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Association of American Railroads
operations and maintenance department
operating—transportation division
operating section

THE STANDARD CODE

OF

OPERATING RULES
BLOCK SIGNAL RULES
INTERLOCKING RULES

Association of American Railroads operations and maintenance department operating—transportation division operating section

THE

STANDARD CODE

OF

OPERATING RULES
BLOCK SIGNAL RULES
INTERLOCKING RULES

WHERE PROPER SAFEGUARDS ARE PROVIDED, RAILROADS MAY MODIFY OR ADD TO THESE RULES TO SUIT THEIR REQUIREMENTS

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GENERAL NOTE.—Blanks	in the	rules may	be filled	by each	railroad
to suit its own organization					

(Form of order putting rules in effect.)

The rules herein set forth govern the railroads operated
by the
Special instructions may be issued by proper authority
(Name)
(Title)

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 must provide themselves with a copy.

Employes whose duties are in any way affected by the time-table must have a copy of the current time-table with them while on duty.

- 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 instructions and must report promptly to the proper official any violation thereof.
- 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 promptly reported by quickest available means of communication to the proper authority.
- G. The use of intoxicants or narcotics by employes subject to duty, or their possession or use while on duty, is prohibited.

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

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

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

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

M. Employes must exercise care to avoid injury to themselves or others. They must observe the condition of equipment and the tools which they use in performing their duties and when found defective will, if practicable, put them in safe condition, reporting defects to the proper authority.

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

They must expect the movement of trains, engines or cars at any time, on any track, in either direction.

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

DEFINITIONS.

OPERATING RULES.

BLOCK SIGNAL RULES.

INTERLOCKING RULES.

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

AUTOMATIC BLOCK SYSTEM.—A series of consecutive blocks governed by block signals, cab signals, or both, actuated by a train, or engine, or by certain conditions affecting the use of a block.

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 STATION.—A place from which block signals are operated.

BLOCK SYSTEM. -A series of consecutive blocks.

Cab Signal.—A signal located in engineman'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.

CURRENT OF TRAFFIC.—The movement of trains on a main track, in one direction, specified by the rules.

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

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.

EXTRA TRAIN.—A train not authorized by a time-table schedule. It may be designated as—

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

Passenger extra-for passenger train extra;

Work extra-for work train extra.

FIXED SIGNAL.—A signal of fixed location indicating a condition affecting 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 *racks between the home signals of an interlocking.

INTERLOCKING SIGNALS.—The fixed signals of an interlocking.

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

LIMITED SPEED.—A speed not exceeding miles per hour.

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.

MEDIUM SPEED.—A speed not exceeding miles per hour.

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

REDUCED SPEED.—Proceed prepared to stop short of train or obstruction.

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

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

NOTE TO DEFINITION OF FIXED SIGNAL.—The definition of a "Fixed Signal" covers such signals as switch, train order, block, interlocking, semaphore, disc, stop signs, yard limit signs, slow signs, or other means for displaying indications that govern the movement of a train or engine.

RESTRICTED SPEED.—Proceed prepared to stop short of train, obstruction, or switch not properly lined and to look out for broken rail.

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.

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

SLOW SPEED.—A speed not exceeding miles per hour.

Spring Switch.—A switch equipped with a spring mechanism arranged to restore the switch points to normal position after having been trailed through.

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

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

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

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

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

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

TRAIN OF SUPERIOR CLASS.—A train given precedence by time-table.

TRAIN OF SUPERIOR DIRECTION.—A train given precedence in the direction specified by time-table as between opposing trains of the same class.

TRAIN OF SUPERIOR RIGHT.—A train given precedence by train order.

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

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

YARD ENGINE.—An engine assigned to yard service.

YARD SPEED.—A speed that will permit stopping within one-half the range of vision.

OPERATING RULES

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

ADOPTED MARCH, 1949

OPERATING RULES

STANDARD TIME.

	1. Standa	rd T	ime	obtained fro	m -				
				transmitted		all	points	from	desig
1	nated offices	at -			m.	da	ily.		

- 2. Each conductor, engineman and other employe as may be designated, must carry, while on duty, a reliable railroad grade watch, for which there must be a prescribed certificate on file with the railroad.
- 3. Unless otherwise-provided, watches of conductors, enginemen and must be compared with a standard clock when commencing each day's work. The time when watches are compared must be registered on a prescribed form. The location of standard clocks will be shown in the time-table.

TIME-TABLES.

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

Schedules on each division, or subdivision, date from their initial stations on such division, or subdivision. Not more than one schedule of the same number and day shall be in effect on any division, or subdivision.

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

Unless otherwise specified, the time applies:

On single track, at the switch where an opposing train clears; where there is no switch it applies at the station.

On two or more tracks, at the station.

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.

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.

SIGNALS AND THEIR USE.

- 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.
- 8. Flags of the prescribed color must be used by day, and lights of the prescribed color and type 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.

10. Color Signals.

COLOR.	INDICATION.
(a) Red. (b)	Stop. Proceed at reduced speed, and for other uses prescribed by the rules.
(c) ————	Proceed, and for other uses prescribed by the Rules.
(d) White.	Flag stop (See Rule 28) and for other uses prescribed by the rules.
(e) Blue. (f) Purple.	See Rule 26. Stop. (Indication for siding derails.)

11. A fusee burning red on or near the track of an approaching train must be extinguished. The train may then proceed at reduced speed.

12. HAND, FLAG AND LAMP SIGNALS.

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

12a.



STOP.

Swung at right angle to the track.

12b.



REDUCE SPEED.

Held horizontally at arm's length.

12c.



PROCEED.

Raised and lowered vertically.

12d.



BACK.

Swung vertically in a circle at right angle to the track.



APPLY AIR BRAKES.

Swung horizontally above the head, when standing.

12g.



RELEASE AIR BRAKES.

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

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

12i. Signals must be given from a point where they may be plainly seen and in such a way that they cannot be misunderstood. If there is doubt as to the meaning of a signal, or for whom it is intended, it must be regarded as a stop signal. If signals disappear from view, the movement must be stopped immediately.

ENGINE WHISTLE SIGNALS. 14.

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

SOUND.	INDICATION.
(a) o	Apply brakes. Stop.
(b) — —	Release brakes. Proceed.
(c) o o o	Flagman protect rear of train.
(d) — — —	Flagman may return from wes
	or south.§
(e) — — — —	Flagman may return from eas
•	or north.§
g) o o	Answer to 14 (k) or any signa
	not otherwise provided for.
h) o o o	When standing, back. Answe to 12 (d) and 16 (c). When
	to 12 (d) and 16 (c). When
	running, answer to 16 (d).
j)	Call for signals.
k) — o o	(SINGLE TRACK) To call atten
	tion of engine and train crew
	of trains of the same class, in
	ferior trains and yard engine
	and of trains at train order
	meeting or waiting points, t
	signals displayed for a follow
	ing section. If not answered by
	a train, the train displaying sig
	nals must stop and ascertai
	the cause unless otherwis
	provided.
	(Two or More Tracks) To ca
	attention of engine and trai
	crews, and yard engines, t
	signals displayed for a follow
l) —— o —	ing section.
1) —— 0 —	Approaching public crossings a
	grade. To be prolonged or re peated until crossing is reached
m) ———	
111/	Approaching stations, junctions railroad crossings at grade an
	as may be required
-As prescribed by Rule	

BOUND	INDICATION
(n) — o	Approaching meeting or waiting points. See Rule S-90.
(o) o —	Inspect train line for leak or for brakes sticking.
(p) Succession of short sounds.	Alarm for persons or live stock on the track.
 (p) Succession of short sounds. (q) — o 	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). When running against the current of traffic: (1) Approaching stations, curves, or other points where view may be obscured. (2) Approaching passenger or freight trains and when passing freight trains. (3) Preceding the signals prescribed by (d), (e), (r), (s), (t), (u), (v) and (w).

