



GREAT NORTHERN RAILWAY COMPANY

MINOT DIVISION

Special Instructions No. 3

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

Sunday, February 23, 1947

These Instructions constitute a part of the Time-Table currently in effect. Employees 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.

**M. L. GAETZ, Superintendent
J. M. BUDD, Assistant General Manager
C. McDONOUGH, General Manager
J. B. SMITH, General Superintendent of Transportation**

FIRST SUBDIVISION

(Main Line)

1. MAXIMUM SPEED FOR TRAINS.

For Streamliner see Item 1, Page 8.

Between	Other	
	Passenger	Freight
Breckenridge and Vance via Fargo	50 MPH	35 MPH
Vance and Nolan	65 MPH	50 MPH
Nolan and New Rockford	70 MPH	50 MPH

Where zone speed for Streamliner is lower than the maximum permissible speed for other trains, zone speed will govern.

2. SPEED RESTRICTIONS.

Between Home Signals of Interlockings at: 20 MPH
Nolan, for movements from Fourth to First Subdivision,
and between Fourth Subdivision and Dakota Division,
(Page)
New Rockford, eastward.

3. ENGINE RESTRICTIONS ON INDUSTRY TRACKS.

Engines heavier than O-6 not permitted on any industry tracks, except Lurgan, Comstock, Rustad, Finkle, Revere, Glenfield, Grace City.

4. TRAIN REGISTER EXCEPTIONS.

Register of trains at Breckenridge will cover their arrival at Wahpeton Jct.
Moorhead Jct., all trains register by ticket.
Fargo-Fargo Jct., first and second class trains and passenger extras register and receive clearance at passenger station, other trains at yard office.
Vance, register only for Nos. 209, 210, 341, 342, 557, 558.

5. CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).

(a) At Wahpeton Jct., trains for which this point is initial station may proceed on authority of clearance under which such trains arrive.

(b) Minot Division clearance received at Fargo or Fargo Jct. will clear westward trains at Fargo Jct. and eastward trains at Moorhead Jct. when train order signal indicates proceed.

(c) At Vance, trains for which this point is initial station may proceed on authority of clearance under which such trains arrive, except clearance under which Nos. 209, 557, and 175 arrive will clear Nos. 176, 558 and 210 respectively at that point.

6. SPRING SWITCHES WITH FACING POINT LOCK.

Breckenridge, lead switch 200 feet east of yard office.

Normal position is for westward main track.
end of double track.

Normal position is for eastward main track.

Moorhead Jct., east siding switch,

Normal position is for main track.

Vance, west wye switch.

Normal position is for First Subdivision.

7. DRAGGING EQUIPMENT DETECTOR INDICATORS.

Indicator for westward trains is located at signal 317.1 approximately 3 miles west of Luverne.

This indicator consists of a single light unit with circular background mounted on signal mast approximately 7 feet above top of rail. Normally no light is displayed on this unit. Track equipment which operates the indicator is located about one mile distant in the approaching direction and consists of apparatus installed on both sides of the rail which will be broken by dragging equipment. The breaking of this apparatus will cause the indicator to display a white light which in no way modifies block signal indications.

When the indicator displays a white light, stop shall be made as promptly as possible consistent with safety to the train and inspection made for dragging equipment. The fact must be reported to the Superintendent from first available point of communication.

8. MANUAL INTERLOCKINGS.

Breckenridge N. P. Ry. crossing
Moorhead Jct. N. P. Ry. crossing
Nolan..... Junction with Fourth Subdivision and Dakota Division
Hannaford N. P. Ry. crossing
Hannaford, the dwarf signal and derail on the siding are interlocked, but only against the Northern Pacific Ry. crossing and in no way governs the position of east switch for movement into or out of siding which must be handled in accordance with Rule 514(A) and instructions for operating electric lock posted in lock box. Rule 670 does not apply for such movements.

Whistle signal for routes:

Moorhead Jct., Dakota First Subdivision1 long.
Minot First Subdivision1 long, 1 short.
Minot First Subdivision siding 3 long, 1 short.
Nolan,
Cassleton Line east1 long.
Surrey Line east2 long, 1 short.
Surrey Line west1 long, 1 short.
Dakota Division west3 long, 1 short.
Siding2 short, 1 long.

