

# **BURLINGTON NORTHERN INC.**

## **OTTUMWA DIVISION**

### **Special Instructions**

# **No. 1**

IN EFFECT AT 12:01 A.M.  
CENTRAL STANDARD TIME

**FRIDAY, MAY 10, 1968**

---

## ALL SUBDIVISIONS

1.	<b>SPEED RESTRICTIONS</b>	<b>MAXIMUM SPEEDS</b>
	Passenger Trains	79 MPH
	Freight Trains	65 MPH

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

All trains and engines through turnouts, crossovers and gantlets except as specified in special instructions or where fixed signals indicate otherwise. . . . . 10 MPH.

Engines running light or with caboose only 50 MPH unless otherwise provided.

EQUIPMENT	MAIN LINE	BRANCH LINE
Ore cars	45 MPH	20 MPH
Derricks	30 MPH	15 MPH
Cranes	30 MPH	15 MPH
Pile drivers	30 MPH	15 MPH
Clamshells and shovels	30 MPH	15 MPH
Jordan spreaders	30 MPH	15 MPH
Scale test cars	35 MPH	20 MPH
Air dump cars (loaded)	35 MPH	20 MPH
Rotary plows, wedge plows and dozers	30 MPH	15 MPH

### 2. MOVEMENT OF ENGINES DEAD IN TRAINS:

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

Other diesel units when in tow dead in trains should not be in groups of more than 5 units, such units may be handled next to road units. Diesel units equipped with coupler control lock blocks must have lock blocks in "Down" position when in multiple groups.

### DIESEL UNITS NOT EQUIPPED WITH ALIGNMENT CONTROL DEVICES:

- GN - 1 through 195
- CBQ - 9103 through 9106  
9136, 9137, 9139 through 9143, 9147 through 9153,  
9203 through 9248, 9400 AB through 9413 AB, 9249  
through 9292, 9300 through 9308, 9310 through 9321
- NP - 100 through 177  
400 through 429  
500-501-525-551-555 through 558  
602-603-651-700 through 724  
750-800 through 803-850 through 853  
900 through 912
- SPS - 11 through 55  
856 through 869

### DIESEL UNITS EQUIPPED WITH COUPLER ALIGNMENT LOCK BLOCKS:

- GN - 550 through 599
- CBQ - 200 through 267, 270 through 287  
300 through 374, 400 through 411  
430 through 459
- NP - 200 through 375, 552 through 554  
562 through 569
- SPS - 60 through 84

All other Diesel units are equipped with alignment control couplers.

### MAXIMUM SPEED DIESEL UNITS DEAD IN TOW.

- 30 mph - CBQ 9103 through 9106  
NP 100
- 50 mph - GN 1 through 195  
NP 99-400 series - 600 series - 700 series -  
5400 series  
CBQ 9136, 9137, 9139 through 9143, 9147 through  
9153, 9203 through 9292, 9300 through 9308  
SPS 11, 22 through 28, 40 through 45, 50 through  
55
- 60 mph - NP 100 series (except 100) - 525 --800 through  
803
- 65 mph - GN 227 through 230, 262 through 279 (A&B)  
307 through 317 (ABC)  
430 through 474 (ABCD)  
550 through 915  
2000 through 2035  
3000 through 3025  
CBQ 100 through 999  
NP 200 and 300 Series  
2500 Series - 2800 Series - 3600 Series  
500-501-550 through 569  
850 Series - 860 Series  
900 Series - 6000 Series - 7000 Series  
SPS 60 through 98  
154 through 327  
856 - 869
- 79 mph - GN 320 through 333, 350 through 375, 400 through  
417 - 500 through 512, 679, 680, 2500 through  
2529 - 3026 through 3040  
CBQ - 9916 through 9993  
NP 6500 Series - 6600 Series - 6700 Series  
SPS 330-335  
150 through 153  
750 - 800 through 806  
Budd cars GN 2350, NP B-30 through B-32 and  
B-40 through B-42 at rear of train

3. When NP road passenger diesel units are coupled in multiple with road freight or road switcher units, the road passenger units must be trailing to avoid danger of sliding wheels on the freight or road switcher units due to excessive brake cylinder pressure. The speed restrictions for freight and road switcher units must be observed to avoid damage to traction motors.

4. Following equipment loaded or empty must be handled on rear of trains, unless otherwise provided:

- Outfit cars
- Tie flats (GN X4800 to X4975, X4410)
- Scale test cars (next ahead of caboose)
- Wrecking derricks
- Pile drivers
- Loco cranes
- Rotary Snow Plows, dozers, wedge plows
- Jordan spreaders
- Air dump cars loaded or empty
- Log flats - NP 117002 to 117892

5. All cars 80 feet in length, or longer, must be handled in rear 30 cars of train where the track curvature is 6 degrees or more on grade of one percent or more.