For additional tracks the following signals may be used

SOUND.	INDICATION.
(r) ——— o	Flagman may return from east or north on track.§
(s) ——— o	Flagman may return from west or south on ———————————————————————————————————
(t) ———— o o	Flagman may return from east or north on ———————————————————————————————————
(u) ———— o o	Flagman may return from west or south on ———————————————————————————————————
(v) ———— o o o	Flagman may return from east or north on track.
(w) ———— o o o	Flagman may return from west or south on track.§

¹⁻As prescribed by Rule 99.

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

Torpedoes must not be placed at stations or on public crossings.

16. COMMUNICATING SIGNALS.

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

SOUND.	INDICATION.
(a) o o	When standing—start.
(b) o o	When running—stop at once.
(c) 000	When standing—back.
(d) 0 0 0	When running—stop at next
(e) o o o o	passenger station. When standing—apply or re- lease air brakes.
(f) 0000	When running—reduce speed.
(g) 00000	When standing—recall flagman.
(h) 00000	When running—increase speed.
(j) 000000	When running—increase train heat.
(k) o — o	Shut off train heat.
(i)	When running—brakes sticking
	look back for hand signals.

17. The headlight will be displayed to the front of every train by night. It must be concealed or extinguished when a train turns out to meet another and has stopped clear of main track.

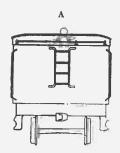
It must be dimmed:

- (a) While passing through yards where yard engines are employed;
- (b) Approaching stations at which stops are to be made or where trains are receiving or discharging passengers;

- (c) Approaching train order signals, junctions, terminals, meeting points, or while standing on main track;
- (d) On two or more tracks when approaching train in the opposite direction.

When an engine is running backward a white light must be displayed by night on the leading end.

Fig. 1.



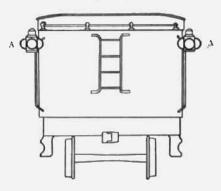
itunning backward by night, without ears or at the front of a train pulling ears.

White light at A.

- 18. Yard engines will display the headlight to the front and rear by night. When not provided with a headlight at the rear, a white light must be displayed.
- 19. The following signals will be displayed to the rear of every train, as markers, to indicate the rear of the train.

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

Fig. 2



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

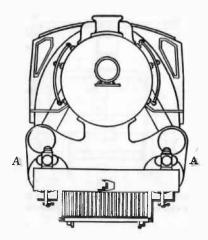
Marker lamps not lighted, or yellow (or green) flags at A A as markers.

Note to Rule 18.—Headlight on end coupled to cars may be extinguished.

Note to Rules 17, 19, 20 and 21.—The diagrams are intended to illustrate the general location of the train signals, not the exact manner in which they are to be attached.

NOTE TO RULES 19, 20 and 21.—When rear unit of a train is equipped with built-in electric markers, they must be lighted by day as well as by night, and the provision that markers will display yellow to the front may be omitted.

Fig. 3.

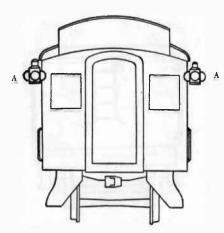


Running backward by day, without cars or at the rear of a train pushing cars.

Marker lamps not lighted, or yellow (or green) flags at A A as markers

19 (continued).

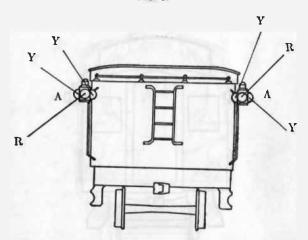
Fig. 4.



Rear of train by day.

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

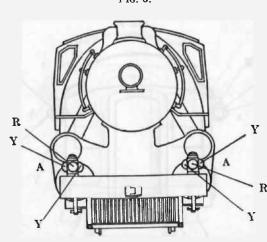
Fig. 5.



Running forward by night, without cars or at the rear of a train pushing cars, on single track, with the current of traffic on two tracks, with the current of traffic on passenger tracks where there are three or more tracks, and on tracks where trains move under the provisions of Rule 261.

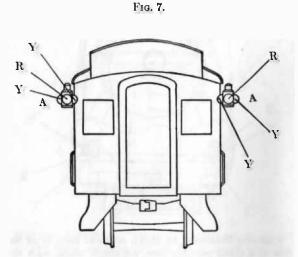
Lights at A A as markers, showing yellow (or green) to the front and side and red to the rear. 19 (continued).

Fig. 6.



Running backward by night, without cars, or at the rear of a train pushing cars, on single track, with the current of traffic on two tracks, with the current of traffic on passenger tracks where there are three or more tracks and on tracks where trains move under the provisions of Rule 261.

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

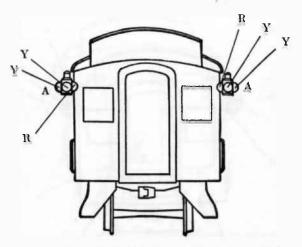


Rear of train by night while running on single track, with the current of traffic on two tracks, with the current of traffic on passenger tracks where there are three or more tracks, and on tracks where trains move under the provisions of Rule 261.

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

19 (continued).

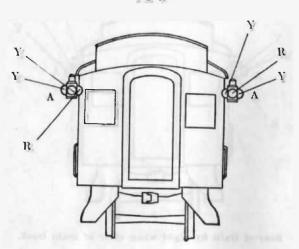
F1g. 8.



Rear of train by night when clear of main track.

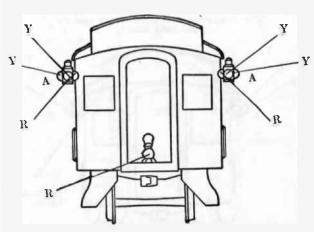
Lights at A A as markers, showing yellow (or green) to the front, side and to rear.

Fig. 9.



19 (continued).

Fig. 10.

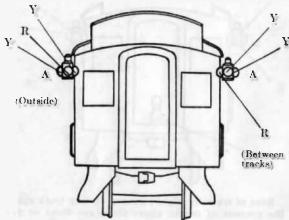


Rear of train by night running on any track against the current of traffic where there are three or more tracks.

Lights at A A as markers, showing yellow (or green) to the rear, with a red light on the platform or the cupola.

Fig. 11.

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

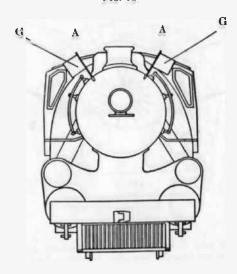


Rear of train by night running against the current of traffic on two tracks.

