrad, register only for trains originating and terminating.

4. **RESTRICTED CLEARANCES.**

Great Falls, passenger station platform will not clear dozer.
Aronow Spur, 2 miles west Kevin, loading track will not clear man on side of car.

5. Emerson Jct., normal position of junction switch is for Great Northern.

6. **MANUAL INTERLOCKINGS WITH DUAL CONTROL SWITCHES.**

Shelby .....End of double track

Whistle signals for routes:

Single track to westward main track	2 long 1 short
Single track to eastward main track	1 long 1 short 1 long
Eastward main track to single track	1 long 1 short 1 long
Westward main track to single track	2 long 1 short
Eastward main track to switching lead	2 long 1 short
Switching lead to eastward main track	2 long 1 short

7. **SWITCH INDICATORS.**

Sweet Grass Line Jct., indicators are located near junction switch. Separate indicators are provided for eastward and westward main tracks. Push buttons and instructions for their operation are in the iron box locked with a switch lock. If train or engine movement is to be made from the Sweet Grass Line to westward main track, it is only necessary to operate westward track indicator. If train or engine movement is to be made from the Sweet Grass Line to the eastward main track, both indicators must be operated.

The member of the crew who is to line switches must first operate push button "R" for route desired and hold a few seconds. Both the trainman and the engineer must observe and be governed by the indicator before lining switch or fouling main track. If indicator displays a yellow light when push button "R" is operated, switches may be lined and movement made immediately without waiting as prescribed by Rule 513. The yellow light will be extinguished by the lining of main track switch. If a yellow light is not displayed in the indicator when push button "R" is operated, every precaution, consistent with train rights and operating rules, must be taken before lining switch or fouling main track.

If push button "R" is operated and the intended movement is not made, or main track switch is not lined, push button "N" must be operated to restore signal system to normal condition to avoid delays to trains on main track. Push button "N" must never be operated after push button "R" if the intended movement is to be made. Push button boxes must be kept closed and locked, except as required to be open for immediate use.

SEVENTH SUBDIVISION

(RICHEY LINE)

1. **MAXIMUM SPEED FOR TRAINS.**

Between	Passenger Steam or Gas Electric	Freight
Snowden and Richey	30 MPH	25 MPH
except O-1, O-5	.....	20 MPH

2. **SPEED RESTRICTIONS.**

Steam engines backing up ..... 15 MPH
First class trains handled by steam power..... 25 MPH

3. Snowden, normal position of Seventh Subdivision switch is for east leg of wye.

4. **MANUAL INTERLOCKINGS.**

Snowden, 2 miles west of .....over drawbridge 12.1

Interlocking signals at east and west approach control train movements over bridge. Electric gates operated by tollman from cabin control vehicular traffic over bridge. Telephones located near interlocking signals are connected with tollman cabin.

EIGHTH SUBDIVISION

(WATFORD CITY LINE)

1. **MAXIMUM SPEED FOR TRAINS.**

Between	Passenger Steam or Gas Electric	Freight
Fairview and Watford City	30 MPH	25 MPH

2. **SPEED RESTRICTIONS.**

Steam engines backing up ..... 15 MPH
First class trains handled by steam power..... 25 MPH

3. **MANUAL INTERLOCKINGS.**

Fairview, 3 miles east of.....over drawbridge 3.2

Interlocking signals at east end of tunnel and west approach control train movements over bridge. Electric gates operated by tollman from cabin control vehicular traffic over bridge. Telephones located near interlocking signals are connected with tollman cabin.

NINTH SUBDIVISION

(OPHEIM LINE)

1. **MAXIMUM SPEED FOR TRAINS.**

Between	Passenger	Freight
Bainville and Scobey	30 MPH	20 MPH
Scobey and Opheim	20 MPH	15 MPH

2. **SPEED RESTRICTIONS.**

Steam engines backing up	15 MPH
Bridge 81.3, Navajo	10 MPH
Bridge 101.9, Scobey	10 MPH

TENTH SUBDIVISION

(HOGELAND LINE)

1. **MAXIMUM SPEED FOR TRAINS.**

Between	Passenger	Freight
Saco and Loring	30 MPH	25 MPH
Loring and Chapman	12 MPH	12 MPH
Chapman and Hogeland	30 MPH	25 MPH

2. **SPEED RESTRICTIONS.**
   Steam engines backing up ..... 10 MPH
3. Trains must not be double-headed over bridges on this subdivision.

