## Consolidated Code of Operating Rules-

## Revised 1959

The rules herein set forth govern the They take effect December 1, 1959, superseding all previous rules and instructions inconsistent therewith.
Special instructions may be issued by proper authority.

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## 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. Employes whose duties are prescribed by these rules will be provided with a copy.

Employes whose duties are in any way affected by the timetable must, while on duty, have a copy of the current timetable in their possession.
B. Employes 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. Employes must pass the required examinations.
D. Persons employed in any service on trains are subject to the rules and special instructions.
E. Employes must render every assistance in their power in carrying out the rules and special instruction, and must report promptly to the proper authority any violation.
F. Accidents, failure in the supply of water or fuel, defects in tracks, bridges, signals, or any unusual conditions which may affect the movement of trains, must be reported by quick- est available means of communication to the proper authority, and must be confirmed by wire or on required form.
G. The use of intoxicants or narcotics is prohibited. Employes must not have intoxicants or narcotics in their possession while on duty.
H. The use of tobacco by employes on duty in or about passenger stations, or on passenger cars, is prohibited.
J. Employee on duty must wear the prescribed badge and uniform and be neat in appearance.
K. Employes and others authorized to transact business at stations and on or about trains, must be courteous, orderly and guiet.
L. In case of danger to the Company's property, employes must unite to protect it.
M. Employes must exercise care to prevent injury to themselves or others.
They must observe the condition of equipment and tools which they use in performing their duties and when found defective must, if practicable, put them in safe condition. Defective equipment or tools, which cannot be put in safe condition, must be so marked, and defects reported to the proper authority.
They must inform themselves as to the location of structures or obstructions where clearances are close.
They must expect the movement of trains, engines, cars or other movable equipment at any time, on any track, in either direction.
They must not stand on the track in front of an approaching engine, car or other moving equipment for the purpose of boarding the same.
They will be governed by the Safety Instructions of the railroad by which they are employed while working upon the property of any railroad governed by the rules of the Consolidated Code.

## DEFINITIONS

Note.-For the purposes of these rules, the following definitions will apply.

ACKNOWLEDGING DEVICE.-A manually operated switch or valve on an engine equipped with automatic cab signal device, by means of which the sounding of the cab warning whistle can be silenced.

APPROACH SIGNAL.- A fixed signal used in connection with one or more signals to govern the approach thereto.

AUTOBATIC BLOCK SIGNAL SYSTEM. (ABS)-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.

AUTOMATIC CAB SIGNAL SYSTEM. (ACS)A system which provides for the automatic operation of the cab signal and cab warning whistle.

BLOCK.--A length of track of defined limits, the use of which by trains and engines is governed by block signals, cab signals, or both.

BLOCK SIGNAL.- A fixed signal at the entrance of a block to govern trains and engines entering and using that block.

BLOCK STATLION.-A place I-from which block signals are operated.

BLOCK SYSTEM.-A series of consecutive blocks.

BULLETIN-Advice of conditions affecting the movement or safety of trains and engines.

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.

CAB WARNING WHISTLE._A whistle located in the cab which gives warning of a change of cab signal indication to a more restrictive indication.

## CENTRALIZED TRAFFIC CONTROL SYSTEM.

(CTC) -A system under which train or engine movements are authorized by block signals whose indications supersede the superiority of trains for both opposing and following movements on the same track.

CONTROL OPERATOR.--An employe assigned to operate a CTC control machine.

CONTROLLED SIDING.-A siding within CTC limits which trains or engines will enter or leave by signal indication.

CURRENT OF TRAFFIC.-The movement of trains on a main track, in one direction, specified by the rules. •
DIVISION.-- That portion of a railroad assigned to the supervision of a superintendent.

DOUBLE TRACK.--'Iwo main tracks, upon one of which the current of traffic is in a specified direction, and upon the other in the opposite direction.
DUAL CONTROL SWITCH.-A power operated switch that is also equipped for hand operation.

DWARF SIGNAL.-A low home signal.
ENGINE.- A unit propelled by any form of energy, or a combination of such units operated from a single control, used in train or yard service.

EQUIPPED ENGINE.---An engine equipped with cab signal apparatus including whistle and acknowledging device in operative condition for the direction in which it is to move. EXTRA TRAIN.--A train not authorized by a timetable 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.

## FACING POINT LOCK, SPRING SWITCH.-A

locking device for a spring switch which automatically locks the points in normal position.

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" covers such signals as switch, train order. block, interlocking, 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.

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.
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 opposing home signals of an interlocking.

INTERLOCKING SIGNALS.-The fixed signals of an interlocking.

INTERLOCKING STATION.-A place from which an interlocking is operated.

MAIN TRACK.-A track extending through yards and between stations, upon which trains are operated by timetable or train order, or both, or the use of which is governed by block signals.

MANUAL BLOCK SYSTEM.-A series of consecutive blocks, governed by block signals operated manually, upon information by telegraph, telephone or other means of communication.

MEDILUM SPEED --A speed not exceeding thirty (30) miles per hour.

PILOT.-An employe assigned to a train when the conductor or engineer, 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.

REGISTER STATION.--A station at which train register is located.

REGULAR TRAIN.- A train authorized by a time-table schedule.

REMOTE CONTROL..-A method of operating outlying signal appliances from a designated point.

RESTRICTED SPEED.- Proceed prepared to stop short of train, obstruction, or anything that may require the speed of a train or engine to be reduced.
Where Automatic Block Signal Rules, Interlocking Rules or signal indications require movement at restricted speed, such movement must be made prepared to stop short of train, obstruction, or switch not properly lined, and be on the lookout for broken rail or anything that may require the speed
of a train or engine to be reduced, but a speed of fifteen (15) miles per hour must not be exceeded.

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

SECTION.--One of two or more trains running on the same schedule displaying signals or for which signals are displayed.

SIDING.-A track auxiliary to the main track for meeting or passing trains.

SIGNAL .ASPECT.-The appearance of a fixed signal conveying an indication as viewed from the direction of an approaching train; or the appearance of a cab signal conveying an indication as viewed by an observer in the cab.

SIGNAL INDICATION.-Tl1B information conveyed by the aspect of a signal.

SINGLE TRACK.-.A main track upon which trains are operated in both directions.

SLOW SPEED.-A speed not exceeding fifteen (15) miles per hour.

SPRING SWITCH.-A switch equipped with a spring mechanism arranged to restore the switch points to original position after having been trailed through.

STATION._-A place designated in the time-table by name.

SUBDIVISION.-A portion of a division designated by time-table.

SUPERIOR TRAIN.--A train having precedence over another train.

TRAIN OF SUPERIOR RIGHT.__A train given precedence by train order.
TRAIN or SUPERIOR CLASS.-A train given precedence by time-table.
TRAIN or SUPERIOR DIRECHON.--A train given precedence in the direction specified by timetable 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.
THREE OR MORE TRACKS.-'Three or more main tracks upon any of which the current of traffic may be in either specified direction.

TRAIN.-An engine or more than one engine coupled, with or without cars, displaying markers.

TRAIN REGISTER .-_A book or form used at designated stations for registering signals displayed, the time of arrival and departure of trains and such other information as may be prescribed.

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 timetab1e, or by train order, may be made, subject to prescribed signals and rules, or special instructions.

YARD ENG1NE.-An engine assigned to yard service.

## 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 term "subdivision" as used in the rules will also apply to a division where subdivisions are not shown in time-table. In these rules and in special instructions, when the term conductor is used, it will also apply to the foreman of a yard engine; when the term trainman is used, it will also apply to a switchman or yard helper; when the term engineer is used, it will apply to any employe operating an engine.