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

20. All sections except the last will display two green flags, and, in addition, two green lights by night in the places provided for that purpose on the front of the engine.

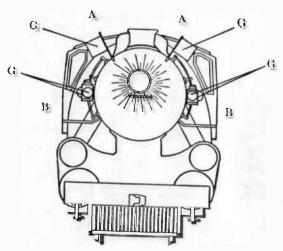
Fig. 12



Running forward by day displaying signals for a following section.

Green flags at A A.

Fig. 13.

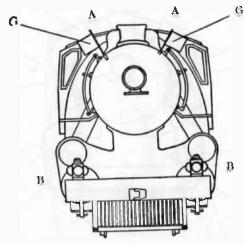


Running forward by night displaying signals for a following section.

Green flags at A A and green lights at B B.

20 (continued)

Fig. 14.



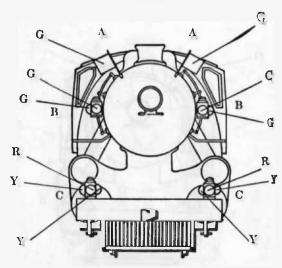
Running backward by day, without cars or at the rear of a train pushing cars, and displaying signals for a following section.

Green flags at A A.

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

20 (concluded).

Fig. 15.



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

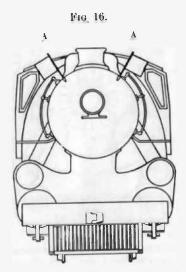
Green flags at A A.

Green lights at B B.

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

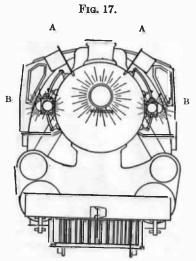
Note to Rules 20 and 21.—Where flags are prescribed, suitable lights may be substituted.

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



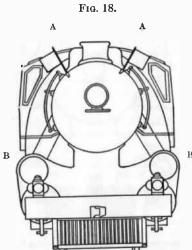
Running forward by day as an extra train.

White flags at A A.



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

21 (continued).

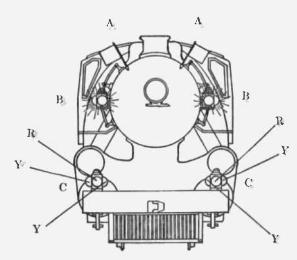


Running backward by day as an extra train, without cars or at the rear of a train pushing cars.

White flags at A A

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

Fig. 19.



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

White flags at A A. White lights at B B.

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

22. When two or more engines are coupled, each engine shall display the signals as prescribed by Rules 20 and 21.

- 23. One flag or 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.
- 24. When two or more engines are coupled, the leading engine shall sound the signals as prescribed by Rule 14.
- 25. Each car of a passenger train must be connected with the engine by a communicating signal appliance.
- 26. A blue signal, displayed at one or both ends of an engine, car or train, indicates that workmen are under or about it; when thus protected it must not be coupled to or moved. Each class of workmen will display the blue signals and the same workmen are alone authorized to remove them. Other equipment must not be placed on the same track so as to intercept the view of the blue signals, without first notifying the workmen.

When emergency repair work is to be done under or about cars in a train and a blue signal is not available, the engineman and fireman will be notified and protection must be given those engaged in making the repairs.

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

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

Note to Rule 27.—Reflectors may be substituted for switch lights.

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

- 28. A white signal will be used to stop a train at the flag stations indicated on its schedule or in special instructions.
- 29. When a signal, except a fixed signal, is given to stop a train, it must, unless otherwise provided, be acknowledged as prescribed by Rule 14 (g) or (h).
- 30. The engine bell must be rung when an engine is about to move and while approaching and passing public crossings at grade and ————————.
- 32. The unnecessary use of either the whistle or the bell is prohibited.
- 33. Watchmen stationed at public crossings at grade must use stop signals when necessary to stop trains. They will use prescribed signals to stop highway traffic.
- 34. All members of engine and train crews must, when practicable, communicate to each other by its name the indication of each signal affecting the movement of their train or engine.
 - 35. The following signals will be used by flagmen:

Day signals—A red flag,

Torpedoes and
Fusees.

Night signals—A red light,

Torpedoes and
Fusees.

SUPERIORITY OF TRAINS.

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

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

Right is superior to class or direction.

Direction is superior as between trains of the same class.

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

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

- 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 by 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 AND ENGINES.

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

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

S-83. A train must not leave its initial station on any division, or subdivision, or a junction, or pass from one of

two or more tracks to single track, until it has been ascertained whether all trains due, which are superior have arrived or left.

Stations at which train registers are located will be designated by time-table.

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

Stations at which train registers are located may be designated by time-table.

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

A section must not pass and run ahead of another section of the same schedule without first exchanging train orders, signals and numbers with the section to be passed. The change in sections must be reported from the next available point of communication.

- 86. Unless otherwise provided, an inferior train must be clear at the time a superior train in the same direction is due to leave the next station in the rear where time is shown.
- S-87. An inferior train must keep out of the way of opposing superior trains and failing to clear the main track by the time required by rule must be protected as prescribed by Rule 99.

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

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

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

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

The superior train must stop at schedule meeting points with trains of the same class unless switch is properly lined and track clear. The inferior train must pull into the siding when practicable. If necessary to back in, unless otherwise provided it must be protected as prescribed by Rule 99.

- S-90. The engineman of each train will give signal 14 (n) at least one mile before reaching a meeting or waiting point.
- 91. Unless some form of block system is used, trains in the same direction must keep not less than ten minutes apart, except in closing up at stations.
- 92. A train must not leave a station in advance of its schedule leaving time.

class, extra trains and engines must move within yard limits at yard speed unless the main track is known to be clear.

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.

- 94. A train which overtakes another train so disabled that it cannot proceed will pass it, if practicable, and if necessary will assume the schedule and take the train orders of the disabled train, proceed to the next available point of communication, and there report to the ———. The disabled train will assume the right or schedule and take the train orders of the last train with which it has exchanged, and will, when able, proceed to and report from the next available point of communication.
- 95. Two or more sections may be run on the same schedule. Each section has equal time-table authority.

Unless otherwise provided, a train must not display signals for a following section without train order authority.

- S-96. Unless otherwise provided, signals must not be ordered displayed to, nor taken down at, other than a register station for the train displaying the signals.
- 97. Unless otherwise provided, extra trains must not be run without train orders.

- 98. Trains and engines must approach the end of two or more tracks, junctions, railroad crossings at grade, and draw-bridges, prepared to stop, unless the switches are properly lined, signals indicate proceed, and track is clear. Where required by law, trains must stop.
- 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 flagman'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, leaving the torpedoes and a lighted fusee.

When a train stops under circumstances in which it may be overtaken by another train, the engineman will immediately signal the flagman to protect the rear. When ready to proceed he will recall the flagman.

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

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

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

NOTE TO RULE 93.—Where block signal rules are in effect, "known to be clear" includes when track is known to be clear by signal indication.

NOTE TO RULE 99.—When trains are operating under Automatic Block System Rules, protection against following trains will have been compiled with when full protection is afforded against trains moving at restricted speed.