If there are 30 or more cars 80 feet in length, or longer, in one train, handle them next ahead of caboose.

The following subdivisions have curves of 6° or more on grades of 1% or more

FIFTH SUBDIVISION	SIXTH SUBDIVISION
M.P. 0.0 Eastward	M.P. 0.90

6. Burlington Lines signal aspects as contained in the 1967 edition Consolidated Code of Operating Rules are in effect.

7. Rule 901 will not apply

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

9. A train authorized by train order to move against the current of traffic must approach all interlockings and CTC limits at reduced speed where approach signals are not provided for such movements.

10. Roadway signs indicate maximum speed for passenger trains. A triangle type sign with reflex letter Z indicates zone territory where maximum speed is indicated by numerals thereon, and will govern until next zone is reached. Where speed restrictions are required on curves within a zone, a banjo type sign with reflex letter C and numerals thereon will indicate maximum speed for that particular curve, after which zone speed may be resumed. Unless otherwise specified by timetable, bulletin, or special instructions these signs will be located one mile from point where zone speed changes or from point of curve.

On subdivisions where maximum speed is 40 MPH or more an octagonal yellow sign with horizontal black stripe displayed on the right of the track will indicate the beginning of slow track.

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

12. Diesel engines left with no one in charge must have the throttle in idle position, transition lever (on engines so equipped) in off position; reversing handle removed from the control stand, generator field switch open, independent air brake and hand brake applied.

When conditions require, or engine is to be left unattended for more than 30 minutes, wheels must be securely blocked.

13. When a train is to make a backup movement and the engine consist is more than three (3) units, the three (3) rear units only will be allowed to work power. Other units must be isolated.

Engine consist of passenger units must not exceed six (6) units in passenger or freight service.

Engine consist of freight units must not exceed eight (8) units in freight or passenger service.

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

15. 250 ton derricks and bridge derrick 204620 must not operate on any branch line or spur.

#### 16. TRACK RESTRICTIONS FOR ENGINES

The following side clearance restrictions are in effect for SD-7, SD-9, SD-24, GP-20 and UP 700 and 800 series diesel engines:

Burlington— Will not clear at following locations:  
 Building on spur No. 78 referred to as Chittenden and Eastman track;  
 Platform on track No. 22 referred to as Freight house track;  
 Coal shed on spur No. 86 referred to as Baker Coal track;  
 Through doors, spur No. 96 referred to as Murray Iron Works No. 2;  
 Shed, platform and hydrant on spur No. 104, referred to as Northwest Cabinet No. 2  
 Look out for close clearance at the following locations:  
 Crane rail post on spur No. 97 referred to as Murray Iron Works No. 1

West Burlington— Will not clear at following locations:  
 Concrete walls on Spur No. 11 referred to as Murray Iron Works.

Ottumwa— Will not clear at following locations at Morrell Packing Co. tracks:  
 Platforms on track Q-129 referred to as Export track 1 Building on track Q-48, referred to as lead to scale.

Chariton— Will not clear at following locations:  
 Platform on Spur No. 29 referred to as freight house track.

Creston— Will not clear at following locations:  
 Platform on spur No. 96 referred to as Freight House track.  
 Platform on spur No. 99 referred to as Jackson and Sherry track.

Red Oak— Will not clear at following locations:  
Platform on Spur No. 26 referred to as Freight House Track.

Monmouth— Look out for close clearance at the following locations:  
Platform on spur No. 19 referred to as Brown, Lynch Scott Co. track.  
Shed on spur No. 22 referred to as McCullough Lumber Co. track.

Fairfield— Look out for close clearance at the following Locations:  
Platform on spur No. 14 referred to as Dexter-Philco Washing Machine track.

Des Moines— Look out for close clearance at the following locations:  
Platform on spur No. 34 referred to as Freight House track.

Villisca— Look out for close clearance at the following locations:  
Platform on spur No. 12 referred to as Freight House track.

Location	Track Number	Local Name of Track
Mt. Pleasant	9	Hayes Co.
Mt. Pleasant	16	South Scrapper Track
Lockridge	2	Stockyard
Fairfield	3	House track
<b>SECOND SUBDIVISION</b>		
Red Oak	8	Yard track
Red Oak	11	Yard track
Red Oak	16	Standard Oil Co.
Red Oak	28	Elevator track
<b>THIRD SUBDIVISION</b>		
St. Joseph	235	Biles Lumber Co.
St. Joseph	299	Western Tablet Co.
St. Joseph	377	Artesian Ice Co.