## 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. Unless otherwise provided, watches that have been examined and certified to by a designated inspector must be used by employes in train, engine and yard service, train dispatchers 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.
3. Unless otherwise provided, the watches of conductors, engineers, yardmasters, foremen of yard engines and train dispatchers, 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.

When conductors, engineers, yardmasters or foremen of yard engines do not have access to a standard clock, they must compare their watches daily with each other and with a conductor or engineer who has compared time with a standard clock and has registered that comparison, or with the train dispatcher. A record of such comparison must be made on the back of their time slip or other form when prescribed, showing time, place, and with whom comparison was made.

Conductors and foremen of yard engines must, when practicable, compare time with their engineers before starting each trip or day's work. At the first opportunity other members of the crew must compare time with the conductor or engineer.

3 (A). Employes governed by time service rules must know that their watches are wound, and when found to vary thirty (30) seconds or more from standard time, watches must be set to correct time.
3 (B). Employes must present their watches to officers and supervisors for time comparison upon request.
3 (C). Employes governed by time service rules must not wear wrist watches while on duty.
3 (D). 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
initial station
terminal station
with a schedule of the new time-table, a train authorized by the preceding time-table will retain its train orders and assume the schedule of the corresponding number of the new time-table.
Schedules on each subdivision date from thei1• 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-table 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 are given, they are the arriving and the leaving time.
Schedule meeting or passing stations are indicated by figures in full-faced type, with 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.

Unless otherwise specified, the time applies:
ON SINGLE TRACK, at the switch where an opposing train enters the siding; where there is no siding it applies at the station.

ON DOUBLE OR THREE OR MORE TRACKS, at the station.
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;
H -hog drenching;
I —interlocking;
J - junction;
K -standard clock;
M -railroad crossing protected by signals or gates;
N -night operator;
O -oil;
P -telephone;
R -train register;
T - turntable;
U -railroad crossing not protected by signals or gates;
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. Employes in train, engine or yard service and others concerned must keep a constant lookout for signals. Employes giving signals must locate themselves so as to be plainly seen, and give them so as to be plainly understood.

When practicable, all signals must be given on the engineer's side of track, but they must be respected when received from either side.

The utmost care must be exercised by employes to avoid acting upon signals that may be intended for other trains or engines. Unless employes are positive that signals given are for them, they must not move their train or engine 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 or lights of the prescribed color and type must be used as required by the rules by day, and lights of the prescribed color and type must be used by night.

Note.-F1ags may be cloth, metal, or other suitable material. Where authorized, reflectorized material of the prescribed color may be used instead of lights by night.
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.

## COLOR SIGNALS

10. 

| COLOR | INDICATION |
| :--- | :--- |
| (a) Red | Stop. |
| Proceed as prescribed by the rules. |  |
| (c) Green | Proceed, and for other uses prescribed <br> by the rules. |
| (d) White | Flag stop (See Rule 28) and for other <br> uses prescribed by the rules. <br> As prescribed by Rule 26 and for other <br> uses. <br> (e) Blue |
| (f) Purple | When used on siding derails- <br> Stop; and for other uses as prescribed <br> by the rules. <br> For use as prescribed by the rules. |
| (ff) Lunar | (b) |

$10(\mathbf{g})$. 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 before passing it and not proceed until proper verbal information is obtained, or written information is found with the red signal, or a 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.
10 (h). When a yellow Hag 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-half 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 (10) 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 the 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. Rear trainman must 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).

## FUSEES

11. A train or engine finding a fusee burning red on or near its track must stop, and may then proceed at restricted speed for one mile.

A train or engine finding a fusee burning red beyond the nearest rail of an adjacent main track need not stop, but must proceed at restricted speed for one mile.

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

## HAND, FLAG AND LANTERN SIGNALS

12. 

Note.-The hand, or a flag, moved the same as the lanterns as illustrated in the following diagrams, gives the same indication.

| MANNER of USING | INDICATION |
| :--- | :--- |
| (a) S w ung horizontally at <br> right angle to the track. | Stop. |
| (b) Moved slowly with <br> arm extended horizontally. | Reduce <br> speed. |
| (c) Raised and lowered <br> vertically | Proceed. |
|  |  |


| MANNER of USING | INDICATION |
| :--- | :--- |
| (d) Swung in a circle at right <br> angle to the track. | Back. |
| (f) Swung horizontally above <br> the head. | Apply <br> air <br> brakes. |
| (g) Held at arm's length <br> above the head. | Release |
| Rair <br> arakes. |  |

(h) Any object waved violently by any person on or near the track must be respected as a signal to stop.

## ENGINE WHISTLE SIGNALS

14. 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 " 0 " 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.

The unnecessary use of the whistle is prohibited and it must not be sounded while passing or being passed by a passenger train, except where required by rule or law, or in case of an emergency.

| SOUND | INDICATION |
| :--- | :--- |
| $(a)-$ | When standing, air brakes applied. |
| $(b)--$ | Release brakes. Proceed. |
| $(c)-0 \circ \circ$ | Flagman protect rear of train. <br> Flagman may return from west or <br> south, as prescribed by Rule 99. <br> (d) $-\infty--$ <br> Flagman may return from east or <br> north, as prescribed by Rule 99. |


| SOUND | INDICATION |
| :---: | :---: |
| (f) $000-$ <br> (g) 00 <br> (h) 000 <br> (j) 0000 <br> (k) - 00 | Protect front of train. <br> Answer to 14 ( k ) or any signal not otherwise provided for. <br> When standing, back. <br> Answer to 12 (d) and 16 (c). <br> When running, answer to 16 (d). <br> Call for signals. <br> SINGLE TRACK—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. <br> If not answered by a train, the train displaying signals must stop, notify them and ascertain the cause. <br> DOUBLE OR THREE OR MORE TRACKS <br> _-To call attention of engine and train crews of trains of the same class and inferior trains moving in the same direction and yard engines to signals displayed for a following section. |

Note.-Where single track is in use with

| SOUND | INDICATION |
| :--- | :--- |
| $(l)--\quad$portions of double or three or more tracks, <br> this signal will also be given to trains in the <br> opposite direction. |  |
|  |  |
|  |  |
|  | Approaching public crossings at <br> grade. <br> Standard sign will designate point at <br> which signal must begin, to be <br> prolonged or repeated until <br> crossing is occupied by engine or <br> cars. <br> This signal must also be used <br> frequently to warn trackmen and |
|  | other employes when view is <br> restricted by weather, obscure <br> curves, or other unusual conditions, <br> and when approaching |
| tunnels and snow sheds, also as alarm |  |
| for persons or livestock on the track. |  |


| SOUND | INDICATION |
| :---: | :---: |
| (m) | Approaching stations, junctions, railroad crossings at grade, drawbridges, and mail cranes located between stations. |
| ( $n$ ) - - | Approaching meeting or waiting points. Answer to 16 (1). See Rule S-90. |
| (o) 0 - | Inspect train for air leak or for brakes sticking. |
| (p) Succession of short sounds | When an emergency exists and it is necessary to use engine whistle to call for brakes to be applied on moving train or cars, or when necessary to use engine whistle to signal some other movement to stop. |
| (q) - o | When running against the current of traffic: |
|  | (1) Approaching stations, curves, orother points where view may be obscured. |
|  | (2) Approaching passenger or freight trains and when passing freight trains. |


| SOUND | INDICATION |
| :---: | :---: |
| (q) -0 | (3) Preceding the s ig n a 1 s prescribed by 14 (d) and 14 (e). <br> Note.-Where there are two main tracks on which movements are made in either direction by signal indications, trains on left track will sound this signal preceding Signal 14 (d) or 14 (e). |
| (r) - - - - | 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 | 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. |
| (z) $0-0$ | Transfer of air brake control. |

## TORPEDOES

15. The explosion of two torpedoes is a signal to immediately reduce speed to twenty (20) miles per hour or as much slower as conditions require, keeping a close lookout for train or obstruction. After reducing to twenty (20) miles per hour, speed must not be increased until train has reached a point at least one mile from where the torpedoes were exploded.