ELEVENTH SUBDIVISION

(LEWISTOWN LINE)

1. **MAXIMUM SPEED FOR TRAINS.**

Between	Passenger	Freight
Lewistown aand Moccasin	35 MPH	20 MPH

2. **SPEED RESTRICTIONS.**
   Steam engines backing up ..... 15 MPH
3. **RESTRICTED CLEARANCES.**
   Lewistown, passenger station platform will not clear dozer.
4. Moccasin, normal position of junction switch is for Fifth Subdivision.
5. Spring Creek Jct., normal position of junction switch is for CMStP&P RR.
6. Lewistown, Great Northern trains enter CMStP&P RR main track at switch leading from transfer track about one-fourth mile east of Great Northern depot.

TWELFTH SUBDIVISION

(GIFFEN LINE)

1. **MAXIMUM SPEED FOR TRAINS.**

Between	Passenger	Freight
Gerber and Giffen	20 MPH	15 MPH

2. **SPEED RESTRICTIONS.**
   Steam engines backing up..... 15 MPH
3. **RESTRICTED CLEARANCES.**
   Giffen, trestle opposite tipple over main track and siding will not clear engine on siding.
   Vertical clearance 14 feet.
4. Gerber, normal position of junction switch is for Fifth Subdivision.
5. Giffen, normal position derail switch in main track near west switch is for derail.

THIRTEENTH SUBDIVISION

(AUGUSTA LINE)

1. **MAXIMUM SPEED FOR TRAINS.**

Between	Passenger Steam or Gas Electric	Steam Freight
Vaughn and Augusta	25 MPH	20 MP

2. **SPEED RESTRICTIONS.**
   Steam engines backing up..... 15 MPH
3. Vaughn, normal position of junction switch is for Sixth Subdivision.
4. Dracut Jct., normal position of junction switch is for Great Northern.

FOURTEENTH SUBDIVISION

(PENDROY LINE)

1. **MAXIMUM SPEED FOR TRAINS.**

Between	Passenger Steam or Gas Electric	Steam Freight
Power and Pendroy	25 MPH	20 MP

2. **SPEED RESTRICTIONS.**
   Steam engines backing up..... 15 MPH
3. Power, normal position of junction switch is for Sixth Subdivision.
4. Eastham Jct., Choteau Jct., normal position of junction switch is for CMStP&P RR.

GREAT FALLS TERMINAL

1. **SPEED RESTRICTIONS.**
   Great Falls, freight trains pulling into west yard..... 8 MPH
2. **RESTRICTED CLEARANCES.**
   Great Falls, passenger station platform will not clear dozer. West Side Jct., when using derrick track be careful of close clearance passing blowdown box.

ALL SUBDIVISIONS

1. **SPEED RESTRICTIONS FOR ENGINES.**

Steam	Maximum Speed Permissible	Movement of Engines Dead in Trains
F-8, G-3	40 MPH	
H-4, H-5, H-7	65 MPH	All Steam engines with side rods on both sides 40 MPH.
H-6	60 MPH	
M	40 MPH	
N-3	35 MPH	
N-3 (Roller Bearing)	50 MPH	All Steam engines without side rods 10 MPH.
O-Classes	50 MPH	
P-2	75 MPH	
Q-1	40 MPH	
Q-2	45 MPH	
R-Classes	40 MPH	
S-1	60 MPH	
S-2	75 MPH	
Steam engines backing up	20 MPH	
Steam engines in forward motion running light or caboose hop	35 MPH	
Diesel and Gas Electric		
50-51	35 MPH	35 MPH
75 to 144	40 MPH	35 MPH
175 to 181	75 MPH	60 MPH
182 to 185	65 MPH	60 MPH
200 and 300	45 MPH	40 MPH
250-251	85 MPH	65 MPH
301 to 305	50 MPH	40 MPH
400 to 428	50 MPH	40 MPH
500 to 504	90 MPH	75 MPH
2300 to 2324	50 MPH	50 MPH
2325 to 2341	70 MPH	60 MPH
Electric		
5000 to 5008-B	45 MPH	45 MPH
5010 to 5017	55 MPH	55 MPH

When moved dead in trains:
Place Class "O" and larger engines not to exceed 15 cars behind road engine, in electrified zone only Class "R" engines can be handled on head end, all others near rear,
Place Class "F-8" and smaller engines next ahead of caboose,
Diesel and Gas-Electric engines 2300 to 2341 must be handled on rear of train,
Not less than five cars between all engines.

