

**THE  
CONSOLIDATED CODE  
OF  
OPERATING RULES  
AND  
GENERAL INSTRUCTIONS**

EDITION OF 1945

This book is the property of the

**CHICAGO, MILWAUKEE, ST. PAUL AND  
PACIFIC RAILROAD COMPANY**

and is loaned to

Name	Occupation

who hereby agrees to return it to the proper officer when called for, or upon leaving the service.

Consolidated Code of Operating Rules and General Instructions.—Revised 1945.

The rules herein set forth govern the railroads operated as listed below. They take effect December 1, 1945, superseding all previous rules and instructions inconsistent therewith.

Special instructions may be issued by proper authority.

**CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC  
RAILROAD COMPANY**

*J. P. Kiley, President.*

*L. F. Donald, Vice President.*

**DULUTH, SOUTH SHORE AND ATLANTIC  
RAILWAY COMPANY**

**MINERAL RANGE RAILROAD COMPANY**

*E. A. Whitman, P. L. Solether, Trustees.*

*H. F. Schmidt, Superintendent.*

**GREAT NORTHERN RAILWAY COMPANY  
AND AFFILIATED LINES**

*C. O. Jenks, Vice President.*

**MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE  
RAILROAD COMPANY**

*R. L. Simpson, General Manager.*

**NORTHERN PACIFIC RAILWAY COMPANY  
AND AFFILIATED LINES**

*H. E. Stevens, Vice President.*

**SPOKANE INTERNATIONAL RAILROAD  
COMPANY**

*E. S. McPherson, President and General Manager.*

**SPOKANE, PORTLAND AND SEATTLE RAILWAY  
COMPANY AND AFFILIATED LINES**

*T. F. Dixon, Vice President and General Manager.*

**UNION PACIFIC RAILROAD COMPANY  
NORTHWESTERN DISTRICT**

*M. C. Williams, General Manager.*

## GENERAL NOTICE.

Safety is of the first importance in the discharge of duty.

Obedience to the rules is essential to safety.

To enter or remain in the service is an assurance of willingness to obey the rules.

The service demands the faithful, intelligent and courteous discharge of duty.

To obtain promotion, ability must be shown for greater responsibility.

## GENERAL RULES.

A. Employees whose duties are prescribed by these rules must obtain a copy from the proper officer.

Employees whose duties are in any way affected by the time-table must, while on duty, have a copy of the current time-table in their possession.

B. Employees must be conversant with and obey the rules and special instructions. If in doubt as to their meaning they must apply to proper authority for an explanation.

C. Employees must pass the required examinations.

D. Persons employed in any service on trains are subject to the rules and special instructions.

E. Employees must render every assistance in their power in carrying out the rules and special instructions and must report to the proper officer any violation thereof.

F. Accidents, failure in the supply of water or fuel, defects in track, bridges, signals, or any unusual conditions which may affect the movement of trains, must be promptly reported by wire to the proper authority.

G. The use of intoxicants or narcotics is prohibited.

H. The use of tobacco by employes on duty in or about passenger stations, or on passenger cars, is prohibited.

J. Employees on duty must wear the prescribed badge and uniform and be neat in appearance.

K. To avoid annoyance to the public, employes and others authorized to transact business at stations and on or about trains, must be courteous, orderly and quiet.

L. In case of danger to the Company's property employes must unite to protect it.

M. Employees must exercise care to prevent injury to themselves or others by observing the condition of equipment and the tools which they use in performing their duties and when found defective will, if prac-

licable, put them in safe condition, reporting defects to the proper authority.

They must inform themselves as to the location of structures or obstructions where clearances are close.

They must expect trains to run at any time, on any track, in either direction.

They must not stand on the track in front of an approaching engine or car for the purpose of boarding the same.

Employees of the railroads governed by the rules of the Consolidated Code will be governed by the Safety Instructions of the railroad by which they are employed and also when working for their company upon the property of other railroads which are also governed by the rules of the Consolidated Code.

#### DEFINITIONS.

**Engine.**—A unit propelled by any form of energy and used in train or yard service.

**Train.**—An engine or more than one engine coupled, with or without cars, displaying markers.

**Regular Train.**—A train authorized by a time-table schedule.

**Section.**—One of two or more trains running on the same schedule displaying signals or for which signals are displayed.

**Extra Train.**—A train not authorized by a time-table schedule. It may be designated as—

Extra—for any extra train except passenger extra or work extra;

Passenger extra—for passenger train extra;

Work extra—for work train extra.

**Superior Train.**—A train having precedence over another train.

**Train of Superior Right.**—A train given precedence by train order.

**Train of Superior Class.**—A train given precedence by time-table.

**Train of Superior Direction.**—A train given precedence in the direction specified by time-table as between opposing trains of the same class.

**Time-Table.**—The authority for the movement of regular trains subject to the rules. It contains the classified schedules of trains with special instructions relating to the movement of trains.

**Schedule.**—That part of a time-table which prescribes class, direction, number and movement for a regular train.

**Division.**—That portion of a railroad assigned to the supervision of a superintendent.

**Subdivision.**—A portion of a division designated by time-table.

**Main Track.**—A track extending through yards and between stations, upon which trains are operated by time-table or train order, or both, or the use of which is governed by block signals.

**Single Track.**—A main track upon which trains are operated in both directions.

**Double Track.**—Two main tracks, upon one of which the current of traffic is in a specified direction, and upon the other in the opposite direction.

**Three or More Tracks.**—Three or more main tracks upon any of which the current of traffic may be in either specified direction.

**Current of Traffic.**—The movement of trains on a main track, in one direction, specified by the rules.

**Station.**—A place designated on the time-table by name.

**Siding.**—A track auxiliary to the main track for meeting or passing trains.

**Fixed Signal.**—A signal of fixed location indicating a condition affecting the movement of a train or engine.

**Note.**—The definition of a "Fixed Signal" cov-

ers such signals as switch, train order, block, interlocking, semaphore, disc, stop signs, yard limit signs, reduce speed and resume speed signs, and other means for displaying indications that govern the movement of a train or engine.

**Yard.**—A system of tracks within defined limits provided for the making up of trains, storing of cars and other purposes, over which movements not authorized by time-table, or by train order, may be made, subject to prescribed signals and rules, or special instructions.

**Yard Engine.**—An engine assigned to yard service and working within yard limits.

**Pilot.**—An employe assigned to a train when the engineer or conductor, or both, are not fully acquainted with the physical characteristics or rules of the railroad, or portion of the railroad, over which the train is to be moved.

**Train Register.**—A book or form which may be used at designated stations for registering signals displayed, the time of arrival and departure of trains and such other information as may be prescribed.

**Bulletin.**—Advice of conditions affecting the movement or safety of trains.

**Restricted Speed.**—Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced.

### OPERATING RULES.

**Note.**—Rules with a prefix "S" are for single track; those with a prefix "D" are for double or three or more tracks. Rules without a prefix are for single, double and three or more tracks. The prefixes "S" and "D" to be printed in italics.

The term "subdivision" as used in the rules will also

apply to a division where subdivisions are not shown in time-table.

### STANDARD TIME.

1. Standard Time obtained from an authorized observatory will be transmitted to all points from designated offices at 11 a. m. Central Time, 10 a. m. Mountain Time, 9 a. m. Pacific Time, daily.

2. Watches that have been examined and certified to by a designated inspector must be used by conductors, engineers, brakemen, flagmen, firemen, yardmasters, foremen of yard engines, outside hostlers, main track switch tenders, engine herders and other employes as may be designated. The certificate in prescribed form must be renewed and filed with the watch inspector during the month of August each year.

(Form of Certificate.)

### CERTIFICATE OF WATCH INSPECTOR

This is to certify that on....., 19.....  
the watch of .....  
employed as .....  
on the ..... R....., was  
examined by me. It is correct and reliable, and, with  
proper care, should run within a variation of thirty seconds  
per week.

Name of maker .....  
Grade .....  
Number of movement .....  
Open or hunting case .....  
Metal of case .....

Signed,

.....  
Inspector.

Address .....

2 (A). Watches subject to inspection must be presented at monthly intervals to a designated inspector

for comparison and registration on prescribed form. Watch comparison should be made as nearly as possible at thirty-day intervals.

3. Unless otherwise provided, the watches of conductors, engineers, yardmasters and foremen of yard engines must be compared with a standard clock before commencing each day's work. The time when watches are compared must be registered on a prescribed form. The location of standard clocks is shown in the time-table.

3 (A). Conductors, engineers, yardmasters and foremen of yard engines who do not have access to a standard clock must compare their watches daily with each other and with conductors and engineers who have standard time and have registered, or with the train dispatcher and make a record of such comparison on the back of the time-slip, showing time, place, and with whom comparison was made.

Conductors, and foremen of yard engines, must compare time with their engineers before starting each trip or day's work, and at the first opportunity, other members of the crew must compare time with the conductor or engineer. Employees governed by time service rules must know that their watches are wound.

3 (B). Train order operators must know that the clock or watch used by them indicates correct time.

#### TIME-TABLES.

4. Each time-table, from the moment it takes effect, supersedes the preceding time-table, and its schedules take effect on any subdivision, at the leaving time at their initial stations on such subdivision. But when a schedule of the preceding time-table corresponds in number, class, day of leaving, direction, and initial and terminal stations with a schedule of the new time-table, a train authorized by the preceding time-table will re-

tain its train orders and assume the schedule of the corresponding number of the new time-table.

Schedules on each subdivision, date from their initial stations on such subdivision.

Not more than one schedule of the same number and day shall be in effect on any subdivision.

Note.—Day of leaving under this rule means the day of the week that the schedule authorizes a train to leave its initial station.

4 (A). Notice of new time-tables will be bulletined. During a period commencing 24 hours before and continuing for six days after a new time-table takes effect, notice by train order form T will be issued to conductors, engineers, yardmasters and foremen of yard engines.

5. Not more than two times are given for a train at any station; where one is given, it is, unless otherwise indicated, the leaving time; where two, they are the arriving and the leaving time.

Schedule meeting or passing stations are indicated by figures in full-faced type.

Both the arriving and leaving time of a train are in full-faced type when both are meeting or passing times, or when one or more trains are to meet or pass it between those times.

Where there are one or more trains to meet or pass a train at any station, attention is called to it by the numbers of the trains to be met or passed in small figures, adjoining.

When trains are to be met or passed at a siding extending between two adjoining stations, the time at each end of the siding will be shown in full-faced type.

S-5. Unless otherwise specified, the time applies at the switch where an opposing train enters the siding; where there is no siding, it applies to the place from which fixed signals are operated; where there is neither

siding nor fixed signal, it applies to the place where traffic is received or discharged.

D-5. Unless otherwise specified, in double or three or more track territory, the time applies to the place from which fixed signals are operated; where there is no fixed signal, it applies to the place where traffic is received or discharged.

6. The following letters, when placed before the figures of the schedule, indicate:

L.—leave;

A.—arrive;

s.—regular stop;

f.—flag stop to receive or discharge traffic.

6 (A). The following letters, when placed in the columns provided, indicate:

B—bulletins;

C—coal;

D—day operator;

N—night operator;

DN—day and night operator;

H—hog drenching;

I —interlocking;

J —junction;

K—standard clock;

M—railroad crossing protected by signals or gates;

O—oil;

P—telephone;

R—train register;

T—turntable;

V—track connection with foreign railroad;

W—water;

X—yard limits;

Y—wye;

Z—track scales.

#### SIGNALS.

7. Employes whose duties may require them to give

signals, must provide themselves with the proper appliances, keep them in good order and ready for immediate use.

7 (A). Signals must be used strictly in accordance with the rules, and trainmen, yardmen, enginemen, and all concerned must keep a constant lookout for them. Those giving signals must locate themselves so as to be plainly seen, and give them so as to be plainly understood. The utmost care must be exercised by trainmen, yardmen and enginemen to avoid taking signals that may be intended for other trains or engines. Unless trainmen, yardmen and enginemen are positive that signals given are for them, they will not move their train until communication is made by words. When backing or pushing a train or cars, the disappearance from view of trainmen or light by which signals are given, must be regarded as a stop signal, except when leading car is equipped with a back-up air brake hose or pipe and whistle in charge of a trainman.

7 (B). Crews of trains clear of main track must not give a proceed signal to an approaching train.

7 (C). Where there are close side clearances, or where conditions require, employes will, if practicable, work on the opposite side.

8. Flags (cloth, metal, or other suitable material) of the prescribed color must be used by day, and lights of the prescribed color by night.

8 (A). Electric lanterns may be used for displaying white lights only. Their use for displaying colored lights for signaling purposes is not permitted, except as specifically authorized.

9. Day signals must be displayed from sunrise to sunset, but when day signals cannot be plainly seen, night signals must be used in addition.

Night signals must be displayed from sunset to sunrise.

10. COLOR SIGNALS.

Color.	Indication.
(a) Red.	Stop.
(b) Yellow.	Proceed as prescribed by the Rules.
(c) Green.	Proceed, and for other uses prescribed by the Rules.
(d) Green and white.	Flag stop. See Rule 28.
(e) Blue.	See Rule 26.
(f) Purple.	When used on siding derails; stop.

(g) When a red flag or a red light is found between the rails of the track, or on the engineer's side of the track, train must stop and not proceed until proper verbal information is obtained, or written information is found with red signal, or proceed signal given with yellow flag or yellow light, is received from foreman in charge. Red signal must be replaced when found between the rails.

(h) When a yellow flag or a yellow light is found on the engineer's side of the track, or is displayed by a flagman, train must be prepared to stop at a red signal one and one-fourth miles from the yellow signal. In the absence of a red signal at that location, train may proceed at a speed of not more than ten miles per hour unless a different speed is specified by train order or bulletin, until a green flag or green light is found on the engineer's side of track, indicating that slow track has been passed. Speed must not be increased above that specified until entire train has passed over the slow track and rear trainman will give proceed signal when rear of train has passed green signal.

If a flagman is at the yellow signal, the signal must be acknowledged, Rule 14 (g).

11. A train finding a fusee burning red on or near its track must stop and extinguish the fusee, and may then proceed prepared to stop short of train or obstruction within the first mile.

11 (A). Fusees must not be placed where they might set fire to anything, nor on public road crossings.

12. HAND, FLAG AND LIGHT SIGNALS.

Note.—The hand, or a flag, moved the same as the light, as illustrated in the following diagrams, gives the same indication, except in the observance of Rule 12 (a) the hand or flag movement may be above the shoulder.

12a.



STOP.

Swung across the track.

12b.



REDUCE SPEED.

Held horizontally at arm's length.



12c.



**PROCEED.**

Raised and lowered vertically.

12d.



**BACK.**

Swung vertically in a circle at half arm's length across the track.

12f.



**APPLY AIR BRAKES.**

Swung horizontally above the head, when standing.

12g.



**RELEASE AIR BRAKES.**

Held at arm's length above the head, when standing.

12h. Any object waved violently by any one on or near the track is a signal to stop.

**14. ENGINE WHISTLE SIGNALS.**

The whistle must be sounded where required by rule or law. In case of whistle failure, speed of train must be reduced and the bell rung continuously when approaching and passing through stations, yards, over public crossings, and around curves.

The signals prescribed are illustrated by "o" for short sounds: "—" for longer sounds. The sound of the whistle should be distinct, with intensity and duration proportionate to the distance signal is to be conveyed.

In sounding signal 14 (1) for public crossings, the first of the long sounds must be started at such a point that the signal will be completed by ending the last sound immediately after passing over the crossing, prolonging it if necessary. The duration of the complete signal must be not less than ten seconds. To avoid unnecessary annoyance, the sounds should be no louder than necessary to give adequate warning to traffic in the vicinity of the crossing. Except in case of emergency, the whistle must not be sounded while passing or being passed by a passenger train.

Sound.	Indication.
(a) o	Apply brakes. Stop.
(b) — —	Release brakes. Proceed.
(c) — o o o	Flagman protect rear of train.
(d) — — — —	Flagman may return from west or south, as prescribed by Rule 99.
(e) — — — — —	Flagman may return from east or north, as prescribed by Rule 99.
(f) o o o —	Protect front of train.
(g) o o	Answer to 14 (k) or any signal not otherwise provided for.
(h) o o o	When standing, back. Answer to 12 (d) and 16 (c). When running, answer to 16 (d).
(j) o o o o	Call for signals.
(k) — o o	<b>SINGLE TRACK</b> —To call attention of engine and train crews of trains of the same class, inferior trains and yard engines, and of trains at train order meeting points to signals displayed for a following section. If not answered by a train, the train displaying signals must stop, notify them and ascertain the cause.

Sound.	Indication.
(k) — o o	<b>DOUBLE OR THREE OR MORE TRACKS</b> —To call attention of engine and train crews of trains of the same class and to inferior trains moving in the same direction and to yard engines to signals displayed for a following section.  Note.—Where single track is in use with portions of double or three or more tracks, this signal will also be given to trains in the opposite direction.
(l) — — o —	Approaching public crossings at grade, tunnels, snowsheds and obscured curves; also as frequently as necessary when moving in fogs, storms or obscured places to warn trackmen and others.
(m) — — — — —	Approaching stations, junctions, railroad crossings at grade, draw bridges, and mail cranes located between stations.
(n) — — o	Approaching meeting or waiting points. Answer to 16 (l). See Rule S-90.
(o) o —	Inspect train line for leak or for brakes sticking.
(p) Succession of short sounds.	Alarm for persons or live stock on the track.

Sound.	Indication.
(q) — o	When running against the current of traffic: (1) Approaching stations, curves, or other points where view may be obscured. (2) Approaching passenger or freight trains and when passing freight trains. (3) Preceding the signals prescribed by (d) and (e).
(r) — — — — o	Flagman may return from east or north on 3 track or diverging line, as prescribed by Rule 99.
(s) — — — — o	Flagman may return from west or south on 3 track or diverging line, as prescribed by Rule 99.
(t) — — — — o o	Flagman may return from east or north on 4 track, as prescribed by Rule 99.
(u) — — — — o o	Flagman may return from west or south on 4 track, as prescribed by Rule 99.
(v) — — — — o o o	Flagman may return from east or north on 5 track, as prescribed by Rule 99.
(w) — — — — o o o	Flagman may return from west or south on 5 track, as prescribed by Rule 99.
(z) o — o	Transfer of air brake control.

15. The explosion of two torpedoes is a signal to proceed at restricted speed for one mile. The explosion of one torpedo will indicate the same as two but the use of two is required.

Torpedoes must be placed not less than 100 feet apart and must not be placed at stations, on public crossings, or where they may cause injury.

THE ABOVE RULE NO. 15 DOES NOT APPLY ON LINES OPERATED BY THE UNION PACIFIC.

THE FOLLOWING RULE NO. 15 APPLIES ONLY ON LINES OPERATED BY THE UNION PACIFIC IN THE NORTHWESTERN DISTRICT COMPRISING THE WASHINGTON AND OREGON DIVISIONS.

15. The explosion of two torpedoes is a signal to immediately reduce speed to 20 miles per hour and proceed at that speed for a distance of one mile from the point where the torpedoes were placed, keeping a close lookout for train or obstruction. A slower speed must be observed where conditions require. The explosion of one torpedo will indicate the same as two, but the use of two torpedoes is required in all cases.

Torpedoes must be placed not less than 100 feet apart, and not in immediate vicinity of station buildings, or public crossings, or where they may cause injury.

In placing torpedoes during extremely cold weather or when they may be covered by snow, in addition to placing torpedoes on the rail on the engineer's side of track, duplicate sets of torpedoes must be placed on the other rail directly opposite those normally required.

#### 16. COMMUNICATING SIGNALS.

Note.—The signals prescribed are illustrated by "o" for short sounds; "—" for longer sounds.

Sound.	Indication.
(a) o o	When standing—start.
(b) o o	When running—stop at once.
(c) o o o	When standing—back.
(d) o o o	When running — stop at next passenger station.
(e) o o o o	When standing—apply or release air brakes.
(f) o o o o	When running—reduce speed.
(g) o o o o o	When standing—recall flagman.
(h) o o o o o	When running—increase speed.
(j) o o o o o o	When running — increase train heat.
(k) o o o o o o o	Shut off steam heat.
(l) —————	When running — brakes sticking; look back for hand signals; or approaching meeting or waiting points. See Rule S-90.

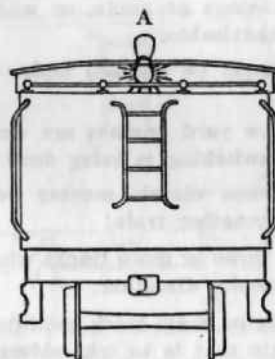
When practicable, hand signals will be given in addition to 16 (a) and 16 (c).

In case of failure of communicating signal system on passenger trains, arrangements must be made for engineer to receive hand signal before passing stations.

17. The headlight must be displayed to the front of trains by night and at any time the view is obscured by storm or fog and while passing through tunnels and snowsheds. It must be extinguished when a train turns out to meet another train and has stopped clear of the main track, or is standing to meet a train at the end of double or three or more tracks or a junction.

When an engine is running backward, a white light must be displayed by night on the rear of the tender.

Fig. 1.



Running backward by night, without cars or at the front of a train pulling cars.

White light at A.

S-17. When a train is to take siding to meet an opposing train, and the headlight of the train which is to take siding falls before train is clear of main track, or if view of headlight is obscured by cars or other obstructions, a member of the crew must be immediately sent ahead on main track to stop opposing train until main track is clear.

Until the headlight of a train turned out to meet another train is extinguished, it is an indication that the main track is obstructed. The opposing train must approach prepared to stop before passing the headlight and if the head end of train is clear of main track, may proceed only at restricted speed to the point where the main track may be obstructed.

17 (A). When the headlight falls enroute, a white light must be used in its place, the bell rung continuously while moving, the whistle sounded frequently, and the train dispatcher notified at the first opportunity.

17 (B). Headlights must not be dimmed in foggy or

stormy weather, or when closely approaching or passing over public crossings at grade, or when other conditions make it inadvisable.

Headlights should be dimmed under conditions outlined below:

In yards where yard engines are employed and at stations where switching is being done;

At stations when closely moving behind or when standing behind another train;

On double or three or more tracks when approaching train in the opposite direction;

While standing on main track awaiting arrival of an approaching train that is to take siding, but not until approaching train dims its headlight as a signal for the standing train to do likewise;

When passing engine or rear of train, to afford identification of moving train;

At other times to permit passing of signals or when the safety of employes or others requires.

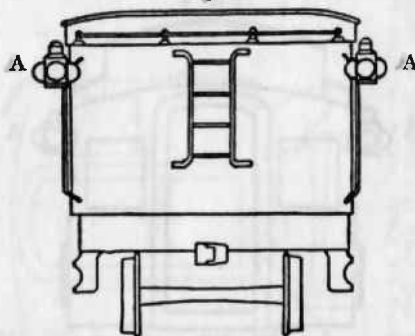
17 (C). On gas-electric, diesel-electric and electric powered trains, when full power headlight is not required it must be burning dim during daylight hours, except as prescribed by Rule 17.

18. Yard engines will display the headlight to the front and rear by night. When not provided with a headlight at the rear, a white light must be displayed.

18 (A). The headlight of engines, on the end that is coupled to cars, may be dimmed or extinguished while so coupled.

19. Unless otherwise provided, the following signals will be displayed to the rear of every train, as markers, to indicate the rear of the train.

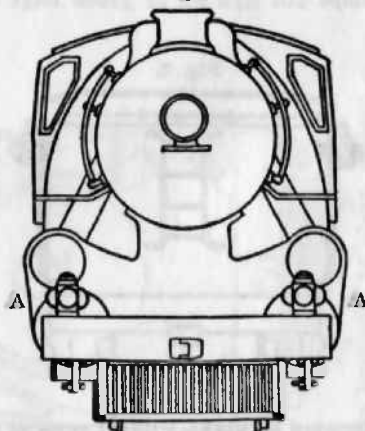
Fig. 2.



Running forward by day, without cars or at the rear of a train pushing cars.

Marker lamps not lighted, or green flags at A A as markers.

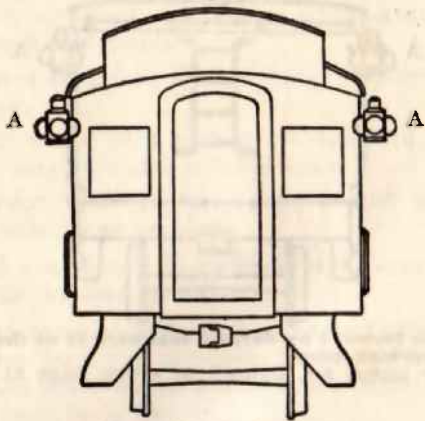
Fig. 3.



Running backward by day, without cars or at the rear of a train pushing cars.

Marker lamps not lighted, or green flags at A A as markers.

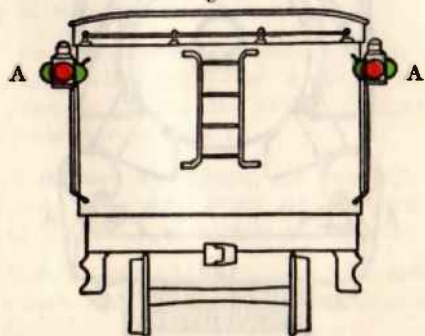
Fig. 4.



Rear of train by day.

Marker lamps not lighted, or green flags at A A as markers.

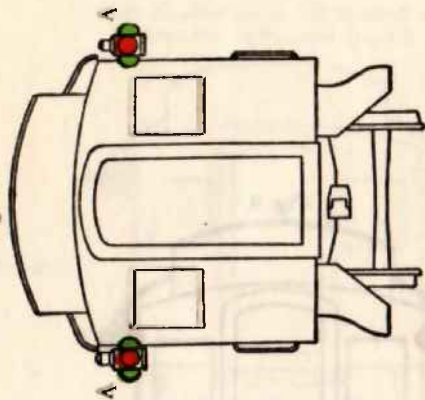
Fig. 5.



Running forward by night, without cars, or at the rear of a train pushing cars on single track and with the current of traffic on double or three or more tracks.

Lights at A A as markers, showing green to the front and side and red to the rear.

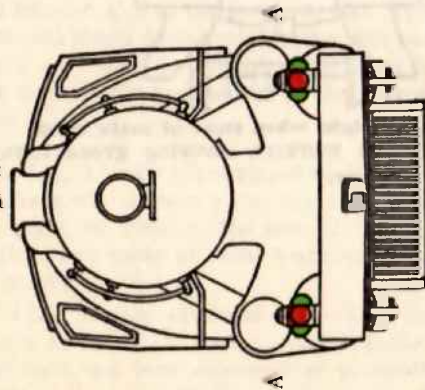
Fig. 7.



Rear of train by night while running on single track, and with the current of traffic on double or three or more tracks.

Lights at A A as markers, showing green to the front and side and red to the rear.

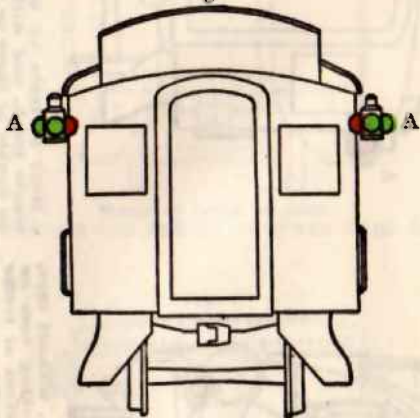
Fig. 6.



Running backward by night, without cars, or at the rear of a train pushing cars on single track, and with the current of traffic on double or three or more tracks.

Lights at A A as markers, showing green to side and in direction engine is moving and red in opposite direction.