SD-24 engines, 500 series, GP 20 and GP 30 engines, 900 series, and UP 700 and 800 series, may be operated at authorized speed restrictions on the following subdivisions except must not operate on following tracks:

**FIRST SUBDIVISION**

Location	Track Number	Local Name of Track
Monmouth	52	W Monmouth Lumber
Monmouth	61	Oil City
Kirkwood	5	P.S. Co.
Burlington	35	Elevator track
West Burlington	12	Murray Iron Works
Danville	4	Elevator track

**FIRST SUBDIVISION**

- Provisions of Rule 97 do not apply.
- When a passenger train is receiving or discharging traffic on the side toward a station, a train or engine must not pass between it and the station unless proper safeguards are provided.  
  
Where trains operate by signal indication and the approaching train has no knowledge of a passenger train at station, trainmen in charge of passenger train at station must provide proper safeguards for passengers.
- When train order (Form D-R) authority for crossover, at facing point hand-throw switch is issued at the point where crossover movement is to be made, train must be stopped before the crossover switches are lined.
- Movement of train and engines against the current of traffic between crossover east of Iowa Avenue and Tisdale Street at Ottumwa will be made on authority of the train dispatcher.
- Extra trains will not display classification signals.

6. Waterman  
Hand operated switch at M.P. 165.06 must not be used until permission has been secured from the operator at Seminary Street Tower. Operator must be informed upon completion of movement and that switch is properly lined and locked.

Switch light indication on tracks 4 to 9, inclusive, is yellow when lined for the ladder, and red when lined for the individual track.

7. Monmouth

To provide protection by automatic gates at Main and First Streets after eastward trains have made station stop they must not exceed 10 M.P.H. until head end of train is over Main Street crossing.

Manual interlocking station is unattended between 1 00 p.m. and 2:00 p.m. and between 10 00 p.m. and 5:00 a.m. daily.

8. Burlington:

Drawbridge 204.66 over Mississippi River is interlocked.

Trains originating at Burlington and trains on which train or engine crew changes must have Clearance.

Engines must not occupy the Chittenden and Eastman stub track between Third and Main Streets when trains are using eastward main track at this location.

Yard engines making Switch moves between Main Street Burlington and "end CTC Sign" M.P. 206.55 must not exceed 10 M.P.H. Extra trains, except trains originating or terminating, will not register.

9. Mt. Pleasant.

Westward trains or engines after stopping in the vicinity of the depot Mt. Pleasant and east of highway circuit sign located 150 feet east of M.P. 233.54 (Highway 218), will approach observing that gates are in a lowered position before occupying crossing.

10. Fairfield:

Between Rock Island Tower 255 and Fairfield Passenger Depot, train and engine movements, in both directions on westward track, will be governed by signal indication.

Westward trains or engines which have stopped East of highway circuit sign at M.P. 255.54 at Fairfield must observe gates in a lowered position when proceeding, before occupying 4th Street crossing.

**SPEED RESTRICTIONS**

LOCATION	Passenger Trains M.P.H.	Freight Trains M.P.H.
Waterman-Graham . . . . .	35	35
ZONE-M.P. 162.42-M.P. 163.60, track 1, westward . . . . .	30	30
ZONE-M.P. 163.50-M.P. 162.42, track 2, eastward . . . . .	30	30
ZONE-M.P. 162.42-M.P. 163.50, track 1, eastward, track 2, westward . . . . .	30	10
ZONE-M.P. 163.50-M.P. 164.00 . . . . .	75	50

LOCATION	Passenger Trains M.P.H.	Freight Trains M.P.H.
ZONE-M.P. 164.00-M.P. 177.40 . . . . .	79	50
M.P. 165.48, turnout, end of two main tracks . . . . .	30	30
Head end of eastward train on westward freight main track between M.P. 165.89 and M.P. 165.60 . . . . .	30	30
Graham, cut-off eastward track between M.P. 165.20 and M.P. 164.74 . . . . .	20	20
Graham, turnouts, except crossover between freight main tracks . . . . .	30	30
ZONE-M.P. 177.40-M.P. 178.75 . . . . .	79	50
ZONE-M.P. 178.75-M.P. 179.50 . . . . .	40	30
ZONE-M.P. 179.50-M.P. 181.09 . . . . .	79	50
ZONE-M.P. 181.09-M.P. 203.00 . . . . .	79	50
Connett through crossovers . . . . .	40	35
ZONE-M.P. 203.00-M.P. 204.00 . . . . .	70	50
ZONE-M.P. 204.00-M.P. 204.99 . . . . .	30	20
ZONE-M.P. 204.99-M.P. 206.80 . . . . .	20	20
Eastward and westward movements on main tracks and Hawkeye lead M.P. 205.93-5th Street to M.P. 205.67, east of Main Street and lead car or engine between M.P. 205.38 and M.P. 204.99 . .	10	10
Westward movements on all other tracks from 150 feet east to Main St. crossing .	5	5
ZONE-M.P. 206.80-M.P. 207.33 . . . . .	50	45
ZONE-M.P. 207.33-M.P. 208.95, westward track . . . . .	50	40
ZONE-M.P. 207.33-M.P. 208.95, eastward track . . . . .	50	40
ZONE-M.P. 208.95-M.P. 210.99 . . . . .	79	50
ZONE-M.P. 210.99-M.P. 276.50 . . . . .	79	50
Head end of train M.P. 232.75 to M.P. 233.75, Mt. Pleasant . . . . .	60	50
Head end of eastward trains on eastward track, and westward trains on westward track over street crossings, Fairfield . .	60	50
Head end of eastward trains on westward track, and westward trains on eastward track over street crossings, Fairfield . .	50	50
ZONE-M.P. 276.50-M.P. 277.55 . . . . .	60	50
ZONE-M.P. 277.55-M.P. 279.00 . . . . .	40	30
ZONE-M.P. 279.00-M.P. 279.62 . . . . .	30	25
Ottumwa, N. & W. Crossing . . . . .	15	15