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 150 feet apart, and not in immediate vicinity of station buildings, or public crossings, or where they may cause injury.

During extremely cold weather or when torpedoes may be covered with snow, a duplicate set must be placed on the opposite rail to explode simultaneously.

## COMMUNICATING SIGNALS

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

If the communicating signal fails, or an engine or car not so equipped is used on a passenger train, arrangements must be made for engineer to receive hand signal before passing stations. On passenger trains so equipped, radio or telephone may be used in place of hand signals.

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

| NUMBER OF <br> SOUNDS | INDICATION |
| :--- | :--- |
| (a) Two | When standing—start. |
| (b) two | When running—stop at once. |
| (c) three | When standing-_back. |
| (d) three | When running—stop at next pas- <br> senger station. |
| (e) four | When standing—apply or release <br> air brakes. |
| (f) four | When running—reduce speed. |
| (g) five | When standing—recall flagman. |
| (h) five | When running—increase speed. |
| (j) six | Increase train heat. |
| (k) seven | Shut off train heat. |
| (l) one long | When running—approaching meeting <br> or waiting points as prescribed by |
| Rule S-90; brakes sticking; look back |  |
| for hand signals. |  |

## HEADLIGHTS

17. The headlight must be displayed burning bright to the front of every train by day and by night.

It must be extinguished when a train has stopped clear of the main track to meet a train, or is standing to meet a train at the end of double or three or more tracks, or at a junction.

At night, when an engine is backing without cars or is backing pulling cars, a white light must be displayed in the direction of movement.

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 fails 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 the main track, may proceed only at restricted speed to the point where the main track may be obstructed.

EXCEPTION: Rule $\mathrm{S}-17$ does not apply in CTC territory.
17 (A). When the headlight fails 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). Except in foggy or stormy weather, or when closely approaching or passing over public crossings at grade, or when other conditions make it inadvisable, headlight must be
dimmed under conditions outlined below:

In yards where yard engines are employed and at stations where switching is being done;
When closely moving behind or when standing behind another train;

On double or three or more tracks when approaching train in the opposite direction;
In CTC territory, when meeting train and it is not necessary to stop for opposing train;
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 I train to do likewise;
When passing engine or rear of train, to afford identification of moving train;
Approaching stations where train orders or messages are to be handed up by operator;
At other times to permit passing of signals or when the safety of employes or others requires.

17 (C). On engines so equipped, oscillating white headlight must be displayed by night and at any time weather or other conditions impair visibility. It must be extinguished when the headlight is dimmed or extinguished.

Oscillating white light should be used in a stationary position as a substitute headlight in case of failure of the headlight.

17 (D). On engine so equipped, oscillating red headlight must be displayed immediately by day or by night under the following conditions:

When a train is disabled or stopped suddenly by an emergency application of air brakes;
When engineer or conductor finds it necessary to stop train due to some defect which might cause an accident;
When an adjacent track is obstructed or there is a possibility of it being obstructed; •
When head end protection is required.
When red headlight is displayed, an opposing train on same or adjacent track must stop before passing headlight, ascertain the cause and be governed by conditions. The use of oscillating red headlight does not in any way relieve members of the crew from compliance with Rules 99 and 102.
18. Yard engines will display the headlight to the front and rear by night and at any time the view is obscured by storm or fog. The headlight on the end that is coupled to cars may be dimmed or extinguished while so coupled. At night, when not provided with a headlight, a white light must be displayed.

## MARKERS AND REAR END LIGHTS

19. Unless otherwise provided, the following signals must be displayed in the places provided to the rear of every train, as markers, to indicate the rear of the train:

By day, marker lamps lighted or unlighted, or green flags;
By night, marker lamps lighted, displaying green to the front and side and red to the rear, except when train is clear of main track, green must be displayed to front, side and rear.

One marker displayed will indicate the same as two but the display of two is required.

EXCEPTIONS: That part of this rule requiring markers to display green to rear when clear of main track does not apply in CTC territory.

D-19. By night, when train is turned out against the current of traffic, marker lamps lighted must display green to the front, side and 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 when clear of main track, a white light instead of a red light will be displayed.

EXCEPTIONS: The red light will not be replaced with a white light in CTC territory.

19 (B). When the rear of a train is equipped with built-in markers or electric signal lights, they must be lighted by day and by night and the requirement that markers display green to front and side will not apply.

19 (C). Unless otherwise provided, train crews arriving at terminals must continue the display of markers until the train has been delivered to connecting crew or is clear of main track and switch is properly lined.

19 (D). On passenger trains so equipped, red rear end light, when not operated automatically must, unless otherwise provided, be displayed in oscillating position from sunset to sunrise and when day signals cannot be seen due to weather or other conditions. It must also be displayed in oscillating position by day when the train is moving under circumstances
in which it may be overtaken by another train, or other emergency conditions require. Its use does not in any way relieve members of the crew from compliance with Rules 99 and 102. Red rear end light must be extinguished when train is clear of main track or when train is to be switched from the rear.

19 (E). When markers of a train ahead display red to the rear, or when red rear end light is displayed in oscillating position, a following train on the same or adjacent track must approach prepared to stop short of rear of preceding train. If rear of preceding train is clear of the track being used, the following train must then proceed at restricted speed until it is seen that the entire train ahead is clear of the track being used, except that in CTC territory, the following train will be governed by signal indication.

## CLASSIFICATION SIGNALS

Note.-On engines provided with places for display of signals on either end, the classification signals must be displayed on the leading end of the engine in the direction of movement.
20. All sections except the last must display two green lights by day and by night 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 and also trains at train order meeting points.
21. Extra trains must display two white lights by day and by night on the front of the engine.
22. When two or more engines are coupled together, each engine must display the required classification signals. The leading engine only will give and answer signals.

EXCEPTION: In CTC or Rule 251 territory, a helper engine moving over only a portion of a subdivision need not display signals.
23. One light displayed, where in Rules 20 and 21 two are prescribed, will indicate the same as two; but the proper display of all train signals is required.

## INDICATORS

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. When train number is required, train must not leave its initial station without the train number being properly displayed in the indicators.
When number of train is changed, indicators must be changed to correspond. Before making such change, movement of other trains must be safeguarded.
When an engine is cut out of a train, train number must be removed promptly from indicators.
Indicators will be displayed in the manner illustrated:

## COMMON STANDARD INDICATORS



No. 2
First 2
Extra 162
Extra 7007A
Engine Number
Engine Number
Engine Number

24 (A). Helper engine, when used on head end of train, must display train number in indicators where required, but unless otherwise provided, train number must not be displayed until helper engine has been coupled to train.

EXCEPTION: In CTC or Rule 251 territory, a helper engine moving over only a part of a subdivision will display its engine number instead of train number in indicators.

When helper engine is not on head end of train, or is moving light to or from helping a train, the engine number only will be displayed in its indicators.

24 (B). When an engine consists of more than one unit and the train number is not used in indicators, the number of one unit only will be illuminated at all times when in service, and will be the identifying number. When practicable the number of the leading unit must be used. The numbers of the other units must not be illuminated.

## INSPECTION AND REPAIR PROTECTION

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.
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. Each class of workmen will display the blue signals and the same workmen are alone authorized to remove them.