9. MANUAL INTERLOCKING WITH DUAL CONTROL SWITCHES.

Nolan west siding switch

10. AUTOMATIC INTERLOCKINGS.

Lurgan, 1.85 miles east of CMS&P&P. RR. crossing
Vance Junction with Seventh Subdivision
New Rockford N. P. Ry. crossing

11. SEMI-AUTOMATIC INTERLOCKINGS.

Wahpeton CMS&P&P. RR. crossing
Wahpeton Jct. Junction with Fourth Subdivision

Wahpeton, if a train is stopped by a stop-indication and no immediate conflicting train movement is evident, and both smash boards are in reverse position, trainmen may signal train to proceed over the crossing after making certain that gates are set against conflicting route. If smash boards are not in reverse position, trainmen shall operate them by hand with crank attached to mechanism. When necessary to make a reverse movement after passing through the home signal zone, but not far enough to clear approach control section, trainmen will operate push button at home signal to obtain route desired.

Wahpeton Jct., interlocking operates automatically for all movements, except to and from Fourth Subdivision which require manual control operation by operator at Breckenridge. When train is stopped by Stop-indication and no immediate conflicting train movement is evident, trainman shall proceed to telephone and communicate with the operator at Breckenridge, and be governed by his instructions in accordance with Rule 663(A) Consolidated Code of Operating Rules. Instructions for operating the plant are posted in the crank box. In case of failure of means of communication, train movement must be made in accordance with train rights and operating rules.

SECOND SUBDIVISION

(Main Line)

1. MAXIMUM SPEED FOR TRAINS.

For Streamliner see Item 1, Page 8.

Between	Other	
	Passenger	Freight
New Rockford and Minot	70 MPH	50 MPH

Where zone speed for Streamliner is lower than the maximum permissible speed for other trains, zone speed will govern.

2. SPEED RESTRICTIONS.

Minot, all trains over footwalk just east of depot..... 10 MPH

3. ENGINE RESTRICTIONS ON INDUSTRY TRACKS.

Engines heavier than O-6 not permitted on any industry tracks, except Clifton, Norfolk, Rangeley, north and south stock yard tracks and Swift's spur New Rockford.

4. TRAIN REGISTER EXCEPTIONS.

Surrey, all trains register by ticket.
Minot, first and second class trains and passenger extras register at passenger station, other trains at yard office.
Register of trains at Minot cover their arrival at Surrey.

When a train is stopped by the Stop indication and no immediate conflicting train movement is evident, trainman shall proceed to the telephone and communicate with the train dispatcher who will advise if train is being held for any purpose. If no instructions are received, or in case of failure of means of communication, train movement through the Home Signal Limits of the interlocking shall be made in accordance with instructions posted at the release push buttons in the telephone booths.

FOURTH SUBDIVISION

(Casselton Line)

1. MAXIMUM SPEED FOR TRAINS.

Between	Passenger	Freight
Wahpeton Jct. and MP 5 west of Casselton Jct.	50 MPH	35 MPH
MP 5 west of Casselton Jct. and Nolan	50 MPH	50 MPH

2. SPEED RESTRICTIONS.

Between Home Signals of Interlockings at:	20 MPH
Wahpeton Jct. eastward	
Davenport	
Casselton Tower	
Nolan westward	

3. ENGINE RESTRICTIONS ON INDUSTRY TRACKS.

Engines heavier than O-6 not permitted on any industry tracks, except Kindred and Addison and interchange track with the Northern Pacific at Casselton.

4. TRAIN REGISTER EXCEPTIONS.

Register of trains at Breckenridge will cover their arrival at Wahpeton Jct.
Casselton Tower, second class trains register by ticket.
Nolan, all trains register by ticket.

5. CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).

At Wahpeton Jct., Casselton Jct., and Chaffee Line Jct., trains for which these points are initial stations may proceed on authority of clearance under which such trains arrive.