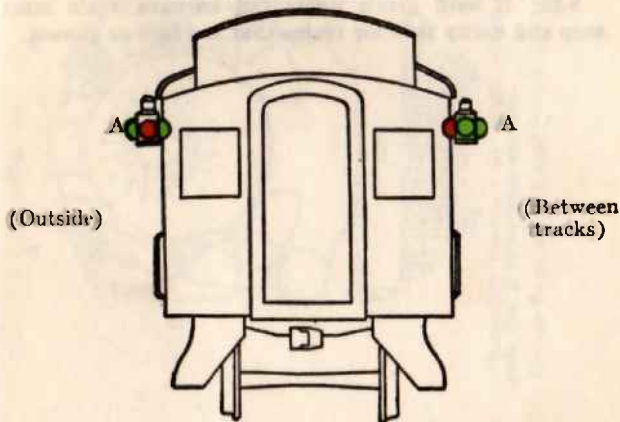
Fig. 8.



Rear of train by night when clear of main track.  
Lights at A A as markers, showing green toward front, side and to rear.

Fig. 9.

(This illustration is for a road which uses the right hand track.)



Rear of train by night when turned out against the current of traffic on double track.

Lights at A A as markers, showing green to front and side and green to the rear on the side next to the main track on which the current of traffic is in the direction the train is moving and red to the rear on the opposite side.

19 (A). A train not equipped to display the prescribed markers will display a red flag by day and a red light by night, to indicate the rear of the train, except by night when clear of main track, a white light will be displayed.

19 (B). Unless otherwise provided, train crews arriving at terminals must not remove the markers until the train has been delivered to connecting crew or is clear of the main track and the switch is closed.

20. All sections except the last will display two

green flags, and, in addition, two green lights by night in the places provided for that purpose on the front of the engine.

S-20. If both green lights fail enroute, train must stop and notify inferior trains that are met or passed.

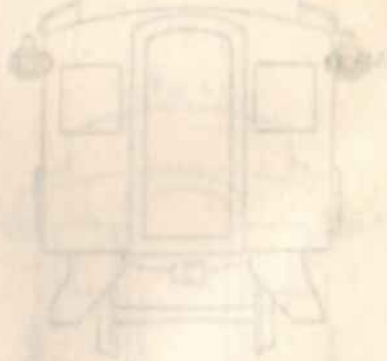
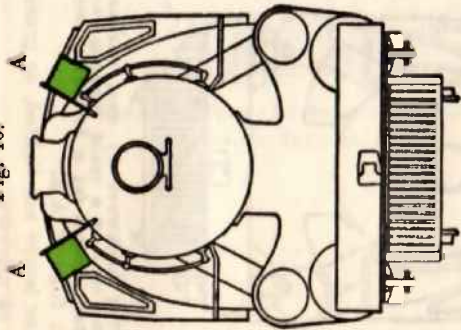


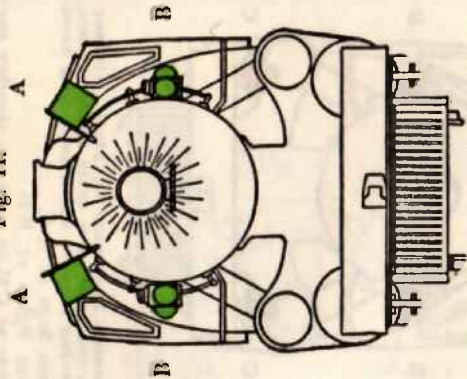
Fig. 10.



Running forward by day displaying signals for a following section.

Green flags at A.

Fig. 11.

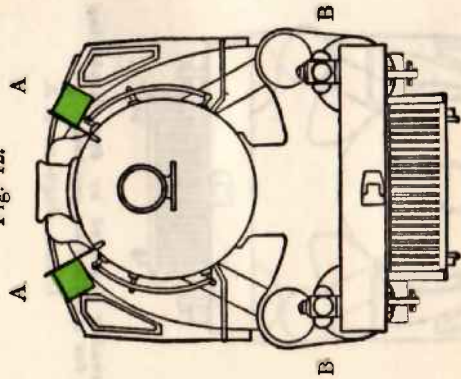


Running forward by night displaying signals for a following section.

Green flags at A and green lights at B.



Fig. 12.

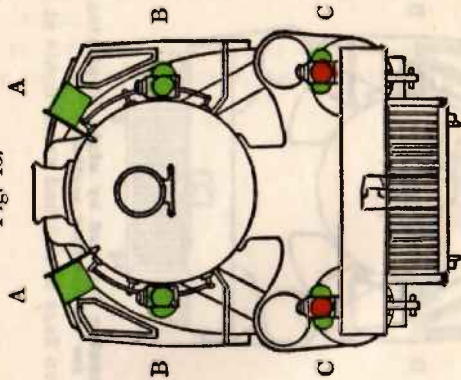


Running backward by day, without cars or at the rear of a train pushing cars, and displaying signals for a following section.

Green flags at A A.

Marker lamps not lighted, or green flags at B B as markers.

Fig. 13.



Running backward by night, without cars or at the rear of a train pushing cars, and displaying signals for a following section.

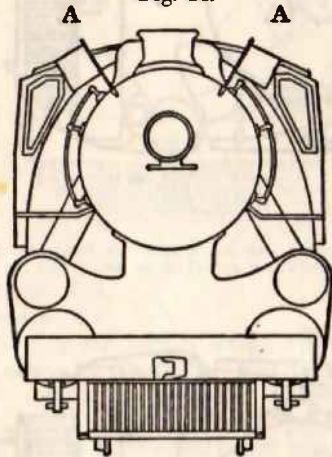
Green flags at A A.

Green lights at B B.

Lights at C C as markers, showing green to side and in direction engine is moving and red in opposite direction.

21. Extra trains will display two white flags and, in addition, two white lights by night, in the places provided for that purpose on the front of the engine.

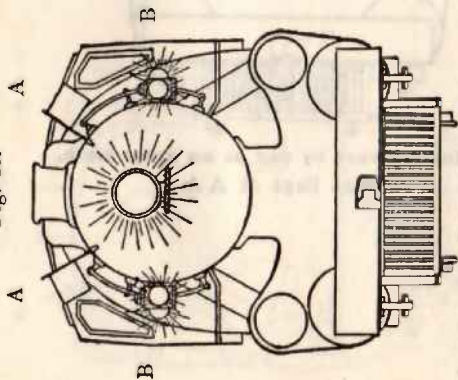
Fig. 14.



Running forward by day as an extra train.

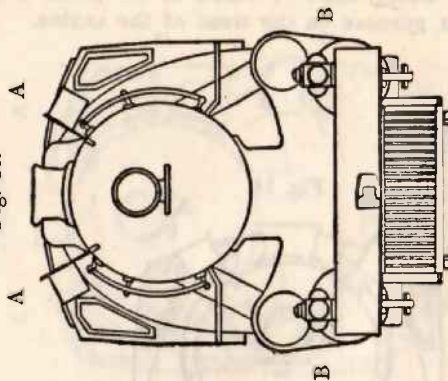
White flags at A A.

Fig. 15.



Running forward by night as an extra train.  
White flags at A A and white lights at B B.

Fig. 16.

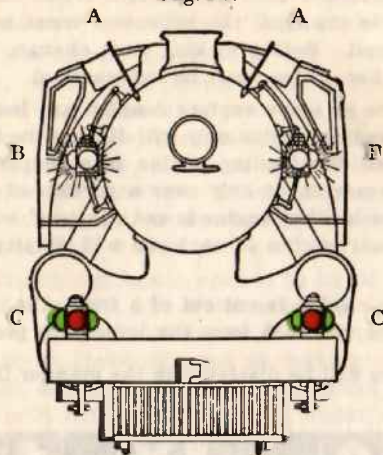


Running backward by day as an extra train, without cars, or at the rear of a train pushing cars.

White flags at A A.

Marker lamps not lighted, or green flags at B B as markers.

Fig. 17.



Running backward by night as an extra train, without cars, or at the rear of a train pushing cars.

White flags at A A.

White lights at B B.

Lights at C C as markers, showing green to side and in direction engine is moving and red in opposite direction.

22. When two or more engines are coupled together, each engine shall display the signals as prescribed by Rules 20 and 21 and the leading engine only will give and answer signals.

23. One flag or light displayed where in Rules 19, 20 and 21 two are prescribed will indicate the same as two except under Fig. 9; but the proper display of all train signals is required.

24. Trains may be identified by indicators displayed on the engine when so equipped, which must have the train number or engine number properly displayed. The train number must not be displayed until the engine

has been coupled onto the train. When the number of a train is changed, the indicators must be changed to correspond. Before making such change, the movement of other trains must be safeguarded.

When two or more engines coupled are handling the train the leading engine only will display the indicators, except when the leading engine is a helper or other engine for movement only over a portion of a subdivision. If the leading engine is not equipped with indicators, the next engine so equipped will display the indicators.

When an engine is cut out of a train, the train number must be removed from the indicators promptly.

Indicators will be displayed in the manner illustrated:



No. 2

Extra 162



First 2

Extra 7007



Engine Number

25. Each car of a passenger train must be connected with the engine by communicating signal appliance.

26. A blue signal, displayed at one or both ends of an engine, car or train, indicates that workmen are under or about it; when thus protected it must not be coupled to or moved. Each class of workmen will display the blue signals and the same workmen are alone authorized to remove them. Other equipment must not be placed on the same track so as to intercept the view of the blue signals, without first notifying the workmen.

When emergency repair work is to be done under or about cars in a train and a blue signal is not available, the engineer and fireman will be notified and protection must be given those engaged in making the repairs. Train must not be moved, nor air brakes applied or released, until employe is out from under or from between cars and yardman or trainman so advises the engineer.

#### USE OF SIGNALS.

27. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown, must be regarded as the most restrictive indication that can be given by that signal, except that when the day indication is plainly seen, it will govern.

Engine and train crews using a switch where the switch light is imperfectly displayed or absent, must, if practicable, correct or replace the light.

A signal imperfectly displayed or the absence of a signal at a place where a signal is usually shown must be promptly reported to the superintendent.

THE ABOVE RULE NO. 27 DOES NOT APPLY ON LINES OPERATED BY THE UNION PACIFIC.

THE FOLLOWING RULE NO. 27 APPLIES ONLY

ON LINES OPERATED BY THE UNION PACIFIC IN THE NORTHWESTERN DISTRICT COMPRISING THE WASHINGTON AND OREGON DIVISIONS.

27. A signal imperfectly displayed or the absence of a signal at a place where a signal is usually displayed, must be regarded as the most restrictive indication that could be given by that signal, except that when a light is not burning on a color light signal other than a Permissive signal, it must be regarded as a Stop signal.

When stop is made due to light not burning or being imperfectly displayed, trains or engines must, after stopping, be governed by the day indication of the signal.

Engine and train crews using a switch where the switch light is imperfectly displayed or absent, must, if practicable, correct or replace the light.

A signal imperfectly displayed or the absence of a signal at a place where a signal is usually displayed must be promptly reported to the train dispatcher.

28. A green and white signal will be used to stop a train to receive traffic only at the flag stations indicated on its schedule.

When necessary to stop a train for other purposes or at other stations, a red signal will be used.

29. When a signal, except a fixed signal, is given to stop a train, it must, unless otherwise provided, be acknowledged as prescribed by Rules 14 (g) or (h).

30. The engine bell must be rung when an engine is about to move and while approaching and passing public crossings at grade, stations and through tunnels and snowsheds.

32. The unnecessary use of either the whistle or the bell is prohibited.

33. Watchmen stationed at public crossings must use stop signals, when necessary to stop trains. They will use prescribed signals to stop highway traffic.

34. All members of train and engine crews must, when practicable, communicate to each other by its name, the indication of each signal affecting the movement of their train or engine.

35. The following signals will be used by flagmen:

Day signals—A red flag,

Torpedoes and Fusees.

Night signals—A red light,

Torpedoes and Fusees.

#### SUPERIORITY OF TRAINS.

S-71. A train is superior to another train by right, class or direction.

Right is conferred by train order; class and direction by time-table.

Right is superior to class or direction.

Direction is superior as between trains of the same class.

D-71. A train is superior to another train by right or class.

Right is conferred by train order; class by time-table.

Right is superior to class.

S-72. Trains of the first class are superior to those of the second; trains of the second class are superior to those of the third; and so on.

Trains in the direction specified by the time-table are superior to trains of the same class in the opposite direction.

D-72. Trains of the first class are superior to those of the second; trains of the second class are superior to those of the third; and so on.

73. Extra trains are inferior to regular trains.

## MOVEMENT OF TRAINS.

81. A main track must not be fouled or occupied without authority, unless protected as prescribed by Rule 99.

82. Time-table schedules, unless fulfilled, are in effect for twelve hours after their time at each station.

Regular trains more than twelve hours behind either their schedule arriving or leaving time at any station lose both right and schedule, and can thereafter proceed only as authorized by train order.

*S-83.* A train must not leave its initial station on any subdivision, or a junction, or pass from double or three or more tracks to single track, until it has been ascertained whether all trains due, which are superior, have arrived or left.

*S-83 (A).* When a train is required to meet, or wait for, an opposing extra train, or when an extra train has been made superior to an opposing train, the train register will not be used as evidence of the arrival of such extra train.

*D-83.* A train must not leave its initial station on any subdivision, or a junction, until it has been ascertained whether all superior trains due have left.

83 (A). Stations at which train registers are located are designated in the time-table.

Conductors of all trains, or engineers of engines without conductors, will register their trains in the train register at points designated by time-table. Where authorized, register ticket may be accepted by the operator who will register for the conductor and report trains to the train dispatcher from train register.

Conductors must fill out train register check on the prescribed form and deliver or have it delivered to engineer before leaving register stations.

The number of a section of a regular train will be

spelled out on clearances, train registers and register tickets.

83 (B). Unless otherwise provided, a train must not leave its initial station on any subdivision, without a clearance endorsed with O.K., the time and the superintendent's initials.

Operators must not issue a clearance to a train at its initial station on any subdivision without authority from the train dispatcher, except in case of failure of means of communication. In case of failure of means of communication, the clearance will be endorsed, "wire failure" with the time and operator's name, instead of the O.K. and superintendent's initials.

A train returning to its regular route at other than an initial station after having been detoured must not resume its schedule unless directed by train order to do so.

83 (C). Unless otherwise provided, a regular train must not be created at a station other than the initial station of the schedule except as authorized by train order.

84. A train must not start until the proper signal is given.

85. When a train of one schedule is on the time of another schedule of the same class in the same direction, it will proceed on its own schedule.

Trains of one schedule may pass trains of another schedule of the same class, and extra trains may pass or run ahead of second and third class trains and extra trains.

Third class trains may pass or run ahead of second class trains.

A section may pass and run ahead of another section of the same schedule, first exchanging train orders,

signals and numbers with the section to be passed. The change in sections must be reported from the next available point of communication.

86. Unless otherwise provided, an inferior train must be clear at the time a superior train in the same direction is due to leave the next station in the rear where time is shown.

87. Necessary identification of trains must be made at meeting points and at passing points.

*S-87.* An inferior train must keep out of the way of opposing superior trains and failing to clear the main track by the time required by rule must be protected as prescribed by Rule 99.

Extra trains must clear the time of opposing regular trains not less than five minutes unless otherwise provided, and will be governed by train orders with respect to opposing extra trains.

*S-88.* At meeting points between extra trains, the train in the inferior time-table direction must take the siding unless otherwise provided.

Trains must pull into the siding when practicable; if necessary to back in, the train must first be protected as prescribed by Rule 99.

*S-89.* At meeting points, the inferior train must take the siding and clear the time of the superior train not less than five minutes, except at schedule meeting points between trains of the same class, where the inferior train must clear the main track before the leaving time of the superior train.

The inferior train must pull into the siding when practicable. If necessary to back in, it must be protected as prescribed by Rule 99.

*S-89 (A).* At schedule meeting points between trains

of the same class, the superior train must stop clear of the switch used by the train to be met in going on siding unless switch is properly lined and track clear.

At train order meeting points, the train holding the main track must stop clear of the switch used by the train to be met in going on siding unless the train to be met is clear of the main track and switch is properly lined.

*S-90.* On trains equipped with communicating signal system the conductor must give signal 16 (l) to the engineer immediately after passing the last station but not less than one mile preceding a schedule meeting point with a train of the same or superior class or a point where by train order it is to meet, or has to wait for, an opposing train. The engineer will immediately reply with signal 14 (n). If the engineer fails to answer by signal 14 (n), the conductor must take immediate action to stop the train.

On other trains, the engineer will give signal 14 (n) at least one mile before reaching a meeting or waiting point.

91. Unless some form of block signals is used, trains in the same direction must keep not less than ten minutes apart, except in closing up at stations.

91(A). Unless otherwise provided, where no form of block signals is in use, operator on duty must space trains ten minutes apart. Trains must also be spaced ten minutes apart when moving against the current of traffic unless track is signalled for traffic in both directions.

When train order signal is used to space trains it must be placed to indicate stop after rear of train has passed signal. When clearance is used to space trains, operator must endorse on clearance the time train may go and train must not leave before that time.

92. A train must not leave a station in advance of its schedule leaving time.

93. Within yard limits the main track may be used, clearing first class trains when due to leave the last station where time is shown. In case of failure to clear the main track, protection must be given as prescribed by Rule 99.

Within yard limits the main track may be used without protecting against second and inferior class, extra trains and engines.

Within yard limits second and inferior class, extra trains and engines must move at restricted speed.

Within yard limits when running against the current of traffic or on a portion of double or three or more tracks used as single track, all trains and engines must move at restricted speed.

Note.—Approach or proceed automatic block signal indications do not supersede the provisions of Rule 93.

**THE ABOVE RULE NO. 93 DOES NOT APPLY ON LINES OPERATED BY THE UNION PACIFIC.**

---

**THE FOLLOWING RULE NO. 93 APPLIES ONLY ON LINES OPERATED BY THE UNION PACIFIC IN THE NORTHWESTERN DISTRICT COMPRISING THE WASHINGTON AND OREGON DIVISIONS.**

93. Within yard limits the main track may be used, protecting against first-class trains.

During foggy or stormy weather, trains and engines must provide proper flag protection, regardless of whether or not a first-class train is due.

All trains and engines must move within yard limits

prepared to stop unless the track is seen or known to be clear. (See Special Instructions, 105-R.)

Note.—Limits of yards are indicated by yard limit signs and the location of yards is shown in time-table.

94. A train which overtakes another train so disabled that it cannot proceed will pass it, if practicable, and if necessary will assume the schedule and take the train orders of the disabled train, proceed to the next available point of communication, and there report to the train dispatcher. The disabled train will assume the right or schedule and take the train orders of the last train with which it has exchanged, and will, when able, proceed to and report from the next available point of communication.

95. Two or more sections may be run on the same schedule.

Each section has equal time-table authority.

A train must not display signals for a following section, except as prescribed by Rule 85, without train order authority.

95 (A). When display of signals is to be discontinued at an intermediate train register station of a schedule, the train which is to continue movement beyond will take down the signals at the place where its train register is located; following sections which are to be discontinued at that station must clear main track at the first switch of the siding, except if siding is beyond train register location they must not occupy main track beyond location of the train register unless further movement is authorized by train order, Rule 93 or under protection as prescribed by Rule 99.

When signals are displayed to the terminal of a schedule on a subdivision, all sections have the same

time-table authority as the regular train has when no signals are displayed.

S-96. Unless otherwise provided, signals must not be ordered displayed to, nor taken down at, other than a register station for the train displaying the signals.

97. Unless otherwise provided, extra trains must be authorized by train orders.

D-97. Where specified on the time-table, extra trains, except work extras, may be authorized to run with the current of traffic by a clearance which will include clearance number, engine number and direction, thus "C & E Extra 77 West", and the name of the station to which the extra is authorized to run. Such clearance must be authorized by the train dispatcher and may be cancelled by train order, and must not be issued by an operator in case of wire failure.

Work extras must be authorized by train orders and unless otherwise provided, must move with the current of traffic.

98. Trains must approach the end of double or three or more tracks, junctions, railroad crossings at grade, and drawbridges, prepared to stop, unless the switches are properly lined, signals indicate proceed, and track is clear. Where required by rule or law, trains must stop.

98 (A). Unless otherwise provided, at a railroad crossing at grade not protected by signals, train or engine must make the required stop. A lookout must be maintained for conflicting movements and unless there is a clear view of at least two hundred feet of the other track on each side of the crossing from the point where the stop is made, the movement must be made at restricted speed. Where conditions require, a flagman must be sent ahead to protect the movement.

Where a railroad crossing at grade is protected by a

gate, if the gate is set against the route to be used, trains or engines must stop and remain at least fifty feet from the crossing until the gate is secured in proper position against the other route.

Where signals are operated in conjunction with the gate and do not indicate proceed when gate is secured against the other track, a member of the crew must proceed to the crossing, ascertain that gate is properly secured and if no conflicting movement is evident will give proceed signal. Train or engine must not proceed until proceed signal has been given. If a train or engine is approaching on a conflicting route, proceed signal must not be given until conflicting movement has been completed over the crossing or has come to a stop. Proceed signal must not be given until after a thorough understanding has been had with the crew of the train or engine stopped on the conflicting route.

When ready to proceed, signal 14 (b) must be sounded.

99. When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fuses. When recalled and safety to the train will permit, he may return.

When the conditions require, he will leave the torpedoes and a lighted fusee.

The front of the train must be protected in the same way when necessary by the forward brakeman, fireman, or other competent employe.

When a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure full protection. By night, or by day when the view is obscured, lighted fusees must be thrown off at proper intervals.

When day signals cannot be plainly seen, owing to



weather or other conditions, night signals must also be used. Conductors and engineers are responsible for the protection of their trains.

THE ABOVE RULE NO. 99 DOES NOT APPLY ON LINES OPERATED BY THE UNION PACIFIC.

THE FOLLOWING RULE NO. 99 APPLIES ONLY ON LINES OPERATED BY THE UNION PACIFIC IN THE NORTHWESTERN DISTRICT COMPRISING THE WASHINGTON AND OREGON DIVISIONS.

99. When a train stops, except when clear of the main track, the flagman must go back immediately with flagman's signals, a sufficient distance to insure full protection. One-half mile from the rear of his train he will place two torpedoes on the rail, continuing back one and one-fourth miles from the rear of his train he will place two torpedoes on the rail. He may then return to the two torpedoes one-half mile from rear of his train where he must remain until relieved by another flagman or is recalled by the whistle of his engine.

During foggy or stormy weather and in the vicinity of obscure curves or descending grades, or when other conditions require it, the flagman will increase the distance, placing two torpedoes at every one-fourth mile.

The front of the train must be protected in the same way when necessary.

After the flagman has the necessary torpedoes placed and has returned to the two torpedoes one-half mile from his train, when he is recalled by the engine whistle he may return if safety to his train will permit, removing the two torpedoes from rail at that point. When the conditions require he will leave a lighted fusee, and not remove the two torpedoes at that point.

Should a train be seen or heard approaching before the flagman has reached the required distance, he must

at once place two torpedoes on the rail, and if it is by night or during foggy or stormy weather, he must display a lighted fusee in addition, and continue in the direction of the approaching train and flag it with hand signals.

If the flagman is recalled before reaching the required distance, he will, if necessary, place two torpedoes on the rail; by night or during foggy or stormy weather, he must display a lighted fusee in addition, to protect his train while returning.

When a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure full protection. By night, or by day when the view is obscured, lighted fusees must be thrown off at proper intervals.

When day signals cannot be plainly seen, due to weather or other conditions, night signals must be used in addition.

Conductors and engineers are responsible for the protection of their trains.

Other duties must not be permitted to interfere with the proper protection of the train.

Flagman's signals:

Day signals—A red flag, not less than ten torpedoes and six fusees.

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

99 (A). When it is known by engineer that his train will be delayed, he must immediately whistle out flagman.

99 (B). When a flagman is sent out with instructions affecting a train's authority to proceed, three copies of the instructions must be made, one copy to be given to the flagman who must show this to the engineer of the

train or trains affected, one copy to the engineer of the train he is sent on (if sent on a train), and the other copy to be retained by the conductor. When a flagman is sent to a siding on a train, he will ride on the engine and the engineer must stop and let him off at the first switch at the station to which he is sent.

100. When the flagman goes back to protect the rear of the train and is left behind, another trainman must take his place on the train.

101. Trains must be fully protected against any known condition not covered by the rules, which interferes with their safe passage.

101 (A). If any defect or condition which might cause an accident is discovered in track, bridges or culverts, the telegraph or telephone must not be depended on to notify other trains; a flagman must be left.

If any member of the train or engine crew has reason to believe that their train has passed over any dangerous defect, the train must be stopped at once and proper protection provided. A prompt report must be made.

101 (B). During severe storms or when there is indication of high water or any condition which threatens damage, trains must move so they can be stopped in time to avoid accident, and if in doubt as to being able to proceed safely, train must be placed on siding. Conductors and engineers must make inquiries at stopping places and, when advisable, extra stops must be made to ascertain extent and severity of storms and to examine bridges, culverts, or other places subject to damage by high water, and if any condition is found that might affect the safety of a train, protection must be provided as prescribed by Rule 99 and section forces and train dispatcher promptly notified.

When a train is flagged by a track patrolman, in case of storm, or indication of storm or high water, patrol-

man must, if necessary, patrol track ahead of train through the storm area.

101 (C). Trains must run carefully in locations affected by drifting sand or slides and under conditions of dense fog or stormy weather when visibility is restricted.

102. When a train is disabled or stopped suddenly by an emergency application of the air brakes or other causes, adjacent tracks as well as tracks of other railroads that are liable to be obstructed must at once be protected until it is ascertained they are safe and clear for the movement of trains.

102 (A). When an engine leaves its train or part of its train behind, and passes any switch where it would be possible for another train or engine to enter that track between the front and rear portions of train, the engine must not return to the rear portion unless a flagman is protecting the return movement, or unless the return movement has been authorized by train dispatcher.

When an engine leaves its train or part of its train on the main track, a sufficient number of hand brakes must be set to keep train from moving, torpedoes must be placed a sufficient distance in advance of the detached portion, to warn the engineer in returning, and at night a light must be placed on the front end of the detached portion of the train. When conditions require, a flagman must protect the returning engine.

103. When cars are pushed by an engine and the conditions require, a trainman must take a conspicuous position on the leading car.

When switching over public crossings at grade or authorized foot crossings not protected by a watchman, by gates, or by crossing signals in operation, a member of the crew must protect the crossing. When protecting crossings a man must be on the ground at the cross-

ing. Protection must also be provided under the following conditions:

- (a) While coupling cars at or near crossings;
- (b) While pushing cars over crossings, except when the leading car is equipped with a back-up air brake hose or pipe and whistle in charge of a trainman;
- (c) When an engine with or without cars is moving on to or over a crossing where the view by the men on the engine is obscured.

The man protecting the crossing must not get on front end of the leading car or on rear of engine until it has passed over the crossing.

When a train is parted to clear a public crossing, not protected by a watchman, by gates, or by crossing signals in operation, or is standing near such crossing, a trainman must, when practicable, protect traffic against trains or engines approaching on main tracks or sidings.

Unnecessary operation of automatic highway crossing signals due to trains or cars standing in circuit should be avoided when practicable.

103 (A). Unless otherwise provided, or in emergency, cars must not be handled ahead of engine between stations, except when necessary to take cars to or from a spur track or in work train service.

Air brakes on such cars must be operative, and the movement must be for no greater distance than necessary.

104. Conductors are responsible for the position of switches used by them and their trainmen, except where switchtenders are stationed. Switches must be properly lined after having been used.

A switch must not be left open for a following train or engine unless in charge of a trainman of such train or engine.

When practicable, the engineer must see that the switches near the engine are properly lined.

A train or engine must not foul a main track until

switches connected with a movement are properly lined and when waiting to cross from one track to another, and during the approach or passage of a train or engine on tracks involved, all switches connected with the movement must be secured in the normal position. Switches must not be restored to normal position until the movement is completed or clear of the main track involved.