When emergency repair work is to be done under the engine, or under or about cars in a train, and a blue signal is not available, the engineer must be notified by a member of the
crew and protection given those engaged in making the repairs. Train or engine must not be moved, nor air brakes applied or released, until all employes are out from under or from between cars, and the engineer so advised by the same employe.

## USE OF SIGNALS

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 can be displayed by that signal, except that when a light is not burning on a signal and the day indication is plainly seen, or if an indication is displayed on a color light signal for the route to be used, it will govern.

Employes 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 superintendent.

27 (A). Where reflectorized type switch lamps are in use, in case of headlight failure or engine backing without a headlight, trains and engines must approach facing point switches at restricted speed.
28. A White signal must be used to stop a train to receive traffic only at the flag stations indicated on its schedule or in special instructions.

When necessary to stop a train for other purposes or at other stations, a red signal must 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. Except where the stop and start, forward or backward, is part of a switching movement, the engine bell must be rung when an engine is about to move; while passing through stations, tunnels and snow sheds; while approaching public crossings at grade, beginning sufficiently in advance to afford ample warning, but not less than one-fourth mile before reaching such crossing, and continuing until the engine has passed over the crossing; and where required by special instructions. The unnecessary use of the bell is prohibited.
33. Watchmen stationed at public crossings must use stop signals when necessary to stop trains. They must use prescribed signals t stop highway traffic.
34. All members of the crew in cab of engine must, and other members of train crew, when practicable, will communicate to each other by its name the indication of each signal affecting the movement of their train or engine as soon as it becomes visible or audible. It is the responsibility of the engineer to know that these requirements are complied with in cab of engine.

## 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 timetable.

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.
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.

S-72. Trains in the direction specified in the time-table are superior to trains of the same class in the opposite direction.
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.

81 (A). When a train, either on main track or siding, is to stop to be met or passed by another train, or is to stop for a signal at the end of a siding, stop should be made not less than 300 feet from the signal or fouling point if length of train will permit.
82. Time-table schedules, unless fulfilled or annulled, 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, except in CTC territory, further movement will be authorized by the train dispatcher.

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, or leave CTC territory 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 must not be used as evidence of the arrival of such extra train, except as provided by Form W train order, Examples (5) or (6).

D-83. A train must not leave its initial station on any subdivision or a junction, or leave CTC or Rule 251 territory,
until it has been ascertained whether all trains due, which are superior, have left.
83 (A). Stations at which train registers are located are designated in the time-table.

Unless otherwise provided, conductors of all trains, and engineers of engines without conductors, must register their trains on the train register at points designated in the timetable. Where authorized, register ticket will be accepted by the operator who must register for the conductor and report trains to the train dispatcher from the train register.

Conductors must fill out train register check on the prescribed form and deliver or have it delivered to engineer before leaving register station, unless cieck of trains is received by train order.

The number of a section of a regular train must be spelled out on train registers and register tickets.

83 (B). Unless otherwise provided, a train must not leave its initial station on any subdivision without a clearance, which must include the 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 words "wire failure" must be shown on the clearance with the time and operator's name instead of the O.K., and the superintendent's initials.

After having been detoured, a train returning to its regular route at other than an initial station for that schedule, must not resume its schedule unless directed by train order to do so.

83 (C). 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, clearances, signals and numbers with the section to be passed. The change in sections must be reported from the first available point of communication.

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.
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 clear the time of opposing superior trains not less than five (5) 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. An inferior train failing to clear the main track by the time required must be protected as prescribed by Rule 99.

87 (A). Where operator's advancing indicators are in service, when a train is required by rule, train order or instructions to take siding for an opposing or following train at that station, and it is desired to advance them on the main track to train order office to receive train order or instructions permitting them to proceed beyond that station, train dispatcher may instruct operator to display advance indication.

A train approaching a station when advance indication is displayed must acknowledge with two long sounds of engine whistle and may proceed on main track at restricted speed to train order office and be governed by train orders or instructions received.

When proceeding on an advance indication against an opposing train and stop is made before reaching train order office, front of train must be protected immediately as prescribed by Rule 99.

Operator must not display advance indication unless authorized by train order Form X.

S-88. Extra trains will be governed by train orders with respect to opposing extra trains.
At meeting points between extra trains the train in the inferior time-table direction must take the siding unless otherwise provided.

S-89. Unless otherwise provided, the inferior train must take siding at meeting points.

The train taking siding must pull in when practicable. If necessary to back in, the movement must first 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 taking siding unless switch is properly lined and track is clear.

At train order meeting points, the train holding the main track must stop clear of the switch used by the train taking 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 (10) 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 (10) minutes apart.

Trains must also be spaced ten (10) 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 immediately after rear of train has passed signal. When clearance is used to space trains, operator must show 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 93 DOES NOT APPLY ON THE UNION PACIFIC OREGON DIVISION OR ON THE SPOKANE INTERNATIONAL RAILROAD.

## THE FOLLOWING RULES 93 AND 93 (A) APPLY ONLY ON THE UNION PACIFIC OREGON DIVISION AND ON THE SPOKANE INTERNATIONAL RAILROAD.

93. Within yard limits, all trains and engines must move prepared to stop within the distance track is seen to be clear.

Within yard limits, where the main track is protected by continuous block signals, protection against other trains is not required. Where not protected by continuous block signals, protection in accordance with Rule 99 must be afforded against first-class trains. In block or non-block signal territory during foggy or stormy weather, protection in accordance with Rule 99 must be afforded against all trains and engines.

EXCEPTION: Unless otherwise authorized, a train or engine must not be moved against the current of traffic within yard limits until provision has been made for the protection of such movement.

93 (A). Second-class, extra trains and engines must avoid delay to first-class trains within yard limits.
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 and clearances of the disabled train, proceed to the first 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 and clearances of the last train with which it has exchanged, and will, when able, proceed to and report from the first 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 without train order authority, except as prescribed by Rules 85 and 267.

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. 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. 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 and engines must approach the end of double or three or more tracks, junctions, railroad crossings at grade, and drawbridges, at restricted speed, unless protected by block or interlocking signals.

Where required by rule or law, trains and engines must stop.

98 (A). At a railroad crossing not protected by signals, trains and engines must stop before passing stop sign. When view is obscured so that at least 200 feet of the other railroad on each side of crossing cannot be seen from point where train or engine is stopped, a member of crew must be sent to crossing to give proceed signal when safe to proceed. The train or engine must not proceed until proceed signal has been received.

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 set 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 received. 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 is moving under circumstances in which it may be overtaken by another train, the flagman must drop lighted fusees at proper intervals and take such other action as may be necessary to insure full protection.

When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with f1agman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fusees.

When recalled and safety to the train will permit, he may return and 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 trainman or other competent employe.

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.

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

When flagman is left behind, or is incapacitated, another trainman must take his place.

Ihe following signals will be used by flagman:

Day signals—A red flag, not less than ten (10) torpedoes and six (6) red fusees.

Night signals--A white light, not less than ten (10) torpedoes and six (6) red fusees.

## THE ABOVE RULE 99 DOES NOT APPLY ON THE UNION PACIFIC OREGON DIVISION OR ON THE SPOKANE INTERNATIONAL RAILROAD.

## THE FOLLOWING RULE 99 APPLIES ONLY ON THE UNION PACIFIC OREGON DIVISION AND ON THE SPOKANE INTERNATIONAL RAILROAD.

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. Onehalf mile from the rear of his train he will place two torpedoes on the rail, continuing back one and one-half 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 and flag approaching trains until relieved or 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 beyond the second set of torpedoes.

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 at once place two torpedoes on the rail and leave a lighted fusee at that point and continue in the direction of the approaching train and flag it with a lighted fusee.