Light engines and single units over highway crossing M.P. 269.90, 15 M.P.H.

Freight trains 60, 64, 66, 100, 118, 61, 63, 65, 101, 163 and 165 when authorized by message or signature of Chief Dispatcher may observe maximum speed of 60 M.P.H. as follows (observing all other speed restrictions):

55 M.P.H. - Between M.P. 247.00 and 263.00.

60 M.P.H. - Between M.P. 211.00 and 247.00  
263.00 and 276.00

**SECOND SUBDIVISION**

1. Provisions of Rule 97 do not apply.
2. When a passenger train is receiving or discharging traffic on the side toward a station, a train or engine must not pass between it and the station unless proper safeguards are provided.  
  
Where trains operate by signal indication and the approaching train has no knowledge of a passenger train at station, trainmen in charge of passenger train at station must provide proper safeguards for passengers.
3. When train order (Form D-R) authority for crossover, at facing-point hand-throw switch is issued at the point where crossover movement is to be made, train must be stopped before the crossover switches are lined.
4. Movement of train and engines against the current of traffic between crossover east of Iowa Avenue and Tisdale Street at Ottumwa; and between stock yards and New York Avenue at Creston, will be made on authority of the train dispatcher.

5. Extra trains will not display classification signals.

6. Ottumwa:

If interlocking signals at N&W Crossing fail to clear, a trainman will precede train through the interlocking, examining switches and assuring himself that they are in proper positions.  
C.R.I. & P. trains and engines will use No. 1 track between Wapello and Market Streets and must move at Reduced Speed. Normal position of switches will be for No. 1 track.

First class trains will register by ticket.

7. Rule 268(A) does not apply at main track switches at Chariton, Albia, M.P. 303.09 (east of Albia) Maxon M.P. 302.20.

8. Talmage Jct.:

BN trains and engines will use C.G.W. tracks between Des Moines and Talmage, and are governed by rules and timetable of C.G.W.R.R. Conductors and engineers of westward trains moving from C.G.W. tracks at Talmage, must receive Clearance.

9. Conductor or engineer or both, arriving at Creston, an all trains must deliver all clearances, train orders, and messages to relieving conductor or engineer or both. Trains or engines originating Creston must receive Clearance.

10. Pacific Jct.:

Normal position for spring switch end of double track Pacific Jct. is for eastward movements.

**SPEED RESTRICTIONS**

LOCATION	Passenger Trains M. P. H.	Freight Trains M. P. H.
Ottumwa N. & W. Crossing . . . . .	15	15
ZONE—M.P. 279.62—M.P. 280.46 . . . . .	30	20
ZONE—M.P. 280.46—M.P. 281.30 . . . . .	79	35
ZONE—M.P. 281.30—M.P. 301.92 . . . . .	79	50
ZONE—M.P. 301.92—M.P. 304.40, westward track . . . . .	70	50
Head end of train between M.P. 303.60 and M.P. 304.40 . . . . .	40	20
ZONE—M.P. 304.40—M.P. 306.90, westward track . . . . .	70	40
ZONE—M.P. 301.92—M.P. 308.25, eastward track . . . . .	65	50
Maxon, east crossover . . . . .	30	30
Maxon, west crossover . . . . .	40	35
Maxon, eastward track over east switch of west crossover . . . . .	50	50
Halpin, east crossover . . . . .	30	30
Halpin, west crossover . . . . .	40	35
ZONE—M.P. 306.90—M.P. 315.00, westward track . . . . .	79	50
ZONE—M.P. 308.25—M.P. 315.00, eastward track . . . . .	79	50
ZONE—M.P. 315.00—M.P. 321.50 . . . . .	70	50
Curve M.P. 316.78 . . . . .	65	50
ZONE—M.P. 321.50—M.P. 323.25 . . . . .	60	50
ZONE—M.P. 323.25—M.P. 333.85 . . . . .	79	50
ZONE—M.P. 333.85—M.P. 334.50 . . . . .	40	30
ZONE—M.P. 334.50—M.P. 336.33 . . . . .	79	40
ZONE—M.P. 336.33—M.P. 338.75 . . . . .	79	50
ZONE—M.P. 338.75—M.P. 340.00, westward track . . . . .	50	40
ZONE—M.P. 338.50—M.P. 340.00, eastward track . . . . .	79	50
ZONE—M.P. 340.00—M.P. 391.65, westward track . . . . .	79	50
Shannon, crossover . . . . .	40	35
ZONE—M.P. 340.00—M.P. 351.50, eastward track . . . . .	79	50
ZONE—M.P. 351.50—M.P. 356.00, eastward track . . . . .	55	45
ZONE—M.P. 356.00—M.P. 391.65, eastward track . . . . .	79	50
Head end of westward trains on westward track between M.P. 359.46 and Main Street Osceola (M.P. 359.94) . . . . .	60	50
Head end eastward trains on eastward track between M.P. 360.42 and Main Street Osceola (M.P. 359.54) . . . . .	60	50
ZONE—M.P. 391.65—M.P. 393.03 . . . . .	50	40
ZONE—M.P. 393.03—M.P. 393.73 . . . . .	30	25
ZONE—M.P. 393.73—M.P. 474.98 . . . . .	79	50
M.P. 441.80, east crossover . . . . .	40	35