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

103. When cars are pushed by an engine, and the conditions require, a trainman must take a conspicuous position on the leading car and when shifting over public crossings at grade not protected by a watchman, or by gates, a member of the crew must protect the crossing.

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

A switch must not be left open for another train or engine unless in charge of a member of the crew of such train or engine.

Employes lining switches must see that points fit properly.

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

A train or engine must not foul a track until switches connected with the movement are properly lined, or in the case of spring switches the normal route is seen to be clear. When waiting to cross from one track to another and dur-

ing 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 a movement is completed or clear of the main track involved.

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.

105. Unless otherwise provided, trains and engines using other than a main track must proceed at yard speed.

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

106. Both the conductor and the engineman are responsible for the safety of the train and the observance of the rules, and, under conditions not provided for by the rules, must take every precaution for protection.

This does not relieve other employes of their responsibility under the rules.

107. When a passenger train is receiving or discharging traffic on the side toward a station, a train or engine must not pass between it and the station unless proper safeguards are provided.

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

NOTE TO RULE 104.—Rule 104 applies only to hand operated switches.

When spring or remotely controlled switches are operated by hand, they are hand operated switches and Rule 104 applies.

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 or engine crosses over to, or obstructs another track, unless otherwise provided, it must first be protected as prescribed by Rule 99.
- 153. When a trailing movement through a spring switch is stopped before passing entirely through the switch, the movement must not be reversed until the switch has been properly set by hand.

Trains and engines must stop and examine main track spring switches before making facing point movements over them, unless receiving a signal indication permitting them to proceed.

RULES FOR

Movement by Train Orders

Rules for Movement by Train Orders.

201. For movements not provided for by time-table, unless otherwise provided, train orders will be issued by authority and over the signature of the — 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 or interlineation.

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

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

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

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

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

205. Each train order must be written in full in a book provided for the purpose in the office of the train dispatcher; and with it recorded the time and the signals which show when, from what offices and by whom the

order was repeated and the responses transmitted; and the train dispatcher's initials. These records must be made at once and never from memory or memoranda.

Additions to train orders must not be made after they have been repeated.

206. In train orders regular trains will be designated by numbers as "No. 10," and sections as "Second 10," adding engine numbers if desired. Extras will be designated by engine numbers and the direction, as "Extra 798, 'East' or 'West'." Work extras will be designated by engine numbers, as "Work extra 798." For the movement of an engine of another company, the initials will precede the engine number.

When two or more engines are coupled and a designation is made by engine numbers, the number of the leading engine will be used in train orders.

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

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

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

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

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

207. To transmit a train order, the signal "31" or "19" followed by the direction must be given to each office addressed, stating the number of copies—thus: "31, West, copy 5" or "19, East, copy 2."

\$\iiiists 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, must include the operator at the meeting or waiting point.

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

A train order restricting the movement of a train must not be issued for it at the point where such movement is restricted if it can be avoided. When so sent, the fact will be stated in the order, the train will be brought to a stop before delivery is made, and special precautions must be taken to insure safety.

209. Operators receiving train orders must write or typewrite them in manifold during transmission. If the requisite number of copies cannot be made at one writing, they must make others from the original copy and repeat to the train dispatcher from the new copies each time additional copies are made. They must retain a copy of each train order. The word "Complete," the time, and the signature of the operator must be in his handwriting.

Enginemen must show train orders to firemen and when practicable to forward trainmen. Conductors must show train orders when practicable to trainmen. Firemen and trainmen are required to read them and, if necessary, remind enginemen and conductors of their contents.

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

receiving the order should observe whether the others repeat correctly.

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

Enginemen must show train orders to firemen and when practicable to forward trainmen. Conductors must show train orders when practicable to trainmen. Firemen and trainmen are required to read them and, if necessary, remind enginemen and conductors of their contents.

211. Clearance Form A must be filled out by the operator before clearing a train, showing thereon, without erasure or alteration, the total number of train orders and the number of each train order, if any, addressed to a train. He will then repeat from Clearance Form A to the train dispatcher the information shown thereon. The dispatcher will make the required record in the train order book, and if operator has correctly repeated the numbers of all train orders addressed to a train will respond by giving "OK," the time and his initials, which the operator will endorse on the Clearance Form A.

If all orders held for a train have been completed, and

communication fails before Clearance Form A has been OK'd by train dispatcher, the operator may deliver such orders accompanied by Clearance Form A, and bearing notation "Wire has failed," which will be acted upon as though "OK" had been given in the usual way. When communication is restored, operator will notify train dispatcher of each train cleared, the time, and the numbers of the orders delivered, which train dispatcher will record in train order book.

Clearance Form A must be delivered together with all train orders to each person addressed. Conductors, enginemen and firemen must, and when practicable trainmen will, see that the information shown on Clearance Form A corresponds with the train orders received.

Operators will retain a copy of each Clearance Form A.

212. When so directed by the train dispatcher, a train order, having been transmitted, may be acknowledged before repating, by the operator responding:

"Order Number — to Number (of train) —, X," with the operator's initials and office signal. The operator must then write on the order his initials and the time.

- 213. "Complete" must not be given to a train order for delivery to an inferior train until the order has been repeated or the "X" response sent by the operator who receives the order for the superior train.
- 214. When a train order has been repeated or "X" response sent, and before "Complete" has been given, the order must be treated as a holding order for the train ad-

dressed, but must not be otherwise acted on until "Complete" has been given.

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

216. When the train dispatcher issues a train order that is to be delivered to a train by the dispatcher, a carbon impression must be made in the train order book at the time the order is written. If later the order is to be sent to another office, it will be transmitted from the copy in the book. The requirements for delivery are the same as at other offices.

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 (or between) _______, care of _______," and forwarded and delivered by the conductor or other person in whose care it is addressed, and who is responsible for its delivery. The numbers of such train orders must be shown in the usual manner on Clearance Form A of the train making delivery.

For orders which 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 signature of the conductor and engineman addressed. This copy he must deliver to the first operator accessible, who must at once transmit the

signatures of the conductor and engineman to the train dispatcher, and preserve the copy. Under such circumstances "Complete" must not be given to the order for an inferior train until the train dispatcher has received the signatures of the conductor and engineman of the superior train.

When form "31" is used, "Complete" will be given upon the signature of the person by whom the order is to be delivered.

- 218. When a train is named in a train order by its schedule number alone, all sections of that schedule are included, and each must have copies delivered to it.
- 219. An operator must not repeat or give the "X" response to a train order restricting the movement of a train which has been cleared, or of which the engine has passed his train order signal in proceed position, until he has obtained the signatures of the conductor and engineman to the order.

If necessary to issue a second Clearance Form A, the original Clearance Form A must be destroyed, and the second Clearance Form A must show the numbers of all train orders addressed to the train.

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

- 221. Unless otherwise provided, a fixed signal must be used at each train order office, which shall indicate "stop" where there is an operator on duty, except when changed to "proceed" to allow a train to pass when there are no train orders for any train in that direction. While "stop" is indicated, trains must not leave without Clearance Form A.
- 222. Operators must promptly record and report to the _____ the time of arrival and departure of all trains and the direction of extra trains.

They must observe trains and report at once to the ______ if the proper signals are not displayed.