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 drop lighted fusees at proper intervals and take such other action as may be necessary to insure full protection.

When a passenger train stops and rules or conditions do not require that flagman protect his train in accordance with Rule 99, the flag- man must take position not less than 60 feet
from rear of train, prepared to provide protection if it becomes necessary.

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

When flagman is left behind, or is incapacitated, another trainman mast take his place.

Flagman's signals:
Day signals-A red flag, not less than ten (10) torpedoes and six (6) red fusees.
Night signals-A white light, not less than ten (10) torpedoes and six (6) red fusees.

99 (A). In CTC territory, protection of train in accordance with Rule 99 is not required when standing on main track between Stop signals of a controlled siding.

In CTC territory, when protection of rear of train is required, Rule 99 must be complied with except that flagman need not go back farther than the last Stop signal governing the direction of his train, calling train dispatcher by telephone at that location.

99 (B). When a train requires flag protection, the engineer must immediately whistle out flagman. If that signal has been sounded before the train has been brought to a stop, it must be repeated immediately after stop has been made. When ready to proceed, he will recall the flagman.

99 (C). When a train has been flagged, flagman must inform the engineer why the train has been flagged and engineer must be governed by conditions.

99 (D). 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 his copy 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 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.
101. Trains and engines must be fully protected against any known condition which interferes with their safe passage at normal speed.

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

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

101 (B). During severe storms or when there is indication of high water or any condition which threatens damage, trains must move at restricted speed. 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.

If any condition is found that might affect the safety of a train, flag protection must be provided and section forces and train dispatcher promptly notified.

When a train is flagged by a track patrolman in case of storm or high water, patrolman 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, a lighted red fusee must be immediately displayed on adjacent tracks at front and rear of train and adjacent tracks as well as tracks of other railroads that are liable to be obstructed must at once be protected in both directions as prescribed by Rule 99 , until it is ascertained they are safe and clear for the movement of trains.

In such cases it must be determined by inspection that the train involved and the track to be used are safe for the train to proceed. Train involved must not proceed, nor flagmen recalled, until engineer has been definitely advised by conductor that it is safe to do so.

In A train on an adjacent track must not pass the disabled train unless it is preceded by a flagman or unless definitely assured by the conductor of the disabled train that the track is clear and it is safe to proceed.

102 (A). When there has been a derailment, after equipment has been rerailed it must be known by inspection of track and equipment that it is safe for the train to proceed.

102 (B). 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, 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 the train dispatcher.

When an engine leaves its train or part of its train behind 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 returning movement. Such movement must be made at restricted speed. In addition, at night or when view is obscured by weather conditions, a light must be placed on the front end of the detached portion of the train. When a light is not available, or when other conditions require, a trainman must protect the returning movement.
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 crossing. The man protecting the crossing must not get on the leading car or engine until front
of movement has passed over the crossing. Protection must also be provided under the following conditions:

While coupling cars at or near crossings;
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.

In general, highway crossing signals are so designed that they will not operate for a train or engine making a reverse movement after having passed over the crossing. Before such reverse movement is made, a member of the crew must take position at the crossing to afford protection to traffic while movement is being made, unless it is known that signals are operating.

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

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

Where automatic crossing signals are equipped for manual operation, signals may be manually operated for highway traffic. If signals have been manually operated they must be restored to automatic operation.

Note. -- Crossing signals in operation means that signals are displaying warning to highway traffic.

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

Air brakes on such cars must be cut in and 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 an employe is assigned to handle switches.

Switches must be left in proper position after having been used and must not be left open for another train or engine unless in charge of a member of the crew of such train or engine or an employe assigned to handle switches.

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

A train or engine must not foul a main track until switches connected with the movement are properly lined. 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 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 to all switches when operated by hand.

104 (A). Unless otherwise provided, the normal position of a main track switch is for the main track and must be lined and
locked in that position, except when changed for immediate movement.

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 hasp. 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.

When a train or engine is on a siding or other track to be met or passed by a train, the employe who is to attend the switch must not go nearer the switch than the fouling point until the expected train has been met or has passed.

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

Except when changed t0 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 section men notified. Switch must be spiked unless section men take charge. If it cannot be made safe, protection must be provided.

104 (B). Spring switches are identified by special targets, lights, or both, and permit trailing point movements through the switch without operating the switch by hand. Rule 513 and the third paragraph of Rule 514 (A) apply only when the switch is operated by hand.

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.

A spring switch must not be operated by hand when wheels are standing on any part of the switch points, or before the points have completed their full movement after being trailed through.

When a train or engine moving in either direction is stopped by a signal governing movement over a spring switch, the switch must be tested by opening and closing by hand, and
switch examined to make certain it is properly lined, locked or secured and that points fit before movement is made.

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.

104 (C). In automatic block signal territory, at locations where there is no signal governing trailing point movements through a spring switch from a siding or other track to the main track, switch must be operated by hand and Rule 513 and the third paragraph of Rule 514 (A) must be complied with. Switch may be restored to normal position after leading wheels have passed the fouling point. Protection as prescribed by Rule 99 must be provided against following movements on the main track.

Under conditions covered by the exceptions in Rule 513, the spring switch may be trailed through without hand operating the switch.

D-104. When moving against the current of traffic on double or three or more tracks, trains and engines must stop and examine facing points of spring switches unless such switches are protected by signals.
105. Trains and engines using a siding or any track other than a main track must move 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 Hag protection.

105 (A). When main track is out of service and trains must be run through an adjacent track, switches must be lined, locked and spiked for that track, and train dispatcher notified. Until train order covering the condition is issued to all trains affected, flag protection must be provided. Flagman must remain until released by the train dispatcher.
106. The conductor and engineer and anyone acting as pilot are equally 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.

Trains or engines must not pass between train and platform at which traffic is being received or discharged unless the movement is properly protected and proceed signal is received. Movement must then be made at restricted speed.
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.

Employes in train, engine and yard service must read bulletins and notices before starting each trip or day's work, 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 and 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 main 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

## ORDERS

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

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

Words or 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, except slow or cautionary 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 anyone who acts as its pilot. Those for a yard engine will be addressed "Yard Engine in care of Yardmaster", "Yardmaster" or "C\&E Yard Engines" as desired. 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.

Train orders and clearances must be read promptly upon receipt by those to whom they are addressed. Conductors
must, when practicable, obtain from engineers an understanding of all train orders before they are acted upon.

Conductors must, when practicable, show train orders and clearances to trainmen. Engineers must show train orders and clearances to members of the crew on the engine.

204 (A). Unless otherwise provided, a copy of all train orders and clearances will be furnished the rear trainman.

When a train has more than one engine in service, or when an engine is added between terminals, a copy of all train orders and clearances affecting their movement must be furnished to each engineer.
205. Each train order must be written in full in a book provided for that purpose in the office of the train dispatcher, and with it recorded:

Time train order signal displayed;
Indication displayed by train order signal;
To what offices the order was transmitted;
When the order was made complete or the " X " response sent at each office;

The names of those who signed the order, when required.

These records must be made at once and never from memory or memoranda. Additions to train orders must not be made after they have been repeated.
206. In train orders and clearances, regular trains will be designated by numbers as "No 10 " and sections as "Second 10 ", adding engine numbers in train orders if desired. Extra trains will be designated by engine numbers
and the direction, as "Extra 798 (east) (west) ", or "Psgr Extra 897 (east) (west)". Work extras will be designated by engine numbers, as "Work Extra 798". Engines with a prefix or suffix letter will be designated as: "E 47" or "6504 A".

For the movement of an engine of another company, the initials or the designated name will precede the engine number.

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.