**SPEED RESTRICTIONS – Continued**

LOCATION	Passenger Trains M.P.H.	Freight Trains M.P.H.
Red Oak, west crossover between main tracks M.P. 442.70 . . . . .	30	30
M.P. 443.26, turnout end of two main tracks . . . . .	40	35
McPherson, Emerson, Hastings and Malvern, siding turnouts . . . . .	30	30
Emerson and Hastings, head end of train over public crossings on siding . .	10	10
M.P. 466.44, turnout end of two main tracks . . . . .	40	35
M.P. 467.95, crossover . . . . .	40	30
Pacific Jct., east crossover between main tracks at M.P. 473.75 . . . . .	30	30
Pacific Jct., crossover between main tracks at M.P. 475.00 . . . . .	30	30
Pacific Jct., northeast wye . . . . .	25	20

Trains must not exceed 15 M.P.H. between Talmage Jct. and Talmage Light engines over Main Street Crossing, Prescott, 20 M.P.H.  
 Light engines over highway crossings M.P. 423.08 and M.P. 426.47, 20 M.P.H.

Freight trains 60, 64, 66, 100, 61, 63, 65, 101, 163 and 165 authorized by message over signature of Chief Dispatcher may observe maximum speed as follows observing all other speed restrictions):

- 60 M.P.H. – Between M.P. 281.00 and 301.00
- 308.00 and 321.00
- 323.25 and 333.00
- 340.00 and 359.00
- 360.00 and 391.65
- 393.73 and 472.00

**THIRD SUBDIVISION**

1. Interlocking in effect between M.P. 0.41 and Begin-End CTC sign M.P. 4.31 Block 4. Interlocking remotely controlled from Ustick.
2. Trains have no timetable superiority between begin-end C.T.C. sign at M.P. 60.02 and M.P. 60.40 and between M.P. 204.90 east of South Park on the Hannibal Division and M.P. 60.02 St. Joseph. All trains and engines must run at reduced speed between these points.
3. Extra trains will not display classification signals.
4. Between St. Joseph and Atchison:  
 Missouri Pacific R.R. trains governed by BN Rules, timetable, and special instructions, copies of which Mo. Pac. employees must have in their possession.
5. Trains and engines handling wide and low cars loaded with airplane parts and similar lading, must not operate through passenger depot tracks 1, 2 and 3 at St. Joseph, account will not clear high platforms.

**SPEED RESTRICTIONS**

LOCATION	Passenger Trains M.P.H.	Freight Trains M.P.H.
Maximum Speed:		
Between Kansas City and St. Joseph . . . . .	79	50
Between M.P. 0.41 and east end Missouri River Bridge . . . . .	10	10
Between east end Missouri River Bridge and Ustick . . . . .	15	15
Curve M.P. 1.68 . . . . .	50	50
Curve M.P. 3.90 . . . . .	50	50
Through Crossover between main tracks Block 4	30	30
Turnout freight lead to westward main track Block 4 . . . . .	15	15
Turnout end of two main tracks Clarke . . . . .	60	50
Curve M.P. 9.50 . . . . .	70	60
On Armour Atchison Advance track M.P. 43.50 to M.P. 44.92 . . . . .	30	30
Curve M.P. 43.60 . . . . .	70	60
Through turnout M.P. 44.92 . . . . .	30	30
Through turnout advance freight lead French . .	40	30
Through turnout freight lead M.P. 58.70 . . . . .	30	25
Curve M.P. 60.02 . . . . .	25	20
Between M.P. 60.40 and M.P. 64.00 . . . . .	20	20
At St. Joseph, Lake Missouri and Illinois Avenues . . . . .	20	20
In Hannibal yard between M.P. 61.90 and 600 feet north of Monterey Street, and on yard lead between highway circuit signs Monterey Street	10	10
On Old Hannibal passenger main between M.P. 205.14 and 400 feet west of 10th Street . . . .	10	10

No. 45 and No. 46 when handling freight cars, may observe maximum speed of 60 M.P.H. between M.P. 4.25 and M.P. 60, (observing all other speed restrictions).