2. **SPEED RESTRICTIONS GENERAL.**

When freight cars, except cars equipped with passenger trucks and steel wheels, are handled in passenger trains, the train will not exceed authorized speed for freight trains in the territory operated.

Freight engines used for handling passenger trains must not exceed authorized speed for freight trains in the territory operated.

Trains handling steam derricks, pile drivers, ditchers, cranes, steam shovels, dozers, etc. on main lines.....25 MPH
except on 6 degree curves or sharper and on branch lines .....15 MPH

Trains handling ore cars or air dump cars loaded with ore or gravel, on main lines .....30 MPH
except on 6 degree curves or sharper and on branch lines .....20 MPH

Unless conditions require a further speed restriction, trains or engines moving against the current of traffic on double track through interlockings.....15 MPH

Trains or engines over drawbridges .....15 MPH

Trains or engines moving on main routes actuating points of spring switches .....35 MPH

Trains or engines moving in facing point direction at spring switches without facing point lock.....25 MPH

Trains or engines through No. 20 turnouts at.....35 MPH
End of double track, Snowden, Lohman, Pacific Jct.

Trains or engines through No. 15 turnouts at.....25 MPH
Havre, west lead switch to westward main track.

Trains or engines through all other turnouts.....15 MPH

3. **CLEARANCE PROVISIONS AND EXCEPTIONS, RULE 83(B).**

(1) Pacific Jct., eastward Kalispell division trains will not require clearance when running with the current of traffic and may proceed to Havre without orders.

(2) Butte Division clearance received at Shelby will clear westward trains at Sweet Grass Line Jct.

(3) Kalispell Division clearance received at Sweet Grass will clear eastward trains at Sweet Grass Line Jct.

(4) Great Northern clearance received at Billings and Laurel will clear trains at Mossmain.

(5) Giffen, Spring Creek Jct., Eastham Jct., Dracut Jct., Choteau Jct., and West Side Jct. (for first and second class trains only). Trains for which these points are initial stations may proceed on authority of clearance under which such train arrives.

4. Under Rule 2 of the Consolidated Code of Operating Rules, watches that have been examined and certified to by a designated inspector must be used by train dispatchers and yardmen.

5. The following Consolidated Code of Operating Rules and definitions, do not apply to Great Northern or Northern Pacific employes, unless they work in joint territory where such rules are in effect:

10f	251-264 incl.	Manual Block System
14 t, u, v, w	300 A-373(A) incl.	Block Stations
210	S-509(A)	Cab Signals
217	606 a, b, c, d	
225	636	

6. (a) Not more than one employe will ride on leading footboard of engine, then outside of rail, preferably on engineer's side.
(b) Employes are prohibited from riding on pilot or pilot beam of engine, or on footboard between engine and cars when cars are being pulled, shoved, switched, or while coupling is being made.

(c) When adjustment is necessary to drawbar, knuckle pin, or locking block, prior to making coupling, or when coupling fails, engine or cars must be separated not less than 10 feet and action taken to prevent movement before going between cars.

(d) Where helper engine is used behind caboose helping train, helper pilot will ride engine, and engine will be uncoupled by trainman from caboose platform.

(e) When heading out of sidings, freight trains with helper engine behind caboose, must regulate speed so that rear trainman can line switch and get on caboose instead of on tank of helper engine. This as a matter of safety because employes are prohibited from using running board of engine or passing from front of engine to caboose while train is in motion.

(f) Employes are forbidden to stand with feet resting upon car trucks, truck frame, or oil box while car is in motion.