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 and repeating train orders by telephone, time must be pronounced first, thus: one naught five; then spelled letter by letter, thus: 0-n-e $\mathrm{n}-\mathrm{a}-\mathrm{u}-\mathrm{g}-\mathrm{h}-\mathrm{t} \mathrm{f}-\mathrm{i}-\mathrm{v}-\mathrm{e}$, following by pronouncing each figure, thus: 1-0-5. The names of stations, sections, and direction of extras must be pronounced plainly and then spelled letter by letter, thus: Aurora, A-u-r-o-r-a; Second, S-e-c-o-n-d; East, E-a-s-t. Order numbers, train, engine and other numbers must be pronounced first and then followed by pronouncing each figure, thus: One hundred five, 1-0-5; Twenty-seven-fifty-six, 2-7-5-6, except where the number is but one figure, it must be pronounced first, thus: One; then spelled, thus: O-n-e. The letters duplicating names of stations, sections, direction and numerals will not be
written in the train 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 must underscore each word and figure each time it is repeated thereafter. When transmitted by telephone he must write the order as he transmits it and must underscore each word and figure each time as it is repeated.
207. To transmit a train order, the train dispatcher must instruct each office addressed the position and direction in which the train order signal is to be displayed and the number of copies to be made, thus: "Stop West copy 5", or "19 East copy 3 ".
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.

208 (A). A train order must not be issued for a train at the point where its movement is restricted if it can be avoided. When so sent, except at its initial station, the fact must be stated in the order. The train being restricted must be brought
to a stop before delivery is made, and special precautions must be taken to insure safety.

A train advanced to a station where the opposing train receives the order 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 "complete", the time, and the signature of the operator must be in his handwriting.

209 (A). If the requisite number of copies of a train order cannot be made at one writing, operators must make additional copies from one previously repeated, and must then repeat to the train dispatcher from the new copies each time additional copies are made. Initials of operator who recopies the order must be shown, but the date of issue, time completed, and name of original receiving operator must not be changed. Operators must retain a copy of each additional writing, showing thereon the time and date it was repeated to the train dispatcher.

The train dispatcher must place notation in train order book of each repetition. When an error is made in transmitting a train order and before it has been repeated, all copies of that order must be immediately destroyed, the order marked "void" in the train order book, and if reissued given another number.

If an order in which an error has been made has been repeated, that order must be annulled.

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 train order has been transmitted, operators must, unless otherwise directed, repeat it at once in the succession in which the several offices have been addressed.
Each operator receiving the order must 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 in the space provided the word "complete", the time, and his last name in full, and deliver a copy to each person addressed, unless the order is annulled by the train dispatcher. 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 trainman.
211. Clearance Form A must be filled out by the operator before clearing a train, showing thereon, without erasure or alteration, the address, the total number of train orders (if none show "no") and the number of each train order, if any, and transmit to the train dispatcher from the clearance as "Seattle, clear No 17 with 3 orders numbers 1, 2 and 3", or "Seattle, clear No 17, no orders".

The train dispatcher must make the required record in the 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 " or, "Seattle, clear No 17, no orders", giving OK, the time and the superintendent's initials, which the operator will endorse on the clearance.

Operators must make the required number of copies of Clearance Form A at one writing, sign last name in full and retain a copy. Typewriter must not be used in writing clearance.

Clearance Form A must be delivered together with all train orders. Conductors and engineers must, and when practicable other members of the crew will, see that their train is correctly designated and that the information shown on the clearance corresponds with the train orders received.

In case of failure of communication, if all orders held for a train have been completed, the operator may deliver such orders accompanied by a Clearance Form A bearing notation "wire failure" and the time instead of the OK and superintendent's initials. Such clearance will be acted upon as though OK had been given in the usual way.

When communication is restored, operator will notify the train dispatcher the time each train was cleared and the numbers of the orders delivered, which the train dispatcher will record in the train order book.
212. When so directed by the train dispatcher, a train order, having been transmitted, may be acknowledged before repeating, by the operator responding: "(number of train order) to (train number), $\mathrm{X} "$ 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 a train until the has been repeated, or the "X" response sent by the operator who receives the order for the train being restricted.
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 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 train dispatcher, a carbon copy of the body of the order must be made in the train order book at the time the order is written on the train order form, and this copy underscored as it is repeated thereafter.
217. A train order to be delivered to a train at a point not a train order office, or at which the office is closed, must be addressed to "C\&E___ (at) (between) ___ care of ___ "_ and forwarded and delivered with Clearance Form A by the person in whose care it is addressed, and who is responsible for its delivery.

When delivery is to be made by conductor or engineer of another train, the numbers of such orders must be shown in the usual manner on Clearance Form A of the train making the delivery and both conductor and engineer supplied with copies. If necessary, train must be stopped to effect delivery.

When orders are sent in the manner herein provided, to a train, the superiority of which is thereby restricted, the
operator will be directed to make an extra copy of the order, which he will deliver to the person who is to make delivery of the order. On this copy, the person delivering the order must secure the signatures of the conductor and engineer addressed. 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. "Complete" must not be given to the order for a train being advanced until the train dispatcher has received the signatures of the conductor and engineer of the train being restricted.
218. When a train is named in a train order by its schedule number alone, all sections of that schedule are included, and copies of the order must be delivered to each section.
219. An operator must not repeat or give the " X " response to a train order restricting the movement of a train which has received Clearance Form A at that station, or after the engine has passed his train order signal displaying proceed indication (Rule 200 C ) until he has obtained the signatures of the conductor and engineer to the order.

When a restricting train order is issued to a train after Clearance Form A has been delivered, operator must take up and destroy all clearances that have been delivered to that train at that station and a new clearance must be issued showing the numbers of all orders delivered that train at that station.

When a train 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 orders delivered to that train at that station.
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 relieving conductor and engineer before proceeding.

220 (A). Train orders annulling a schedule or a section and 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.
221. Unless otherwise provided, a fixed signal must be used at each train order office.

Where a two indication color light type or Swift type, or two position semaphore type train order signal is used, signal will indicate "stop" when trains are to be stopped for train orders, except when a yellow flag by day or a yellow light by night is displayed below the stop indication it will indicate "19 order" and the name and indication will be the same as shown in Rule 200 B.

Where a three indication color light type or three position semaphore type train order signal is used, signal will indicate "stop" when trains are to be stopped for train orders and will indicate " 19 order" when trains are to receive train orders without stopping.

Train order signal must indicate "stop" when the order is addressed to the operator at the meeting or waiting point, or when an order restricting the superiority of a train is issued at the point where its movement is restricted.

Unless otherwise provided, when there are no train orders, signal must indicate "proceed".

While "stop" or "19 order" indication is displayed, trains must not proceed without a Clearance Form A.

Operators must have the proper appliances for hand signalling ready for immediate use and will use these hand signals should the fixed signal fail to operate properly, or when other conditions require.

## THE ABOVE RULE 221 DOES NOT APPLY ON THE MINNEAPOLIS AND ST. LOUIS RAILWAY COMPANY.

THE FOLLOWING RULE 221 APPLIES ONLY ON THE MINNEAPOLIS AND ST. LOUIS RAILWAY COMPANY.
221. Unless otherwise provided, a fixed signal must be used at each train order office.

Where a two indication color light type, or Swift type, or two position semaphore type train order signal is used, signal will indicate STOP when trains are to be stopped for train orders or when train orders are to be delivered to them.