223. The following signals and abbreviations may be used:

Initials for signature of ————.

Such office and other signals as are arranged by the

C&E-Conductor and Engineman.

C&---Conductor and -

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

Com- Complete.

OK- Correct.

O S- Train Report.

No- Number.

Eng- Engine.

Sec- Section.

Psgr-Passenger.

Frt- Freight.

Mins- Minutes.

Jct- Junction.

MP- Mile Post.

MPH-Miles Per Hour.

Dispr-Train Dispatcher.

Opr-Operator.

31 or 19—To clear the line for train orders and for operators to ask for train orders.

The usual abbreviations for the names of the months and stations.

FORMS OF TRAIN ORDERS

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

FORMS OF TRAIN ORDERS

S-A.

Fixing Meeting Points for Opposing Trains.

- (1.) No 1 meet No 2 at B.

 No 3 meet Second 4 at B.

 No 5 meet Extra 95 east at B.

 Passenger Extra 652 north meet Extra 231 south at B.
- (2.) No 2 and Second 4 meet No 1 and No 3 at C and Extra 95 west at D (and so on). No 1 meet No 2 at B Second 4 at C and Extra 95 east at D.

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

В.

DIRECTING A TRAIN TO PASS OR RUN AHEAD OF

ANOTHER TRAIN.

(1.) Extra 594 west pass No. 1 at J.

Both trains will run according to rule to the designated point and there arrange for the rear train to pass promptly. Unless otherwise provided, the train to be passed will take siding.

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

(2.) Extra 594 east run ahead of No 6 M to B.

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

S-C.

GIVING RIGHT OVER AN OPPOSING TRAIN.

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

If the second-named train reaches the point last named before the other arrives, it may proceed, keeping clear of the schedule of 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 authorized by train order to do so.

These orders give right to the train first-named over the other train between the points named. If the trains meet at either of the designated points, the first-named train must take the siding, unless the order otherwise prescribes.

(3.) Extra 72 south has right over Extra 91 north A to Z and wait at N until 2 10 p m

P 3 25 p m

for Extra 91 north.

The first-named extra train must not pass the designated waiting points before the time given, unless the second-named extra train has arrived. The second-named extra train must clear the time specified at the designated points or any intermediate station not less than 5 minutes.

D.

GIVING RIGHT OVER ANOTHER TRAIN IN THE SAME DIRECTION.

(1.) No 1 has right over No 3 A to Z.

The second-named train must clear the time of the firstnamed train, between the designated points, as required by rule.

(2.) Extra 62 east has right over No 4 Z to A and wait at:
Z until 12 50 p m

Y 1 10 p m

X 1 20 p m

(3.) Extra 57 west has right over Extra 61 west A to Z.

These orders give right to the first-named train over the other train between the points named. If train order time is given, the first-named train must not pass the designated stations before the time shown, and the second-named train must clear such times as required by rule. If no time is given, the second-named train must not leave the point first named ahead of the first-named train.

E

TIME ORDERS.

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

No 1 run 50 mins late A to G and 20 mins late G to K, etc. This makes the schedule time of the train named, between the stations designated, as much later as stated in the order, and any other train receiving the order is required to run with respect to this later time as before required to run with respect to the regular schedule time. The time in the order should be such as can be easily added to the schedule time.

(2.) No 1 and No 3 wait at N until 9 59 a m

P 10 30 a m

R 10 55 a m, etc.

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

S-E.

(1.) No 1 wait at H until 9 59 a m for No 2.

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

F.

FOR SECTIONS.

(1.) Eng 20 display signals and run as First 1 A to Z.

To be used when the number of the engine for which signals are displayed is unknown, and is to be followed by (2), both being single-order examples.

(2.) Eng 25 run as Second 1 A to Z.

- (3.) Second 1 display signals B to E for Eng 99.
- (4.) Engs 20 25 and 99 run as First Second and Third 1 A to Z.

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

(5.) Eng 85 display signals and run as Second 1 A to Z. Following sections change numbers accordingly.

The engine named will display signals and run as directed, and following sections will take the next higher number.

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

(6.) Eng 85 is withdrawn as Second 1 at H. Following sections change numbers accordingly.

The engine named will drop out at H, and following sections will take the next lower number.

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

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

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

Following sections need not be addressed.

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

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

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

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

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

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

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

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

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

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

G.

EXTRA TRAINS.

- (1.) Eng 99 run extra A to F.
- (2.) Eng 99 run Passenger Extra A to F.
- (3.) Eng 99 run extra A to F and return to C. The extra must go to F before returning to C.

S-H.

WORK EXTRA.

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

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

This may be modified by adding:

(a) Not protecting against eastward extra trains.

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

(b) Not protecting against extra trains.

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

(c) Extra 173 east wait at E until 9 15 a m Extra 209 east wait at E until 12 10 p m Other eastward extra trains wait at E until 5 45 p m for Work Extra 292.

The work extra will protect against the trains named after the times specified in the order.

The work extra must protect against westward extra trains.

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 a designated extra, an order may be given in the following form:

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

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

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

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

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

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

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

The working limits should be as short as practicable, to be changed as the progress of the work may require. Work extras must give way to all trains as promptly as practicable.

Whenever extra trains are run over working limits they must be given a copy of the order sent to the work extra. Should the working order instruct a work extra to net protect against extra trains in one or both directions, extra trains must protect against the work extra; if the order indicates that the work extra is protecting itself against other trains, they will run expecting to find the work extra protecting itself.

D-H.

WORK EXTRA.

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 form may be modified by adding:

(a) Not protecting against extra trains.

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

(b) Extra 173 east wait at E until 9 15 a m Extra 209 east wait at E until 12 10 p m Other eastward extra trains wait at E until 5 45 p m

The work extra will protect against the trains named after the times specified in the order. The time of regular trains must be cleared.

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

(2.) Work extra 292 protects against No 55 between D and E.

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

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

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

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

(3.) Work extra 292 has right over all trains on and tracks between G and H 7 01 p m until 1 01 a m.

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

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

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

J

HOLDING ORDER.

(1.) Hold No 2.

(2.) Hold all (or eastward) trains.

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

----- may go.

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

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

K.

ANNULLING A SCHEDULE OR A SECTION.

- (1.) No 1 due to leave A Feb 29th is annulled A to Z.
- (2.) Second 5 due to leave E Feb 29th is annulled E to G.

The schedule or section annulled becomes void between the points designated and cannot be restored.

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

L.

ANNULLING AN ORDER.

(1.) Order No 10 is annulled.

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

Annulled by Order No ----

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

M.

ANNULLING PART OF AN ORDER.

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

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

S-P.

SUPERSEDING AN ORDER OR A PART OF AN ORDER.

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

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

An order which has been superseded must not be 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.

P.

SUPERSEDING AN ORDER OR A PART OF AN ORDER.

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

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

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

Q

ISSUANCE OF A NEW TIME-TABLE.

(1.) Time-table No 1 is effective at 1201 a m Sunday July 10.

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

D-R.

PROVIDING FOR A MOVEMENT AGAINST THE CURRENT OF TRAFFIC.