(g) Riding on open cars containing lading which may shift is prohibited, except as required to operate hand brakes or to ride the lead car when cars are being pushed. Employes must make every effort to station themselves to prevent injury, and on gondola cars must not stand or place arm, leg, or other part of body between sides or end of car and lading.

(h) Trainmen or other employes, when carrying baggage or other articles, except brake club and lantern, are prohibited from climbing up or walking over top of trains.

(i) Employes are forbidden to ride on top or sides or stand on top of air dump cars, either loaded or empty.

(j) Jumping from the top of one car to the top of another car on adjacent track is prohibited.

7. Snow or ice should not be allowed to accumulate on footboards.

8. Employes who desire to wear colored glasses while on duty are obliged to purchase them from Company Storekeeper.

9. Brakemen with less than one year of experience should not be used as flagman except in emergency, and then Superintendent will be notified by wire.

10. Double heading trains is prohibited, except as authorized by Superintendent.

11. When operating snow machines in non-block signal territory no train should be permitted to follow closer than a station apart, when that cannot be done they will be blocked not less than thirty minutes apart.

12. After severe blizzard or dirt storm, employes on first train over road must exercise care to avoid accident caused by striking drift without first having drifts faced with hand shovels, cutting in far enough to get beyond the hard snow and giving a perpendicular wall to strike against instead of slope or wedge-like shape.

13. When operating snow dozer, flanger will be operated by competent employe, and conductor in charge will ride in the dozer.

14. On snow and dirt dozers every precaution must be taken to see that cage, flangers and wings clear all obstacles when in service and are properly secured when in through trains, and dozers properly turned. Hand screws must be tightened to raise flanger on dozers as high as possible before making a back-up movement, and must not be released until the dozing work is actually to start. Hand screws holding the cage on dozers must be tightened or chains otherwise fastened except when dozer has air in cylinders and is attended by an employe.

15. Loaded dump cars should not be handled on double track after dark, but if necessary to do so, close watch must be kept by trainmen and if a car dumps its load, train must be stopped and protection afforded on the opposite track.

16. Account necessity of heating road oil to permit faster flowing, such cars will not be spotted in the immediate vicinity of any building due to fire hazard.

17. When dining cars or other non-platform cars are placed on the rear of passenger trains, in addition to flexible gate being closed and fastened in place, rear door of car must be kept locked with coach key.

18. Kicking or dropping cars into tracks on which there are occupied outfit cars is prohibited.

19. Baggage cars returned deadhead when moved in storage mail service in opposite direction will be accompanied by waybill carrying notation "Deadhead mail car, no material of any character other than U. S. Mail or mail sacks to be loaded in it." Conductors will be held responsible for compliance of waybill instructions.

20. Baggage cars on trains 1 and 2 carry 100 ft. of steam hose in two 50 ft. lengths for emergency use in event of steam failure on train engine and non-steam train line engine furnished to handle train. On one of the 50 ft. lengths, one end is equipped with standard connection to fit steam dome of engine and other end equipped with standard Vapor No. 312 steam coupler which fits all steam conduits. The other 50 ft. hose has both ends equipped with Vapor No. 312 steam coupler. Fastened to base of reel is an extra combination Vapor attached to hose with steam dome connection and in case of steam line failure on a car both hoses can be used to run around such car so can be taken to first terminal, but car to be drained before proceeding.

21. Unless otherwise provided, when passenger trains are operated against current of traffic on double track or through sidings, conductors shall notify Railway Postal Clerks, trains shall stop at points where U. S. Mail is usually picked up and conductors are responsible for delivery of mail to postal car.

22. Conductors will report by wire all flat spots on wheels of passenger cars. Any cars having flat spots on wheels of more than two and one-half inches long must be set out.

23. Pullman Troop Sleepers and Pullman Troop Kitchen cars have two separate sets of brake equipment cylinders. When necessary to release air brakes both of these cylinders must be bled off to avoid slid flat wheels.

24. Conductors will see that multiple sheet metal protectors are returned to equipment box on baggage cars when extra journal bearings are used.

25. Conductors will make prompt wire report to Superintendent and Coach Yard Foreman, St. Paul, when air hose is removed from sealed box marked "Emergency Air Hose" found over

Jennings Drive on passenger cars having truck mounted brakes, and when spare belt is used which is provided as emergency in air conditioned cars to avoid possible complete failure if blower fan belt should break.