Trains or engines leaving a main track must, when practicable, pull clear of the main track before stopping for trainman to line the switch.

Where trains or engines are required to be reported clear of main track, such report must not be made until switch has been secured in its normal position.

Note.—Rules 104 and 104 (A) apply only to switches when operated by hand.

104 (A). Unless otherwise provided, the normal position of a main track switch is for main track and must be lined and locked in that position, except when changed for immediate movement through it. For facing point movements, switches equipped with locks must be locked, or if equipped with hooks only must be hooked, for trains moving through them; for trailing point movements and for other than train movements switches will be secured by placing locks or hooks in staple. Switches equipped with other types of locks or security devices which do not permit of this must be secured to the extent practicable.

A main track switch must not be left open unless a member of the crew remains near enough to be able to line it upon the approach of a train or engine.

Employes handling switches must know they are properly lined, locked or secured and that switch points fit. Lock must be tested by pulling chain to know that it is secured.

Employes must stand not less than twenty feet from

the switch stand and, when practicable, on the opposite side of the track while a train is closely approaching or passing. An employe who is to line a main track switch for a train or engine that is on siding for another train must not go between the fouling point and the main track switch until such train has passed.

Employes alighting from a moving train must, when practicable, get off from the rear end of rear car, but when this cannot be done and safety permits must get off train from side opposite the switch stand.

Except when changed to permit movement, derails must be set in derailing position and where equipped with locks they must be locked.

Switches must be set for the dead rails over track scales when the scales are not in use.

If a switch lock is missing or found defective, another lock must be supplied if practicable, and a report made to train dispatcher.

If a switch is damaged or run through, report must be made to proper authority, and when practicable sectionmen notified. Switch must be spiked unless sectionmen take charge. If it cannot be made safe, protection must be provided.

105. Unless otherwise provided, trains using a siding must proceed at restricted speed.

Sidings of an assigned direction must not be used in a reverse direction unless authorized by the superintendent or in an emergency under flag protection.

105 (A). When main track is out of service between siding switches and trains must be run through siding, switches will be set, locked, and spiked for siding, train dispatcher notified, and must be protected by flagman until train order covering the condition is issued for all trains affected and the sectionmen notified. Flagman must remain until released by the train dispatcher.

106. The conductor and the engineer (and pilot when

there is one) are responsible for the safety of the train and the observance of the rules, and, under conditions not provided for by the rules, must take every precaution for protection.

107. Trains or engines must run at restricted speed in passing a train receiving or discharging traffic at a station, except where proper safeguards are provided, or the movement is otherwise protected. They must not pass between it and the platform at which traffic is being received or discharged, unless the movement is properly protected.

108. In case of doubt or uncertainty, the safe course must be taken.

109. The locations of bulletin boards or bulletin books are designated in the time-table.

Bulletins will be numbered consecutively beginning with No. 1 January first of each year. They will be issued and cancelled by the superintendent. The time and date posted will be endorsed on the face of each bulletin.

Train, engine and yard men must read bulletins and notices before starting the day's work or trip, and will be held accountable for their observance.

The number of the last bulletin will be recorded by conductors, engineers and foremen of yard engines in the place provided as acknowledgment of all bulletins posted prior to commencing each day's work.

Where crews operate over more than one division and bulletins of each division are posted at the starting point of run, receipt for the last bulletin of each division will be made by showing initials of each division with the number of the bulletin.

D-151. On double track, trains must keep to the right, unless otherwise provided.

Where three or more main tracks are in service they

shall be designated by numbers and their use indicated by special instructions.

D-152. When a train crosses over to, or obstructs another track, unless otherwise provided, it must first be protected as prescribed by Rule 99 in both directions on that track.

### TRAIN ORDER SIGNAL RULES.

200. The following signals will appear where conditions require their use.

The indications are given by the position of the arms, by lights of the prescribed color, or by both. Where authorized by the superintendent lights will not be displayed.

Where the semaphore is used the governing arm is displayed to the right of the signal mast as viewed from an approaching train, and on double or three or more tracks, governs trains moving against the current of traffic the same as if moving with the current of traffic.

Rule 200 A  
Name—Stop signal.

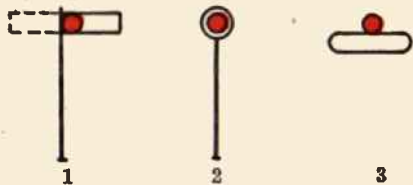


Fig. 1 2 3  
Indication—Stop for orders.  
See Rule 221(A).

Rule 200 B  
Name—19 order signal.

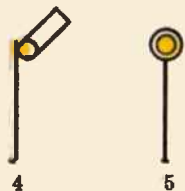


Fig. 4 5  
Indication—Proceed under clearance or train order and clearance.  
See Rule 221(B).

Rule 200 C  
Name—Clear signal.

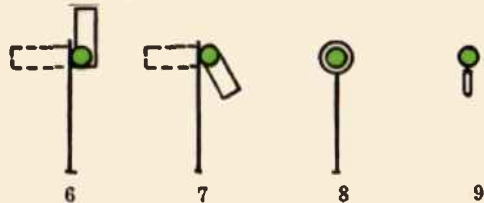


Fig. 6 7 8 9  
Indication—Proceed.  
See Rule 221(A).

## RULES FOR MOVEMENT BY TRAIN ORDERS.

201. For movements not provided for by time-table, train orders will be issued by authority and over the signature of the superintendent and contain only information or instructions essential to such movements.

They must be brief and clear; in the prescribed forms when applicable; and without erasure, alteration or interlineation.

Figures in train orders must not be surrounded by brackets, circles or other characters.

202. Each train order must be given in the same words to all employes or trains addressed.

203. Train orders must be numbered consecutively each day, beginning at midnight.

204. Train orders must be addressed to those who are to execute them, naming the place at which each is to receive his copy. Those for a train must be addressed to the conductor and engineer, and also to any one who acts as its pilot. A copy for each employe addressed must be supplied by the operator.

Orders addressed to operators restricting the movement of trains must be respected by conductors and engineers the same as if addressed to them.

Engineers must show train orders to firemen and when practicable to forward trainmen. Conductors must show train orders when practicable to trainmen.

204 (A). Unless otherwise provided, a copy of all train orders and clearance will be furnished the rear trainman and when a train has more than one engine in service, also to each engineer.

205. Each train order must be written in full in a book provided for the purpose at the office of the train dispatcher; and with it recorded the names of those who have signed for the order; the time and the signals which show when and from what offices the order was repeated and the responses transmitted; and the train

dispatcher's initials. These records must be made at once and never from memory or memoranda.

206. In train orders, regular trains will be designated by number as "No 10" and sections as "Second 10" adding engine numbers if desired. Extra trains will be designated by engine numbers, and the direction as "Extra 798 east (or west)". For the movement of an engine of another company the initials as well as the engine number will be used.

Even hours as "10 00 A.M." must not be used in stating time in train orders.

In transmitting train orders by telegraph, time may be stated in figures only or duplicated in words.

In transmitting train orders by telephone, the numbers of trains and engines in the address may be pronounced and then spelled, letter by letter if so desired. All stations and numerals in the body of an order must first be plainly pronounced and then spelled, letter by letter thus: Aurora, A-u-r-o-r-a, and One Naught Five, O-n-e N-a-u-g-h-t F-i-v-e.

The letters duplicating names of stations and numerals will not be written in the order book nor upon train orders except time which may be duplicated in words.

When train orders are transmitted by telegraph, the train dispatcher must write the order the first time it is repeated and underscore each word and figure each time as it is repeated thereafter. When transmitted by telephone, he must write the order as he transmits it and underscore each word and figure each time as it is repeated.

When two or more engines are coupled, the number of the leading engine only will be used in train orders, except when helper engines or other engines are placed on the head end of a train over a portion of a subdivision, the road engine number will be used.

207. To transmit a train order, the signal "31" or the

signal "19" followed by the direction must be given to each office addressed, the number of copies being stated, if more or less than three—thus: "31, West, copy 5", or "19, East, copy 2".

Note.—Where forms "31" and "19" are not both in use, the signal may be omitted.

208. A train order to be sent to two or more offices must be transmitted simultaneously to as many of them as practicable. When not sent simultaneously to all, the order must be sent first to the superior train.

The several addresses must be in the order of superiority of trains, each office taking its proper address, and, when practicable, except in automatic block signal territory, must include the operator at the meeting or waiting point.

Copies of the order addressed to the operator at the meeting or waiting point must be delivered to the trains affected until all have arrived from one direction.

A train order must not be sent to a superior train at the meeting or waiting point if it can be avoided. When an order is so sent, the fact will be stated in the order and special precautions must be taken to insure safety.

S-208 (A). A train advanced to a station where the opposing train receives the order at the meeting or waiting point must approach that station expecting to find the train receiving the order on the main track and where conditions require, the train advanced must protect against the opposing train as prescribed by Rule 99.

209. Operators receiving train orders must write or typewrite them in manifold during transmission. They must retain a copy of each train order. The time, complete, and the signature of the operator must be in his handwriting.

209 (A). If the requisite number of copies cannot be made at one writing, operators must make others from

the original copy and repeat to the train dispatcher from the new copies each time additional copies are made. The name of the original receiving operator will be shown with the initials of the operator who recopies the order. The train dispatcher will place notation in train order book of the repetition, but the original date of issue and time completed will not be changed. When an error is made in transmitting a train order that train order must be immediately destroyed and if reissued, given another number. When train orders are annulled on other than the date of issue, the date as well as the number of the order annulled, must be designated in the annulment order.

210. When a "31" train order has been transmitted, operators must, unless otherwise directed, repeat it at once from the manifold copy in the succession in which the several offices have been addressed, and then write the time of repetition on the order. Each operator receiving the order should observe whether the others repeat correctly.

The conductor or engineer and others addressed must read it to the operator and then sign it, and the operator will send their signatures preceded by the number of the order to the train dispatcher. The response "complete," and the time, with the initials of the superintendent, will then be given by the train dispatcher. Each operator receiving this response will then write on each copy the word "complete," the time, and his last name in full, and then deliver a copy to each person addressed, except that when the order is signed by the conductor, he must personally deliver a copy of it to each engineer; the engineer will then read the order to the conductor before proceeding.

211. When a "19" train order has been transmitted, operators must, unless otherwise directed, repeat it at once from the manifold copy, in the succession in which

the several offices have been addressed. Each operator receiving the order should observe whether the others repeat correctly. When the order has been repeated correctly by an operator, the response "complete," and the time, with the initials of the superintendent, will be given by the train dispatcher. The operator receiving this response will then write on each copy the word "complete," the time, and his last name in full and deliver a copy to each person addressed without taking his signature. But when delivery to engineer will take the operator from the immediate vicinity of his office, the engineer's copy will be delivered by conductor or brakeman.

When a "19" train order restricting the superiority of a train is issued for it at the point where such superiority is restricted, the train must be brought to a stop before delivery of the order.

212. When so directed by the train dispatcher, a train order may be acknowledged before repeating, by the operator responding: "number of train order to train number, X" with the operator's initials and office signal. The operator must then write on the order his initials and the time.

213. "Complete" must not be given to a train order for delivery to an inferior train until the order has been repeated or the "X" response sent by the operator who receives the order for the superior train.

214. When a train order has been repeated, including the signature of the superintendent, or "X" response sent, and before "complete" has been given, the order must be treated as a holding order for the train addressed, but must not be otherwise acted on until "complete" has been given.

If the means of communication fails before an office has repeated an order or has sent the "X" response, the order at that office is of no effect and must be there treated as if it had not been sent.

216. For train orders delivered by the train dispatcher the requirements as to the record and delivery are the same as at other offices.

216 (A). When the train dispatcher issues a train order that is to be delivered to a train by the dispatcher, a carbon copy of the body of the order must be made in the dispatcher's train order book at the time the order is written on form "19" or "31" and this copy underscored as required by Rule 206.

217. A train order to be delivered to a train at a point not a train order office, or at one at which the office is closed, must be addressed to "C & E ..... at ..... care of ....." and forwarded and delivered by the conductor or other person in whose care it is addressed. When form "31" is used, "complete" will be given upon the signature of the person by whom the order is to be delivered, who must be supplied with copies for the conductor and engineer addressed, and a copy upon which he shall take their signatures. This copy he must deliver to the first operator accessible, who must at once transmit the signatures of the conductor and engineer to the train dispatcher and preserve the copy.

Orders so delivered must be acted on as if "complete" had been given in the usual way.

For orders which are sent, in the manner herein provided, to a train, the superiority of which is thereby restricted, "complete" must not be given to an inferior train until the signatures of the conductor and engineer of the superior train have been sent to the train dispatcher.

217 (A). On railroads that use form "19" orders exclusively, a train order to be delivered to a train at a point not a train order office, or at one at which the office is closed, must be addressed to

"C & E ..... at ..... care of ....."



and when "complete" is given will be forwarded and delivered by the conductor or other person in whose care it is addressed, who must be supplied with copies for the conductor and engineer addressed, and when the superiority of their train is thereby restricted, a copy upon which he shall take their signatures. This copy he must deliver to the first operator accessible, who must at once transmit the signatures of the conductor and engineer to the train dispatcher and preserve the copy.

Orders so delivered must be acted on as if "complete" had been given in the usual way.

For orders which are sent in the manner herein provided to a train, the superiority of which is thereby restricted, "complete" must not be given to an inferior train until the signatures of the conductor and engineer of the superior train have been sent to the train dispatcher.

217 (B). When delivery of a train order as provided in Rules 217 or 217 (A) is to be made by another train, the train order must be addressed in care of conductor or engineer of delivering train, both of whom must be supplied with copies. The person in whose care it is addressed must be supplied with clearance and copies of the train order for delivery to the conductor, engineer and rear trainman of the train addressed. The number of the train order to be delivered must be included on the clearance for the train making delivery and engineer will make stop to effect delivery.

218. When a train is named in a train order by its schedule number alone, all sections of that schedule are included, and each must have copies delivered to it.

219. An operator must not repeat or give the "X" response to a train order restricting the superiority of a train which has been cleared or after the engine has passed the train-order signal displaying proceed indica-

tion (200 C) until he has obtained the signatures of the conductor and engineer to the train order.

220. Train orders once in effect continue so until fulfilled, superseded or annulled. Any part of an order specifying a particular movement may be either superseded or annulled.

Orders held by or issued for or any part of an order relating to a regular train become void when such train loses both right and schedule as prescribed by Rules 4 and 82, or its schedule is annulled.

When a conductor or engineer, or both, is relieved before the completion of a trip, all train orders, clearances and instructions held by them must be delivered to the relieving conductor or engineer. Such train orders, clearances and instructions must be compared by the conductor and engineer before proceeding.

220 (A). Slow or cautionary orders issued to a conductor or engineer continue in effect to them, on continuous trip or tour of duty, although the schedule or section number or the running order of their train be changed.

220 (B). Each train order must be delivered by the operator to the train addressed, unless the order is annulled by the train dispatcher.

When train orders are to be delivered to yard engines, they will be addressed "yard engs in care of yardmaster", "yardmaster" or "C & E yard engs", as desired.

221 (A). Unless otherwise provided, a fixed signal must be used at each train-order office, which shall indicate "stop" when trains are to be stopped for train orders. When there are no orders, the signal must indicate "proceed".

When an operator receives the signal "31", or "19", followed by the direction, he must immediately display the "stop signal" for the direction indicated and then

reply "stop displayed", adding the direction and until the orders have been delivered or annulled, the signal must not be restored to "proceed". While "stop" is indicated, trains must not proceed without a clearance.

221 (B). Where a three-position train order signal is used, the "19 order signal" may be used for "19" train orders. When the order is addressed to the operator at the meeting or waiting point as provided in Rule 208, or when the order restricts the superiority of a train and is sent to a point where such superiority is restricted, the train dispatcher must instruct the operator to display the "stop signal".

When an operator receives the signal "19", followed by the direction, he must immediately display the "stop signal" or "19 order signal" for the direction indicated and then reply "stop displayed", or "19 displayed", adding the direction; and until the orders have been delivered or annulled, the signal must not be restored to "proceed".

At a train order office where there is no train order signal the operator will respond "NS" instead of "SD" or "19D".

Unless otherwise provided, a yellow flag by day or a yellow light by night displayed below the red signal on a Swift or two-position semaphore type train order signal will indicate "19 order signal" and the name and indication will be the same as shown in Rule 200 B.

While "stop" or "19" is indicated, trains must not proceed without a clearance.

Operators must have the proper appliances for hand signalling ready for immediate use at all times and will use these hand signals should the fixed signal fail to operate properly.

221 (C). Clearance Form A must be delivered together with all train orders, showing the number of orders for the train and the number of each order.

Conductors and engineers must, and when practicable the fireman and trainmen will, see that the information shown on Clearance Form A corresponds with the numbers of the train orders received and that their train is correctly designated. The operator must fill out the clearance with the address and number of orders and the number of each order and transmit to the train dispatcher as entered on the clearance as, "Seattle, clear No. 17 with 3 orders numbers 1, 2 and 3". The train dispatcher must make the required record in his train order book and check the order numbers and if correct will reply as, "Seattle, clear No. 17 with 3 orders numbers 1, 2 and 3", giving O.K., the time and superintendent's initials, which the operator will endorse on the clearance.

When a restricting train order is issued to a train after clearance has been delivered, in addition to complying with Rule 219, operator must take up and destroy all clearances that have been delivered to that train at that station and a new one must be issued showing the numbers of all orders delivered that train at that station.

When an order that does not restrict the train is issued after clearance has been delivered, if it is not practicable to take up clearance, the train dispatcher will authorize the operator to issue an additional clearance which must include the numbers of all train orders delivered to that train at that station.

When necessary for an operator to issue a clearance to a train when there are no train orders to be delivered, the operator will request train dispatcher as, "Seattle, clear No. 15 no orders" and if correct, the train dispatcher will repeat in same manner and make record of such clearance in his train order book, giving O.K., the time and superintendent's initials, which the operator will endorse on the clearance.

Operators must not issue clearance to a train unless

it has been O.K'd by the train dispatcher, except in case of failure of means of communication, and not then to a train held as prescribed by Rule 214.

When a clearance is issued in case of failure of means of communication, operator will endorse clearance "wire failure" with the time and his name instead of the O.K. and superintendent's initials. When communication is restored, the operator will notify the train dispatcher of each train and time cleared and the numbers of the orders delivered.

221 (D). Operators must make the required number of copies of clearance at one writing, sign last name in full and retain a copy.

222. Operators must promptly record and report to the train dispatcher the time of arrival and departure of all trains and the direction of extra trains.

They must, when practicable, observe trains and report at once to the train dispatcher if the proper signals are not displayed.

223. The following signals and abbreviations may be used:

Initials for signature of the superintendent.

Such office and other signals as are arranged by the superintendent and usual abbreviations for names of stations.

C & E—for Conductor and Engineer.

Condr—for Conductor.

Engr—for Engineer.

YM—for Yardmaster.

X—Train will be held until train order is made "complete".

Com—for Complete.

O S—Train Report.

No—for Number.

Exa—for Extra.

Eng—for Engine.

Psgr—for Passenger.

Frt—for Freight.

Mins—for Minutes.

Jct—for Junction.

Dispr—for Train Dispatcher.

Opr—for Operator.

9—to clear the line for Train Orders, and for Operators to ask for Train Orders.

S D—for "stop displayed".

19 D—for "19 signal displayed".

Subdiv—for Subdivision.

M P H—for Miles per Hour.

M P—for Mile Post.

Jan—January.

Feb—February.

Mar—March.

Apr—April.

Aug—August.

Sept—September.

Oct—October.

Nov—November.

Dec—December.

224. Rules and special instructions relative to the movement of trains by telegraph must be complied with, when the telephone is used.

225. To relay a "31" train order, the train dispatcher must transmit it to the relaying operator, who will then transmit it to destination. The employe receiving it at destination must repeat it to the relaying operator, who on the copy he retains must underscore each word as it is repeated to him, and then repeat it to the train dispatcher, and if correct, the train dispatcher will reply "O K". After it has been signed by the proper persons at the point of destination, the signatures must be given to the relaying operator, who will then transmit them to the train dispatcher and "complete" will be given as per Rule 210, and relayed to destination.

226. To relay a "19" train order, the train dispatcher must transmit it to the relaying operator, who will then transmit it to destination. The employe receiving it at destination, must repeat it to the relaying operator, who on the copy he retains must underscore each word as it is repeated to him, and then repeat it to the train dispatcher, and if correct, "complete" will be given as per Rule 211, and relayed to destination.

#### FORMS OF TRAIN ORDERS.

Note.—Forms with a prefix "S" are for single track, those with a prefix "D" are for double or three or more tracks; those without prefixes "S" or "D" are for single, double and three or more tracks. The prefix "S" and "D" to be printed in italics. The words and figures in italics in the forms are examples, indicating the manner in which the orders are to be filled out.

##### S-A.

#### FIXING MEETING POINTS FOR OPPOSING TRAINS.

- (1.) *No 1* meet *No 2* at *B*.  
*No 3* meet *Second 4* at *B*.  
*No 5* meet *Extra 95 east* at *B*.  
*Psgr Extra 652 east* meet *Extra 231 west* and *Extra 235 west* at *B*.

- (2.) *No 2* and *Second 4* meet *No 1* and *No 3* at *F* and *Extra 95 west* at *D* (and so on).  
*No 1* meet *No 2* at *B* *Second 4* at *C* and *Extra 95 east* at *D*.

Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner prescribed by the rules.

##### B.

#### DIRECTING A TRAIN TO PASS OR RUN AHEAD OF ANOTHER TRAIN.

- (1.) *No 1* pass *No 3* at *K*.

Both trains will run according to rule to the designated point and there arrange for the rear train to pass promptly.

- (2.) *Extra 594 west* pass *No 3* at *K*.

When an inferior train receives an order to pass a superior train, right is conferred to run ahead of the train passed from the designated point.

Under Examples (1) and (2), if *No 3*, after being passed, should overtake the other train, *No 3* should be permitted to pass.

- (3.) *Extra 594 east* run ahead of *No 6 M* to *B*.

The first-named train will run ahead of the second-named train between the designated points.

- (4.) *Extra 95 west* run ahead of *No 3 B* until overtaken.

The first-named train will run ahead of the second-named train from the designated point but if overtaken at that point or at any station beyond will arrange to let the second-named train pass promptly.

##### C.

#### GIVING RIGHT OVER ANOTHER TRAIN IN THE SAME DIRECTION.

- (1.) *No 1* has right over *No 3 A* to *Z*.  
 (2.) *Extra 21 west* has right over *Extra 25 west A* to *Z*  
 and wait at *A* until 12 50 p m  
   *C*           1 10 p m  
   *E*           1 20 p m

- (3.) *No 401* (a second class train) has right over *Extra 25 west A* to *Z* and wait at *A* until 12 50 p m  
   *C*           1 10 p m  
   *E*           1 20 p m

These orders give right to the train first-named over the other train between the points named. The second-named train must keep clear of the other as required by Rule 86. Under Examples (2.) and (3.) the first-named train must not pass the designated points before the times given.

S-C.

GIVING RIGHT OVER AN OPPOSING TRAIN.

(1.) *No 1* has right over *No 2* *G* to *X*.

If the second-named train reaches the point last named before the other arrives, it may proceed, keeping clear of the schedule of the opposing train as required by rule.

(2.) *Extra 37 east* has right over *No 3 F* to *A*.

The regular train must not go beyond the point last named until the extra train has arrived, unless directed by train order to do so.

(3.) *Extra 38 east* has right over *Extra 37 west X* to *G*.

(4.) *Extra 77 west* has right over *Extra 78 east B* to *G*.

Neither train shall go beyond the point last named until the other train has arrived, unless directed by train order to do so.

Example (3.) of Form E or Example (1.) of Form S-E may be used in combination with these examples as shown in Examples (5.) and (6.).

(5.) *Extra 38 east* has right over *Extra 37 west X* to *G*  
and wait at *M* until 9 59 a m

L 10 30 a m

J 10 55 a m

The first-named train must not pass the designated waiting points before the times given. Trains receiving this order must clear the time specified at the design-

ated waiting points or any intermediate station not less than five minutes.

(6.) *Extra 38 east* has right over *Extra 37 west X* to *G*  
and wait at *M* until 9 59 a m

L 10 30 a m

J 10 55 a m

for *Extra 37 west*.

The first-named train must not pass the designated waiting points before the times given unless the second-named train has arrived. The second-named train must clear the time specified at the designated waiting points or any intermediate station not less than five minutes.

In Examples (5) and (6), the first-named train must not go beyond *G* until the other train has arrived, unless directed by train order to do so.

When it is desired to authorize the first-named train to leave the second-named point and there is no conflicting movement involved between the two trains beyond that point, Examples (3), (4), (5), or (6) may be modified by adding:

(7.) *Extra* — (*east*) (*west*) will not wait at *G* for  
*Extra* — (*west*) (*east*).

Examples (1), (2) (3), (4), (5) and (6) of Form S-C give right to the first-named train over the specified train between the points named. If the trains meet at either of the designated points, the first-named train must take the siding, unless the order otherwise prescribes. If the trains meet between the designated points, the second-named train must take the siding, unless the order otherwise prescribes.

When right is given to the end of double or three or more tracks, the first-named train may proceed with the current of traffic, but must not again enter single

track unless the second-named train has arrived, or is directed by train order to do so.

### E.

#### TIME ORDERS.

- (1.) *No 1* run 50 mins late *A* to *G*.

This makes the schedule time of the train named, between the stations designated, as much later as stated in the order, and any other train receiving the order is required to run with respect to this later time, as before required to run with respect to the regular schedule time. The time in the order should be such as can be easily added to the schedule time.

- (2.) *No 1* run 50 mins late *A* to *G* and 20 mins late *G* to *K*, etc.

This makes the schedule time of the train named, between the stations designated, as much later as stated in the order, and any other train receiving the order is required to run with respect to this later time as before required to run with respect to the regular schedule time. The time in the order should be such as can be easily added to the schedule time.

- (3.) *No 1* and *No 3* wait at *N* until 9 59 a m  
P 10 30 a m  
R 10 55 a m, etc.

The train, or trains, named must not pass the designated points before the times given. Other trains receiving the order are required to run with respect to the time specified at the designated points or any intermediate station where schedule time is earlier than the time specified in the order, as before required to run with respect to the schedule time of the train, or trains, named.

### S-E.

- (1.) *No 1* wait at *H* until 9 59 a m  
J 10 20 a m

for *No 2*

The train first-named must not pass the designated points before the times given, unless the other train has arrived. The train last named is required to run with respect to the time specified, at the designated points or any intermediate station where schedule time is earlier than the time specified in the order, as before required to run with respect to the schedule time of the train first-named.

### F.

#### FOR SECTIONS.

- (1.) *Eng 20* display signals and run as *First 1 A* to *Z*.  
To be used when the number of the engine for which signals are displayed is unknown, and is to be followed by (2.), both being single-order examples.
- (2.) *Eng 25* run as *Second 1 A* to *Z*.
- (3.) *Second 1* display signals *B* to *Z* for *Eng 99*.
- (4.) *Engs 20 25* and *99* run as *First Second* and *Third 1 A* to *Z*.

To add an intermediate section, (5.) will be used.

- (5.) *Eng 85* display signals and run as *Second 1 A* to *Z*  
Following sections change numbers accordingly.  
The engine named will display signals and run as directed, and following sections will take the next higher number.

To drop an intermediate section, (6.) will be used.

- (6.) *Eng 85* is withdrawn as *Second 1* at *H*  
Following sections change numbers accordingly.  
The engine named will drop out at *H*, and following sections will take the next lower number.

To substitute one engine for another on a section, (7.) will be used.

(7.) *Eng 18* instead of *Eng 85* display signals and run as *Second 1 R* to *Z*.