No. 45 when handling TOFC traffic may observe maximum speed of 70 M.P.H. between M.P. 4.25 and M.P. 60, (observing all other speed restrictions).

Freight trains 78, 96, 76, 188, 87, 79, 75, and 95 between Kansas City, and St. Joseph and MoPac trains 174 and 175 between Armour and St. Joseph authorized by message over Signature of Chief Dispatcher may observe maximum speed of 60 M.P.H. (observing other speed restrictions).

## FOURTH SUBDIVISION

1. Extra trains will not display classification signals.
2. Armour:  
Rule 83(B) does not apply.  
Cars set out must not block or foul route leading to Fourth Subdivision.
3. Movement of trains and engines over Missouri River Bridge Atchison governed by signal indication and special instructions of the Atchison and Eastern Bridge Company.
4. Atchison and Eastern Bridge Co. at Atchison, Kansas.  
Movement of trains and engines over this Company's Bridge and tracks will be handled by a system of signals, indication of which will govern movements.

Signals are of the two position color light type. Normal position will be stop.

Color	Indication	Name
Red	Stop	Stop Signal
Green	Proceed	Clear Signal

Clearing section is that portion of track between signals and yellow paint mark on rails in advance of all signals located near east and west ends of bridge. Trains on CRI&P, after entering clearing section, will be governed by signal indication.

Trains on BN will enter clearing sections, and if there is no conflicting movement being made, reverse junction switch, then be governed by signal indication. Junction switch must be restored to normal position after being used.

Trains on Depot track No. 5, will, after entering clearing section, be governed by signal indication.

Trains from Depot to No. 3 and 4 will enter clearing section, and if there is no conflicting movement being made, reverse junction switch, then be governed by signal indication.

Junction switch must be restored to normal position after being used.

Trains on Missouri Pacific connection will, if there is no conflicting movement being made, reverse junction switch, then be governed by signal indication.

Junction switch must be restored to normal position after being used.

Should a train be standing in clearing section and is desired for another train to move first, it will be necessary for train first named to back out of clearing section.

Should signals fail to indicate proceed after waiting five minutes; and it is evident there is no conflicting movement being made, a train may proceed to the opposite signal when preceded by a flagman of that train.

5. Atchison:  
Trains must receive BN Clearance from Missouri Pacific operator, and from 11 P.M. to 4 P.M. daily will register by ticket.

From 4 P.M. to 11 P.M. daily, trains are not required to register unless instructed to do so.

BN tracks are yard tracks.

Railroad crossing at Atchison track 5 and Missouri Pacific old main track between Signal 3305-R and Missouri Pacific main track is not connected with the signal system. This crossing must be protected against conflicting train and engine movements by a member of crew.

When making movement to MoPac track, before occupying 4th Street crossing, a member of crew must know that crossing protection is operating. If crossing protection is not operating, insert switch key in box marked "BN" located northeast of crossing and turn key.

Maximum Speed . . . . .	30
Over Missouri River Bridge . . . . .	15

## FIFTH SUBDIVISION

1. Yard Limit in effect between N&W Junction and Des Moines.
2. Engines must not operate over heater pits on heater track or thaw pits Iowa Power Light Spur Des Moines.
3. The following restrictions apply over bridge 67.43:  
SD 7 and SD-9 must not operate. Engines 200 to 289, 9350 to 9379 series single unit 10 M.P.H., doublehead 6 M.P.H. Engines 116 to 136, 160 to 169 series four units or less, and engines 9130 to 9153, 9103 to 9107, 9300 and 9308 series 10 M.P.H. Engines 9916 to 9997 three or more units, may operate on detour only at 6 M.P.H. Engines 9200 to 9270 and 9400 to 9414, single unit 6 M.P.H. and two or more units must not operate.
4. When trains are operated with more than one engine, restricted from double-heading, engines must be separated by not less than five cars, or operated separately over the bridges.