26. Where journal boxes on passenger cars are equipped with spring packing retainers and it becomes necessary to repack or rebrass journal, trainmen will see packing retainer is put back in place.

27. When necessary to set out equipment due to hot journal, be sure that all traces of fire are extinguished, and journal box properly marked.

28. Trainmen and others must not hang train order hoops on brake staff of cabooses as this is not only dangerous, but also a violation of Federal Law.

29. Telephones located in booths and freight houses must have switch cut out after using and must be kept secured by lock, except when being used.

30. Conditions make it necessary to handle in trains and in switching movements certain equipment of extreme height and width and all employes are warned to keep off top of these cars when moving and also such standing cars in electrified zone, except in case of emergency as height of cars is such that man standing on top of cars will not have proper overhead clearance at many tunnels and structures. Train, engine and yard men are cautioned to be on the look out for such equipment and in absence of previous advice wire proper officer for instructions.

31. The contract with the Western Fruit Express Company does not relieve the Railway Company of responsibility for proper handling of perishable freight on the road and at points where the Express Company does not maintain representatives. Conductors on trains carrying perishable freight will ascertain from waybills class of service required and light or extinguish heaters and manipulate vents in accordance with current instructions for handling perishable freight issued by the National Perishable Freight Committee, copies of which are furnished to all interested parties.

32. Handling of Explosives, Inflammable and Corrosive Liquids.
Cars placarded explosives moving in through freight trains must be handled not less than 16th car from road engine, one car from helper engine, and 11 cars from caboose. These cars may be handled second car from engine or caboose in local trains. These cars must not be placed in train next to loaded tank cars, flat or gondola cars loaded with pipe, lumber, poles, iron, steel, or refrigerator cars equipped with gas burning heaters, stoves, or lanterns, or next to box cars bearing inflammable or corrosive liquids. Cars containing explosives must have air and hand brakes in operative condition, and must not be cut off while in motion.

The following will govern handling of shipments of explosives by express and handled in passenger trains:

Carload shipments of explosives may be made by Express and handled in passenger trains when in sealed express car properly placarded.

Less than carload shipments may be made in so-called Express peddler car with messenger in charge when such car is assigned to the handling of express and baggage exclusively, provided shipments are accompanied by an authorized representative of the United States Government while on our trains.

Placarded loaded tank cars must not be placed in train next to cars containing lighted heaters, stoves, lanterns, or gas burning type refrigerators, or next to flat or gondola cars loaded with logs, lumber, rails, pipe, or anything that is liable to shift, and cars must not be handled less than the 6th car from engine or caboose when possible to do so. Loaded tank cars must not be cut off in motion until all preceding cars have cleared route, and in turn cleared, before any cars are allowed to follow. Further details governing handling of Explosives, Inflammable and Corrosive Liquids may be found in I.C.C. Regulations.

33. The use of open flame lights, burning oil lanterns, and smoking, is prohibited when handling gasoline or other flammable oils, also in and around the operating cab of gas-electric engines.

34. Gas-electric engines must not be fueled while occupied by passengers, or coupled to cars occupied by passengers.

35. Delivery of gasoline or other flammable oils must not be made after dark.

36. The normal position of a spring switch with facing point lock is identified by a color light type signal displaying a lunar white light for train or engine movements in a trailing point direction and for movements in facing point direction when conditions require.

37. The normal position of a spring switch without facing point lock is identified by a triangular yellow target on switch stand with letter "S" in black, and "lunar white" light in switch lamp in place of green light displayed in both directions through or over the switch.

38. Trains, when departing from stations, either from siding or main track in trailing point movement which actuate points of spring switches, a member of the crew must observe the indication of the governing signal in the opposite direction after rear end of train has passed through switch to ascertain if switch points return to normal position. If this signal indicates stop and no immediate train movement or other cause is evidence report the fact to the Superintendent from the first available point of communication.