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

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

This order may be modified as follows:

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

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

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

FORMS OF BLANKS FOR Single and Two or More Tracks

SPECIFICATIONS FOR TRAIN ORDER FORM AND BOOKS FOR 31 ORDERS.

Form as here shown. Blank space for order 4". The mode of filling the blanks is indicated by small type.

Size 7" x 7½"; yellow translucent train order tissue, sized and of such thickness as to admit of making nine good manifold copies with stylus and double faced carbon; printed black ink one side; 100 sheets to a pad; printed manila top sheet; strawboard back; glued at top with muslin strip.

Standard Train Order Blank for 31 Order.

	me,	ORDER	1174	FORM 31 MPAN
				19
то		At:	* * * * * * *	, , ,
X Initials		Opr.;	1	45 A M.
		***************************************	***************************************	
Repe	ated a	2 20 . Made	A.M.	Operator
	1 1		1 1	Operator Black
Conductor or Engineman	Train	Made	Time	
Conductor or Engineman	Train	Made	Time	
Conductor or Engineman	Train	Made	Time	
Conductor or Engineman	Train	Made	Time	

SPECIFICATIONS FOR TRAIN ORDER FORM AND BOOKS FOR 19 ORDERS.

Form as here shown. Blank space for order 4". The mode of filling the blanks is indicated by small type.

Size 7" x 7½"; green translucent train order tissue, sized and of such thickness as to admit of making nine good manifold copies with stylus and double faced carbon; printed black ink one side; 100 sheets to a pad; printed manila top sheet; strawboard back; glued at top with muslin strip.

Standard Train Order Blank for 19 Order

TRAIN ORDER No.



(To be printed

Made

Complete

time

ಬ 16 P

Black Opr

EAST AND WEST RAILROAD COMPANY CLEARANCE FORM A

×

Opr.;

45

×



19

634") To C & E.....at on white paper I have orders for your train. (If no train orders, operator must write "No" in space provided above) No. No. No. No. No. Orders: No. No. No. No. No.

* When this form is used as authority for a train to pass Manual Block Signal in Stop position, condition of block will be shown below. Block

No. No. No. No. No.

Time OK M. Dispr.

Manifold copies will be made for each Conductor, Engineman and Operator, the latter retaining a copy.

^{*} To be used only in connection with Rule 308.

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

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

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

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

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

Note.—Railroads operating under these rules must provide proper signals to control the approach and movement of trains.

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

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

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

FIXED SIGNALS.

Rules 281 to 292, inclusive.

Aspects may be shown by the position of semaphore arms, color of lights, position of lights, flashing of lights, or a combination of color, position, and flashing of lights.

Day and night aspects for color light signals shall have the same colors as the night aspects of the semaphore signals.

Day and night aspects for position light signals shall have the same positions as the day aspects of the sema-phore signals.

Aspects shown are typical. Each road should show the aspects and colors of lights it uses.

Note.—In the following illustrations of typical signal aspects, Rules 281 to 292, inclusive,

R = RedY = Yellow

G = Green

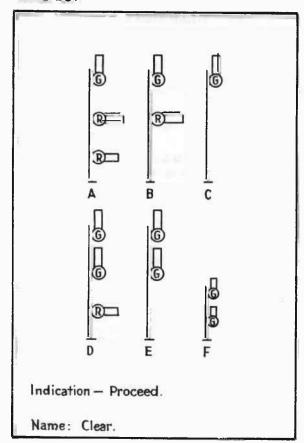
Note.—When flashing color lights are used, they shall be indicated as follows:

FR = Flashing Red

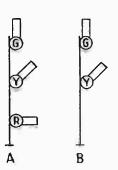
FY = Flashing Yellow

FG = Flashing Green

RULE 281



RULE 281 A



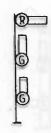
Indication — Proceed approaching second signal at medium speed.

Name: Advance approach medium.

Indication — Proceed approaching next signal at limited speed.

Name: Approach limited.

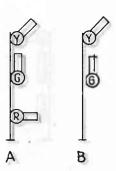
RULE 281C



Indication - Proceed; limited speed within interlocking limits.

Name: Limited - clear.

RULE 282A





Indication — Proceed approaching next signal at medium speed.

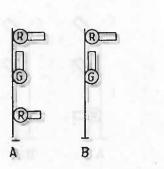
Name: Approach medium.

B B



Indication — Proceed preparing to stop at second signal.

Name: Advance approach.



96 .

Indication — Proceed; medium speed within interlocking limits.

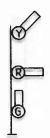
Name: Medium-clear.

Indication - Proceed preparing to stop at second signal; medium speed within interlocking limits. Name: Medium - advance approach.



Indication — Proceed at medium speed approaching next signal at slow speed.

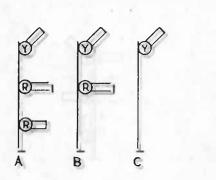
Name: Medium - approach slow.



Indication - Proceed approaching next signal at slow speed. Train exceeding medium speed must at once reduce to that speed.

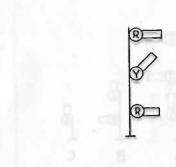
Name: Approach slow.

RULE 286



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

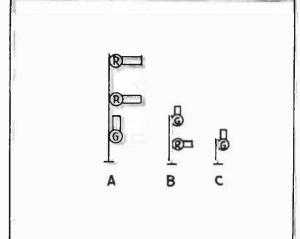
Name: Approach.



Indication - Proceed at medium speed preparing to stop at next signal.

Name: Medium - approach.

RULE 287



Indication - Proceed; slow speed within interlocking limits.

Name: Slow - clear.

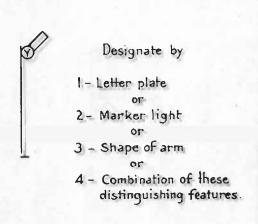
RULE 288



Indication - Proceed preparing to stop at next signal; slow speed within interlocking limits.

Name: Slow-approach.

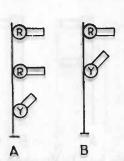
RULE-289



Indication—Manual Block occupied; proceed prepared to stop short of train or obstruction, but not exceeding 15 miles per hour.

Name: Permissive.

RULE 290

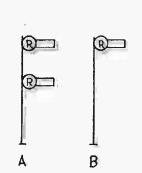




Indication - Proceed at restricted speed.

Name: Restricting.

RULE 292



Designate by: 1-Number plate or

2-Marker light

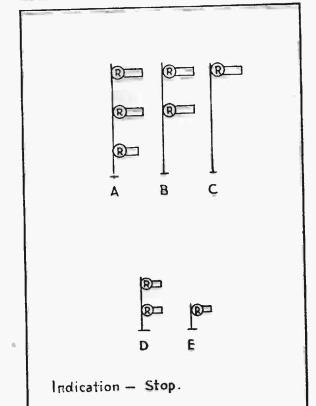
3-Pointed blade

4-Combination of these distinguishing features.

Indication - Stop; then proceed at restricted speed.

Name: Stop and proceed.

NOTE—Railroads desiring to avoid stopping trains may arrange accordingly.



Name: Stop.

293. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown, must be regarded as the most restrictive indication that can be given by that signal, except that when the day indication is plainly seen, or when sufficient lights in a position or color position light signal are displayed to determine indication of the signal, it will govern.