The second-named engine will drop out at *R*, and be replaced by the first-named engine.

Following sections need not be addressed.

If the second-named engine is the last section, the words "display signals and" will be omitted.

To discontinue the display of signals, (8.) will be used.

(8.) *Second 1* take down signals at *D*.

The train named will take down signals as directed, and a following section must not proceed beyond the designated point.

To pass one section by another (9.) will be used.

(9.) *Engs 99* and *25* reverse positions as *Second* and *Third 1 H* to *Z*.

Conductors and engineers of the trains addressed will exchange orders and signals. Following sections, if any, need not be addressed.

Each section affected by these orders must have copies and must arrange signals accordingly.

To annul a section for which signals have been displayed over a subdivision, or any part thereof, when no train is to follow the signals, Form K must be used.

When sections are run to an intermediate point of a schedule, the train orders must specify which section or sections shall assume this schedule beyond such point.

When trains are running in sections of a schedule, the responsibility for a following section passing a leading section without proper authority rests with the leading section.

## G.

### EXTRA TRAINS.

(1.) *Eng 99* run extra *A* to *F*.

(2.) *Eng 99* run psgr extra *A* to *F*.

This gives the extra no right to occupy the main track between the switches of the siding at *A* or *F*.

(3.) *Eng 99* run extra *A* to *F* and return to *C*.

The extra must go to *F* before returning to *C*.

This gives the extra no right to occupy the main track between the switches of the siding at *A* or *F*, or at *C* on the return trip.

(4.) *Eng 77* run extra leaving *A* on *Thursday Feb 17th* as follows with right over all trains.

Leave *A* 11 30 p m

*C* 12 25 a m

*E* 1 47 a m

Arrive *F* 2 22 a m

This order may be varied by specifying the kind of extra and the particular trains over which the extra shall or shall not have right.

An extra authorized by this form of train order must not pass the designated points before the times given and must move within yard limits the same as any other extra train.

Trains over which the extra is thus given right must clear the extra the same as an inferior class train is required to clear a first class train.

Examples of Form E and S-E may be used in connection with an extra train created by this example.

(5.) *Eng 99* run extra *A* to *F* this order is annulled at 7 10 p m.

The extra authorized by this form of order must be

clear of the main track at the time specified or protected in both directions, as prescribed by Rule 99.

(6.) *On Feb 17th after 6 45 a m eng 99 run extra A to F.*

The extra authorized by this form of order must not leave the first-named station before the time specified.

(7.) *After extra 55 west has arrived at (or passed) F eng 66 run extra F to A.*

This form to be used only when or where it is impracticable to give a meet with the first-named train. The extra authorized by this form of order must not leave F until the first-named train has arrived at (or passed) F.

Examples (4), (5), (6) or (7) do not give the extra authorized by these orders right to occupy the main track between the switches of the siding at A or F.

S-H.

WORK EXTRA.

(1.) *Eng 292 works extra 6 45 a m until 5 45 p m between D and E.*

The work extra must, whether standing or moving, protect itself against extra trains within the working limits in both directions as prescribed by the rules. The time of regular trains must be cleared.

This may be modified by adding:

(2.) *Not protecting against eastward extra trains.*

The work extra will protect only against westward extra trains. The time of regular trains must be cleared.

(3.) *Not protecting against extra trains.*

Protection against extra trains is not required. The time of regular trains must be cleared.

When a work extra has been instructed by order to not protect against extra trains, and, afterward, it is desired to have it clear the track for, or protect itself after a certain hour against a designated extra, an order may be given in the following form:

(4.) *Work Extra 292 clears (or protects against) Extra 76 east between D and E after 2 10 p m.*

Extra 76 east must not enter the working limits before 2 10 p m, and will then run expecting to find the work extra clear of the main track, or protecting itself, as the order may require.

To enable a work extra to work upon the time of a regular train, the following form will be used:

(5.) *Work Extra 292 protects against No 55 (or class trains) between D and E.*

The work extra may work upon the time of the train or trains mentioned in the order, and must protect itself against such train or trains. The regular train or trains receiving the order will run expecting to find the work extra protecting itself.

When a work extra is to be given exclusive right over all trains, the following form will be used:

(6.) *Work Extra 292 has right over all trains between D and E 7 15 p m until 1 15 a m.*

This gives the work extra the exclusive right between the points designated between the times named.

(7.) *On Feb 17th Eng 292 works extra 6 45 a m until 5 45 p m between D and E.*

This form to be used to authorize in advance a work extra, and may be modified by specifying two or more dates.

The working limits should be as short as practicable,



to be changed as the progress of the work may require.

Work extras must give way to all trains as promptly as practicable.

Whenever extra trains are run over working limits they must be given a copy of the order sent to the work extra. Should the working order instruct a work extra to not protect against extra trains in one or both directions, such extra trains must protect against the work extra; if the order indicates that the work extra is protecting itself against other trains, such trains will run expecting to find the work extra protecting itself.

Examples (1.) and (7.) confer no right to the work extra to occupy the main track between the switches of the siding at either of the points named.

D-H.

WORK EXTRA.

- (1.) *Eng 292* works extra on \_\_\_\_\_ track (or \_\_\_\_\_ tracks) 6 45 a m until 5 45 p m between D and E.

The work extra must, whether standing or moving, protect itself within the working limits against extra trains moving with the current of traffic on the track or tracks named. The time of regular trains must be cleared.

This confers no right to the work extra to occupy the main track between the switches of the siding at either of the points named.

This form may be modified by adding:

- (2.) *Not protecting against eastward extra trains.*

Protection against eastward extra trains is not required. The time of regular trains must be cleared. The work extra may move against the current of traffic on the eastward track.

- (3.) *Not protecting against extra trains.*

Protection against extra trains is not required. The

time of regular trains must be cleared. The work extra may move against the current of traffic.

When a work extra has been instructed by order to not protect against extra trains, and afterward, it is desired to have it clear the track for, or protect itself after a certain hour against a designated extra, an order may be given in the following form:

- (4.) *Work Extra 292 clears (or protects against) Extra 76 east between D and E after 2 10 p m.*

Extra 76 east must not enter the working limits before 2 10 p m, and will then run expecting to find the work extra clear of the main track, or protecting itself, as the order may require.

To enable a work extra to work upon the time of a regular train, the following form may be used:

- (5.) *Work Extra 292 protects against No 55 (or \_\_\_\_\_ class trains) between D and E.*

The work extra may work upon the time of the train or trains mentioned in the order and must protect against such train or trains.

The regular train or trains receiving the order will run expecting to find the work extra protecting itself.

When it is desired to move a train against the current of traffic over the working limits, provision must be made for the protection of such movement.

When a work extra is to be given exclusive right over all trains, the following form will be used:

- (6.) *Work Extra 292 has right over all trains on \_\_\_\_\_ track (or \_\_\_\_\_ tracks) between G and H 7 01 p m until 1 01 a m.*

This gives the work extra the exclusive right to the track, or tracks, mentioned between the points designated between the times named.

The working limits should be as short as practicable to be changed as the progress of the work may require.

Work extras must give way to all trains as promptly as practicable.

Whenever extra trains are run over working limits, they must be given a copy of the order sent to the work extra. Should the working order instruct a work extra to not protect against extra trains, such extra trains must protect against the work extra; if the order indicates that the work extra is protecting itself against other trains, such trains will run expecting to find the work extra protecting itself.

#### J.

##### HOLDING ORDER.

- (1.) Hold *No 2*.
- (2.) Hold all (or eastward) trains.

When a train has been so held it must not proceed until the order to hold is annulled, or an order given to the operator in the form:

*No 2* may go.

These orders will be addressed to the operator and acknowledged in the usual manner, and will be delivered to conductors and engineers of all trains affected.

Form J will be used only when necessary to hold trains until orders can be given, or in case of emergency.

#### K.

##### ANNULLING A SCHEDULE OR A SECTION.

- (1.) *No 1* due to leave *A Feb 29th* is annulled *A* to *Z*.
- (2.) *Second 5* due to leave *E Feb 29th* is annulled *E* to *G*.
- (3.) *No 401* due to leave *E Feb 29th* is annulled *E* to *Z*.
- (4.) *No 401* due to leave *A Feb 29th* has arrived at *E* and is annulled *E* to *Z*.

The schedule or section annulled becomes void be-

tween the points designated and cannot be restored.

Form K will not be combined with other forms of train orders.

Form K orders issued to a conductor or engineer continue in effect to them, although the schedule or section number or the running order of their train be changed.

#### L.

##### ANNULLING AN ORDER.

- (1.) Order *No 10* is annulled.

If an order which is to be annulled has not been delivered to a train, the annulling order will be addressed to the operator, who will destroy all copies of the order annulled but his own, and write on that:

*Annulled by Order No*———.

An order which has been annulled must not be re-issued under its original number.

#### S-M.

##### ANNULLING PART OF AN ORDER.

- (1.) That part of order *No 10* reading *No 1 meet No 2* at *S* is annulled.
- (2.) That part of order *No 12* reading *No 3 pass No 1* at *S* is annulled.

Form S-M will be used only when that part of the order not annulled is clear in its wording.

#### D-M.

##### ANNULLING PART OF AN ORDER.

- (1.) That part of order *No 10* reading *Extra 263 west pass No 1* at *S* is annulled.
- (2.) That part of order *No 12* reading *No 3 pass No 1* at *S* is annulled.

Form D-M will be used only when that part of the order not annulled is clear in its wording.

### S-P.

#### SUPERSEDING AN ORDER OR A PART OF AN ORDER.

This order will be given by adding to prescribed forms the words "instead of———".

- (1.) *No 1 meet No 2 at C instead of B.*

An order which has been superseded must not be re-issued under its original number.

When a train is directed by train order to take siding for another train, such instructions apply only at the point designated in that order, and do not apply to the superseding order unless so specified.

### P.

#### SUPERSEDING AN ORDER OR A PART OF AN ORDER.

This order will be given by adding to prescribed forms, the words "instead of———".

- (1.) *No 1 pass No 3 at C instead of B.*

An order which has been superseded must not be reissued under its original number.

### D-R.

#### PROVIDING FOR A MOVEMENT AGAINST THE CURRENT OF TRAFFIC.

- (1.) *No 1 has right over opposing trains on——— track C to F.*

The designated train must use the track specified between the points named and has right over opposing trains on that track between those points. Opposing trains must not leave the point last named until the designated train arrives.

All trains between the points named moving with the current of traffic in the same direction as the designated train must, when practicable, receive a copy of the order, and may then proceed on their schedules, or rights.

This order may be modified as follows:

- (2.) *After No 4 arrives at C No 1 has right over opposing trains on———track C to F.*

The train to be moved against the current of traffic must not leave the first-named point until the arrival of the first-named train.

A train must not be moved against the current of traffic until the track on which it is to run has been cleared of opposing trains.

### D-S.

#### PROVIDING FOR THE USE OF A SECTION OF DOUBLE OR THREE OR MORE TRACKS AS SINGLE TRACK.

- (1.) ———track will be used as single track between *F* and *G*.

If it is desired to limit the time for such use, add *from 101 p m to 301 p m*.

All trains must use the track specified between the stations named and will be governed by rules for single track.

Trains moving against the current of traffic on the track named must be clear of the track at the expiration of the time named, or protected in both directions, as prescribed by Rule 99.

### T.

#### NOTICE OF NEW TIME TABLE AND RECEIPT.

Time-table receipt to be used in accordance with Rule 4(A).

Acceptance of this order is acknowledgment of receipt of time table No —— effective—— m —— 19——.

Trains and engines must not occupy main track after effective time and date of new time-table until copies of the new time-table have been received.

U.

ADVANCE AUTHORITY TO PROCEED FROM AN AUTOMATIC BLOCK STOP SIGNAL.

Advance authority for a train to proceed from an automatic block stop signal displaying Stop-indication when the train dispatcher knows there is no opposing train movement.

After stopping pass signal—————

This order permits a train to proceed from an automatic block stop signal indicating stop and to proceed at restricted speed to the next block signal.

V.

CHECK OF TRAINS.

These forms to be used when it is desired to give a train the information as required:

- (1.) All (superior) (first class) etc. trains due at C at or before 6 50 a m (have passed) (have arrived) (have left); as circumstances may require.

This may be modified by adding "except—————".

When the term "superior" is used, it includes trains made superior either by train order or time-table.

- (2.) No 1 and No 2 (have passed) (have arrived) (have left) G.

W.

TO AVOID STOPPING TRAINS TO REGISTER OR FOR CLEARANCE.

When it is desired to avoid stopping trains to register or receive clearance, the following form will be used:

- (1.) ————— will not register or require a clearance at ————— if the train order signal indicates proceed.
(2.) ————— will register at ————— by register ticket.

When Example (2.) is used, a copy of the order will be addressed to the operator at the station specified.

Z.

RELIEF OF FLAG PROTECTION.

This form of order will be used to relieve a train from protecting against following extra trains;

All eastward extra trains between H and B except Extra 77 east wait at H until 4 10 p m.

Extra trains named except Extra 77 east must not pass the designated point before the time specified in the order.

Extra 77 east is relieved from protecting against following extra trains between H and B until the time specified in the order.

When a regular train is to be relieved from protecting against following extra trains, the words, "except Extra 77 east" will be omitted.

FORMS OF BLANKS

Name

..... COMPANY
A A

CLEARANCE FORM A

.....M.....19..

To ..... at .....

I have .....orders for your train.

No..... No..... No..... No..... No..... No.....

No..... No..... No..... No..... No..... No.....

There are no further orders for your train.

Block .....

.....

.....

.....

.....

.....

.....

.....

.....

Superintendent Operator or Signalman

Standard Train Order Blank for 31 Order.

FORM  
**31**

FORM  
**31**

Name \_\_\_\_\_ **COMPANY**

**TRAIN ORDER No.** 10

Jan 1 19 45

---

To \_\_\_\_\_ At \_\_\_\_\_

---

X Initials \_\_\_\_\_ **Opr.;** 1 45 A **M**

---

Each employe addressed must have a copy  
of this order.

---

**Repeated at** 2 20 A **M**

Conductor or Engineer	Train	Made	Time	Operator
Jones      Brown	45	Complete	2 20a m	Black

Standard Train Order Blank for 19 Order.

FORM  
**19**

FORM  
**19**

Name \_\_\_\_\_ **COMPANY**

**TRAIN ORDER No.** 10

Jan 1 19 45

---

To \_\_\_\_\_ At \_\_\_\_\_

---

X Initials \_\_\_\_\_ **Opr.;** 1 45 A **M**

---

Each employe addressed must have a copy  
of this order.

---

**Made** Complete **time** 2 16 A **M** Black **Opr.**

## BLOCK SIGNAL AND INTERLOCKING RULES. DEFINITIONS.

**Block System.**—A series of consecutive blocks.

**Manual Block System.**—A series of consecutive blocks, governed by block signals operated manually, upon information by telegraph, telephone or other means of communication.

**Automatic Block System.**—A series of consecutive blocks governed by block signals, cab signals, or both, actuated by a train or engine, or by certain conditions affecting the use of a block.

**Interlocking.**—An arrangement of signals and signal appliances so interconnected that their movements must succeed each other in proper sequence and for which interlocking rules are in effect. It may be operated manually or automatically.

**Interlocking Limits.**—The tracks between the home signals of an interlocking.

**Block Station.**—A place from which block signals are operated.

**Interlocking Station.**—A place from which an interlocking is operated.

**Block.**—A length of track of defined limits, the use of which by trains or engines is governed by block signals, cab signals or both.

**Fixed Signal.**—A signal of fixed location indicating a condition affecting the movement of a train or engine.

**Cab Signal.**—A signal located in engineer's compartment or cab, indicating a condition affecting the movement of a train or engine and used in conjunction with interlocking signals and in conjunction with or in lieu of block signals.

**Block Signal.**—A fixed signal at the entrance of a block to govern trains or engines entering and using that block.

**Interlocking Signals.**—The fixed signals of an interlocking.

**Home Signal.**—A fixed signal at the entrance of a route or block to govern trains or engines entering and using that route or block.

**Approach Signal.**—A fixed signal used in connection with one or more signals to govern the approach thereto.

**Dwarf Signal.**—A low home signal.

**Dual Control Switch.**—A power operated switch that is also equipped for hand operation.

**Medium Speed.**—A speed not exceeding thirty (30) miles per hour.

**Slow Speed.**—A speed not exceeding fifteen (15) miles per hour.

**Restricted Speed.**—Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train to be reduced.

## RULES GOVERNING THE MOVEMENT OF TRAINS IN THE SAME DIRECTION BY BLOCK SIGNALS.

251. On portions of the railroad, and on designated tracks so specified on the time-table, trains will run with reference to other trains in the same direction by block signals whose indications will supersede the superiority of trains.

253. The superintendent must be advised in advance, of any known condition that will delay the train or prevent it from making usual speed.

254. Except as affected by Rule 251, all Block Signal Rules and Operating Rules remain in force.

## RULES GOVERNING OPPOSING AND FOLLOWING MOVEMENT OF TRAINS BY BLOCK SIGNALS.

261. On portions of the railroad, and on designated

tracks so specified on the time-table, trains will be governed by block signals, whose indications will supersede the superiority of trains for both opposing and following movements on the same track.

263. The superintendent must be advised in advance of any known condition that will delay the train or prevent it from making usual speed.

264. Except as affected by Rule 261, all Block Signal Rules and Operating Rules remain in force.

### MANUAL BLOCK SIGNAL RULES.

300. The following signals will appear where conditions require their use.

The indications are given by the position of the arms, by lights of prescribed color, or by both.

Except in special cases, signals are located over or upon the right of and adjoining the track to which they refer.

Semaphore arms that govern are displayed to the right of the signal mast as viewed from an approaching train.

Train order signals are also used as block signals.

Rule 300 A  
Name—Stop signal.

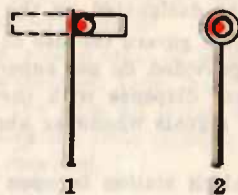


Fig.  
Indication—Stop.

Rule 300 B  
Name—19 order signal.

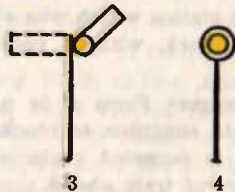


Fig.  
Indication—Proceed under clearance or train order and clearance.

Rule 300 C  
Name—Clear signal.

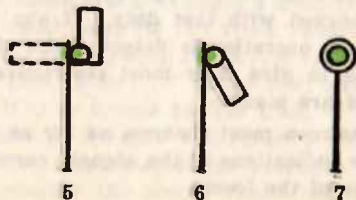


Fig.  
Indication—Proceed.

## MANUAL BLOCK SYSTEM.

### RULES AND FORMS.

(To be used as designated on the time-table.)

305. Block signals govern the use of the blocks, but, unless otherwise provided, do not supersede the superiority of trains; nor dispense with the use or the observance of other signals whenever and wherever they may be required.

306. When a block station is open at an irregular hour, trains must be notified, when possible, by train order.

307. A train having entered a block on other than a proceed indication or Clearance Form A showing block "clear" must not accept a proceed indication at any intermediate block station which was closed when such train entered the block, without receiving Clearance Form A.

308. When Clearance Form A is used information will be shown as to condition of block "clear" or "occupied". If block is occupied, train will proceed prepared to stop short of train ahead.

### SIGNALMEN.

311. Signals must be kept in the position displaying the most restrictive indication, except when displayed for an immediate movement.

312. Appliances must be operated carefully and only by those charged with that duty. If any irregularity affecting their operation is detected the signals must be displayed to give their most restrictive indication until repairs are made.

313. Signalmen must observe, as far as practicable, whether the indications of the signals correspond with the positions of the levers.

314. Signalmen must not make nor permit any un-

authorized repairs, alterations or additions to the apparatus.

Any defects in the appliances must be promptly reported to the superintendent.

315. A block record must be kept at each block station on the prescribed form, beginning at 12 01 a.m. daily, showing the time all trains enter and clear the block, communicating code signals, and the time they are given and received.

### 316. COMMUNICATING CODE.

1.—Keep block signal in stop position for opposing train.

13.—I understand.

2.—Block clear.

5.—Block not clear of train other than passenger.

56.—Block not clear of passenger train.

38.—Opening block station. Answer by 2, 5 or 56.

39.—Closing block station, followed by 2.

If the block is clear, to be answered by 13, followed by 2. If the block is not clear, to be answered by 5 or 56.

When two or more tracks are used in the same direction, signalmen in using the communicating code must also specify the track.

Note.—When telephone is used, the code will be used without the numerals.

317. On single track, to admit a train to a block, the signalman must examine the block record, and if the block is clear of opposing trains and preceding passenger trains, give "1 for . . . ." to the next block station in advance. If it is proper for the train to be admitted, the signalman in advance will reply "2 for . . . ." or "5 of . . . .". The signalman at the entrance of the block must then display the proper signal indication.

A train must not be admitted to a block which is oc-



cupied by an opposing train or by a passenger train, except as provided in Rule 333 or by train order. A train may be permitted to follow a train other than a passenger train into a block under Clearance Form A, when so directed by train dispatcher.

317 (A). To admit a train to a block to meet opposing trains at a closed block station or a siding between two open block stations, by train order, the signalman must examine the block record, and if the block is clear of all but the train or trains to be met, give "1 for .... except ....", to the next block station in advance.

The signalman receiving this signal, if there is no train in the block except the train or trains to be met, must display Stop-indication or 19 order indication and then reply "13 for..... except .....". The signalman at the entrance of the block must then display Stop-indication or 19 order indication.

The approaching train will then be admitted to the block with a Clearance Form A reading, "Block clear except ..... Stop-indication or 19 order indication is displayed for ..... to meet ..... as per order number .....".

The authority of a signalman for the issuance of such clearance will be the receipt of a copy of the order to be repeated and signed by him and completed by the train dispatcher.

317 (B). To admit a train awaiting the arrival of an opposing train or trains to a block, the signalman must examine the block record and if the block is clear of all but the expected train or trains, give "1 for..... except ....." to the next block station in advance.

The signalman receiving this signal, if the block is clear of all but the train or trains to be met, must display Stop-indication and then reply "13 for..... except

.....". The signalman at the entrance of the block must then display the proper signal indication.

The train must be brought to a stop and may then be given Clearance Form A reading, "Block clear except ..... Stop-indication is displayed for ..... to meet .....". A train receiving such clearance must not leave until the opposing train has arrived.

317 (C). In case a train has left an open block station expecting to reach the next open block station for an opposing superior train and fails to do so, and there are one or more closed block stations or sidings between the two open block stations, the train dispatcher, after holding the superior train 5 minutes or more beyond its schedule leaving time or train order waiting time, may authorize the release of the superior train with a train order in the following form:

"..... left ..... at ..... and has not arrived at ..... Operator ..... will release No. ....".

Clearance Form A will then be issued reading: "Block clear except ..... Stop-indication is displayed for Order No. ....".

318. On double or three or more tracks to admit a train to a block, the signalman must examine the block record, and display proper signal indication.

A train must not be admitted to a block which is occupied by a passenger train, except as provided in Rule 333 or by train order.

A train may be permitted to follow a train other than a passenger train into a block under Clearance Form A when so directed by the train dispatcher.

319. When a train enters a block, the signalman must give train number and time to the next block station in advance. When the rear of the train has passed 250 feet beyond the block signal, he must give the record of the train to the next block station in the rear. This information must be entered on the block records.

319 (A). When a train, other than a passenger or a mixed train, is inside the outer switches at certain block stations indicated by time-table or special instructions, it may be reported as arrived provided the operator has seen the markers or is notified by the conductor that all of his train is inside the switches. Following trains may be given a proceed indication or a Clearance Form A showing block "clear", except that if a first class train is to enter the block it must have a train order and a Clearance Form A showing block "occupied". Trains, other than first class trains accepting and moving under proceed indication or Clearance Form A showing block "clear", must approach the designated station at restricted speed.

320. Unless otherwise provided, signalmen must not ask for the block until they have received a report of the train from the next block station in the rear.

321. Signalmen must, as far as practicable, observe all passing trains and note whether they are complete and in order, and the markers properly displayed.

322. Should a train pass a block station with any indication of conditions endangering the train, or a train on another track, the signalman must immediately notify the signalman at the next block station in advance, and each must display Stop-indications to all trains that may be affected, and must not permit any train to proceed until it is known that its track is not obstructed.

325. A signalman informed of any obstruction in a block must immediately notify the signalman at the other end of the block and each must display Stop-indications to all trains that may be affected and must not permit any train to proceed until it is known that its track is not obstructed.

326. When a train or engine takes a siding or otherwise clears the main track the signalman must know

that it is clear of the block before giving "2" or displaying a Clear-indication for that block.

The signalman must obtain control of the block before permitting a train or engine to re-enter the block.

327. To permit a train or engine to enter a block or foul the main track, or to cross from one main track to another, the signalman must examine the block record, and if all the blocks affected are clear of approaching trains he must provide or arrange for block protection before permission is given, and until movement is complete and the block clear, trains will not be admitted to the block except under Clearance Form A.

All cross-over movements must be entered on the block record.

328. When coupled trains are separated, as prescribed by Rule 364, the signalman must regard each portion as an independent train.

329. When necessary to stop a train for which other than a Stop-indication has been displayed and accepted, the signalman must give hand signals in addition to displaying the Stop-indication.

333. When, from any cause, a signalman is unable to communicate with the next block station in advance, he must stop all trains approaching in that direction. Should no cause for detaining a train be known, it may then be permitted to proceed with Clearance Form A, provided ten minutes have elapsed since the passage of the last preceding train.

334. Hand signals must not be used when the proper indication can be displayed by the block signals, except as prescribed by Rule 329 or 343. When hand signals are necessary they must be given from such a place and in such a way that there can be no misunderstanding on the part of engine men or trainmen as to the signals,

or as to the train or engine for which they are intended.

Note.—Hand signaling includes the use of flag, light, torpedo and fusee signals.

335. Block signals for a track apply only to trains moving with the current of traffic on that track. Signalmen will use train order or home signal for blocking trains moving against the current of traffic.

336. Signalmen are responsible for the care of the block station, lamps and supplies; and, unless otherwise provided, of the signal apparatus.

337. Lights in block stations must be so placed that they cannot be seen from approaching trains.

339. If a Stop-indication is disregarded, the fact must be reported to the next block station in advance and then to train dispatcher.

340. To open a block station, the signalman must give "38" to the next block station in each direction and record the trains that are in the extended block.

When trains, which were in the extended block when the block station was opened and which had passed his block station before it was opened, clear the block in advance he must repeat the record to the block station in the rear.

341. A block station must not be closed except upon authority of train dispatcher.

342. Unless otherwise provided, a block station must not be closed until the block in each direction is clear of all trains.

To close a block station, the signalman must give 39 followed by 2 to the next block station in each direction and when he receives 13 followed by 2 enter it on his block record, with the time it is received from each block station.

The block signals must then be secured in the proceed position, all lights extinguished, and the block

wires and, when necessary, circuits arranged to work through the closed block station.

343. When a block station is open at an irregular hour, signalmen must use hand signals, in addition to block signals, to give the required indications until all trains have passed which have not been notified by train order that the block station is open.

343 (A). When weather conditions obscure the view, operators will promptly report to the train dispatcher, who will decide if an absolute block of all trains must be maintained.

344. Signalmen must not permit unauthorized persons to enter the block station.

#### ENGINE AND TRAIN CREWS.

361. Block signals for a track apply only to trains moving with the current of traffic on that track.

Train order or home signal will be used for blocking trains moving against the current of traffic.

362. Trains must not pass a Stop-indication or 19 order indication without receiving Clearance Form A.

362 (A). Where train order signal is also used as block signal, a train may pass such signal at Stop-indication or 19 order indication to make a station stop, to take fuel or water, or to enter the siding in advance of the signal, provided the track is known to be clear, and under protection as prescribed by Rule 99.