6. MANUAL INTERLOCKINGS.

Davenport	N. P. Ry. crossing
Casselton Tower	N. P. Ry. crossing
Nolan	Junction with First Subdivision

Whistle signals for routes,
Davenport and Casselton Tower:

Main track	1 long.
siding	1 long, 1 short
Elevator track Davenport	2 long, 1 short

Nolan:

Casselton Line east	1 long.
Surrey Line east	2 long, 1 short
Surrey Line west	1 long, 1 short
Dakota Division west	3 long, 1 short
siding	2 short, 1 long

7. MANUAL INTERLOCKINGS WITH DUAL CONTROL SWITCHES.

Wahpeton Jct. Junction with First Subdivision
Casselton Jct. Junction with Seventh Subdivision
Wahpeton Jct., interlocking operates automatically for all movements, except to and from Fourth Subdivision which requires push button operation from depot Breckenridge. In case of failure to obtain route desired trainmen will be governed by the instructions in Crank box.

Casselton Jct., switch is electrically controlled by operator at Casselton Tower.

FIFTH SUBDIVISION

(Crosby Line)

1. MAXIMUM SPEED FOR TRAINS.

Between	Passenger	Freight
Crosby Line Jct. and Crosby	35 MPH	30 MPH

2. SPEED RESTRICTIONS.

O-1 engines	25 MPH
Noonan, coal mine tracks	5 MPH

3. ENGINE RESTRICTIONS.

Engines heavier than O-1 prohibited, except all classes of engines permitted to use main track Crosby Line Jct. to point 5000 feet west.

4. ENGINE RESTRICTIONS ON INDUSTRY TRACKS.

O-1 engines not permitted on any industry track or on mine tracks and wye Kincaid.

5. CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).

At Crosby Line Jct., Northgate Line Jct., trains for which these points are initial stations may proceed on authority of clearance under which such trains arrive.

SIXTH SUBDIVISION

(Northgate Line)

1. MAXIMUM SPEED FOR TRAINS.

Between	Passenger	Freight
Northgate Line Jct. and Northgate	35 MPH	20 MPH

2. SPEED RESTRICTIONS.

Between Home Signals of Interlockings at Bowbells....	20 MPH
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3. ENGINE RESTRICTIONS.

Engines heavier than O-1 prohibited.

4. CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).

Northgate Line Jct., trains for which this point is initial station may proceed on authority of clearance under which such train arrives.

5. Account no water at Northgate, trains destined that point must take full tank of water at Des Lacs.

6. Northgate, when using Canadian National Railway tracks, train and engine men will be governed by their time table and rules.

Northgate, track between stop board, 200 feet north of west switch and International Border will be used as interchange.

8. AUTOMATIC INTERLOCKINGS.

Bowbells, 1.15 miles east of MStP&SSM. RR. crossing

SEVENTH SUBDIVISION

(Amenia Line)

1. MAXIMUM SPEED FOR TRAINS.

Between	Passenger	Freight
Casselton Jct. and Vance.....	35 MPH	20 MPH

2. ENGINE RESTRICTIONS ON INDUSTRY TRACKS.

Engines heavier than O-6 not permitted on any industry tracks.

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

(a) At Vance, trains for which this point is initial station may proceed on authority of clearance under which such trains arrive, except clearance under which Nos. 209, 557, and 176 arrive will clear Nos. 176, 558, and 210 respectively at that point.
(b) At Casselton Jct., trains for which this point is initial station may proceed on authority of clearance under which such trains arrive.

2. **STAIRING SWITCHES WITH FACING POINT LOCK.**
Vance, west wye switch.
Normal position is for First Subdivision.
5. **AUTOMATIC INTERLOCKINGS.**
Vance Junction with First Subdivision

EIGHTH SUBDIVISION

(Grenora Line)

1. **MAXIMUM SPEED FOR TRAINS.**
- | | | |
|--------------------------------------|-----------|---------|
| Between | Passenger | Freight |
| Grenora Line Jct. and Wildrose | 30 MPH | 20 MPH |
| Wildrose and Grenora | 35 MPH | 30 MPH |
2. **ENGINE RESTRICTIONS.**
Engines heavier than F-8 and 1000 H.P. Diesel prohibited.
3. **CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).**
At Grenora Line Jct., trains for which this point is initial station may proceed on authority of clearance under which such trains arrive, except clearance under which Nos. 180 and 178 arrive will clear Nos. 177 and 179 respectively at that point.