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

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

MANUAL BLOCK SYSTEM

RULES.

- 305. Block signals govern the use of the blocks, but, unless otherwise provided, do not supersede the superiority of trains; nor dispense with the use or the observance of other signals whenever and wherever they may be required.
- 306. When a block station is open at an irregular hour, trains must be notified when possible by train order.
- 307. A train having entered a block on other than a proceed indication, must not accept a proceed indication at any intermediate block station which was closed when such train entered the block, without receiving Clearance Form A.

- 308. When Clearance Form is used information will be shown as to condition of block "clear" or "occupied." If block is occupied train will proceed prepared to stop short of train or obstruction, but not exceeding 15 miles per hour.
- 308. (Optional) When Clearance Form A is used information will be shown as to condition of block "clear" or "occupied." If block is occupied train will proceed prepared to stop short of train ahead.

OPERATORS.

- 311. Signals must be kept in the position displaying the most restrictive indication, except when displayed for an immediate movement.
- 312. Appliances must be operated carefully and only by those charged with that duty. If any irregularity affecting their operation is detected the signals must be displayed to give their most restrictive indication until repairs are made.
- 313. Operators must observe, as far as practicable, whether the indications of the signals correspond with the positions of the levers.
- 314. Operators must not make nor permit any unauthorized repairs, alterations or additions to the apparatus.

Any defects in the appliances must be promptly reported to the

- 315. A block record must be kept at each block station.
- 317. On single track, to admit a train to a block, operator must examine block record and if block in advance is clear

of opposing trains and preceding passenger trains, request operator at block station in advance to "Block for No......". If it is proper for the train to be admitted, the operator in advance will reply "OK, blocking for No.......". Operator requesting block will then display the proper signal indication. Operators must promptly enter on block record the time block is given or received.

A passenger train must not be admitted to an occupied block, nor any train admitted to a block occupied by an opposing train or a passenger train, except under flag protection.

A train other than a passenger train may be permitted to follow a train other than a passenger train into a block under Permissive indication, train order or Clearance Form A.

317. (Optional) On single track, to admit a train to a block, operator must examine block record and if block in advance is clear of opposing trains and preceding passenger trains, request operator at block station in advance to "Block for No.". If it is proper for the train to be admitted, the operator in advance will reply "OK, blocking for No.". Operator requesting block will then display the proper signal indication. Operators must promptly enter on block record the time block is given or received.

A train must not be admitted to a block which is occupied by an opposing train or by a passenger train except as provided in Rule 333 or by train order. A train may be permitted to follow a train other than a passenger train into a block under Permissive indication or Clearance Form A. 318. On two or more tracks, to admit a train to a block, the operator must examine the block record and display proper signal indication.

A passenger train must not be admitted to an occupied block, nor any train admitted to a block occupied by an opposing train or a passenger train, except under flag protection.

A train other than a passenger train may be permitted to follow a train other than a passenger train into a block under Permissive indication, train order or Clearance Form A.

318. (Optional) On two or more tracks, to admit a train to a block, the operator must examine the block record and display proper signal indication.

A train must not be admitted to a block which is occupied by a passenger train except as provided in Rule 333 or by train order. A train may be permitted to follow a train other than a passenger train into a block under Permissive indication or Clearance Form A.

319. When a train enters a block, the operator must give train number and time to the next block station in advance. When two or more tracks are used in the same direction, operators must also specify the track. When the rear of the train has passed feet beyond the Block Signal, he must give the record of the train to the next block station in the rear.

This information must be entered on the block records.

NOTE TO RULE 317 (OPTIONAL).—Railroads that do not require blocking opposing trains should omit this rule.

NOTE TO RULE 318 (OPTIONAL).—Railroads that do not use Rule 317 (Optional) should omit "On two or more tracks."

- 320. Unless otherwise provided, operators must not ask for the block until they have received a report of the train from the next block station in the rear.
- 321. Operators must, as far as practicable, observe all passing trains and note whether they are complete and in order. Should a train without markers pass a block station, the operator must notify the operator at the next block station in each direction, and must not report that train clear of the block, nor clear the signal for the block in the rear, until he has ascertained that the train is complete.
- 322. Should a train pass a block station with any indication of conditions endangering the train, or a train on another track, the operator must immediately notify the operator at the next block station in advance, and each must display Stop-indications to all trains that may be affected, and must not permit any train to proceed until it is known that its track is not obstructed.
- 325. An operator informed of any obstruction in a block must immediately notify the operator at the other end of the block, and each must display Stop-indications to all trains that may be affected until it is known that the track is unobstructed.
- 326. When a train or engine clears the main track, the operator must know it is clear of the block before giving block for another movement or displaying a clear indication for that block.

The operator must obtain control of the block before permitting a train or engine to re-enter the block. 327. To permit a train or engine to enter a block or foul the main track, or to cross from one main track to another, the operator must examine the block record and if all the blocks affected are clear of approaching trains he must provide or arrange for block protection before permission is given, and until movement is complete and block clear, trains will not be admitted to the block except as prescribed by Rule 289 or Clearance Form A.

All crossover movements must be entered on the block record.

- 328. When coupled trains are separated, as prescribed by Rule 364, the operator must regard each portion as an independent train.
- 329. When necessary to stop a train for which other than a Stop-indication has been displayed and accepted, the operator must give hand signals in addition to displaying the Stop-indication.
- 333. When, from any cause, an operator is unable to communicate with the next block station in advance, he must stop all trains approaching in that direction. Should no cause for detaining a train be known, it may then be permitted to proceed with Clearance Form A, provided minutes have elapsed since the passage of the last preceding train.
- 334. Hand signals must not be used when the proper indication can be displayed by the block signals, except as prescribed by Rule 329 or 343. When hand signals are necessary they must be given from such a place and in such a way that there can be no misunderstanding on the part of enginemen or trainmen as to the signals, or as to the train or engine for which they are intended.

335. Block signals for a track apply only to trains moving with the current of traffic on that track. Operators will use for blocking trains moving against the current of traffic.

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

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

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

340. To open a block station, the operator must notify the next block station in each direction and record the trains that are in the extended block.

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

- 341. A block station must not be closed except upon authority of
- 342. Unless otherwise provided, a block station must not be closed until the block in each direction is clear of all trains.

To close a black station, the operator must notify the next block station in each direction and when he receives the acknowledgment enter it on the block record, with the time it is received from each block station.

The block signals must then be secured in the clear position, all lights extinguished, and the block wires and, when necessary, circuits arranged to work through the closed block station.

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

ENGINE AND TRAIN CREWS.

- 361. Block signals for a track apply only to trains moving with the current of traffic on that track.
- against the current of traffic.
- 362. Trains must not pass a Stop-indication without receiving Clearance Form A.
- 363. Trains must not proceed on hand signals as against block signals.
- 364. Unless otherwise directed, when two or more trains have been coupled and so move past any block station, they must be separated only at a block station and the operator notified.
- 365. When a train or engine clears the main track, the conductor or engineman must report "Clear" to the operator unless the switch involved is controlled by the

operator. A train or engine must not enter a block or foul the main track, or cross from one main track to another, without permission of the operator.