363. Trains must not proceed on hand signals as against block signals.

364. Unless otherwise directed, when two or more trains have been coupled and so move past any block station, they must be separated only at a block station and the signalman notified.

365. When a train or engine takes a siding or otherwise clears the main track, unless the switch involved

is operated by the signalman, conductor or engineer must so report to the signalman. A train or engine must not enter a block or foul the main track, or cross from one main track to another, without permission of the signalman.

A train or engine having passed beyond the limits of a block must not back into that block without permission of the signalman.

365 (A). Trains must not go to a closed block station or a siding between two open block stations to meet a train or trains without a train order, and in addition will receive Clearance Form A at the nearest open block station reading, "Block clear except ..... Stop-indication or 19 order indication is displayed for..... to meet ..... as per Order No. ....".

365 (B). Trains must not go to a closed block station or a siding between two open block stations to be passed by other trains without a train order.

365 (C). To permit a train to go to a closed block station or a siding between two open block stations to be passed by other trains, the following form of train order must be used: "No..... may enter the block at ..... ahead of No. ....". The trains receiving this order will run according to the rules.

365 (D). When a train is passed by another train at a closed block station or a siding between two open block stations, it may, after waiting 10 minutes, proceed on its right or schedule, prepared to stop short of train ahead.

370. When there is an obstruction between block stations, notice must be given to the nearest signalman.

371. When a train is stopped by a home or block signal, the conductor or engineer must, when practicable, immediately ascertain the cause.

372. Conductors must report to superintendent any unusual detention at block stations.

373. A block station must not be considered as closed, except as provided for by time-table or special instructions.

373 (A). When a train receives a Clearance Form A filled out as shown in Rule 317 (B), it must not leave that station before the opposing train mentioned in the clearance has arrived.

CHICAGO, MILWAUKEE, ST. PAUL  
AND PACIFIC RAILROAD

AUTOMATIC BLOCK SIGNAL RULES

Pages 105 to 109

of the

CHICAGO, MILWAUKEE, ST. PAUL  
AND PACIFIC RAILROAD.

See Rules 505 to 525 inclusive.

C. M. ST. P. & P. R. R.  
AUTOMATIC BLOCK SIGNAL RULES

Rule 501 A

Name—Stop signal.

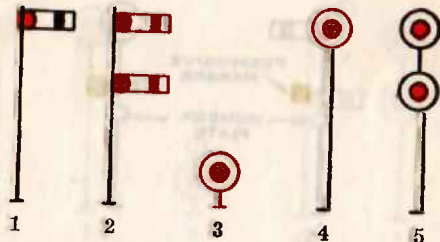


Fig.

Indication—Stop.  
See Rule 509(A).

Rule 501 AA

Name—Stop and proceed signal.

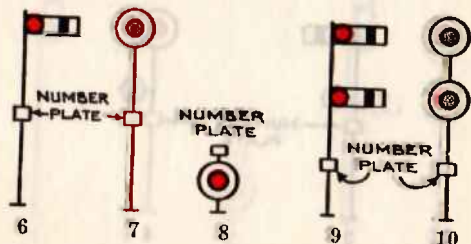


Fig.

Indication—Stop, then proceed at restricted speed.  
See Rules 509(B) and 522.

C. M. ST. P. & P. R. R.  
 AUTOMATIC BLOCK SIGNAL RULES

Rule 501 AAA

Name—Permissive signal.

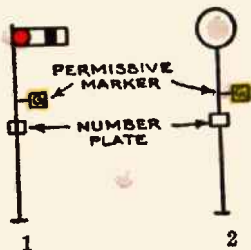


Fig.

Indication—Proceed at restricted speed without stopping.  
 See Rule 509(C).

Rule 501 AAAA

Name—Take siding signal.

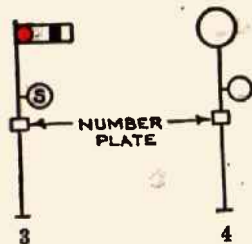


Fig.

Indication—When letter "S" is illuminated take siding.

C. M. ST. P. & P. R. R.  
 AUTOMATIC BLOCK SIGNAL RULES

Rule 501 B

Name—Approach signal.

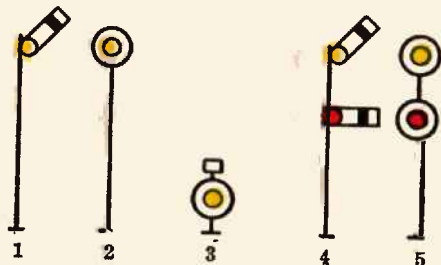


Fig.

Indication—Proceed prepared to stop at next signal.  
 Train exceeding medium speed must at once reduce to that speed.

Rule 501 C

Name—Clear signal.

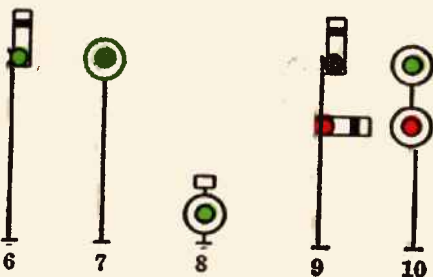


Fig.

Indication—Proceed.  
 See Rule 519.

C. M. ST. P. & P. R. R.  
AUTOMATIC BLOCK SIGNAL RULES

Rule 501 D

Name—Approach diverging route signal.

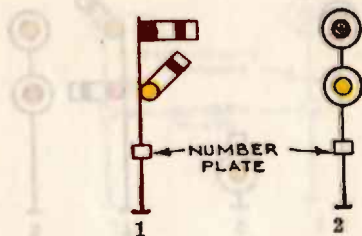


Fig.

Indication—Proceed at slow speed on diverging route.

Rule 501 E

Name—Clear diverging route signal.

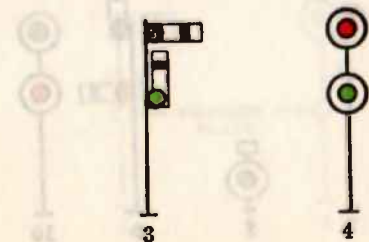


Fig.

Indication—Proceed on diverging route.

C. M. ST. P. & P. R. R.  
AUTOMATIC BLOCK SIGNAL RULES

Rule 501 EE

Name—Approach diverging route signal.

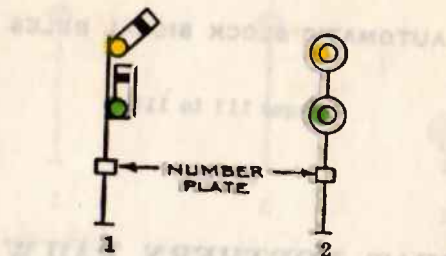


Fig.

Indication—Approach next signal prepared to proceed on diverging route.

AUTOMATIC BLOCK SIGNAL RULES

Pages 111 to 114

of the

**GREAT NORTHERN RAILWAY  
AND AFFILIATED LINES.**

See Rules 505 to 525 inclusive.

**GREAT NORTHERN RY.  
AUTOMATIC BLOCK SIGNAL RULES**

Rule 501 A

Name—Stop signal.

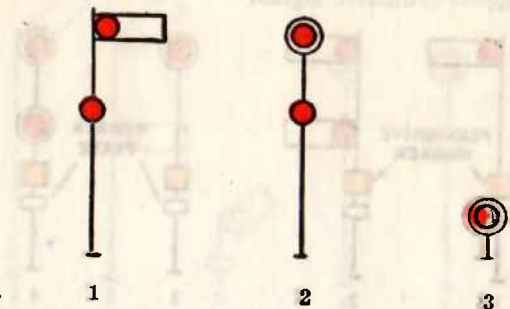


Fig. 1

2

3

Indication—Stop.  
See Rule 509 (A).

Rule 501 AA

Name—Stop and proceed signal.

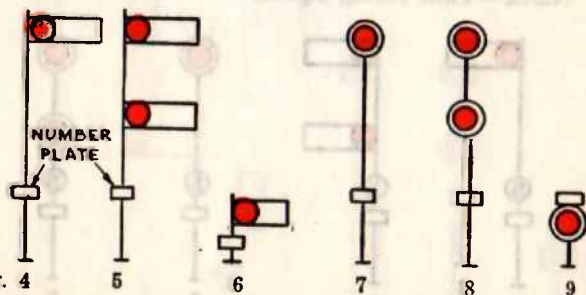


Fig. 4

5

6

7

8

9

Indication—Stop, then proceed at restricted speed.  
See Rules 509 (B) and 522.



GREAT NORTHERN RY.  
AUTOMATIC BLOCK SIGNAL RULES

Rule 501 AAA

Name—Permissive signal.

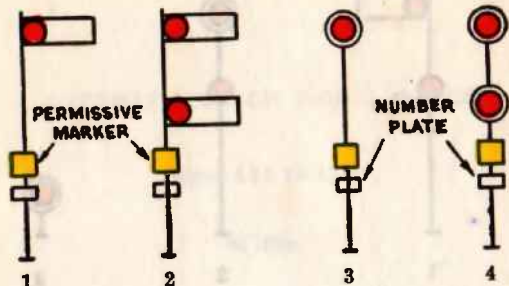


Fig. 1 2 3 4  
Indication—Proceed at restricted speed without stopping.

See Rule 509(C).

Rule 501 AAAA

Name—Take siding signal.

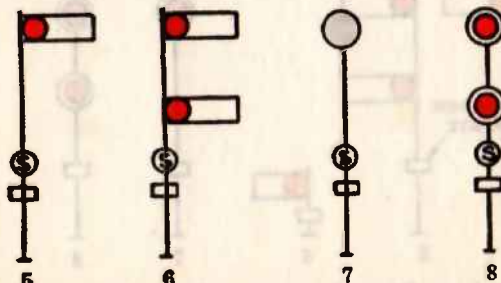


Fig. 5 6 7 8  
Indication—When letter "S" is illuminated take siding.

GREAT NORTHERN RY.  
AUTOMATIC BLOCK SIGNAL RULES

Rule 501 B

Name—Approach signal.

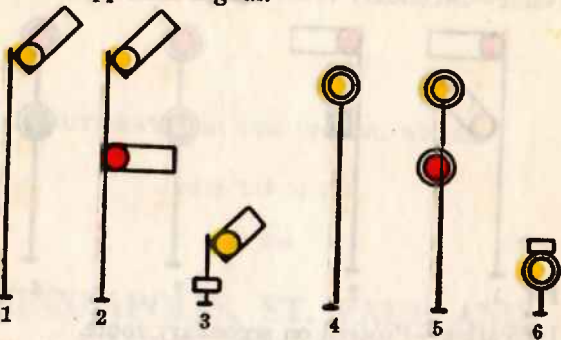


Fig. 1 2 3 4 5 6  
Indication—Proceed on main route prepared to stop at next signal. Train exceeding medium speed must at once reduce to that speed.

Rule 501 C

Name—Clear signal.

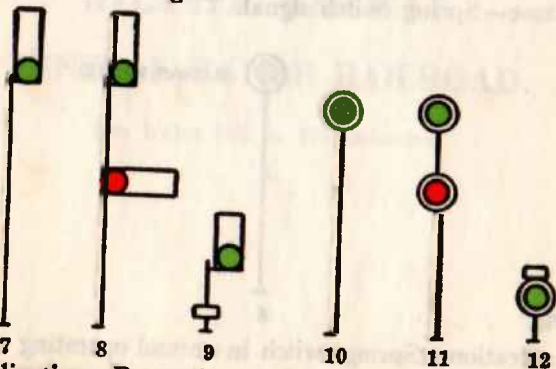
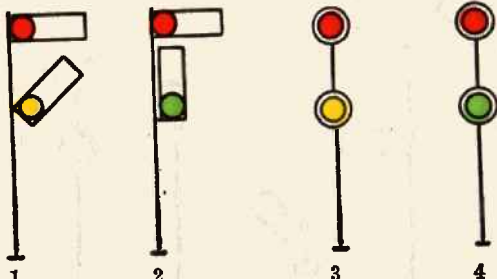


Fig. 7 8 9 10 11 12  
Indication—Proceed on main route.  
See Rule 519.

GREAT NORTHERN RY.  
AUTOMATIC BLOCK SIGNAL RULES

Rule 501 D

Name—Secondary route signal.



Indication—Proceed on secondary route.

Rule 501 E

Name—Spring switch signal.

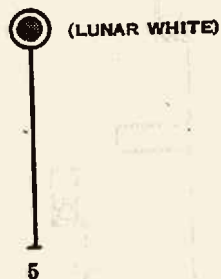


Fig.

Indication—Spring switch in normal operating condition.

See Rule 520.

AUTOMATIC BLOCK SIGNAL RULES

Pages 116 to 119

of the

MINNEAPOLIS, ST. PAUL AND  
SAULT STE. MARIE  
RAILROAD.

DULUTH, SOUTH SHORE AND  
ATLANTIC RAILWAY.

MINERAL RANGE RAILROAD.

See Rules 505 to 525 inclusive.

M. ST. P. & S. S. M. R. R. and D. S. S. & A. Ry.  
**AUTOMATIC BLOCK SIGNAL RULES**

**Rule 501 A**

Name—Stop signal.

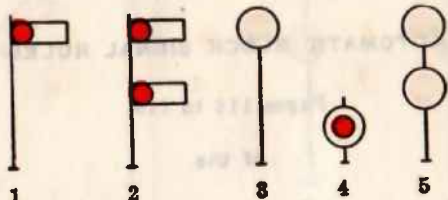


Fig.

1

2

3

4

5

Indication—Stop.

See Rule 509(A).

**Rule 501 AA**

Name—Stop and proceed signal.

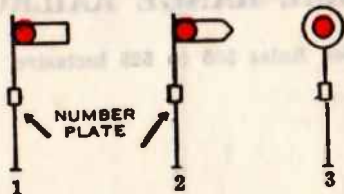


Fig.

1

2

3

Indication—Stop, then proceed at restricted speed.  
 See Rules 509(B) and 522.

M. ST. P. & S. S. M. R. R. and D. S. S. & A. Ry.  
**AUTOMATIC BLOCK SIGNAL RULES**

**Rule 501 AAA**

Name—Permissive signal.

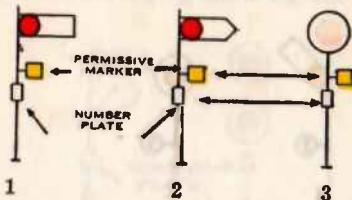


Fig.

1

2

3

Indication—Proceed at restricted speed without stopping.

See Rule 509(C).

**Rule 501 B**

Name—Approach signal.

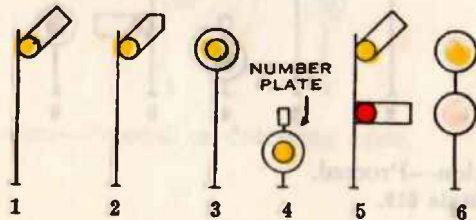


Fig.

1

2

3

4

5

6

Indication—Proceed prepared to stop at next signal.  
 Train exceeding medium speed must at once reduce to that speed.

M. ST. P. & S. S. M. R. R. and D. S. S. & A. Ry.  
**AUTOMATIC BLOCK SIGNAL RULES**

**Rule 501 BB**

Name—Take siding signal.

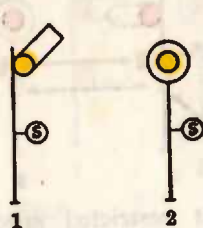


Fig.

Indication—When letter "S" is illuminated take siding.

**Rule 501 C**

Name—Clear signal.

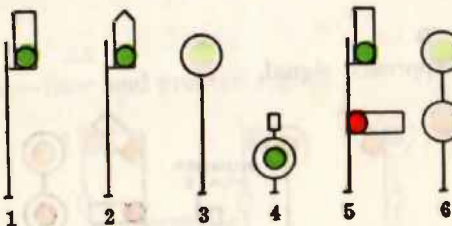


Fig. 1

2

3

4

5

6

Indication—Proceed.  
 See Rule 519.

M. ST. P. & S. S. M. R. R. and D. S. S. & A. Ry.  
**AUTOMATIC BLOCK SIGNAL RULES**

**Rule 501 D**

Name—Approach diverging route signal.

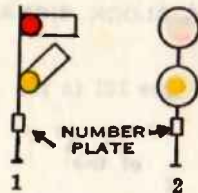


Fig.

Indication—Proceed at slow speed on diverging route.

**Rule 501 E**

Name—Clear diverging route signal.

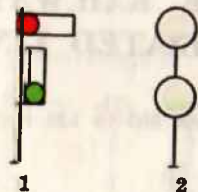


Fig.

Indication—Proceed on diverging route.

**AUTOMATIC BLOCK SIGNAL RULES**

Pages 121 to 125

of the

**NORTHERN PACIFIC RAILWAY.**

**SPOKANE, PORTLAND AND  
SEATTLE RAILWAY AND  
AFFILIATED LINES.**

See Rules 505 to 525 inclusive.

**N. P. RY. and S. P. & S. Ry.  
AUTOMATIC BLOCK SIGNAL RULES**

Rule 501 A

Name—Stop Signal.

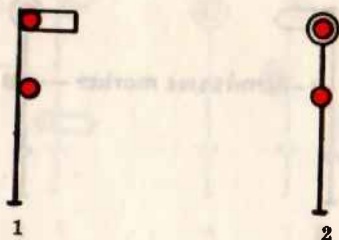


Fig. 1

2

Indication—Stop.

See Rule 509 (A).

Rule 501 AA

Name—Stop and proceed signal.

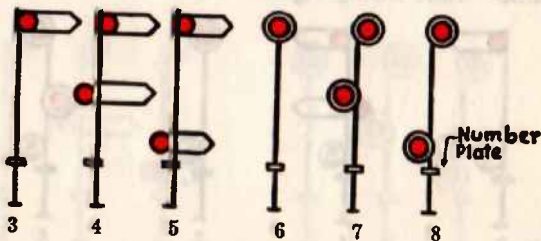


Fig. 3

4

5

6

7

8

Indication—Stop, then proceed at restricted speed.  
See Rules 509 (B) and 522.

N. P. RY. and S. P. & S. Ry.  
**AUTOMATIC BLOCK SIGNAL RULES**

Rule 501 AAA  
 Name—Permissive signal.

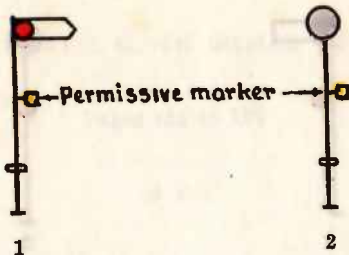


Fig. 1 2  
 Indication—Proceed at restricted speed without stopping.  
 See Rule 509 (C).

Rule 501 AAAA  
 Name—Take siding signal.

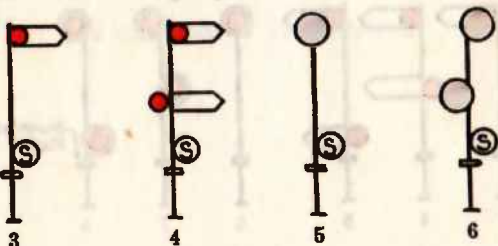


Fig. 3 4 5 6  
 Indication—When letter "S" is illuminated take siding.

N. P. RY. and S. P. & S. Ry.  
**AUTOMATIC BLOCK SIGNAL RULES**

Rule 501 B  
 Name—Approach signal.

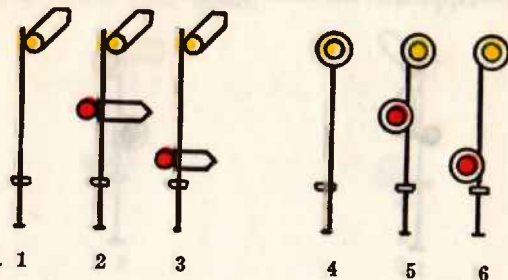


Fig. 1 2 3 4 5 6  
 Indication—Proceed prepared to stop at next signal.  
 Train exceeding medium speed must at once reduce to that speed.

Rule 501 C  
 Name—Clear signal.

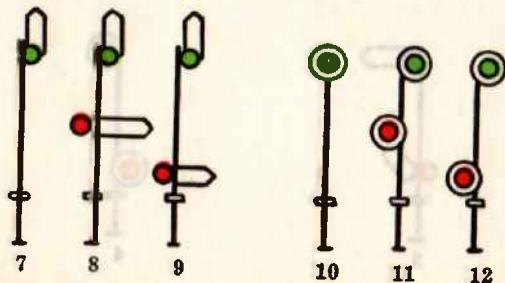


Fig. 7 8 9 10 11 12  
 Indication—Proceed.  
 See Rule 519.

N. P. RY. and S. P. & S. Ry.  
**AUTOMATIC BLOCK SIGNAL RULES**

**Rule 501 D**

Name—Approach-medium signal.

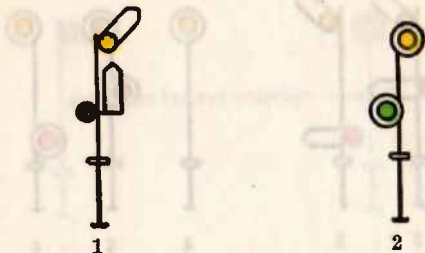


Fig.

Indication—Proceed approaching next signal at medium speed.

**Rule 501 E**

Name—Restricting signal.

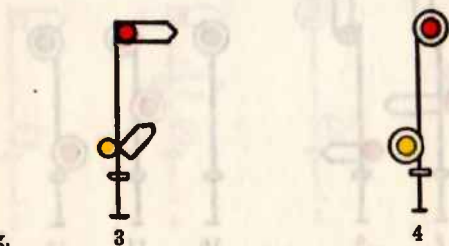


Fig.

Indication—Proceed at restricted speed.

N. P. RY. and S. P. & S. Ry.  
**AUTOMATIC BLOCK SIGNAL RULES**

**Rule 501 F**

Name—Slow-clear signal.

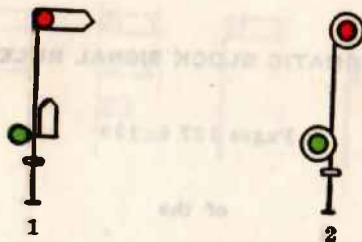


Fig.

Indication—Proceed at slow speed.

**AUTOMATIC BLOCK SIGNAL RULES**

Pages 127 to 130

of the

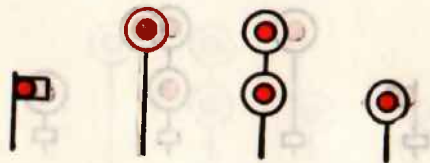
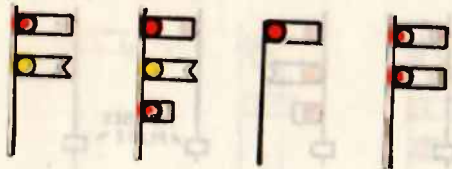
**UNION PACIFIC RAILROAD,  
NORTHWESTERN DISTRICT.**

See Rules 505 to 525 inclusive.

**UNION PACIFIC  
AUTOMATIC BLOCK SIGNAL RULES**

Rule 501 A

Name—Stop signal.



Indication—Stop.

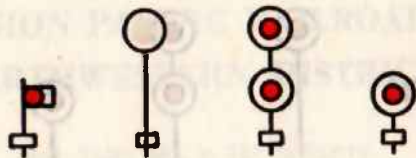
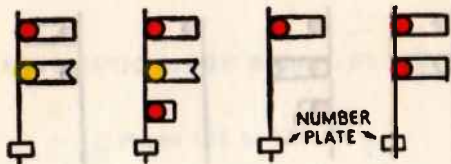
See Rule 509(A).



UNION PACIFIC  
AUTOMATIC BLOCK SIGNAL RULES

Rule 501 AA

Name—Stop and proceed signal.

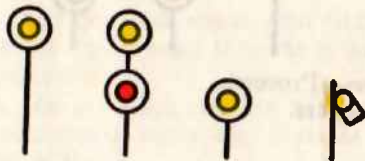
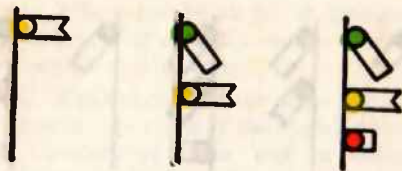


Indication—Stop, then proceed at restricted speed.  
See Rule 509 (B).

UNION PACIFIC  
AUTOMATIC BLOCK SIGNAL RULES

Rule 501 B

Name—Approach signal.

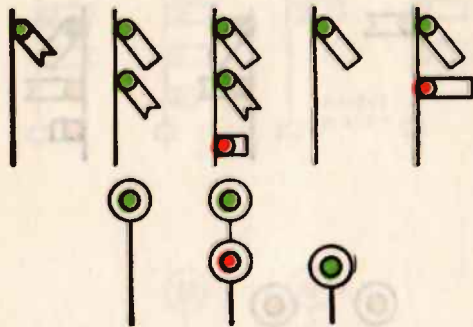


Indication—Immediately reduce speed to 20 miles per hour and as much slower as necessary in order to be able to stop before passing the next signal.

UNION PACIFIC  
AUTOMATIC BLOCK SIGNAL RULES

Rule 501 C

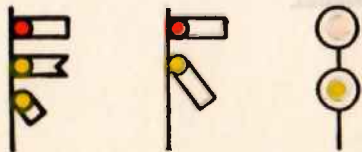
Name—Clear signal.



Indication—Proceed.  
See Rule 519.

Rule 501 D

Name—Approach diverging route signal.



Indication—Proceed at slow speed on diverging route.

AUTOMATIC BLOCK SYSTEM RULES.

505. Block signals, cab signals, or both, govern the use of blocks, but, unless otherwise provided, do not supersede the superiority of trains; nor dispense with the use or the observance of other signals whenever and wherever they may be required.

506 (A). Block signals, as far as practicable, are located to the right of and adjacent to or directly above the track which they govern.

506 (B). Block signals of the semaphore type display arm or arms to the right of the signal mast, as viewed from an approaching train, and in addition display lights of the prescribed color as required.

506 (C). Block signals of the color light type, display their indication by lights of prescribed color as viewed from an approaching train.

508 (A). On any track signaled for traffic in both directions, block signals apply to trains in the direction of their movement.

508 (B). On any track signaled for traffic in one direction, block signals apply only to trains moving with the current of traffic.

508 (C). Stop signals have no number plates. Stop and proceed signals are designated by number plates.

509 (A). When a train is stopped by a Stop-indication, if the indication of the signal does not change it must stay until authorized to proceed, and will then proceed at restricted speed, or in case of failure of means of communication or when no means of communication is provided, it may proceed at restricted speed when preceded by a flagman to the next Clear signal of the lower quadrant type; or to the next Approach or Clear signal of the upper quadrant or color light type.

When the train dispatcher knows there is no opposing train movement involved, he may verbally authorize

the train to proceed in the following form, "You may proceed at restricted speed to the next signal". If the train dispatcher does not positively know there is no opposing train movement involved, he will verbally authorize the train to proceed in the following form, "You may proceed under flag protection to next signal displaying a proceed indication".

When flagging from a Stop signal, train must wait ten minutes after flagman has started.

By daylight, if the track ahead is seen to be clear through to the next signal displaying proceed indication, train may proceed at restricted speed from the Stop signal without sending a flagman ahead.

When a flagman has been sent ahead, he must be on lookout for train, obstruction, switch not properly lined, broken rail, slide warning device plug pulled out, or anything that may affect movement of train.

Flagman may be picked up in the daylight, if a point is reached from which track ahead can be seen to be clear through to next signal displaying proceed indication. After flagman has been picked up, train must proceed at restricted speed to next signal.

S-509 (A). On subdivisions designated by special instruction, when a train or engine without a brakeman, or other specifically designated train, is stopped by a Stop-indication under conditions requiring a flagman be sent ahead to comply with Rule 509 (A), it may proceed at restricted speed to the next signal displaying a proceed indication without sending a flagman ahead.