NINTH SUBDIVISION

(Chaffee Line)

1. **MAXIMUM SPEED FOR TRAINS.**
- | | |
|-------------------------------------------------|--------|
| Between | |
| Chaffee Line Jct. and Chaffee, all trains | 12 MPH |
2. **SPEED RESTRICTIONS.**
Steam engines backing up

3. **ENGINE RESTRICTIONS.**
Engines heavier than G-3 prohibited.

4. **CLEARANCE PROVISIONS AND EXCEPTIONS RULE 83(B).**
At Chaffee Line Jct., trains for which this point is initial station may proceed on authority of clearance under which such trains arrive.

ALL SUBDIVISIONS

1. **INSTRUCTIONS GOVERNING THE OPERATION OF STREAMLINER TRAINS.**

CLEARING OF STREAMLINERS

The time of No. 1 must be cleared by westward first class trains not less than 5 minutes before No. 1 is due to leave the last station where time is shown, and by other westward trains not less than 10 minutes before No. 1 is due to leave the last station where time is shown.

The time of No. 1 must be cleared by eastward first class trains, except No. 2, not less than 10 minutes at all stations, and by other eastward trains not less than 15 minutes.

The time of No. 2 must be cleared by eastward first class trains not less than 5 minutes before No. 2 is due to leave the last station where time is shown, and by other eastward trains not less than 10 minutes before No. 2 is due to leave the last station where time is shown.

The time of No. 2 must be cleared by westward first class trains, except No. 1, not less than 10 minutes at all stations, and by other westward trains not less than 15 minutes.

Within yard limits, inferior trains and engines must clear the main track not less than 10 minutes before No. 1 and No. 2 are due to leave the last station where time is shown.

MAXIMUM SPEED OF STREAMLINERS

Maximum speed of Streamliners, consisting of Streamliner cars handled by Diesel engines, will be designated by distinctive roadway signs in the shape of letter "D", with silver gray Scotchlite background.

Except as directly affected by restrictions under Items 1 and 2 all Subdivisions, of Special Instructions No. 3, the "D" signs designate zone speed territories and the numerals thereon indicate in miles per hour the maximum permissible speed which will govern until the next zone is reached.

Other trains will be governed by other roadway signs.

Where zone speed for Streamliner is lower than the maximum permissible speed for other trains, zone speed will govern.

Where the movement is from a higher to a lower speed zone the zone sign is located approximately 5000 ft. from the point where the lower speed becomes effective. When the movement is from a lower to a higher speed zone the zone sign is located at the point where speed may be increased. Zone territories are listed herein for the convenience of employees.

MAXIMUM SPEED EXCEPTIONS:

When a Streamliner is detoured over Great Northern tracks outside of regular Streamliner territory, the Streamliner must not exceed by more than 10 MPH the maximum permissible speed for other passenger trains in the territory operated.

When Streamliner is operated against the current of traffic in double track territory the Streamliner must not exceed the maximum permissible speed for other passenger trains.

When Streamliner is handled by steam engine, or when other passenger trains are operated on Streamliner schedule, or when train consists of mixed Streamliner and conventional type equipment, the train must not exceed maximum permissible speed for other passenger trains in territory operated.

In event of failure of the electric straight air brakes, or if electric brakes cannot be used on account of cars not equipped with electric straight air brakes being handled in the train, the automatic air brakes will be used and Superintendent notified. In this event speed of train will not exceed the maximum permissible speed for other passenger trains.