39. Switch Indicators at Spring Switches. A Switch Indicator, consisting of a single yellow light unit (normally dark) and a switch-key-controller mounted on an iron mast located at the clearance point of a siding, must be operated by a member of the crew who, together with the engineer, must observe and be governed by its indication before fouling main track or making movement from a siding to the main track through a spring switch in automatic signal territory, unless the movement is made immediately after an opposing train has passed the switch.

    If the Indicator displays a yellow light when the switch-key-controller is operated, train or engine movement to the main track may be made immediately in accordance with train rights and operating rules. Display of yellow light must continue until the leading wheels have passed the clearance point.

    If the Indicator does not display a yellow light when the switch-key-controller is operated, every precaution consistent with train rights and operating rules must be taken to provide proper protection before passing the clearance point and fouling the main track.

    To operate Switch Indicator, insert switch key in controller and turn clockwise toward "R", and hold a few seconds. If yellow light is displayed and intended movement is not made, insert switch key in controller and turn counter-clockwise toward "N" to restore signal system to normal condition to avoid delays to trains on main track.

    Switch-key-controller must never be operated toward "N" after having been operated toward "R" if intended movement to the main track is to be made.

40. Facing point locks on hand operated switches are indicated by a six inch yellow stripe painted on target staff. Be positive locking device is restored to normal position after using. A running switch must not be made through this type switch.

41. Unless otherwise displayed, yard limit signs of the reflectorized type consist of the letter "Y" and approach signs, one mile distant, are diamond shaped.

42. Employes are forbidden to go out on ledges, running boards, or any other outside structure of ditchers, steam shovels, cranes or other similar machines while moving.

43. Employes must not go out on exterior of cab or use running board, nor hang from gangway or steps of moving engine. Using the narrow ledge along the bottom of the engine cabs to pass to or from cab to running board or to work from is prohibited. This narrow ledge is to be used only in cases of extreme emergency when it is necessary to escape from the cab in this manner to prevent injury from escaping steam, hot water, fire or similar causes.

    If necessary to get out on running board of engine, engine must not be moving and employes shall use the steps that are provided on the front of the engine from pilot to running board. On engine in roundhouse or shop it is permissible to use ladders or special built stair platforms.

44. Under Consolidated Code Rule 24, engine number only will be displayed in indicators on engines so equipped. This will also apply when our engines are operating over Northern Pacific tracks. Between Klamath Falls and Chemult, Southern Pacific Rules will govern.

45. When picking up train orders on head end of train it must be done from window of engine cab and never from gangway or steps.

46. While Consolidated Code Rule 204(A) prescribes that copies of train orders will be furnished the rear trainman, such orders will only be furnished on trains designated, as follows:
    Trains Nos. 1, 2, 3, 4, 7, 8, 28, 355, 358, 359, 360 and sections thereof; also any extra passenger train whether operated as section of regular trains or as a passenger extra.

47. When no color indication is displayed by a train order signal of the color light type, trains which have not been notified must stop. Trains thus stopped may proceed after securing clearance from operator. If there is no operator on duty, call the operator and secure clearance. Failing to contact operator communicate with train dispatcher for instructions before proceeding. Report the fact to the Superintendent from the first available point of communication.

48. When engine is being spotted for purpose of taking fuel or water, or leaving there, it will not be moved until it is positively known that employes are located where they will not be injured. Manhole cover must not be opened until actually necessary and closed immediately after using. Avoid overflowing engine tanks particularly during freezing weather to prevent ice forming on ground, grab irons, tanks and foot boards of engines.

49. Employes must see that manhole covers on fuel oil cistern of oil burning engines are securely fastened by all lugs after fuel oil has been taken.

50. On stoker equipped engines, stoker must be stopped before employes attempt to pass through or perform any work in the coal space of tender.

51. Employes who are authorized to move engines at shops and roundhouses, either on inside or outside tracks, must, by inspection, know before moving engine that it is in condition to be moved, and be positive that no one is working underneath or around it that is liable to be injured. When necessary to work under engine on outside tracks another employe will stand watch to prevent engine being moved.

52. When moving engines or heater cars in or about roundhouse tracks, employes in charge of such movement must see man is stationed on rear end of engine or on leading end of heater car while movements are being made and at night white light must be displayed on the rear end of engine or heater car.