Where three indication color light type or three position semaphore type train order signals are used, they will display indications as follows:
\(\left.\left.$$
\begin{array}{l|l}\hline \text { RED LIGHT OR } \\
\text { ARM IN HORIZONTAL } \\
\text { POSITON }\end{array}
$$ \quad $$
\begin{array}{l}\text { STOP, unless clearance } \\
\text { received }\end{array}
$$\right] $$
\begin{array}{ll}\text { YELLOW LIGHT OR } & \begin{array}{l}\text { RESTRICTED SPEED } \\
\text { (advance indication, See } \\
\text { ARM DIAGONALLY } \\
\text { UPWARD OR } \\
\text { DOWNWARD }\end{array}
$$ <br>
\hline track at restricted speed to <br>

train order signal\end{array}\right]\)| GREEN LIGHT OR |
| :--- |
| ARM IN VERTICAL |
| POSITION |

RESTRICTED SPEED indication will be used for train. orders affecting movement of train beyond the station at
which this indication is displayed. Train will use main track at restricted speed to train order signal.
RESTRICTED SPEED indication will also be used to advance a train beyond a station where it is restricted for a train or trains; when so restricted and RESTRICTED $S P E E D$ indication is displayed, train will use main track at restricted speed to train order signal.

Trains must acknowledge RESTRICTED SPEED indication of train order signal by two long sounds of engine whistle, signal 14( $b$ ). When engineer sounds whistle signal 14( $b$ ), operator will then display train order signal at STOP indication.

Clearance Form A or train order and Clearance Form A must be delivered with train order signal displaying STOP indication.

Train order signal must indicate STO P when order is addressed to operator at the meeting or waiting point or when an order restricting the superiority of a train is issued at the point where its movement is restricted.

A Clearance Form A is required on a STOP indication of the train order signal.

A train must not leave a station while train order signal is displaying and RESTRICTED SPEED indication.

Operators must have the proper appliances for hand signalling ready for immediate use and will use these hand signals should the fixed signal fail to operate properly, or when other conditions require.

221 (A). When an operator receives the signal "stop" or "19" followed by the direction, he must immediately display the proper indication for the direction indicated and then reply "SD" or "19D", adding the direction, and until the order has been delivered or annulled the position of 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".
222. Unless relieved of that duty, operators must promptly record and report to the train dispatcher the time of arrival, departure or passing 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 designated by the superintendent;

Names of months: Jan, Feb, Mar, Apr, Aug, Sept, Oct, Nov, Dec;
ABS -Automatic Block Signal System;
ACS —Automatic Cab Signal System;
C\&E - Conductor and Engineer;
Com -Complete;
Condr - Conductor;
CTC -Centralized Traffic Control System;
Dispr -Train Dispatcher;
Div —Division;
Eng -Engine;

| Engr | -Engineer; |
| :---: | :---: |
| Frt | -Freight; |
| Jct | -Junction; |
| Mins | -Minutes; |
| MPH | -Miles per hour; |
| MP | -Mile Post; |
| ND | -Not displayed; |
| No | -Number; |
| NS | -No train order signal; |
| OK | -Correct; |
| Opr | -Operator; |
| Orig | -Originating; |
| OS | -report; |
| Psgr | -Passenger; |
| SD | -Stop" displayed; T |
| 19D | -19 order" displayed; |
| Str | -Streamline; |
| Subdiv | -Subdivision; |
| Supt | -Superintendent; |
| X | -will be held until train order is made complete; |
| YM | -Yardmaster. |

224. To relay a train order, the train dispatcher must transmit it to the relaying operator, who must then transmit it to destination.
The employe receiving it at destination must, after obtaining the signatures of conductor an engineer when required, repeat it to the relaying operator. The relaying operator must, on the copy he retains, underscore each word and figure as it is repeated to him, and then repeat it to the train dispatcher. If correct, "complete" will be given by train dispatcher and relayed to destination.

## FORMS OF TRAIN ORDERS

S-A.

## FIXING MEETING POINTS FOR OPPOSING TRAINS

(1) No I 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 237 west and Extra 235 west at B
(2) No 2 and Second 4 meet No I and No 3 at F and

Extra 95 west at D (and so on)
No I meet No 2 at B Second 4 at C and Extra 95 east at D

Examples (1) and (2) may be modified by adding "___take siding" or "__ gets this order
at $\qquad$ ".

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. <br> DIRECTING A TRAIN TO PASS OR RUN AHEAD OF ANOTHER TRAIN

(1) No I 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), unless otherwise provided, the train to be passed will take siding.
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, unless delayed, run ahead of the second-named train between the designated points.
If a train is delayed after receiving an order to run ahead of a superior train, the firstnamed train may allow the secondnamed train to pass, and the train order must then be considered fulfilled.
The train dispatcher will be notified at once by the inferior train, when practicable, and by the superior train at first open office.
(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 7 has right over No 3 A to $Z$
(2) Extra 27 west has right over Extra 25 west A to $Z$ and wait at $A$ until 7250 pm

| $C$ | 770 pm |
| :---: | :---: |
| $E$ | 720 pm |

(3) No 407 ( a second class train) has right over Extra 25 west $A$ to $Z$ and wait at A until 7250 pm
C $\quad 770 \mathrm{pm}$

E $\quad 720$ pm
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 <br> GIVING RIGHT OVER AN OPPOSING TRAIN

(7) No 7 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.

Examples (1), (2), (3) and (4) may be modified by adding, "and at ..........". This confers right to the first-named train to occupy the main track between the switches of the siding at
the point last named. If the trains meet at the point last named the second-named train must take siding.

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 959 am

L 7030 am
J 7055 am
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 designated 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 959 am

$$
L \quad 7030 \mathrm{am}
$$

$$
J \quad 7055 \mathrm{am}
$$

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 firstnamed train must take the siding, unless the order otherwise prescribes.

If the trains meet between the designated points, the secondnamed train must take the siding unless otherwise directed by train order.

When right is given to the end of double or three or more tracks, or to the beginning of CTC territory, the first-named train may proceed with the current of traffic or under CTC Rules, but must not leave double or three or more tracks, or CTC territory to enter single track until the second-named train has arrived, unless authorized by train order to do so, or it may proceed keeping clear of the schedule of the opposing train as required by rule.

## E. <br> TIME ORDERS

(l) No 1 run 50 mins lute $A$ to $G$
(2) No 1 run 50 mins lute $A$ to $G$ and 20 mins lute G to $K$

Examples (1) and (2) make 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 must be such as can be easily added to the schedule time.
(3) No 7 and No 3 wait at $N$ until 959 am

| $P$ | 7030 am |
| :--- | :--- |
| $R$ | 7055 am |

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. <br> TIME ORDERS

(7) No 7 wait at $H$ until 959 am

J 7020 am
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. <br> FOR SECTIONS

(7) Eng 20 display signals and run as First 7 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 $i$ A to $Z$
(3) Second 1 display signals B to Z for Eng 99
(4) Engs 2025 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 EEng 85 display signals and run as Second $l R$ 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 7 H to Z
Conductors and engineers of the trains ad- dressed will exchange orders, clearances 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 order must specify which engine or engines shall assume the schedule beyond such point.