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

- 370. When there is an obstruction between block stations, notice must be given to the nearest operator.
- 371. When a train is stopped by a home or block signal the conductor or engineman must, when practicable, immediately ascertain the cause.
- 372. Conductors must report to any unusual detention at block stations.
- 373. A block station must not be considered as closed, except as provided for by time-table or

AUTOMATIC BLOCK SYSTEM RULES.

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

Engine and Train Crews.

. 508. Unless otherwise provided, block signals for a track apply only to trains or engines moving with the current of traffic on that track.

- 509. When a train is stopped by a Stop-indication it must stay until authorized to proceed, and will then proceed at restricted speed, or in case of failure of means of communication it may proceed when preceded by a flagman to the next signal displaying a proceed indication.
- 511. Both switches of a crossover must be open before a train or engine starts to make a crossover movement, and the movement must be completed before either switch is restored to normal position.
- 512. Where switch indicators are used, the indications displayed do not relieve enginemen and trainmen from protecting their train as required by the rules.
- 513 (a). When a train or engine has passed a signal permitting it to proceed and is delayed in the block, it must proceed at restricted speed to the next signal.
 - 513. (b). Unless otherwise protected, entrance to a main

track through a spring switch must be made under the provisions of Rule 513, operating the switch by hand.

- 514. A train or engine entering a block between signals must be protected as required by the rules and must proceed at restricted speed to the next signal in advance.
- 515. A train or engine having passed beyond the limits of a block must not back into that block except under protection as prescribed by Rule 99 or
- 516. Should cab signal and fixed signal indications conflict, the more restrictive indication will govern.
- 517. Cab signal indications do not supersede fixed signal indications, except when cab signal changes to a more restrictive or a more favorable indication after passing a fixed signal.
- 518. If after passing a fixed signal, the cab signal indication changes from restricted speed to a more favorable indication, speed must not be increased until train has run its length.

INTERLOCKING RULES.

605. Interlocking signals govern the use of the routes of an interlocking, and as to movements within Home Signal limits, their indications supersede the superiority of trains, but do not dispense with the use or the observance of other signals whenever and wherever they may be required.

Rules 99 and D-152 do not apply within Home Signal limits.

606.

EMERGENCY SIGNALS (Whistle or Horn)

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

SOUND.	INDICATION.
(a) ———	All trains and engines within in- terlocking limits stop immedi- ately.
(b) o o	Resume normal movement afte receiving the proper signal of permission from the operator
(c) o o o	Whistle or horn test.
(c) o o o o (d) o o o o	Call signal maintainer or repair man.

OPERATORS.

- 611. Signals must be kept in the position displaying the most restrictive indication, except when displayed for an immediate movement.
- 612. Appliances must be operated carefully and only by those charged with that duty. If any irregularity affecting their operation is detected the signals must be displayed to give their most restrictive indication until repairs are made.
- 613. When the route is set the signals must be operated sufficiently in advance of approaching trains to avoid delay.
- 615. When necessary to change any route for which the signals have been cleared for an approaching train or engine, switches, movable frogs or derails must not be

changed or signals cleared for any conflicting route until the train or engine for which the signals were first cleared has stopped.

- 616. The lever operating a switch, derail, movable frog, detector bar or lock must not be moved when any portion of a train or engine is standing on or closely approaching the switch, derail or movable frog.
- 617. Operating levers must be blocked or marked and should not be used when a track, switch or signal is undergoing repairs or when a track is obstructed.
- 619. If the force whose duty it is to keep switches clear when snow or sand is drifting, is not on hand when required, the fact must be reported to the
- 620. If a signal fails to work properly its operation must be discontinued and until repaired the signal secured so as to display its most restrictive indication.
- 621. Operators must observe, as far as practicable, whether the indications of the signals correspond with the positions of the levers.
- 622. Operator must not make nor permit any unauthorized repairs, alterations or additions to the interlocking.

Any defects in the interlocking must be promptly reported to the

623. If there is a derailment or if a switch, movable point frog or derail is run through, or if any damage occurs to the track or interlocking, the signals must be restored so as to display their most restrictive indication, and no

movement permitted until all parts of the interlocking and track liable to consequent damage have been examined and are known to be in safe condition.

- 624. When necessary to disconnect a switch, movable point frog, derail, facing point lock, detector bar or electric locking circuits, all switches, movable point frogs and derails affected must be securely spiked or fastened in the required position and the levers blocked or marked in such a manner that they cannot be operated, before any train or engine is permitted to pass over them.
- 625. When switches, movable point frogs, derails or signals are undergoing repairs, Stop-indication must be displayed for any movement which may be affected by such repairs, until it has been ascertained from the repairman that the switches, movable point frogs and derails are properly lined for such movement.
- 626. Operators must, as far as practicable, observe all passing trains and note whether they are complete and in order; should there be any indication of conditions endangering the train, or any other train, the operator must take such measures for the protection of trains as may be practicable.
- 628. Hand signals must not be used when the proper indication can be displayed by the interlocking signals.
- 629. If necessary to authorize a train or engine to pass an interlocking signal indicating stop, hand signal or permission may be given by the operator. Such occurrence must be reported to the ______.

- 630. Operators are responsible for the care of the interlocking station, lamps and supplies.
- 631. Lights in interlocking stations must be so placed that they cannot be seen from approaching trains.
- 633. If a train or engine overruns a Stop-indication, the fact must be reported to
- 634. Operators must not permit unauthorized persons to enter the interlocking station.

The interlocking station must be securely locked.

636. At interlocking stations, where there is a train order or block signal operated by the same operator, such signals must not be changed to display a proceed indication for a train until after the interlocking signal has been changed to permit the train to proceed.

ENGINE AND TRAIN CREWS.

- 663. Trains or engines must not pass an interlocking signal indicating stop until a member of the train or engine crew is fully informed of the situation. Movement may

- then be made on hand signal or permission of the operator, at restricted speed.
- 667. Sand must not be used nor water allowed to run over movable parts of an interlocking or spring switch.
- 669. Trains or engines stopped by the operator in making a movement through an interlocking, must not move in either direction until they have received the proper signal from him.
- 670. A reverse movement within the limits of an interlocking or a forward movement after making a reverse movement, must not be made without the proper interlocking signal indication or permission from the operator.
- 670(a). When a train or engine having accepted a proceed indication of an interlocking signal, stops less than 30 feet in advance of such signal, it must not again proceed without permission from the operator.
- 671. While an interlocking station is closed, should a signal for an open route indicate "Stop," movements through the interlocking must be preceded by a flagman. Before proceeding, the engineman and trainmen must know the route is properly lined.

The facts must be reported to the from the first available point of communication.

672. When a train or engine is stopped by a Stop-indication of an automatic interlocking signal and no immediate conflicting movement is evident, a member of the crew must operate the time release. If signal does not change its indication at expiration of time release interval,

train or engine may then proceed on hand signal from a member of the crew if there is no train or engine on conflicting route and signals on conflicting route indicate Stop.

If a train or engine is on conflicting route, hand proceed signal must not be given until such movement is stopped, and if signals on conflicting route do not indicate Stop, proper flag protection must be provided.

(Note: For Clearance Form A, see page 87.)