At meeting or passing points, when a train is stopped under these conditions, if the engineer is verbally informed by a trainman of a train on siding that his train has more cars than the siding will hold, the train holding main track may proceed at restricted speed without sending a flagman ahead.

509 (B). When a train is stopped by a Stop and proceed indication, it may proceed:

On any track signaled for traffic in both directions, at restricted speed through the entire block. Where the Stop and proceed signal is located at the leaving end of a siding, the Stop-indication may be due to an opposing train proceeding in the same block on an Approach-signal indication and every precaution consistent with train rights and the track ahead should be taken before proceeding, to insure safe movement through the block.

On any track signaled for traffic in one direction, at once at restricted speed through the entire block.

509 (C). When a train approaches an automatic block signal equipped with a permissive marker and displaying the Stop-indication, it may pass the signal at restricted speed without stopping.

510. When a train is stopped by a block signal which is evidently out of order, unless otherwise provided, the fact must be reported to the train dispatcher.

510 (A). When stopping at a signal displaying a Stop-indication, no part of the train or engine shall pass the signal and when ready to proceed, signal 14 (b) must be sounded.

When block signal rules require movement at restricted speed, this speed must not be increased until after the rear of train has passed through the block.

511. Both switches of a cross-over must be open before a train or engine starts to make a cross-over movement, and the movement must be completed before either switch is restored to normal position.

512. Where switch indicators are used, the indications displayed do not relieve enginemen and trainmen from protecting their train as required by the rules.

513. Unless otherwise provided, before a train or

engine enters on or fouls a main track, or crosses from one main track to another, it must wait three minutes after any bolt-locked switch, derail or other switch connected with the movement has been operated to affect the signal indications. Exception:—If the switch or derail has been changed before the rear of an opposing train has passed the next signal in the direction of its movement, the movement may be made at once. This will not relieve employes from the duty of promptly and properly protecting the movement.

514. A train or engine entering a block between signals must be protected as required by the rules and must proceed at restricted speed to the next signal.

514 (A). A train or engine or cars on sidings or other tracks must stand clear of insulated joints placed in the track at the clearance point.

When a train or engine enters a siding or other track, the main track switch shall be kept open until the entire train has passed the insulated joints at the clearance point.

Trains or engines proceeding from sidings or other tracks, to the main track, must remain clear of the insulated joints at the clearance point on such tracks until the main track switch has been opened.

515. A train or engine having passed beyond the limits of a block must not back into that block, except under protection as prescribed by Rule 99 or train order.

516. A train which is to take siding at a point where the switch to be used is within 300 feet in advance of an automatic block signal, may pass such signal at stop to enter siding at restricted speed, provided the switch is set for the siding and the way is known to be clear.

517. In foggy or stormy weather, engineers must approach all signals with great care, prepared to respect the indication given.

518. Light weight motor trains of two cars or less, must not be allowed to stand on sanded rails.

519. After passing a signal displaying a proceed indication, the indication of the next signal may change to stop and enginemen and trainmen must be on the alert to observe it.

### SPRING SWITCHES.

520. Spring switches permit trailing point movements through the switch without hand operating the switch. They may be identified by special targets, lights or both. Rule 513 and the third paragraph of Rule 514 (A) only apply when switch is operated by hand.

521. A train or engine stopping on a spring switch while trailing through and actuating the switch points must not make a reverse movement, or take slack until the switch has been operated by hand and it is known that switch points are in proper position for safe movement.

522. When a train or engine moving in either direction is stopped by a signal governing movements over a spring switch, the switch must be examined to make certain it is properly lined, locked or secured and that points fit.

523. When a train or engine is stopped by a signal governing a trailing point movement through a spring switch, and no conflicting train movement is evident, the switch must be operated by hand for the route. If switch is equipped with a facing point lock, it must not be lined and locked in normal position until after movement has been completed. If switch is not equipped with a facing point lock, it must be lined and locked in normal position after the leading wheels have passed the fouling point.

D-524. When moving against the current of traffic

on double or three or more tracks, trains must stop and examine facing points of spring switches unless such switches are protected by signals.

525. Unless otherwise provided, in automatic block signal territory when a train or engine has been stopped by a signal governing movement through or over a spring switch, and signal continues to display Stop-indication, after complying with Rules 522 and 523, movement must be made as provided by Rule 509(B), except that Rule 509(A) will govern on railroads that apply Rule 509(A) exclusively to single track operation.

## **INTERLOCKING SIGNAL RULES**

Pages 138 to 143

of the

# **CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD.**

See Rules 605 to 672 inclusive.

C. M. ST. P. & P. R. R.  
INTERLOCKING SIGNAL RULES

Rule 601 A

Name—Stop signal.

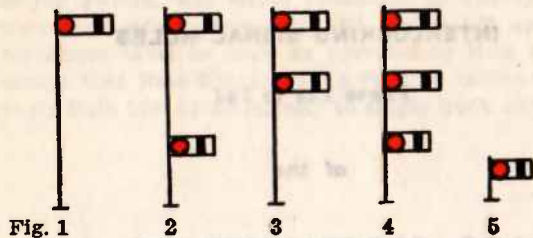


Fig. 1

2

3

4

5

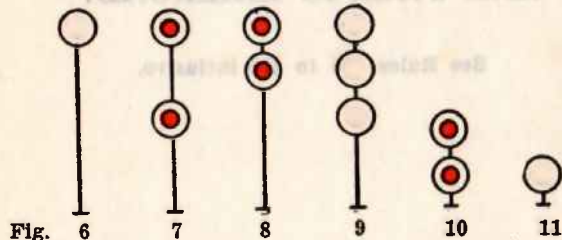


Fig. 6

7

8

9

10

11

Indication—Stop.

C. M. ST. P. & P. R. R.  
INTERLOCKING SIGNAL RULES

Rule 601 B

Name—Approach signal.

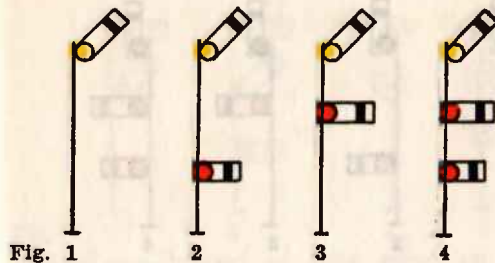


Fig. 1

2

3

4

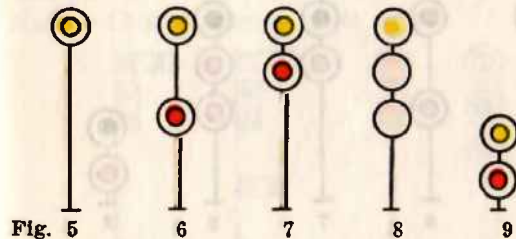


Fig. 5

6

7

8

9

Indication—Proceed prepared to stop at next signal.  
Train exceeding medium speed must at once reduce to that speed.

C. M. ST. P. & P. R. R.  
INTERLOCKING SIGNAL RULES

Rule 601 C

Name—Clear signal.

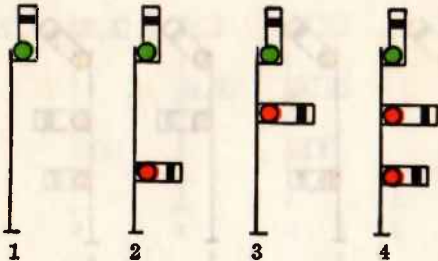


Fig.

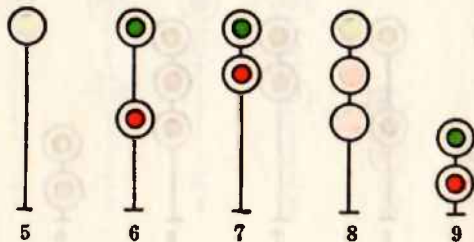


Fig.

Indication—Proceed.  
See Rule 519.

C. M. ST. P. & P. R. R.  
INTERLOCKING SIGNAL RULES

Rule 601 D

Name—Approach diverging route signal.

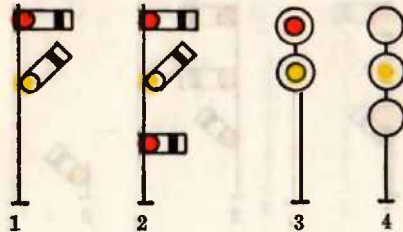


Fig.

Indication—Proceed at slow speed on diverging route.

Rule 601 E

Name—Clear diverging route signal.

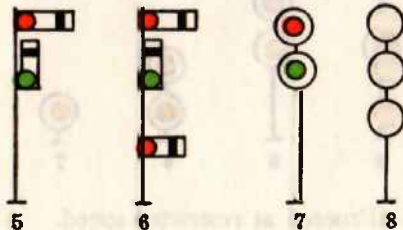


Fig.

Indication—Proceed on diverging route.

C. M. ST. P. & P. R. R.  
INTERLOCKING SIGNAL RULES

Rule 601 F

Name—Restricting signal.

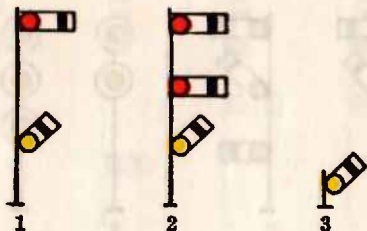


Fig.

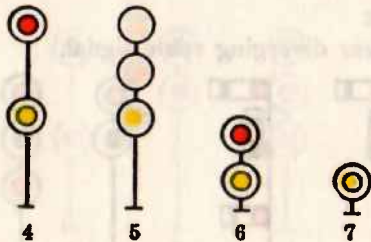


Fig.

Indication—Proceed at restricted speed.

C. M. ST. P. & P. R. R.  
INTERLOCKING SIGNAL RULES

Rule 601 G

Name—Open the switch signal.

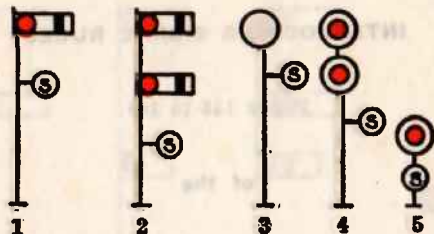


Fig.

Indication—When letter "S" is illuminated open the switch.



INTERLOCKING SIGNAL RULES

Pages 145 to 149

of the

**GREAT NORTHERN RAILWAY  
AND AFFILIATED LINES.**

See Rules 605 to 672 inclusive.

**GREAT NORTHERN RY.  
INTERLOCKING SIGNAL RULES**

Rule 601 A

Name—Stop signal.

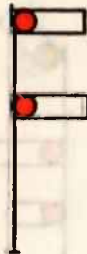


Fig. 1



2



3



4



Fig. 5



6



7



8



9

Indication—Stop.

See Rules 663, 663(A) and 663(D).

GREAT NORTHERN RY.  
INTERLOCKING SIGNAL RULES

Rule 601 B

Name—Approach signal.

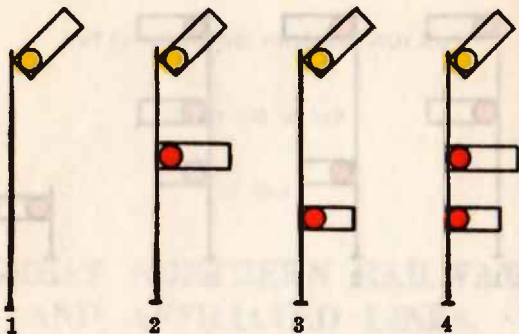


Fig. 1

2

3

4

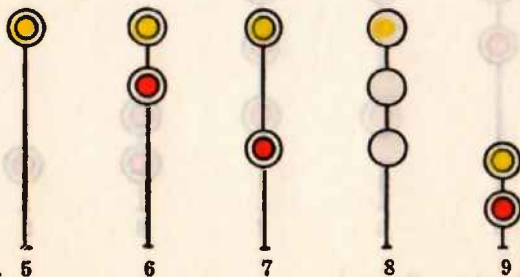


Fig. 5

6

7

8

9

Indication—Proceed on main route prepared to stop at next signal. Train exceeding medium speed must at once reduce to that speed.

GREAT NORTHERN RY.  
INTERLOCKING SIGNAL RULES

Rule 601 C

Name—Clear signal.

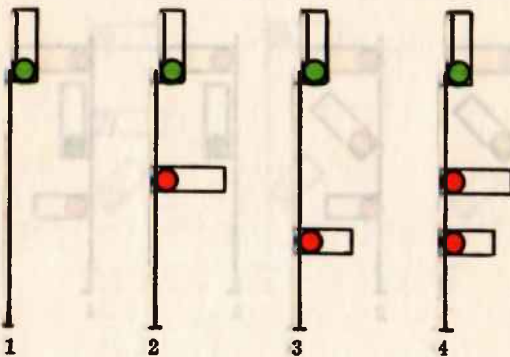


Fig. 1

2

3

4

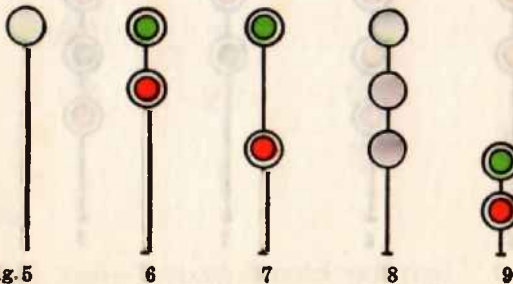


Fig. 5

6

7

8

9

Indication—Proceed on main route.

See Rule 519.

GREAT NORTHERN RY.  
INTERLOCKING SIGNAL RULES

Rule 601 D

Name—Secondary route signal.

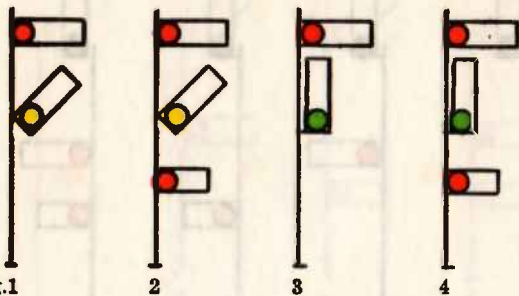


Fig. 1

2

3

4

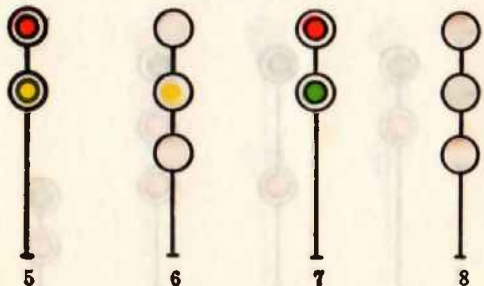


Fig. 5

5

6

7

8

Indication—Proceed on secondary route.

GREAT NORTHERN RY.  
INTERLOCKING SIGNAL RULES

Rule 601 E

Name—Restricting signal.

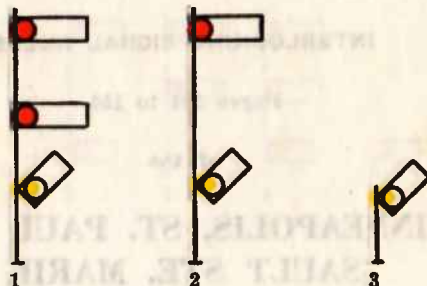


Fig. 1

1

2

3

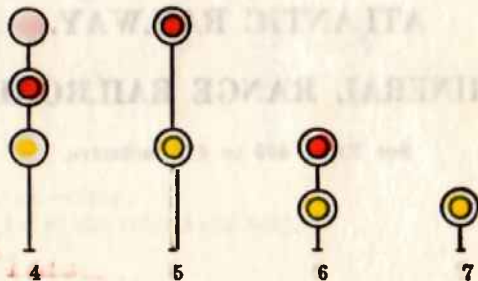


Fig. 4

4

5

6

7

Indication—Proceed at restricted speed.

THE BRIGHTON TOWER  
BUILDING JAMES H. HODGKINS  
INTERLOCKING SIGNAL RULES

## INTERLOCKING SIGNAL RULES

Pages 151 to 156

of the

### MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RAILROAD.

### DULUTH, SOUTH SHORE AND ATLANTIC RAILWAY.

### MINERAL RANGE RAILROAD.

See Rules 605 to 672 inclusive.

## M. ST. P. & S. S. M. R. R. and D. S. S. & A. RY. INTERLOCKING SIGNAL RULES

Rule 601 A  
Name—Stop signal.

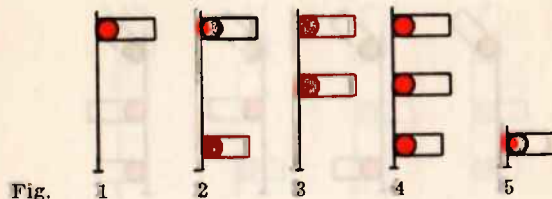


Fig.

1

2

3

4

5

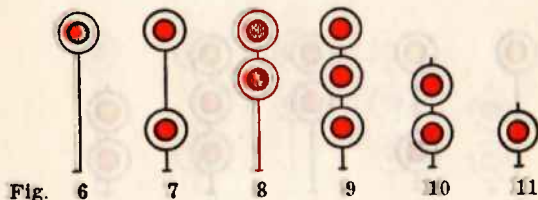


Fig.

6

7

8

9

10

11

Indication—Stop.

See Rules 663, 663(A) and 663(D).

M. ST. P. & S. S. M. R. R. and D. S. S. & A. RY.  
**INTERLOCKING SIGNAL RULES**

**Rule 601 B**

Name—Approach signal.

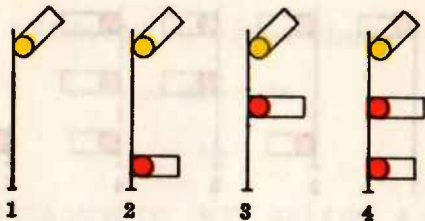


Fig.

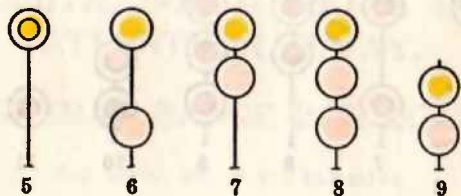


Fig.

Indication—Proceed prepared to stop at next signal.  
 Train exceeding medium speed must at once  
 reduce to that speed.

M. ST. P. & S. S. M. R. R. and D. S. S. & A. RY.  
**INTERLOCKING SIGNAL RULES**

**Rule 601 C**

Name—Clear signal.

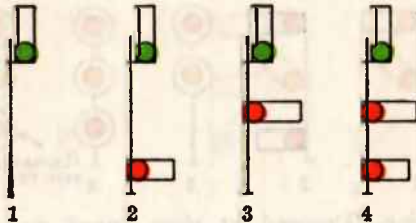


Fig.

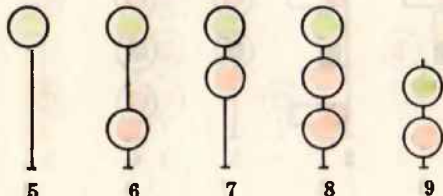


Fig.

Indication—Proceed.  
 See Rule 519.

M. ST. P. & S. S. M. R. R. and D. S. S. & A. Ry.  
**INTERLOCKING SIGNAL RULES**

**Rule 601 D**

Name—Approach diverging route signal.

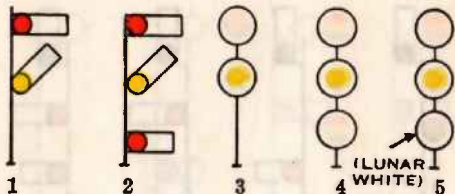


Fig.

1

2

3

4

5

Indication—Proceed at slow speed on diverging route.

**Rule 601 E**

Name—Clear diverging route signal.

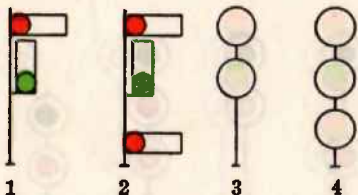


Fig.

1

2

3

4

Indication—Proceed on diverging route.

M. ST. P. & S. S. M. R. R. and D. S. S. & A. Ry.  
**INTERLOCKING SIGNAL RULES**

**Rule 601 F**

Name—Restricting signal.

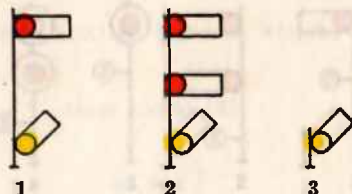


Fig.

1

2

3

Fig.

4

5

6

7

Indication—Proceed at restricted speed.

M. ST. P. & S. S. M. R. R. and D. S. S. & A. Ry.  
INTERLOCKING SIGNAL RULES

Rule 601 G

Name—Open the switch signal.

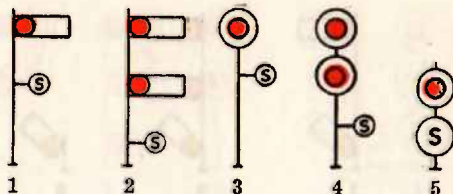


Fig.

1

2

3

4

5

Indication—When letter "S" is illuminated, open the switch.

INTERLOCKING SIGNAL RULES

Pages 158 to 161

of the

**NORTHERN PACIFIC RAILWAY.**

**SPOKANE, PORTLAND AND  
SEATTLE RAILWAY AND  
AFFILIATED LINES.**

See Rules 605 to 672 inclusive.

N. P. RY. and S. P. & S. Ry.  
**INTERLOCKING SIGNAL RULES**

**Rule 601 A**

Name—Stop signal.

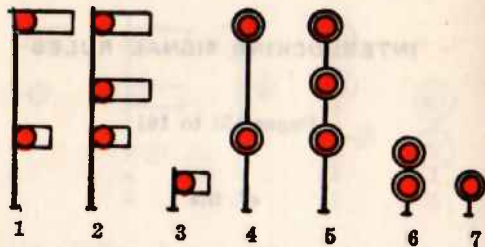


Fig. 1 2 3 4 5 6 7

Indication—Stop.

**Rule 601 B**

Name—Approach signal.

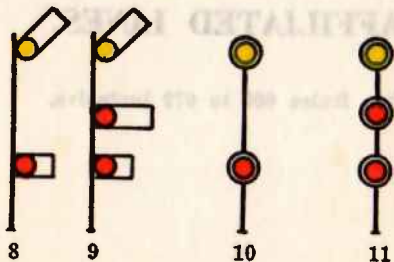


Fig. 8 9 10 11

Indication—Proceed prepared to stop at next signal.  
 Train exceeding medium speed must at once  
 reduce to that speed.

N. P. RY. and S. P. & S. Ry.  
**INTERLOCKING SIGNAL RULES**

**Rule 601 C**

Name—Clear signal.

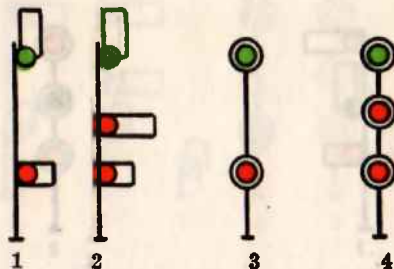


Fig. 1 2 3 4

Indication—Proceed.

See Rule 519.

**Rule 601 D**

Name—Medium-approach signal.



Fig. 5 6

Indication—Proceed at medium speed prepared to  
 stop at next signal.



N. P. RY. and S. P. & S. Ry.  
**INTERLOCKING SIGNAL RULES**

Rule 601 E

Name—Medium-clear signal.

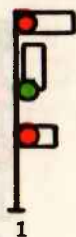


Fig.

Indication—Proceed; medium speed within interlocking limits.

Rule 601 F

Name—Restricting signal.

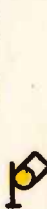


Fig. 3

4

5

6

7

8

9

Indication—Proceed at restricted speed.

N. P. RY. and S. P. & S. Ry.  
**INTERLOCKING SIGNAL RULES**

Rule 601 G

Name—Slow-clear signal.

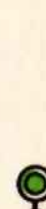


Fig.

1

2

3

4

5

6

7

Indication—Proceed; slow speed within interlocking limits.

Rule 601 H

Name—Slow-approach signal.



Fig.

1

Indication—Proceed at slow speed prepared to stop at next signal.

**INTERLOCKING SIGNAL RULES**

Pages 163 to 166

of the

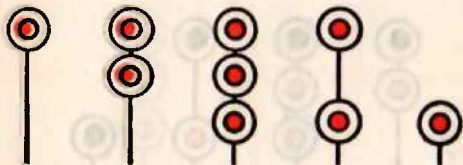
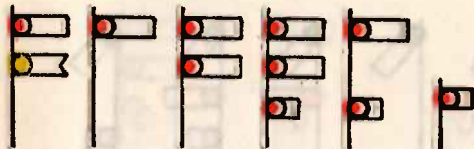
**UNION PACIFIC RAILROAD,  
NORTHWESTERN DISTRICT.**

See Rules 605 to 672 inclusive.

**UNION PACIFIC  
INTERLOCKING SIGNAL RULES**

Rule 601 A

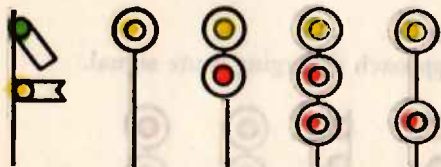
Name—Stop signal.



Indication—Stop.

Rule 601 B

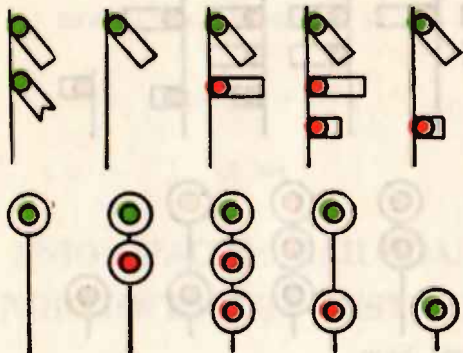
Name—Approach signal.



Indication—Immediately reduce speed to 20 miles per hour and as much slower as necessary in order to be able to stop before passing the next signal.

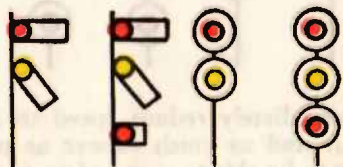
UNION PACIFIC  
INTERLOCKING SIGNAL RULES

Rule 601 C  
Name—Clear signal.



Indication—Proceed.  
See Rule 519.

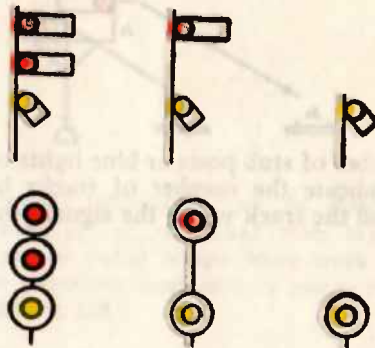
Rule 601 D  
Name—Approach diverging route signal.



Indication—Proceed at slow speed on diverging route.

UNION PACIFIC  
INTERLOCKING SIGNAL RULES

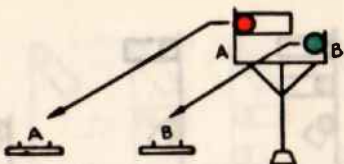
Rule 601 F  
Name—Restricting signal.



Indication—Proceed at restricted speed.

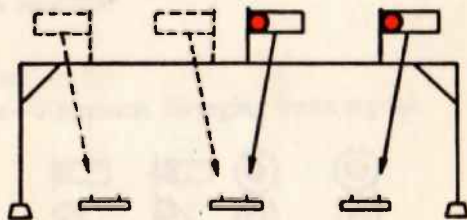
UNION PACIFIC  
INTERLOCKING SIGNAL RULES

Rule 601 G



The number of stub posts or blue lights on a bracket signal indicate the number of tracks between the signal and the track which the signal governs.