SPEED RESTRICTIONS	M.P.H.
Through turn-out N&W Junction . . . . .	30
MP 63.15 (N&W Jct.) to MP 64.55 . . . . .	30
MP 64.55 to Des Moines . . . . .	20
Over Bridge 67.43. . . . .	20
1200-H.P. diesel switch engines . . . . .	6
Diesel engines, single or multiple units . . . . .	10
Diesel engines doubleheaded, must have at least 5 light cars between the engines . . . . .	6
Eastward between approach and absolute signals at CRI&P Crossing M.P. 65.7 . . . . .	20
Maury Street, Des Moines . . . . .	10
18th Street, Freight trains protect movement . . . . .	Stop
Between 18th Street and Des Moines . . . . .	10
East Sixth Street, Des Moines freight yard . . . . .	6
Loaded tank cars . . . . .	25

**SIXTH SUBDIVISION**

1. Unless otherwise provided, protection against following trains as required by Rule 99 is not required.
2. Lights on train order signals will not be displayed.
3. Trains will not register at Albany Junction and Giles unless directed to do so by train order.
4. Eastward trains and engines, after stopping for C.R.I. & P. crossing Eighth Street, St. Joseph, must protect movement over the crossing.

**SPEED RESTRICTIONS**

	M.P.H.
Maximum Speed:	
M.P. 0.83-M.P. 4.00 . . . . .	45
M.P. 4.00-M.P. 9.55 . . . . .	35
M.P. 9.55-M.P. 10.20 . . . . .	30
M.P. 10.20-M.P. 46.20 . . . . .	35
Over Highway crossing M.P. 33.14 . . . . .	15
M.P. 46.20-M.P. 47.45 . . . . .	30
M.P. 47.45-M.P. 57.00 . . . . .	35
M.P. 57.00-M.P. 75.00 . . . . .	25
M.P. 75.00-M.P. 106.00 . . . . .	35
Over Highway No. 85, M.P. 94.40 . . . . .	10
Over turnout each end Albany Yard . . . . .	10
1000 H.P. diesels or heavier over Bridge 98.18 . . . . .	25
1000 H.P. diesel engines or heavier doubleheaded over Bridge 98.18 . . . . .	15
Loaded cement hopper cars over Bridge 98.18 . . . . .	10
M.P. 106.00-M.P. 106.65 . . . . .	30
M.P. 106.65-M.P. 114.95 . . . . .	35
M.P. 114.95-M.P. 115.80 . . . . .	30
M.P. 115.80-M.P. 141.39 . . . . .	35
1000 H.P. diesel engines or heavier over Bridge S 138.33 . . . . .	10

**AIR BRAKE RULES AND INSTRUCTIONS**

The following rules and instructions are for trainmen and engineers whose duties are connected with the operation of the air brake equipment.

1. Conductors and trainmen must familiarize themselves with the operation of the brakes on all cars in their charge and with the rules pertaining to the handling of trains with air brakes.
2. Each train must have the air brakes on all cars in effective operating condition, except in case of emergency, but at no time shall the number of operative air brakes be less than 85% of the total.
3. All trains must be given an initial terminal road train air brake inspection and test at points: (1) Where train is originally made up (Initial Terminal); (2) Where train consist is changed other than by adding or removing a solid block of cars and the train brake system remains charged; (3) Where train is received in interchange.

**INITIAL TERMINAL ROAD TRAIN AIR BRAKE TESTS**

5(a). Train air brake system must be charged to required air pressure, angle cocks and cutout cocks must be properly positioned, air hose must be properly coupled and must be in condition for service. An examination must be made for leaks and necessary repairs made to reduce leakage to a minimum. Retaining valves must be inspected and known to be in condition for service.

5(b). After the air brake system on a freight train is charged to within 15 pounds of the setting of the feed valve on the locomotive, but to not less than 60 pounds, as indicated by an accurate gauge at rear end of train, and on a passenger train when charged to not less than 70 pounds, and upon receiving the signal to apply brakes for test, a 15 pound brake pipe service reduction must be made in automatic brake operation, the brake valve lapped, and the number of pounds of brake pipe leakage per minute noted as indicated by brake pipe gauge, after which brake pipe reduction must be increased to full service. Inspection of the train brakes must be made to determine that angle cocks are properly positioned, that the brakes are applied on each car, that piston travel is correct, that brake rigging does not bind or foul, and that all parts of the brake equipment are properly secured. When this inspection has been completed, the release signal must be given and brakes released and each brake inspected to see that all have released.

6. When the engine used to haul the train is provided with means for maintaining brake pipe pressure at a constant level during service application of the train brakes, this feature must be cutout during train air brake tests.

7. Brake pipe leakage must not exceed 5 pounds per minute.

**PISTON TRAVEL**

8(a). At initial terminal, piston travel of body mounted brake cylinders which is less than 7 inches or more than 9 inches must be adjusted to nominally 7 inches.

8(b). Minimum brake cylinder piston travel of truck mounted brake cylinders must be sufficient to provide proper brake shoe clearance when brakes are released. Maximum piston travel must not exceed 6 inches.

8(c). Piston travel of brake cylinders on freight cars equipped with other than standard single capacity brake, must be adjusted as indicated on badge plate or stenciling on car located in a conspicuous place near brake cylinder.