53. No employe will move the reverse lever of an engine without first knowing that no one is working around links or other parts who might be injured thereby.

54. Employes firing up boilers must see that boiler is full of water, that reverse lever is in center of quadrant with throttle closed and cylinder cocks open before starting fire to generate steam in boiler.

55. The hole in fire box door of oil burning engines will be closed except when being used for sanding purposes.

56. Air hose on diesel and electric engines must be hooked up in hose fastener when not in use.

57. Before leaving any engine terminal enginemen will make proper tests and inspections of water glasses, gauge cocks, water column and injectors, and will not leave the terminal unless all these are in proper working order.

Should enginemen on steam engines find that the water is not in sight in water glasses, and if water cannot be raised to bottom gauge cock or water glass by opening throttle, on oil burning engines the fire must be extinguished immediately and on coal burning engines the fire must be knocked out or smothered to the extent there will be no damage done to the crown sheet. If water can be raised to the bottom gauge cock or water glass the water level should be built up by use of the pump, or injector, or both.

Should the low water alarm whistle blow, on any engine so equipped, enginemen will immediately ascertain where the water level is in the boiler by blowing out water glasses and water column, and being sure that water glass mounting valves are open and if water cannot be raised to the bottom gauge cock or water glass by opening throttle, enginemen will be governed by instructions in the preceding paragraph.

58. **ON ENGINES, PASSENGER AND FREIGHT CARS EQUIPPED WITH ROLLER BEARINGS, EMPLOYES WILL BE GOVERNED AS FOLLOWS:**

American Steel Foundries' type roller bearings have the roller bearing in the hub of the wheel and standard journal brasses in the journal box. Should the roller bearing fail, or overheat, the axle will then turn on the conventional brass in the journal box and should be given the same attention as standard non-roller bearing boxes. If the roller bearings should fail in such a manner as to permit the wheel to wobble on the axle, care must be exercised, train moved slowly to first siding and car set out.

Roller bearing failures on cars or engines equipped with roller bearings in the journal boxes may be due to lack of oil. If the box is not blazing, the oil plug in the cover should be removed and engine or valve oil added. Oil must never be added to a box that is blazing. After the oil has been added and plug replaced, the train should proceed at reduced speed and care exercised until it is apparent that the box will run cool. A car equipped with roller bearing that is on fire must be closely watched, train moved slowly to first siding and car set out. Prompt report of all roller bearing failures occurring on engines and cars must be made to the Superintendent from the first available point of communication.

Some engines and cars equipped with roller bearings have heat indicators or stench bombs inserted in the housing of boxes which release a strong pungent odor in the event of excessive journal box temperatures. When this odor is detected train must be stopped at once and box located. Compare the temperature of this box with the other boxes on the same engine or car, check the oil level, and if there is no evidence of overheating, train may proceed, but if the box is overheating proceed only as instructed in the preceding paragraph.

59. **TRAIN INSPECTION.**

On passenger trains frequent running inspection shall be made from the vestibules in various parts of the train and trainman should so place himself so as to take advantage of air currents or other atmospheric conditions. When stops are made for water or fuel, or when on siding at meeting points and at other stops where in the judgment of the conductor it is necessary, a careful inspection shall be made of the running gear.

Freight and mixed trains, in addition to the designated stops for inspection, shall not make a continuous run of more than 50 miles without a stop for inspection. These stops shall be made between switches, except when stop is made for water, fuel or train orders. This, however, does not relieve trainmen from making inspection when other stops permit, or whenever in the judgment of the conductor it is necessary.

During stormy weather, when view of running gear is obscured, or if other conditions require, more frequent inspections shall be made.

Engine and trainmen must frequently look along both sides of the train from the head end and the rear end, especially while rounding curves and approaching sidings, to observe condition of train. They must be on the lookout for signals given by other employes who may observe defects on passing train. Frequent inspection shall be made by trainmen of track behind moving train to detect if anything on the train is dragging so that if any indications of fresh marks on the track are observed the train may be brought to a stop as quickly as pos-

sible to avoid derailment. When caboose is equipped with electric spot light it shall be used at night to make such track inspection; when not so equipped trainmen shall use electric lantern for this purpose.