Rule 601 H



Standard signal indications may be displayed by signals mounted on, or suspended from, bracket, or cantilever mast or signal bridge when track arrangement or other condition requires their use.

STANDARD SIGNAL INDICATIONS

Standard signal indications may be displayed by signals mounted on, or suspended from bracket, or cantilever mast or signal bridge when track arrangement or other condition requires their use as shown on pages 168, 169 and 170.

Where purple is shown on pages 168 and 169 blue may be used as desired.

SIGNALS ON BRACKET MASTS

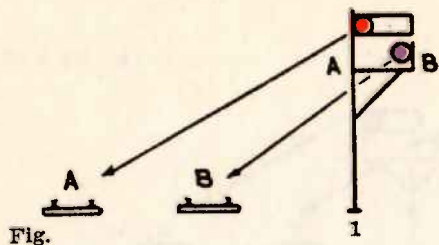


Fig.

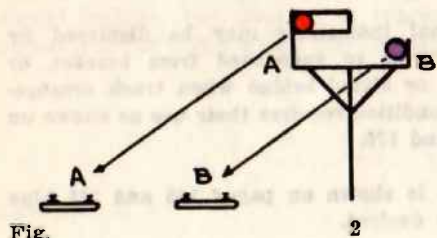


Fig.

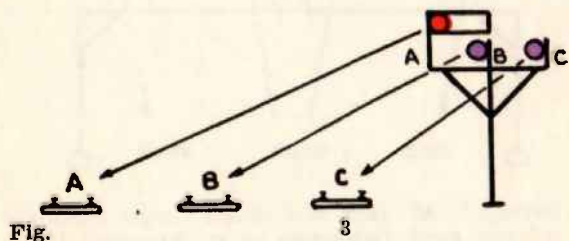


Fig.

SIGNALS ON BRACKET MASTS

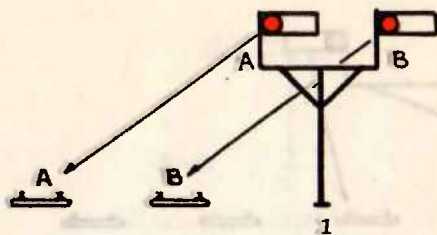


Fig.

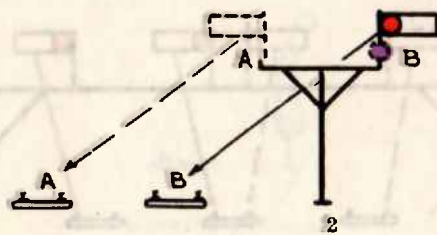


Fig.

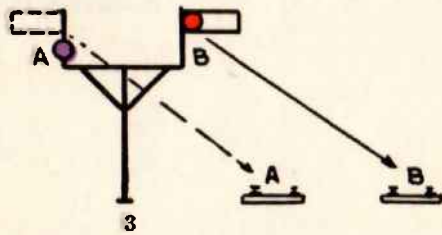


Fig.

SIGNALS ON CANTILEVER MAST OR BRIDGE

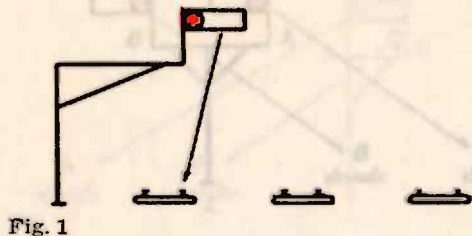


Fig. 1

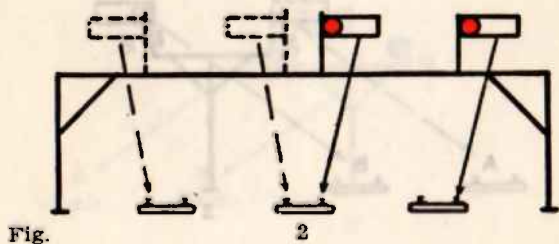


Fig.

SMASH-BOARDS

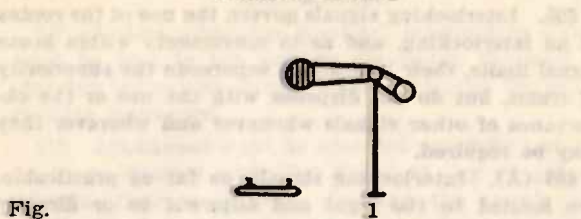


Fig.

Normal position.

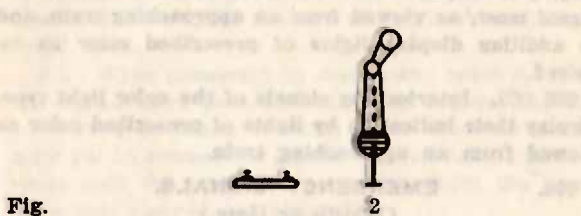


Fig.

Reverse position.

Smash-board in reverse position does not supersede signal indication.

## INTERLOCKING RULES.

605. Interlocking signals govern the use of the routes of an interlocking, and as to movements within home signal limits, their indications supersede the superiority of trains, but do not dispense with the use or the observance of other signals whenever and wherever they may be required.

605 (A). Interlocking signals, as far as practicable, are located to the right and adjacent to or directly above the track which they govern.

605 (B). Interlocking signals of the semaphore type display semaphore arm or arms to the right of the signal mast, as viewed from an approaching train, and in addition display lights of prescribed color as required.

605 (C). Interlocking signals of the color light type, display their indication by lights of prescribed color as viewed from an approaching train.

## 606. EMERGENCY SIGNALS.

(Whistle or Horn.)

Note.—The signals prescribed are illustrated by "o" for short sounds; "—" for longer sounds.

Sound.	Indication.
(a) —————	All trains and engines within interlocking limits stop immediately.
(b) o o	Resume normal movement after receiving the proper signal or permission from the signalman.
(c) o o o	Whistle or horn test.
(d) o o o o	Call signal maintainer or repairman.

607. Unless otherwise provided, interlocking signals located in automatic block signal territory, are a part of the automatic block signal system.

## SIGNALMEN.

611. Unless otherwise provided, interlocking signals must be kept in the position displaying the most restrictive indication, except when displayed for an immediate movement.

612. Appliances must be operated carefully and only by those charged with that duty. If any irregularity affecting their operation is detected, the signals must be displayed to give their most restrictive indication until repairs are made.

613. When the route is set the signals must be operated sufficiently in advance of approaching trains to avoid delay.

615. When necessary to change any route for which the signals have been cleared for an approaching train or engine, switches, movable point frogs or derails, must not be changed or signals cleared for a conflicting route until the train or engine for which the signals were first cleared has stopped.

616. The lever operating a switch, derail, movable point frog, detector bar or lock must not be moved when any portion of a train or engine is standing on or closely approaching the switch, derail or movable point frog.

617. Operating levers must be blocked or marked and should not be used when a track, switch or signal is undergoing repairs or when a track is obstructed.

618. During cold weather, the levers must be moved as often as may be necessary to keep connections from freezing.

619. If the force whose duty it is to keep switches clear when snow or sand is drifting, is not on hand when required, the fact must be reported to the superintendent.

620. If a signal fails to work properly, its operation must be discontinued and until repaired the signal

secured so as to display its most restrictive indication.

621. Signalmen must observe, as far as practicable, whether the indications of the signals correspond with the position of the levers.

622. Signalmen must not make nor permit any unauthorized repairs, alterations or additions to the interlocking.

Any defects in the interlocking must be promptly reported to the superintendent.

623. If there is a derailment or if a switch, movable point frog or derail is run through, or if any damage occurs to the track or interlocking, the signals must be restored so as to display their most restrictive indication, and no movement permitted until all parts of the interlocking and track liable to consequent damage have been examined and are known to be in a safe condition.

624. When necessary to disconnect a switch, movable point frog, derail, facing point lock, detector bar or electric locking circuits, all switches, movable point frogs and derails affected must be securely spiked or fastened in the required position and the levers blocked or marked in such a manner that they cannot be operated, before any train or engine is permitted to pass over them.

625. When switches, movable point frogs, derails or signals are undergoing repairs, Stop-indication must be displayed for any movement which may be affected by such repairs, until it has been ascertained from the repairman that the switches, movable point frogs and derails are properly lined for such movement.

626. Signalmen must, as far as practicable, observe all passing trains and note whether they are complete and in order; should there be any indication of conditions endangering the train, or any other train, the signalman must take such measures for the protection of trains as may be practicable.

628. Signalman must not give hand signals when the proper indication can be displayed by the interlocking signals. Hand signals must not be given until the route has been examined, is known to be safe for the passage of train, and until after the train comes to a stop at the Home Signal. Signalman will then give hand signal, using a yellow flag by day and yellow light by night from the center of the track on which the train movement is to be made. When more than one train is in sight and confusion may result, hand signal must be given from a point where it cannot be misunderstood.

628 (A). At interlockings where distances make it impracticable for signalman to examine routes and give hand signals, trainman must be governed by instructions from signalman, examining route and operating switches by hand as required, before proceeding.

628 (B). When necessary to perform switching over dual control switches, they may be manually operated by trainman, but movement must not be made until trainman has verbal understanding with the operator.

629. If necessary to pass any interlocking signal indicating stop, hand signals must be used and the superintendent notified.

630. Signalmen are responsible for the care of the interlocking station, lamps and supplies.

631. Lights in interlocking stations must be so placed that they cannot be seen from approaching trains.

633. If a train or engine overruns a Stop-indication, the fact must be reported to the superintendent.

634. Signalmen must not permit unauthorized persons to enter the interlocking station.

635. During a stated period, an interlocking station may be closed upon authority of the superintendent. When so closed, switches and switch levers must be secured for routes that do not conflict, and signal levers



placed in position so that signals will display the proper indication.

The interlocking station must be securely locked.

636. At interlocking stations where there is a train order or block signal operated by the same signalman, such signals must not be changed to display a proceed indication for a train until after the interlocking signal has been changed to permit the train to proceed.

637. When it is safe to do so, switches and signals may be operated on the request of sectionmen, signalmen, or inspectors.

### ENGINE AND TRAIN CREWS.

661. If a signal indication, permitting a train or engine to proceed, after being accepted, is changed to a Stop-indication before it is reached, the stop must be made at once. Such occurrence must be reported to the superintendent.

663. When a train or engine is stopped by an interlocking Stop-indication, it may proceed at restricted speed after receiving a hand signal from the signalman, given with a yellow flag by day and a yellow light by night, from the center of the track on which the movement is to be made. When more than one train is in sight and confusion may result, hand signal must be given from a point where it cannot be misunderstood.

663 (A). At interlockings where distances make it impracticable for signalman to examine routes and give hand signals, trainman must be governed by instructions from signalman, examining route and operating switches by hand as required, before proceeding.

663 (B). When necessary to perform switching over dual control switches, they may be manually operated by trainman, but movement must not be made until trainman has verbal understanding with the operator. In making such movement, employes must be governed by instructions posted at the switch. In the absence

of other instructions, trainman must first throw selector lever from power position to hand operating position, then operate switch with hand throw lever. Selector lever must not be returned to power position until after the final movement over the switch has been made. Both levers must be left in normal position and locked.

663 (C). When no telephone at dual control switch or when operator is not on duty at control station, switch must be handled in accordance with instructions governing manual operations posted at the switch.

663 (D). When a train or engine is stopped by a Stop-indication of a signal governing movements over an automatically operated dual control switch, it may proceed:

If the movement is in a facing point direction, only after operating switch by hand, even though the switch points appear to be in proper position for the movement desired;

At once if the movement is in a trailing point direction and switch points are in proper position for such movement, otherwise switch must be operated by hand.

When switching movements are to be made switch must be operated by hand. Instructions for hand operation are posted at the switch.

663 (E). Unless otherwise provided, in automatic block signal territory, when a train or engine has moved through the interlocking limits either on hand signals or preceded by a flagman, or as provided by Rule 663 (A) or 663 (D), it must proceed as provided by Rule 509 (B), except that on railroads that apply Rule 509 (A) exclusively to single track operation, Rule 509 (A) will govern.

667. Sand must not be used nor water allowed to run over the movable parts of an interlocking or spring switch.

668. When stopping at a signal displaying a Stop-

indication, no part of the train or engine shall pass the signal.

669. Trains or engines stopped by the signalman in making a movement through an interlocking, must not move in either direction until they have received the proper signal from him.

670. A reverse movement within the limits of an interlocking, or a forward movement after making a reverse movement, must not be made without the proper interlocking signal indication or permission from the signalman.

671. While an interlocking station is closed, should a signal for an open route indicate "stop", movements through the interlocking must be preceded by a flagman. Before proceeding, the engineer and trainmen must know the route is properly lined.

In addition, if the interlocking governs movement over a drawbridge, engineer or trainmen must ascertain if bridge is in proper position for passage of a train.

The facts must be reported to the superintendent from the first available point of communication.

672. When a train or engine is stopped by the Stop-indication of an automatic interlocking signal, and no immediate conflicting train movement is evident, a member of crew must proceed to the crossing and operate "Release". If the signal does not change its indication at expiration of time interval, he may signal his train to proceed over the crossing if there is no train or engine approaching on conflicting routes. If a train or engine is approaching on a conflicting route, proceed signal must not be given until conflicting movement has been completed over the crossing, or has come to a stop at the governing home signal. If a train or engine is standing between the home signals on a conflicting route, the proceed signal must not be given until after a thorough understanding has been had with

the crew of the train or engine on the conflicting route.

Trains or engines operating through automatic interlocking are governed by Automatic Block Signal Rules 501 A to 525 inclusive, and Interlocking Rules 601 A to 607 inclusive, and 661 to 672 inclusive.

Where smash-boards are in use, instructions for hand operation are posted in Release box.

#### GENERAL INSTRUCTIONS.

701. Employes must be alert and devote themselves exclusively to the company's service, attend to their duties during the hours prescribed, reside where required, and comply with the instructions from the proper authority in matters pertaining to their respective branches of the service. They must not absent themselves from duty, exchange duties with or substitute others in their place, nor engage in other business without proper authority.

Carelessness of a person's own safety or that of others is prohibited.

The reading of newspapers, books or periodicals or the playing of games by enginemen, trainmen or yardmen, while on duty, is prohibited.

702. Civil, gentlemanly deportment is required of all employes in their dealings with the public, their subordinates, and each other. Courtesy and attention to patrons is demanded.

Employes are prohibited from entering into altercation with any person regardless of provocation. They will make a note of the facts, if necessary, and report to their immediate superior.

Employes must refrain from loud talking or the use of profane or vulgar language at stations or on or about trains.

Playing practical jokes, scuffling or wrestling while on duty is prohibited.

Employes who are insubordinate, dishonest, immoral,

quarrelsome or otherwise vicious, or who do not conduct themselves in such a manner and handle their personal obligations in such a way that their railroad will not be subjected to criticism and loss of good will, shall not be retained in the service.

703. Employes must not give information respecting the affairs of the railroad except to authorized officers or to persons authorized by law to receive it, and must not permit unauthorized persons to have access to the books, waybills or other statistics in their charge.

704. Employes must exercise care and economy in the use of railroad property, and when leaving the service, or upon demand by proper authority, must return property intrusted to their care.

705. Unless specially authorized, employes must not use the railroad's credit and must neither receive nor pay out money on the railroad account. Property of the railroad must not be sold nor in any way disposed of without proper authority. All articles of value found on railroad property must be cared for and promptly reported.

706. The telegraph or telephone must not be used when mail will answer the purpose. Messages must be briefly worded and confined to railroad business.

Letters of a personal nature must not be sent by railroad mail.

707. Alteration in the arrangement or design of structures, cars, or other railroad property is prohibited, except by proper authority.

708. No person will be permitted to ride on an engine, or in a baggage, mail, or express car, or on track cars (except employes in discharge of their duties), without a written order from the proper authority.

709. Railroad premises must be kept in neat, clean and orderly condition.

710. Before stopping for meals, trainmen and engine-

men must notify the train dispatcher sufficiently in advance to avoid delays to trains.

711. Passengers will not be carried on freight trains except as authorized by time-table or special instructions, or as otherwise authorized. Trainmen must warn passengers about the hazard of injury in starting and stopping and request they remain seated while train is moving.

712. Employes must observe rules for other classes of employes that relate in any way to the proper discharge of their own duties or the safety of operation.

713. Employes must, so far as practicable, observe passing trains for defects such as brakes sticking, brake rigging down, swinging doors, hot journals, indications of fire, shifted lading and protruding objects. Should there be any indication of conditions endangering the train, they will signal crews of such trains, calling attention to dangerous conditions by signals shown.

When passing other trains and interlocking, block, water, coal or other stations, and points where trackmen or bridgemen are working, train and engine crews on moving trains must be on the lookout for signals. If unable to communicate signals, the train dispatcher should be notified as quickly as possible of defective conditions.

The following signals will be used:

Hot journal.

}	By Day—Nose held with one hand and the other hand pointed toward passing train.
	By Night—Lamp swung vertically in a small circle; lamp to be held by guard wire around globe.

Brakes sticking.

By Day—Hands shoved in sliding motion out from body.

By Night—Same signal given with lamp in hand.

Broken wheels.

Defective truck.

Dragging brake connection.

Lading shifted over side or end of car.

Swinging car door or any other dangerous condition.

Indication of fire.

Stop signal.

714. Employes on a standing or moving train should guard against being struck by objects that might be protruding or may fall from a train on adjacent track, wayside signals, mail cranes, or other impaired clearances.

715. Employes must not remain near the track when trains or engines are passing, as coal, stone, car doors, or other articles are liable to fall.

716. Turntables not under immediate supervision of an employe must be kept locked.

717. When persons who are evidently intoxicated, idiotic, or insane, are seen in the vicinity of tracks they should be guarded from approaching trains.

718. All accidents resulting in injuries to employes when on duty, and off duty accidents where they occur on railway premises, and all accidents to persons other than employes occurring on railway property, regardless of the extent of injuries, and all accidents resulting in property damage must be promptly reported to the proper officer.

In an emergency, or in case of obstruction by acci-

dent or other cause, the employe upon whom the responsibility most naturally falls must assume authority until the arrival of an officer, and must at once report conditions and make suggestions as to forces, material and equipment required.

Whenever passengers or employes are injured, everything possible must be done to care for them properly. If they are able to be moved, they must be taken for treatment to the nearest place at which the company has a surgeon. If the case is urgent and the company surgeon cannot be immediately procured, the conductor, agent or officer in charge is authorized to call the nearest surgeon available to administer first aid and care for the patient until the company surgeon can take charge of the case.

719. In cases of serious accidents to trains, conductors, after making everything safe, must give their undivided attention to the care and comfort of their passengers, especially to those who are injured.

Bedding and linen may be taken from sleepers for this purpose, the conductor arranging with sleeping car employes to keep account of all material so taken. When necessary, injured persons may be put in the sleepers.

When a number of persons are injured, the services of competent surgeons, preferably company surgeons, in the vicinity should be secured at once.

720. In case of injuries to trespassers or others, injured person or persons must be taken to nearest station, when possible and either placed in the care of relatives or friends, or in the charge of the local county, city, or village authorities. Necessary medical attention should be arranged with the distinct understanding that no expense therefor will be assumed by the company without specific authority from either the superintendent or the general claim department.

In case of death on train, body should be taken to

nearest station and proper public officer and superintendent notified immediately.

In case of death on company property from accidental or other cause, after exact position of body and surrounding conditions have been carefully noted, body should be moved to give clear passage for trains and left in charge of an employe or other responsible person, and proper public officer and superintendent notified immediately.

721. A report of all accidents must be made, and immediately sent by wire to superintendent, giving all information. Quick action is especially imperative in cases of serious injury and particularly so in connection with accidents to passenger trains wherein any passengers thereon are injured.

Conductors in charge of passenger trains should be supplied at all times with supply of prescribed forms for taking names of passengers on trains derailed or in collision. One of these forms should be completely filled out for each passenger on train whether or not passenger claims injury, and passenger then requested to sign the form. If conductor's duties immediately following the accident are such as to prevent his obtaining these, he should delegate brakeman or some other available employe on train to procure them. These should be turned over to the claim agent, as soon as he boards train, or to the superintendent at destination, if not picked up by the claim agent.

722. In case of personal injury, loss of life, or damage to property in which a train is involved, the conductor must immediately secure the names, addresses and occupations of all persons involved, including all persons at the scene when the accident occurred and those arriving soon thereafter, regardless of whether these persons admit knowing anything about the accident. License numbers of automobiles nearby must

be obtained. This information, obtained with the assistance of other employes when necessary, should be included in reports made covering such occurrences. Where signalling devices are provided, or crossing watchmen or flagmen are on duty, a special effort should be made to determine who, among the witnesses, can testify whether the signalling devices were functioning properly or if the crossing watchman or flagman was properly performing his duty. Names of witnesses who can testify relative to bell and whistle signals must be obtained when possible to do so.

723. In cases where persons or vehicles are struck and injured or damaged by trains or engines on crossings in the vicinity of stations, agent at point where accident occurred will immediately locate on a rough sketch and show by actual measurement the position of all cars standing on tracks at or near the crossing, and send report to the superintendent, describing the cars, giving the initials and number of each and their location with reference to the crossing where the accident occurred.

724. All equipment such as cars, engines, machinery or tools, etc., also premises involved in accidents resulting in personal injuries should be promptly inspected by the foreman or other person in charge of the work or by other competent inspectors to ascertain the condition of same. A report of such inspection stating the conditions found and name or names of the persons making the inspection should be promptly forwarded to the superior officer of the person making the inspection.

When tools, machinery or other types of equipment or appliances are involved in an accident resulting in personal injury, they should, if at all possible, be marked for identification and placed in custody of some responsible officer or employe and held subject

to the order of the general claim department or the superintendent, regardless of whether or not inspection reveals any defect therein.

725. When engines, cars or other rolling stock are involved in an accident resulting in personal injury, such inspection as can be made should be made before such equipment leaves the place of accident, and this should be followed by a further inspection at the first terminal. Such inspection should be made by at least two competent employes, preferably by car inspector, car foreman or master mechanic. Report of the result of such inspection should be promptly forwarded through the proper channels to the superintendent and by him transmitted to the general claim department.

726. Every precaution must be taken to prevent loss and damage by fire. The rules and instructions governing fire prevention and fire protection must be fully complied with.

It is important that the cause of a fire be ascertained, if possible, in each case and promptly reported by wire to the superintendent.

Buildings and structures should be kept free of refuse, and oily clothing or waste must not be stored in lockers. Stoves, pipes and flues must be kept in safe condition. Matches must be kept in proper receptacles.

726 (A). Train and engine men must report at first opportunity the presence of fires on or near right of way, unless fire is being controlled by other employes. In case of danger of fire spreading to a bridge or other structure, train must be stopped and crew assist in extinguishing fire.

The conductor must promptly notify his engineer of fires which may have been started by their engine and require an inspection of the fire prevention appliances. Anything that might cause a fire must not be dropped or thrown from an engine or train.

Engineers must personally inspect and know that the

doors of ash pans are closed and properly secured before leaving a terminal or any place where ash pans have been opened. Ash pans and front ends must be cleaned only at cinder pits or designated locations. When cleaning ash pans or dumping cinders where there are no pits, the cinders must be leveled off flush with the rail and any fire in them extinguished. Doors of ash pans must be closed and grates must not be shaken while passing over bridges or trestles. When fire is observed falling from ash pans report must be made to train dispatcher so sectionmen can be notified to make inspection of track and bridges. Should ash pan door come open while running, train must be stopped and door closed.

On engines equipped with sprinklers, engineers must use sprinklers, (except during freezing weather), when passing over bridges, station platforms, and when pulling away from stations where ash pans have been dumped. Trainmen should observe whether or not sprinklers are working and report failures to engineers.

726 (B). In case of fire in a car containing passengers, caretakers or employes, the train must be stopped at once, occupants that may be in danger, immediately removed from such car or cars, and prevented from re-entering such car. Every effort must be made to extinguish the fire. After all occupants have been removed to safety, if it is then found to be impossible to extinguish the fire at the point where train is stopped, the conductor, if advisable and if it can be done with safety, will have train, car or cars moved to the nearest available point where assistance is obtainable.

In case of fire in or between air conditioned passenger cars, immediate action must be taken to shut off air conditioning blower fan on such cars.

726 (C). Employes must familiarize themselves with the Interstate Commerce Commission regulations gov-

erning the handling and transportation of explosives and inflammables and be governed thereby.

Gunpowder, dynamite, nitro-glycerine, or other explosives must not be transported in any car attached to a passenger train. Motion picture films must not be carried in any car in which passengers are carried except when being transported as baggage or express in accordance with the provisions of Interstate Commerce Commission, Bureau of Safety Regulations, or as United States Mail, as provided for in Postal Laws and Regulations.

Cars placarded "explosives" must be handled with care and as little as possible. They must not be cut off while in motion and permitted to strike another car nor may other cars be cut off and permitted to strike them. They must be removed from all danger of fire and must not be placed in or adjacent to passenger sheds or stations or under bridges. When possible, engines on adjacent tracks must not be permitted to stand opposite or near such cars.

When handling cars containing explosives or inflammables, it must be known that they are in proper place in the train.

#### TRAIN AND YARD SERVICE.

800. When pile drivers, cranes, derricks or other track or off-track equipment is being used, they must not be operated to foul a track while trains or other movements are passing; and before blocking or fouling any track, protection in both directions must be provided. Care must be used to avoid contact with overhead wires.

When trains are seen or known to be closely approaching, trains unloading ballast or other track material, or operating dozers, snow machinery or similar equipment must stop and be sure adjacent track is clear and booms or other projecting parts of pile drivers,

cranes, derricks or other similar track or off-track equipment must be secured to clear adjacent track, and operation stopped.

Derricks or similar machines must not be turned or swung while travelling, either under own power or being handled by an engine, except where necessary in short moves of less than 100 feet or in closely continuous travel and work operation.

Before moving a work train, the engine whistle signal 14 (b) or 14 (h) must be sounded for protection of men working about the train and the operators of cranes, ditchers or similar machines notified.

Cars used in transporting men to and from work should be pulled when practicable.

801. Before coupling to or moving occupied outfit cars, notice must first be given all occupants, and all ladders and other equipment cleared before moving.

Occupied outfit cars should be handled immediately ahead of caboose when practicable. Women or children will not be permitted to ride in such cars unless authorized by the superintendent.

When occupied outfit cars are set out or taken into yards in trains, the train dispatcher and the yardmaster must be promptly notified. When practicable, occupied outfit cars should not be placed adjacent to or in buildings or structures.

Sidings blocked by occupied outfit cars should not be used for meeting or passing trains if it can be avoided.

802. When pile drivers, cranes, derricks, steam shovels or similar equipment of the swinging or pivoting type, are being moved on their own wheels, or on cars, conductor must know that cars are in proper place in train, with booms properly secured and, when practicable, booms tralling, and engineer notified. Before such equipment is moved, it must be inspected and must receive frequent inspection enroute.

When such equipment is loaded on cars, it must be

loaded and secured in strict accordance with A.A.R. loading rules and must be inspected by competent inspector before being moved and must receive frequent inspection enroute.

Spreaders being moved in trains must, when practicable, be headed in direction train is moving. In all cases wings must be properly secured.

803. When it can be avoided, trains must not stand across the tracks of another railroad at grade.

Public crossings must not be blocked longer than necessary and in no case longer than authorized by instructions or by law.

Cars on any track must be left clear of crossings and a clear passageway must be left to the station. When necessary to spot cars in the vicinity of public or private crossings, they must, if practicable, be left a sufficient distance from road, sidewalk or street line to afford a clear view of approaching trains.

804. Except in emergency, cars must not be left on sidings without authority. The train dispatcher must be immediately notified when cars are left on sidings.

Cars stored on isolated tracks should be separated into cuts of ten cars each, one hundred feet apart.