ZONE TERRITORIES AND MAXIMUM SPEED FOR STREAMLINERS

Stations	Zone Territories		Maximum Speed MPH	
	Between Mile Posts		Westward	Eastward
Breckenridge				
Wahpeton	0.0 and	1.0.....	25	25
Wahpeton Jct.	1.0 "	0.3.....	45	45
	0.3 "	42.3.....	60	60
Moorhead Jct.				
Fargo Jct.	42.3 "	2.2.....	30	30
	2.2 "	24.5.....	60	60
Vance	24.5 "	63.5.....	75	75
Luverne	63.5 "	64.2.....	40	40
	64.2 "	76.0.....	75	75
Hannaford	76.0 "	225.5.....	85	85
Surrey	225.5 "	196.7.....	35	75
	196.7 "	200.2.....	85	75
C K Switch	200.2 "	200.4.....	50	35
	200.4 "	203.0.....	50	50
Minot	0.0 "	1.0.....	20	20
	1.0 "	4.2.....	60	60
W L Switch	4.2 "	5.3.....	25	25
Gassman Switch	5.3 "	13.9.....	60	60
Des Lacs	13.9 "	14.1.....	35	35
	14.1 "	44.0.....	65	65
Palermo	44.0 "	98.8.....	75	75
Wheelock	98.9 "	99.0.....	65	35
	99.0 "	118.2.....	65	60
Williston	118.2 "	121.0.....	50	50

7. Snow or ice should not be allowed to accumulate on footboards.
8. Employees 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 flagmen 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, and dormitory cars on trains 3, 4, 7 and 8 carry 100 ft. of steam hose in two 50 ft. lengths for emergency use in the event of steam failure on the train engine and a non-steam train line engine is furnished to handle the 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 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 No. 312 steam coupler, which can be attached to hose with steam dome connection and in case of steam line failure on a car both hose 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. 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.
26. When necessary to set out equipment due to hot journal, be sure that all traces of fire are extinguished, and journal box properly marked.
27. 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.
28. 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 lookout for such equipment and in absence of previous advice wire proper officer for instructions.
29. 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.
30. **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.
31. 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 of gas-electric engines.
32. Gas-electric engines must not be fueled while occupied by passengers or coupled to cars occupied by passengers.
33. Delivery of gasoline or other flammable oils must not be made after dark.

- 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.
35. 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.
 36. 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 evident report the fact to the Superintendent from the first available point of communication.
 37. **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, until 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 Indicators, insert switch key in controller and turn clockwise toward "R", and hold a few seconds. If the 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.
 38. 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 locking switch must not be made through this type switch.
 39. Unless otherwise displayed, yard limit signs of the reflectorized type consist of letter "Y" and approach signs, one mile distant are diamond shaped.
 40. Employees 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.
 41. Employees must not go out on exterior of cab or use running board, nor hang from gangway of 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 employee shall use the steps that are provided on the front of the engine from pilot to running board. On engine in roundhouses or shop it is permissible to use ladders or special stair platforms.
 42. 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.
 43. 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.
 44. 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:
Nos. 1, 2, 3, 4, 7, 8, 9, 10, 28, 29, 30, 355, 358, 359, 360, and sections thereof; also, any extra passenger trains whether operated as a section of regular trains or as a passenger extra.
 45. 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.
 46. 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 employees 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.
 47. Employees 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.
 48. On stoker equipped engines, stoker must be stopped before employees attempt to pass through or perform any work in the coal space of tender.
 49. Employees 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 from being moved.
 50. 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.
 51. 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.
 52. Employees firing up boiler, 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.
 53. The hole in fire box door of oil burning engines will be closed except when being used for sanding purposes.
 54. Air hose on diesel and electric engines must be hooked up in hose fastener when not in use.
 55. 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.