These instructions do not supersede Rules 714, 812 and 927 of the Consolidated Code of Operating Rules, but are supplementary thereto.

During winter weather, when stops are made at inspection points, train line in first four cars behind engine shall be thoroughly blown out to prevent ice from forming in train line due to moisture accumulation. If stop is made for another purpose one station on either side of designated points, inspection may be made at that point instead of regular inspection point.

The following stations are designated as regular inspection points where stop shall be made for inspection of freight and mixed trains:

	Eastward Trains	Westward Trains
First Subdivision	Frazer	Snowden
Second Subdivision	Zurich	Hinsdale
Third Subdivision	Tunis	Big Sandy
Fourth Subdivision	Basin	Cascade
Fifth Subdivision	Armington	Comanche
Sixth Subdivision	Conrad	Power

60. Rule D-97 is in effect on this division.

61. Between Lewistown and Spring Creek Jct.,
Emerson Jct., Vaughn and Dracut Jct.,
Eastham Jct. and Choteau Jct.,

The following will govern the joint operation of Great Northern and CMStP&P RR. Co. trains: Lewistown, transfer track will be used as a main track by Great Northern trains moving to and from CMStP&P main track and must be kept clear.

Lewistown, westward Great Northern trains departing from Great Northern passenger station will obtain clearance from GN and CMStP&P dispatchers.

Great Falls, westward CMStP&P trains departing from Milwaukee passenger station will obtain clearance from GN dispatcher. Bulletin boards of CMStP&P RR located in Great Northern passenger station, Lewistown, Telegraph Office and Roundhouse, Great Falls. Bulletin boards of Great Northern located in Milwaukee passenger station, Lewistown and Great Falls.

Hanover is a joint station. Crews of both railroads will perform station switching of its respective business at Hanover and Arro Spur.

Great Northern trains will handle its business at Hobson Elevator Spur, between Eastham Jct. and Choteau Jct. on CMStP&P RR tracks.

WATCH INSPECTORS

Butte	J. W. Uncles.
Conrad	E. M. Nichols.
Glasgow	E. T. Bowles.
Great Falls	Wheeler & Barnes.
Havre	Francis A. Black & Lained L. Black.
Helena	R. W. Crawford.
Judith Gap	Agent—Comparison only.
Lewistown	Mrs. A. Scheidt.
Plentywood	A. G. Amundson.
Saco	Agent—Comparison only.
Shelby	Peter Lee.
Sidney	J. B. Finneman.
Snowden	Agent—Comparison only.
Whitefish	Dr. Leon Reed.
Williston	R. M. Gross.

SPEED TABLE

Time Per Mile Min.	Sec.	Miles Per Hour	Time Per Mile Min.	Sec.	Miles Per Hour
	40	90.0	1	12	50.0
	41	87.8	1	14	48.6
	42	85.7	1	16	47.4
	43	83.7	1	18	46.1
	44	81.8	1	20	45.0
	45	80.0	1	22	43.9
	46	78.3	1	24	42.9
	47	76.6	1	26	41.9
	48	75.0	1	28	40.9
	49	73.5	1	30	40.0
	50	72.0	1	33	38.7
	51	70.6	1	36	37.5
	52	69.2	1	39	36.4
	53	67.9	1	42	35.3
	54	66.6	1	45	34.3
	55	65.4	1	50	32.7
	56	64.2	1	55	31.3
	57	63.1	2	0	30.0
	58	62.0	2	10	27.7
	59	61.0	2	20	25.7
1	0	60.0	2	30	24.0
1	1	59.0	2	40	22.5
1	2	58.0	3	0	20.0
1	3	57.1	3	30	17.1
1	4	56.2	4	0	15.0
1	5	55.3	5	0	12.0
1	6	54.5	6	0	10.0
1	7	53.7	7	0	8.5
1	8	52.9	8	0	7.5
1	9	52.1	9	0	6.7
1	10	51.4	10	0	6.0

T. J. Murphy, Chief Dispatcher.

P. W. Doles, Chief Dispatcher.

R. N. Whitman, Trainmaster.

N. F. Seil, Trainmaster.

G. W. Noffsinger, Trainmaster.

M. J. Sommers, Trainmaster.