805. When it can be avoided, engines must not stand within 100 feet of a public crossing, under bridges or viaducts, or in the vicinity of waiting rooms, telegraph offices, or near cars which are occupied by passengers.

Before moving cars or engines in a street, or on station or yard tracks, it must be known that they can be moved with safety.

Before moving or coupling to cars that are being loaded or unloaded, all persons in or about the cars must be notified and cars must not be moved unless movement can be made without endangering anyone. When cars are moved, they must be returned to their former location unless otherwise provided.

Cars containing livestock must not be switched un-

necessarily or cut off and allowed to strike other cars.

Care and good judgment must be used in switching cars to avoid damage to contents and equipment, and it must be known that necessary couplings are made and that sufficient hand brakes are set.

When switching at stations or in yards where engines may be working at both ends of the track, movements must be made carefully and an understanding had with other crews involved.

When switching or placing cars they must not be left standing so close as to not fully clear passing cars on adjacent tracks or cause injury to employes riding on the side of cars. Cars must not be shoved blind or out to foul other tracks unless the movement is properly protected.

806. When cars are left on any track, sufficient hand brakes must be set to prevent cars moving; if the track is on a grade and hand brakes are not sufficient, wheels must also be blocked or chained and, when practicable, cars must be coupled together.

When necessary to hold or stop cars by the use of hand brakes, it must be known that such brakes are in good order before cutting off cars.

807. When doing work at stations where the grade is such that cars will start if brakes are released, a trainman must be left in charge of the train while work is being done unless slack is bunched and train secured by hand brakes.

Before engines are detached from a train on a grade, either on main track or siding, a sufficient number of hand brakes must be applied on the low end of train to hold train; the air brakes must be released and the slack closed in against cars on which the hand brakes are applied.

When engine is recoupled to train, hand brakes must not be released until air brake system is fully recharged.

When shoving train on descending grade, sufficient



hand brakes must be set on low end of train to control slack.

Train must not be left standing unattended on a grade, unless air brakes are released, slack is bunched and train properly secured by hand brakes.

808. Running switches must not be made:

- (a) With cars containing explosives or inflammables;
- (b) When they involve danger to employes, equipment or contents of cars;
- (c) Over or through spring switches or interlockings;
- (d) Over or through remote control or dual control switches when the power is on.

Before making a running switch, it must be known that switches and brakes are in working order. The engine must be run on straight track when practicable.

809. When approaching and passing through stations or yards, or passing over railroad crossings, drawbridges, track covered by slow orders, or on long descending grades, and other places where safety requires, conductors and brakemen must, when practicable, station themselves where they can observe and transmit signals and assist in stopping train, if necessary.

810. In case of damage to trains or structures where in the security of company property or freight is involved, watchmen must be immediately stationed and arrangements made promptly for the protection of such property against theft, or loss from other causes.

811. When a break-in-two occurs, after the train is coupled, trainmen must make inspection as the train pulls by them.

If a car handled on rear of train has coupler pulled out, draft gear housing should be removed, if possible. When that cannot be done trainmen must know that

housing is securely fastened to prevent further accidents in transit.

Whenever there is a derailment, after cars are re-railed, a careful inspection must be made of the running gear to determine positively that the wedges and brasses are in place, that wheels are not loose and that axles are not bent.

812. In departing from stations, and at every opportunity on the road, trainmen must carefully inspect their trains for swinging doors, protruding objects, shifted lading, possible defects of the running gear, brake and draft rigging, giving special attention to hot journals, sticking brakes, and sliding wheels. If train is moving when defect is discovered, train should be stopped. If possible, defects should be remedied, but if this cannot be done and if car is unsafe to run, it should be set out and the train dispatcher notified.

When practicable, while train is moving, frequent inspection must be made of track from rear of train.

In starting freight trains, the speed for the first train length should be such as will permit full inspection by the train crew, and permit them to safely board the train.

813. Caution and good judgment must be exercised in starting and stopping trains to avoid sudden movements which might cause discomfort or injury to persons or damage to property.

Conductors should call the attention of engineers to any rough handling as soon as the information can be given, and will make prompt report to the superintendent of any improper handling of trains.

814. Except as otherwise provided, employes will be governed by instructions contained in the current air brake instruction book issued by their company, covering operation and maintenance of air brake and air signal apparatus, and employes having to do with air brake operation must provide themselves with a copy and be

prepared to pass a satisfactory examination on all rules pertaining to their duties.

815. 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 brakes be less than permitted by Federal requirements. Cars with inoperative air brakes must be placed behind cars with operative brakes; and must not be intermingled with power brake cars controlled by the engineer. Should an air brake become defective in operation to the extent of having to be cut out after leaving a repair point, car may be hauled to the next repair point without being switched to the rear. Each car having a defective air brake must be properly carded and reported on a prescribed form. There must be at least 85% of all cars in the train with the air brakes in effective operative condition.

816. Trains must not leave terminals nor start from points where train line has been disconnected or an angle cock closed or crews changed, nor pass the summit or descend mountain grades until after the prescribed tests of the brakes have been made.

A running test of brakes on a passenger train must be made, when practicable, two miles from meeting points, junctions, railroad crossings, drawbridges, and other points where failure of the brakes to operate properly would result in hazard.

817. Should the air brakes on a train become ineffective, the engineer must notify the conductor at once and if they are so ineffective as to interfere with proper control of train, a report must be made to the superintendent.

Passenger equipment or occupied outfit cars must not be switched without having the air brakes cut in and operative.

Passenger trains must not be backed without suitable back-up hose or its equivalent, and the conductor or

other competent employe at the rear, and when such back-up hose is to be used, the brakes must be tested as prescribed by the air brake rules.

818. Trainmen must know by speed of train, grade, or caboose air gauge that train is being handled safely and under control, and, when necessary, take immediate action to get train under safe control.

Note.—Rules 815 to 818, inclusive, do not supersede any air brake rule in effect on any of the railroads but are only supplementary thereto.

#### YARDMASTERS.

840. At stations where a yardmaster is employed, the general direction and government of the yard is in his charge, and all persons employed in yard service must obey his instructions.

Yardmasters must see that cars are carefully handled and no unnecessary noise made by engines or employes, giving particular attention to the work in connection with or near sleeping cars in service and see that the occupants are not unnecessarily disturbed.

841. Yardmasters are responsible for the proper make-up and movement of trains through yards, the prompt handling of cars and the requirements as to the diversion, refrigeration, ventilation and heating, and for the proper position and security of all yard switches.

#### TRAINMEN.

850. The general direction and government of a train is in charge of the conductor and all persons employed on the train are subject to his instructions. Should there be any doubt as to authority or safety of proceeding, from any cause, he will consult the engineer and shall be equally responsible with him for the safety and proper handling of the train, and for such use of signals and other precautions as the case may require. He must be vigilant and cautious; he must comply with the in-

structions of yardmasters within yard limits and be governed by the direction of agents in doing work at stations.

851. Conductors and other trainmen must report for duty at the appointed time, and, by personal attention, insure departure at the required time.

They must see that their trains are provided with proper tools and equipment at all times; know that the cars in their trains have been inspected, and that the brakes are in proper working order.

Conductors must expedite the handling of trains, performance of station work, and if necessary at night to avoid serious delay, call the day operator.

852. Conductors must see that their trainmen are familiar with and perform their duties, instruct them if necessary, and caution them as to its risks; see that they are conversant with and properly understand and comply with the rules and special instructions, particularly those relating to protection of trains. Disobedience and incompetency must be reported.

853. Trainmen must attend to the needs of those in charge of livestock and other freight, see that cars occupied by them are given proper attention as to heat and water, and information given as to stops for meals or change of cars. Such attendants and other passengers permitted to ride on freight trains should only be permitted to get on or off when train is standing.

854. Trainmen on duty, when not engaged elsewhere, must occupy the posts assigned to them. They will observe the position of all train order signals, be prepared to and pick up any messages or orders, keep a sharp lookout for signals displayed by other trains, and keep in mind all train orders and notices affecting the movement of trains so as to be prepared to call attention to or take necessary action in the event of any oversight or mistake.

Forward brakeman must frequently make inspection

of train, especially on curves, and, when practicable, must keep lookout ahead especially when engineer's view is obstructed.

The rear brakeman or flagman should be on the last car of the train, or in the car next ahead, when practicable, and on passenger trains should get on and off at the openings between those cars. He must not, except when necessary, disturb the occupants, nor ride in the observation end of observation or special cars, except at times when that part of the car is not occupied.

When a passenger train stops, the flagman properly clothed and with necessary flagging equipment, must appear on the ground at the rear of the rear car prepared to provide protection as prescribed by the rules.

#### PASSENGER SERVICE.

870. Hand baggage should not be placed in the aisles of passenger cars. Heavy hand baggage or bulky packages should not be placed in overhead racks where there is possible danger of falling. Train crews should supervise the stowing of baggage and see that it is accomplished in such a manner as to minimize hazard of accident to passengers.

871. Conductors must not permit intoxicated or disorderly persons to get on their trains, nor persons mentally incompetent unless accompanied by an attendant. They must not permit obscene or profane language, nor interference or annoyance of other passengers, or other misconduct.

872. Train employes must be on the lookout for confidence men and swindlers; have them watched, personally warn passengers, and if any attempt be made to defraud them, must prevent it and report the case by wire to the superintendent. They must not permit beggars or unauthorized peddlers to practice their voca-

tions on the train, nor allow advertising matter to be distributed.

873. No person will be allowed to ride without proper transportation, and conductors must collect fare from all persons traveling without it.

874. When examining tickets, conductors must notify passengers destined to points reached by other trains, where they are to change cars, where they will find trains of such connections and the approximate leaving time.

Approaching and before leaving stations, junctions, lunch rooms and terminals, proper announcement necessary for the information and guidance of passengers must be made by trainmen. Before departure, when visitors are permitted on trains, announcement must be made, "Visitors off, please".

Conductors will see that employes of sleeping and parlor cars give their passengers sufficient notice as to leaving train.

875. As far as possible, conductors must see that passengers are provided with seats, and that no one is allowed to occupy more than a single seat to the exclusion of others. When there are not seats enough in the coaches and there are vacant seats in any parlor or sleeping car (except chartered cars), passengers may be seated therein and train conductors will arrange with parlor or sleeping car conductors accordingly. Such seats must be surrendered as soon as there is room in the coaches or whenever they are wanted for regular use. Seats in sleeping cars must not be so assigned or occupied at night after the regular passengers have retired.

876. Train employes must not occupy seats with passengers, nor enter into conversation with them or other employes further than is required in the discharge of their duty, but will give proper attention to the convenience and comfort of passengers, and give particular

assistance to children who are unattended, and to persons who are ill, infirm, inexperienced, or otherwise unable to care for themselves.

877. If necessary to eject a passenger from a train, discretion must be used. Local rules, state laws and the conditions shall govern. Conductors will call upon local peace officers or upon railroad police for assistance when necessary.

If a passenger is ejected from the train, the names and addresses of all witnesses and their statements in writing, if possible, should be obtained. Passengers must not be ejected except where shelter and food may be obtained.

If there is doubt as to the right of a passenger to continue on transportation presented, or as to the proper course to be pursued, the facts in the case must be reported by wire to the superintendent.

878. Articles found in trains should be labelled with train number, car number and name of finder, and upon arrival at terminal or junction station should be turned over to agent or baggageman and receipt secured.

879. When a conductor delivers a train to another conductor, he must inform him of any facts which it may be necessary or proper for the relieving conductor to know before taking charge. Care must be exercised to properly transfer transportation. Except as otherwise arranged, passenger trainmen will remain at their trains at terminals in uniform to answer inquiries and assist passengers until the train is vacated, or until they are relieved.

880. Conductors will see that all telegrams intrusted to their care are promptly delivered. If, for any reason, they cannot be delivered, conductors will write this fact upon the envelope and hand it off at the next open telegraph office.

881. Train employes must familiarize themselves

with the instructions governing heating, lighting, ventilation and air conditioning of cars and see that the instructions are complied with, and that cars are properly supplied with water or ice and are kept clean.

Toilets in passenger cars must be locked before cars are placed at terminal stations, on approaching terminals, and prolonged stops at intermediate stations. Steam valves on rear of passenger trains must not be opened until it is known no one will be injured thereby.

882. Side doors and trap doors of vestibules must be kept closed on other than suburban trains when trains are moving except when necessary to check signals or inspect train or immediately before stop is made to handle passengers.

When a train is standing to meet or to be passed by another train at a point where no passengers are to be received or discharged, the vestibule doors must be kept closed on the side on which the approaching train is to move, unless a trainman is in position to prevent passengers from alighting.

When cuts are to be made between passenger cars while switching, trainmen must know that end gates, bars or chains are in proper position at the end of each car where cut is to be made.

When necessary to uncouple an electric-lighted train, the connector must be taken down and not left hanging.

Unnecessary noises in or about sleeping cars at night should be prevented so far as possible, and careless switching or coupling of cars avoided.

883. Train employes should not pass through dining, sleeping or private cars except when necessary in the performance of duty, and when passing through dining cars during meal hours, or through private cars, train employes, other than the conductors when lifting tickets, will remove their caps.

Marker lamps should not be carried through business,

dining, sleeping, observation or private cars, when it can be avoided.

884. Trains must not leave a station at which they are scheduled to receive U. S. mail until the loading has been completed. Trainmen will decline to accept pouches containing mail matter unless the pouches are properly locked. When trains are diverted from their regular track on which they usually pick up mail, arrangements must be made for getting that mail.

### FREIGHT SERVICE.

900. Conductors are responsible for the security of all freight carried by their trains while in their charge, and for its delivery, with the necessary waybills or manifests at its destination or at terminals.

The doors of empty cars in trains must be kept closed. The doors of loaded cars must be kept closed and properly secured unless left open for ventilation. The instructions relative to the sealing of cars and ventilation of perishable commodities must be carefully observed.

901. Trainmen must give proper attention to the handling of live stock and perishable freight and be governed by instructions relating thereto. Necessary attention must be given to stock unaccompanied by attendants. Any unusual condition must be promptly reported.

902. Conductors must see that their cabooses are kept in a clean and neat condition.

903. When necessary to set out bad order cars, a wire report must be promptly made to the superintendent giving initials and car number, nature of defect, and material necessary to repair; if loaded, the report must show contents and waybill reference.

Waybills will be left with agent, or if no agent at point where car is set out, at the first station where

there is an agent, with proper endorsement showing why and where car was left.

When cars with any defect are picked up, the same information should be given, and if received from another railroad, this information should be shown.

When repairs are made to foreign cars, a report on prescribed form must be made.

If cars containing valuable equipment or freight liable to be stolen are set out short of destination at a point where there is no agent, the superintendent must be notified by wire.

904. Unless otherwise instructed, all freight handled in trains must be covered by station or card waybills. A car must not be taken from a station if it is unsafely loaded, in which case a report must be promptly made to the superintendent. Waybills must be examined and all instructions thereon complied with. Card bills must be handled with as much care as regular waybills.

905. Unless otherwise directed, when notified that loaded cars are ready for their trains at side tracks which are reached before the billing station for such tracks, the cars may be taken to the billing station where the proper waybills must be procured or the cars left. When the billing station is reached first, the waybills for cars that are expected to be ready to go forward from such side tracks may be taken; but if the cars are found not ready to go, the waybills must be promptly returned by mail to the billing agent with a statement showing why the cars were not taken. The superintendent must also be notified by wire.

906. If there is no agent where freight is left, conductors must check upon the waybill all freight so left, making the proper record on the face of the waybill of all freight, over, short and damaged, and must deliver any freight that is over at such points, to the agent at the billing station for such points.

907. When taking freight from a station where there is no agent, conductors must carefully check the freight, see that it is properly marked and accompanied by a shipping order, and that such orders are delivered to the billing agent for such points, who will furnish the proper billing.

908. Conductors must check all freight loaded by them with the waybills, making the proper record on face of waybill of anything over, short, or damaged.

909. When freight is transferred from one car to another, proper record must be entered on face of the waybill, including the date, and point of transfer, the initials and number of car to which the transfer is made, and exceptions as to over, short, and damaged freight.

910. After loading, unloading or transferring, freight left in cars must be properly stowed.

911. When cars in trains have been pilfered or broken into, conductors will wire the superintendent and railroad police officer from the first available point, giving car number, seal numbers and as much information as practicable.

#### ENGINEMEN.

920. Enginemen must report for duty at the appointed time. They must know that their engine is in good working order and is furnished with fuel, water, tools, sand and other supplies, including flagging equipment and signal appliances. They should make every effort to see that the train for which they are called departs on time.

At night, they must have a red light in the cab, where it cannot be seen by passing trains, and when necessary, signal approaching trains.

921. When there is no conductor, or when the conductor is disabled, the engineer will, unless otherwise directed, have charge of the train and will be governed by the rules prescribed for conductors. When more

than one engine, the senior engineer in the service will assume these duties.

922. Firemen are subordinate to engineers. Engineers must see that firemen are familiar with and perform their duties, instruct them, if necessary, and see that they are conversant with and properly understand and comply with the rules and special instructions, particularly those relating to protection of trains. Disobedience and incompetency must be reported.

The engineer or fireman must not move the engine or any part of its machinery, unless he knows that it can be done without injury to any one. Engineer or fireman must not go underneath engine without notifying the other.

923. Unless otherwise provided, the fireman, when competent, may handle the engine under the supervision of the engineer, the engineer being responsible.

When engines under steam are left unattended, the valves must be centered, throttle tightly closed, cylinder cocks opened, and straight air set; and in addition, the wheels must be blocked where conditions require.

While switching, the engineer and fireman must both remain on the engine and give close attention to signals. Engine must be handled with great care while making couplings.

924. Care must be used to prevent water being thrown from smoke stack when starting. Cylinder cocks must not be open nor overflow from injector permitted at station platforms, and water must not be wasted from the engine while standing at or passing station platforms during freezing weather.

925. The firing should be done in such a manner as to prevent dense smoke, and the blower used gently to prevent smoke trailing when at stations.

The escape of steam should be prevented when en-

gines are standing at or near stations, road or foot crossings.

Boilers must not be blown out on frogs, switches, interlocking, signal cases, steel bridges, in the vicinity of road crossings, and paralleling a highway when the escaping steam would be liable to obscure the view of the users of the highway, or at any place where it might cause injury to persons or damage to property.

926. Engines must not be coaled while passenger trains are standing or passing on next track. Engines must not be moved from water or fueling stations until employes are off the tender. Water spouts, water and fuel oil cranes, coal chutes, hose or pipe must not be moved to or from the tender while the engine is in motion, and must be empty before they are moved. After being used they must be replaced and secured in proper position.

When using water or fuel oil cranes that are equipped with handles, the spout must be turned from the ground.

927. Enginemen must frequently look back, especially while rounding curves, to observe the condition of the train.

While passing through cities, towns and yards, there must be no failure to keep a careful lookout ahead on both sides of the engine.

928. Any defective condition of the engine must be promptly reported to the master mechanic, and, at the end of each trip a record made on the prescribed form of the repairs required.

929. Care must be used to avoid striking stock. When stock is observed inside of right-of-way fence, the train dispatcher must be notified, and if practicable, the sectionmen also. If live stock is killed or injured, a report must be made on the prescribed form.

When a train strikes live stock, train must be stopped, and inspection made to ascertain if any damage to

equipment. If live stock is struck by trains near switches, the switches should be examined.

930. Care must be used when backing to train, or to take or leave cars, and when approaching switches which are to be lined, and a lookout maintained for derail switches.

931. If a passenger train makes an improper station stop or it is necessary to move engine after making stop for water or fuel, engineer must give signal 14 (b) or 14 (h) and receive proper signal from conductor before moving train.

932. While engine is moving, the fireman must keep a constant lookout when not engaged in other duties. He must be on the lookout if the view of the engineer is obstructed or if the engineer is obliged to look away from the track ahead; he must give instant notice to the engineer of any signals or indication of danger or obstruction, or if there is any reason to believe the train may strike a person or object on the track. He must keep a sharp lookout for signals displayed by other trains, and keep in mind all train orders and notices affecting the movement of trains so as to be prepared to call attention to, or take necessary action in the event of any oversight or mistake.

#### STATION AGENTS.

950. Agents have charge of employes at stations, and must see that they properly perform their duties and are courteous and considerate in their dealings with the public.

They must not be absent from their stations, grant leave of absence to their subordinates, or make any change in their forces without permission. They are responsible for the railroad's property and other property intrusted to the railroad in the transaction of its business. They must not permit unauthorized persons to frequent offices.

951. The position of main track switches must be observed and the switches must be kept closed and locked in proper position when not in use by trains.

They must see that stations are furnished with necessary signal equipment, and ready for immediate use.

952. Agents must see that the buildings and grounds connected therewith are kept neat and clean and in proper condition for the accommodation of passengers and the handling of freight.

953. Agents must make frequent inspections of yards, platforms, offices, buildings and surroundings; see that the station platforms and walks are properly cleared of snow, ice, or dirt; that rubbish is not allowed to accumulate about any of the buildings, and that the premises are maintained in neat condition.

954. Agents must acquaint themselves with the business interests of the people among whom they are situated, use all proper means to secure traffic and act with the view of accommodating the public, and promoting the best interests of the railroad, notifying the proper officer of anything affecting their department, detrimental thereto or conducive to its good, present or prospective.

955. Agents shall report promptly any information of possible action by State, County, Township, Municipal or other authority, corporation or individual, coming to their notice which will in any way affect the railroad.

956. All cases of attempted robbery, theft of property belonging to or in charge of the railroad, damage to property by fire or storm, personal injury and other extraordinary occurrences at or in the vicinity of the station, must be promptly reported by wire to the superintendent.

957. Notices to the public must be neatly posted in conspicuous places in the station; other advertising matter must not be posted on the premises, except when



properly authorized, and then only at places designated for that purpose. Train bulletin boards must bear current date and such information regarding trains as is required by law or by instructions.

958. Agents must familiarize themselves with the boundaries of the railroad property at their stations, and must not permit any encroachment thereon.

Unless provided for by lease, they must not allow any commodities to be placed on grounds or right-of-way at their stations for the purpose of storage without written permission from the superintendent, and then only after release on prescribed form has been executed by the owner.

959. Agents must preserve order in and about the station, and indicate the places where vehicles shall be allowed to stand at the station, and where the persons in charge thereof, hotel runners and other solicitors shall remain while engaged in their duties on the railroad premises. Bicycle riding on station platforms must not be permitted.

960. When their duties are in any way connected with the handling of United States Mail, agents must be familiar with and be governed by the instructions relative to the transportation and handling of United States Mail.

961. Agents must give prompt attention to correspondence; keep the books and accounts promptly and neatly written up, in the manner prescribed by the accounting and other departments to which they relate, and submit them to the traveling auditor or other authorized officer for examination as may be required. Tariffs must be properly filed.

962. Agents must not permit billboards to be erected nor material placed in such position as to prevent a plain view of approaching trains; see that cars are not left where they will obstruct view of the main track

and that their brakes are securely set; when on a grade, or if the brakes are defective, the wheels must be securely blocked. When there are indications of heavy winds, they must see at once that cars are secured.

963. When unloading of cars is delayed by refusal of consignees to accept freight, or from any other cause, agents must report the matter to the proper officer and obtain disposition therefor. Immediately upon arrival of cars containing railroad material, the consignee should be notified, and if not released within twenty-four hours, the superintendent must be notified.

964. Agents must furnish conductors a switch list; make every effort to avoid delay in the movement of cars, both loaded and empty, and see that they are promptly forwarded.

965. When cars are left short of destination, a wire report must be made to the superintendent advising of their contents, destination and why left; the date and train in which such cars are forwarded must also be reported. Prompt report must be made of the completion of repairs to disabled cars.

966. Agents must see that all freight loaded is safely and properly stowed, and when necessary is securely fastened by braces, blocks, cleats, stakes, chains, or other means, as the nature of the freight may require to prevent loss or damage by falling, shifting, chafing, breaking, or by contact with any contaminating substance. They must not allow anything to be loaded on the roof of a car.

967. The required cards or placards must be applied to cars as indicated by the special instructions relating thereto and all old cards, except home route and defect or repair cards must be removed before cars are forwarded.

968. Local freight to be loaded or unloaded must be

checked by the conductor and agent together and anything irregular noted on the waybill.

All freight which requires shelter must be promptly placed in freight house or in cars.

969. Freight houses must be locked, and cars containing freight, which can be closed, must be sealed or locked at all times, except when the agent or other authorized person is in immediate charge thereof. Seals must be kept in a secure place and the required seal records made.

970. Freight, baggage, or express must not be left between main tracks, nor within six feet of the edge of main track platforms.

971. Skids, trucks and scales, when not in use, should be placed in baggage room or warehouse; if necessary to leave them on platforms, they should be lined up at the end or in the rear of station building, and must be locked or otherwise secured, with the handles fastened in a nearly vertical position.

972. Agents must not permit women, children or persons incompetent to take care of live stock or other freight, to act as attendants.

#### OPERATORS.

980. Operators must give preferred attention to train order service. They must assist in clerical or other station service when called upon, but must be within hearing of their instruments when possible.

In telegraph offices where several operators are on duty at the same time, only one operator on each shift will be permitted to handle train orders and clear trains, except when service requires more than one train order operator and then the work must be arranged so that not more than one operator on a shift will handle train orders and clearances for the same territory.

981. Operators must not permit unauthorized per-

sons to frequent their offices; must not make public the fact or particulars of accidents, or communicate them to any person, except to the proper officers of the railroad. Messages of a personal nature must be held strictly confidential, and in no manner be made known to any person, except the one addressed; nor be made the subject of remark. Messages for persons on trains must be enclosed in envelopes and sealed.

982. Operators must advise the train dispatcher promptly of fogs and as to severity of all storms and extent of damage. When there are indications of heavy winds, cloudbursts, or abnormal weather conditions, they must see at once that cars at their stations are so secured that they will not move. They must have the necessary signal equipment, and ready for immediate use.

983. Operators going off duty must make a written transfer on the prescribed form, of all train orders, instructions, unfinished business, condition of wires, position of train order signal and overdue trains. The operator going on duty must not handle the train order signal or train orders until the transfer has been completed. Each operator will personally sign the transfer. When shifts are not continuous, the transfer will be made in the same manner.

984. At stations not open continuously, the operators must post their addresses on the inside of the cover of the waybill box.

985. Operators will be held responsible for the prompt delivery of messages at their stations. When answers are required, they must make every reasonable effort to obtain them. In case the person to whom the message is addressed cannot be found, they must notify the office at which it originated, without delay.

986. Operators must understand how to test and

patch wires in switchboard, as ordered, and prompt and careful attention must be given this work.

In closing the office for the day or night, the instruments must be cut out.

Switchboards must be examined frequently to see that plugs are in proper place, and tightly set. Care must be taken to keep instruments in proper adjustment at all times. Before opening key, the relay must be adjusted carefully to see that the wire is not in use.

Wires must not be grounded in switchboard except when necessary in case of wire trouble or when ordered by the wire chief.

987. Inflammable articles, typewriter covers, and rubbish of any kind must be kept away from switchboard, wires and instruments.

988. Batteries must be kept clean and in good working condition.

989. Before closing the office for any length of time, and upon reopening the office, operators must notify relay office in order to prevent unnecessary delays to telegrams.

990. All messages filed must show filing time and all proper sending notations. Messages telephoned must show date, time, to whom and by whom telephoned.

#### TRAIN DISPATCHERS.

995. Train dispatchers will issue train orders and will transmit and record them as prescribed by the rules. They will make the various records required.

996. Train dispatchers must report immediately to the chief train dispatcher any irregularity relating to the movement of trains or the handling and execution of train orders.

997. Train dispatchers must guard against danger-

ous conditions in train movements and improper or unsafe combinations in train orders.

When a train order is not understood, or if there is any doubt as to there being a common understanding, the train order must be annulled and another order issued.