## G. <br> 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 tfo $C$ 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 17 as follows with right over all trains
Leave A 1130 pm

$$
\text { C } 1225 \mathrm{am}
$$

E 747 am

## F 222 am

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 be- fore 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 710 pm
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 17 after 645 am 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. <br> WORK EXTRAS

(1) Eng 292 works extra 645 am until 545 pm 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 must be given in the following form:
(4) Work Extra 292 clears (or protects against)

Extra 76 east between D and E after 210 pm
Extra 76 east must not enter the working limits before 210 pm, 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 must be used:
(5) Work Extra 292 protects against No 55 ( or $\qquad$ 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 must be used:
(6) Work Extra 292 has right over all trains between
$D$ and $E 715$ pm until 115 am
This gives the work extra the exclusive right between the points designated between the times named.
(7) On Feb l7 Eng 292 works extra 645 am until 545 pm 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 work 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 EXTRAS

(1) Eng 292 works extra on___track (or tracks) 645 am until 545 pm 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.
(2) 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 must be given in the following form:
(4) Work Extra 292 clears (or protects against)

Extra 76 east between D and E after 210 pm
Extra 76 east must not enter the working limits before 210 pm , 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 must 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 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 must be used:
(6) Work Extra 292 has right over all trains on $\qquad$ track (or $\qquad$ tracks) between G and H 70 l pm until lOl am

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 work 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. <br> HOLD1NG 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. <br> ANNULLING A SCHEDULE on A SECTION

(1) No l due to leave A Feb 29 is annulled A to $Z$
(2) Second 5 due to leave $E$ Feb 29 is annulled $E$ to $G$
(3) No 401 due to leave $E$ Feb 29 is annulled $E$ to $Z$
(4) No 401 due to leave A Feb 29 has arrived at $E$ and is annulled $E$ to $Z$
The schedule or section annulled becomes void between the points designated and cannot be restored.
Form K must not be combined with other forms of train orders.

## L. <br> ANNULLING AN ORDER

(1) Order No lO 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 $\qquad$

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

## M. <br> ANNULLING PART OF AN ORDER

(1) That part of order No 10 reading No l meet No 2 at $S$ is annulled
(2) That part of order No 12 reading No 3 pass No lat $S$ is annulled

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

## P. <br> SUPERSEDING AN ORDER OR PART OF AN ORDER

This order will be given by adding to prescribed forms the words "instead of $\qquad$
(1) No 1 meet No 2 at $C$ instead of $B$
(3) No 1 pass No 3 at $C$ instead of $B$

An order which has been superseded must not be reissued 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.

## D-R. <br> PROVIDING FOR A MOVEMENT AGAINST THE CURRENT OF TRAFFIC

(1) No $l$ has right over opposing trains on $\qquad$ 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 has arrived at C No l has right over opposing trains on $\qquad$ 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. <br> PROVIDING FOR THE USE OF A SECTION OF DOUBLE OR THREE OR MORE TRACKS AS SINGLE TRACK

(1) $\qquad$ track will be used as single track between $F$ and $G$ If it is desired to limit the time for such use, this order may be modified as follows:
$\qquad$ track will be used as single track between $F$ and G l0l pm until 301 pm
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). (1) Acceptance of this order is acknowledgment of receipt of time table No $\qquad$ effective $\qquad$ $m$ $\qquad$ 19 $\qquad$
Trains and engines must not occupy main track after effective time and date of new time-table until copies of the new timetable have been received.

## U. <br> 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.
(1) After stopping pass signal $\qquad$
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.
This may be modified by adding to the order:
"This order is annulled if signal indicates proceed"

## $\stackrel{\text { V. }}{\text { CHECK OF TRAINS }}$

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

$$
\begin{aligned}
& \text { (1) All (regular) (__ class) trains due at C at or before } \\
& 650 \text { am (have passed) (have arrived) (have left) }
\end{aligned}
$$

This may be modified by adding:
"except $\qquad$ ".
(2) No 1 and No 2 (have passed) (have arrived) (have left) G

When it is desired to inform a train of the arrival or departure of an extra train, the following form must be used:
(3) Extra 99 east (has arrived) (has left) A on order No $\qquad$ W. CHANGE IN CLEARANCE OR REGISTER REQUIREMENTS
(1) $\qquad$ will not (register) or (require a clearance) at $C$
(2) will not require a clearance at $C$ if train order signal indicates proceed
(3) $\qquad$ will register at $C$ by register ticket
(4) Extra 37 west register at $C$ on order No $\qquad$
(5) Extra 38 east may check register at C against Extra 37 west on order No $\qquad$
(6) No 2 may check register at C against Extra 37 west on order No $\qquad$
Examples (1), (2) and (3) must be used when it is desired to modify register or clearance requirements.
When Example (3) is used, a copy of the order must be addressed to the operator at the station specified.
Examples (4), (5) and (6) must be used when it is desired to permit a train to accept the train register as evidence of the arrival of an extra train in accordance with Rule S-83 (A). When Example (4) is used, number and date of the order specified must be inserted in column of train register captioned "Signals".

## X. ADVANCING ORDER

When it is desired to advance a train to the train order office as prescribed by Rule 87 (A), the following form must be used:
(1) Advance Extra 38 east on main track until 1101 am

This form, addressed to the operator, may be used only after proper orders or instructions have been issued at that station which provide authority and time necessary for the train named to hold main track and advance at least to the next station ahead of, or against, all trains for which they are restricted. The train dispatcher must specify a time limit which will safely allow the train named to move on the main track to the next station at normal speed.
The operator receiving this order must display advance indication in Operator's Advancing Indicator. If train has not acknowledged this indication by the specified time, the advance indication must be extinguished and train dispatcher notified.

## Z. <br> RELIEF OF FLAG PROTECTION

This form of order must be used to relieve a train from protecting against following extra trains:
(1) Eastward extra trains between $H$ and $B$ except Extra 77 east wait at $H$ until 410 pm
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.

## GENERAL DESCRIPTION OF SIGNALS

Aspects of fixed signals are shown by the position of semaphore arms, color of lights, flashing of lights, position of lights, or any combination thereof. They may be qualified by
number plate, letter plate, marker, shape and color of semaphore arms, or any combination thereof.

Block and interlocking signals, as far as practicable, are located to the right of, and adjacent to, or directly over the track which they govern.
When it is not practicable to locate signals to the right of, or directly above the track which they govern, two signals may be bracketed and located on the supporting mast for displaying indications on two tracks, right-hand signal governing right-hand track and left—hand signal governing left-hand track.
When a track intervenes to the right between a signal and the track governed, a stub post with the prescribed marker will be placed to the right of the signal.
When a track intervenes to the left between a signal and the track governed, a stub post with the prescribed marker will be placed to the left of the signal.
Fixed signals of the semaphore type display their indications by arm, or arms, to the right of the signal mast and in addition, by night, display lights of the prescribed color as viewed from an approaching train.
Fixed signals of the color light type display their indications by lights of prescribed color or flashing of such lights as viewed from an approaching train.
Fixed signals of the position-light type display their indication by lights arranged in the prescribed position.
Stop signals have no number plates. Stop-and-proceed signals are designated by number plates. Block signal numbers indicate their location approximately in miles and tenths according to mile posts.



GREAT NORTHERN RY. AUTOMATIC BLOCK
R RULE

## AND INTERLOCKING SIGNAL INDICATIONS

| NAME | INDICATION |
| :---: | :--- |
| Stop | Stop. |
| Stop and <br> proceed | Stop, then proceed at restricted <br> speed. <br> Permissive <br> Proceed at restricted speed without <br> stopping. |
| Approach | Proceed on main route prepared to <br> stop at next signal. Train exceed- <br> ing medium speed must at once re- <br> duce to that speed. |
| Proceed on main route. |  |

GREAT NORTHERN RY. AUTOMATIC BLOCK


## AND INTERLOCKING SIGNAL INDICATIONS

| NAME | INDICATION <br> Restricting |
| :--- | :--- |
| Diverging <br> approach | Proceed of restricted speed. <br> pared to stop at next signal. |
| Diverging <br> clear | Proceed on diverging route. |
| Take <br> siding | When letter "S" is illuminated take <br> siding. |
| Spring <br> switch | Spring switch in normal operating condition. <br> If automatic block signal governing movement <br> over a spring switch indicates "proceed" and <br> lunar light at that switch is dark, it will <br> not be regarded as an imperfectly displayed <br> signal. This does not modify Rule D-104. |