56. Wheel Slip Light on Diesel engines functions because of a difference in voltage between two traction motors. This is caused by the power wheels revolving at different speeds which may be due to either one pair of wheels slipping or sliding. When one pair of wheels slip on one or more trucks the Wheel Slip Light on the engineer's instrument panel will light intermittently. When one pair of wheels lock or skid, due to a broken pinion or axle gear, or the armature shaft frozen in its bearings, the Wheel Slip Signal will light and give a continuous warning as long as power is being supplied to the motors. When the Wheel Slip Light gives continuous warning the train should be brought to a stop and positive observation made to ascertain whether or not all the Diesel truck wheels are turning. In the event that a pair of wheels is locked, Superintendent should be notified immediately and no attempt made to move engine until properly authorized.
57. On Diesel road engines consisting of one or more units in freight and passenger service, the following will govern in the event of emergency: In the event that enginemen observe Diesel engine emitting fire, smoke or water; or in event of derailment, fire in one of the units; or broken connecting rod or other rotating part in one of the engines causing excessive pounding, the enginemen should immediately shut down all the engines from the operating position in the engineer's control station in the cab. This can be done on road engines by pushing the button at the end of the throttle handle with the thumb and then moving the throttle forward to the farthest position. The fuel pump switch at the control box should also be pulled; and in the event of fire, the emergency fuel cut-off valve cord should be pulled. If there is any question in the engineer's mind as to what is occurring in the trailing cabs, all the units should be shut down from the operating cab as stated above and details investigated when the train has stopped. In the event of a fire in the engine, fire fighting equipment should be operated in accordance with the instructions mounted in each engine cab.
58. Diesel engines are provided with bayonet gauges or lubricating oil sight glasses which provide a means of determining the lubricating oil level in the engine. The oil level should always be between the "Low" and "High" limits. Any increase in oil level in the crankcase above the "Full" mark would indicate oil or water leak into the oil pan. If this condition is found the engine should be shut down and not again operated until a qualified mechanic or supervisor ascertains whether the engine is in safe condition to continue operation.
59. When necessary to shut down one of the engines on freight or passenger Diesel engines during freezing weather the following will govern:
- Engine should be drained to low level and "C" valve opened.
 - Steam admission valve to engine must be opened to supply steam to engine cooling system from steam generator.

60. MARS LIGHT.

Engineers operating engines equipped with Mars Light must familiarize themselves with the instructions and will be governed by the following:

Mars Light on engines are of a type that will display either a white, or emergency red, oscillating light. An operating headlight panel switch is located to the right of the engineer. First turn on dynamo motor generator snap switch adjacent to panel switch, then turn on snap switch on headlight panel switch. This will start the oscillating motion of the light. The operating lever on headlight panel may then be placed in one of the following positions: emergency red - off - full - dim - which will display corresponding lights: bright emergency red light - bright white light - dim white light. This light takes a 480 watt, 12 volt globe.

The Mars Light on engines will be used in addition to the headlight and will be displayed in the same manner as the headlight as prescribed by Rule 17 and 17(B) of the Consolidated Code of Operating Rules.

When necessary, the Mars Light can be used as an emergency headlight in case of failure of regular headlight, or as a focus light in territories where there is falling rock. When used as a focus light the Mars Light will come to a stop by turning off the oscillating snap switch, then by operating the push button on the headlight panel switch it can be focused to any position desired.

When necessary to use the Mars Light as a protection light on engine, the engineer must immediately place the operating lever in red position and it must be used in that position by day or night when protection is required in double and single track territory such as:—when a train is disabled or stopped suddenly by an emergency application of the air brakes; over-running the fouling point at meeting or waiting points, at end of double track or a junction; or other emergencies when in the judgment of the conductor or engineer protection is necessary at front end of train or engine.

Engineer of an approaching train finding a Mars Light displayed in red position must immediately stop and if running on an adjacent track will not proceed until it has been ascertained that track is clear and will then proceed at restricted speed until train has been passed.

The use of the emergency red oscillating light at either the head and rear end of train does not in any way relieve enginemen and trainmen from complying with requirements of Rules 99 and 102 of the Consolidated Code of Operating Rules or the observance of other rules.

Conductors and trainmen on trains equipped with Mars Light at rear of train must familiarize themselves with instructions on the type of light and location of switches which control the light and will be governed by the following:

Mars emergency red oscillating light on cars are of two types—Automatic Control and Portable Manual Control. The Master Switch, emergency switch, pilot light and detailed instructions covering operation of light are located in locker inside of car.