9. During standing test, brakes must not be applied or released until proper signal is given.

10. When train air brake system has been tested from a yard test plant as prescribed and air brake system remains charged until road motive power is coupled to train, the air brake test required is an automatic brake application and release of air brakes on rear car.

## INTERMEDIATE TERMINAL ROAD TRAIN AIR BRAKE TESTS

11(a). Passenger train: Before motive power is detached or angle cocks closed, except when closing angle cock for cutting off one or more cars from the rear end of train, automatic air brake must be applied. After recoupling, brake system must be recharged to required air pressure and before proceeding and upon receipt of proper request or signal, application and release tests of brakes on rear car must be made from the locomotive in automatic brake operation.

11(b). Freight trains: Before motive power is detached or angle cocks are closed, brakes must be applied with a full service brake pipe reduction. After recoupling and angle cocks are opened, it must be known that brake pipe air pressure is being properly restored as indicated by the caboose gauge and that brakes on rear car are released. In the absence of a caboose gauge, air brake test must be made as prescribed by paragraph (a).

12. At a point other than initial terminal where locomotive or caboose is changed, or where one or more consecutive cars are cut off from rear end or head end of train with consist otherwise remaining intact, after train brake system is charged to within 15 pounds of feed valve setting on locomotive but not less than 60 pounds as indicated at rear of freight train, and on a passenger train to at least 70 pounds, a 20 pound brake pipe reduction must be made and it must be determined that brakes on rear car apply and release properly.

13. At a point other than a terminal where one or more cars are added to a train, and after the train brake system is charged to not less than 60 pounds as indicated by a gauge at the rear of freight train and on a passenger train to not less than 70 pounds, tests of air brakes must be made to determine that brake pipe leakage does not exceed five (5) pounds per minute as indicated by the brake pipe gauge after a 15 pound brake pipe reduction. After the leakage test is completed, brake pipe reduction must be increased to full service, and it must be known that the brakes on each of these cars and on the rear car of train apply and release.

14. At a terminal where cars which have been previously charged and tested are added to a train, test must be made to determine that brakes on the rear car of train apply and release.

At terminals where cars which have not been previously charged and tested are added to a train, such cars must receive initial terminal road-train air brake test and it must be determined that the brakes on the rear car of the train apply and release.

15. Transfer train and yard train movements not exceeding 20 miles, must have the air brake hose coupled between all cars, and after the brake system is charged to not less than 60 pounds, a 15 pound service brake pipe reduction must be made to determine that the brakes are applied on each car before releasing and proceeding.

16. When more than one engine is attached to a train, the engineer of the leading engine shall operate the brakes. On all other motive power units in the train the brake pipe cutout cock to the brake valve must be closed, the maximum main reservoir pressure maintained and brake valve handles kept in the prescribed position. In case it becomes necessary for the leading engine to give up control of the train short of the destination of the train, a test of the brakes must be made to see that the brakes are operative from the automatic brake valve of the engine taking control of the train.

## RUNNING TEST

17. When motive power, engine crew or train crew has been changed, angle cocks have been closed except for cutting off one or more cars from the rear end of train, running test of train air brakes on passenger train must be made, as soon as speed of train permits, by use of automatic brake. Power must not be shut off unless required and running test must be made by applying train air brakes with sufficient force to ascertain whether or not brakes are operating properly. If air brakes do not properly operate, train must be stopped, cause of failure ascertained and corrected and running test repeated.

## BACK UP MOVEMENTS

18. When back up movement is to be controlled with a standard hose or valve, the brakes must be applied from the back up hose or valve and released from the engine before movement is started.

When backing a train, the engine brake valve must be in running position.

Movement must not be started until proper signal is given. A running test must be made with the back up hose or valve before the train has moved 300 feet; if the running test is not made within 300 feet, the engineer must stop the train and ascertain the cause.

19. If the brake pipe on a passenger car is broken, pass brake pipe air through signal line on car by use of emergency hose at each end. The communicating signal will be inoperative behind this car. Engineer must be notified of this condition.

20. Conductors and trainmen must familiarize themselves with the location of emergency air brake valves in their train.

The emergency air brake valve located in all passenger, baggage and express cars and brake valve in cabooses of freight trains must not be used unless absolutely necessary. If an emergency arises where the train must be stopped as quickly as possible to avoid danger to life or property, open the emergency air brake valve wide and leave it open until the train stops.

21. If it is necessary to stop a train due to inability to transmit signal to the engineer, open the brake valve carefully and after the brakes begin to apply, gradually increase the exhaust until it is sufficient to keep the brakes applied to the stop.

22. Hand brakes must be released on cars before leaving terminals and on cars added to the train enroute. It must be ascertained that brakes are released on both trucks before moving the car.

23. Unless otherwise specified by special instructions, the feed valve on engines will be adjusted to regulate brake pipe pressure as follows:

Passenger	110 pounds
Freight	80 pounds