There are two emergency switches on business cars, lounge and parlor cars with non-ventible ends; one inside of car and the other on outside at rear under body of car on engineer's side. When the master switch is cut out the Mars Light may be turned on and off by either of these emergency switches.

On cars equipped with automatic control light, immediately as the train departs from its initial station the flagman must at once turn on the master switch which will set the automatic control and emergency red light into operation; it will continue to operate automatically when train speed is below 18 MPH and off when above that speed. Light will remain burning during stops.

If the automatic control feature fails, the Mars Light will remain burning continuously regardless of train speed. Under such condition flagman must promptly cut out master switch and operate light manually with emergency switches.

Portable Mars Light can be turned on and off by a pull and push switch mounted on outside casing of light. Before coupling another car on rear the Portable light must be removed.

Automatic control or Portable Mars red light must be displayed by day or night each time train stops; also, when moving under circumstances in which it might be overtaken by another train or engine, and, also during foggy and stormy weather. When necessary to protect train at speeds above 18 MPH the flagman may operate light manually with the emergency switch complying at all times with requirements of Rule 99.

Flagman must make frequent inspection to determine that Mars Light is functioning properly, particularly when going out to flag.

The pilot light must not be depended on as indicating that the Mars Light is burning. If pilot light is burning and Mars Light is out this is an indication that Mars Light globe is burned out. If both Mars Light and pilot light are not burning check the fuses. If this fails to correct, the conductor will wire Car Foreman at next terminal. Spare globes are carried in rack in the locker. Mars Light on cars take a 250 Watt, 32 Volt globe.

The Mars Light must be extinguished under following conditions:

- When train is standing at the initial and terminal stations.
- When switching is to be performed from rear end of trains.
- When train is on siding to be passed by another train.

(d) When operating in double track or in territory where another train is approaching from the rear on an adjacent track, but not until the flagman has definitely ascertained that the approaching train is running on the adjacent track.

61. ON ENGINES, PASSENGER AND FREIGHT CARS EQUIPPED WITH ROLLER BEARINGS, EMPLOYEES WILL BE GOVERNED AS FOLLOWS:

American Steel Foundries' type roller bearings have the roller bearings 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 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.

62. 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 when stopped for the purpose of taking fuel, water, meeting trains, station work, train orders, etc., conductors must see that careful inspection is made of running gear before proceeding, and when practicable such stops should be made between switches. 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 train men 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 possible 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.

During winter weather at points where inspections are made 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.

These instructions do not supersede Rules 713 and 812 of the Consolidated Code of Operating Rules, but are supplementary thereto.

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

WATCH INSPECTORS

Breckenridge	J. P. Winkle
New Rockford	A. R. Hawkinson
Fargo	E. W. Johnson
Minot	J. N. Anderson
Minot	A. J. Parke
Williston	R. M. Gross
Stanley	Operators
Crosby	M. J. Werges

SPEED TABLE

Time Per Mile			Miles		
Min.	Sec.	Per Hour	Min.	Sec.	Per Hour
		40	1	12	50.0
		41	1	14	48.6
		42	1	16	47.4
		43	1	18	46.1
		44	1	20	45.0
		45	1	22	43.9
		46	1	24	42.9
		47	1	26	41.9
		48	1	28	40.9
		49	1	30	40.0
		50	1	33	38.7
		51	1	36	37.5
		52	1	39	36.4
		53	1	42	35.3
		54	1	45	34.3
		55	1	50	32.7
		56	1	55	31.3
		57	2	—	30.0
		58	2	10	27.7
		59	2	20	25.7
		0	2	30	24.0
1		1	2	40	22.5
1		2	3	—	20.0
1		3	3	30	17.1
1		4	4	—	15.0
1		5	5	—	12.0
1		6	6	—	10.0
1		7	7	—	8.5
1		8	8	—	7.5
1		9	9	—	6.7
1		10	10	—	6.0

W. T. Hiatt	Chief Dispatcher
R. E. Strom	Trainmaster
O. E. Fisher	Trainmaster
W. J. Barke	Trainmaster