

CANADIAN NATIONAL RAILWAYS
GRAND TRUNK RAILWAY SYSTEM
DULUTH WINNIPEG AND PACIFIC
RAILWAY
CENTRAL VERMONT RAILWAY

OPERATING RULES

FORM 700

NO. 51880

CANADIAN NATIONAL RAILWAYS
GRAND TRUNK RAILWAY SYSTEM
DULUTH, WINNIPEG AND PACIFIC
RAILWAY
CENTRAL VERMONT RAILWAY

OPERATING RULES

DATED JULY 1ST., 1929

PRINTED IN CANADA

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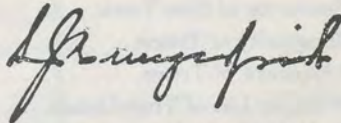
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The Rules herein set forth govern the railroads operated by the

Canadian National Railways,
Grand Trunk Railway System,
Duluth, Winnipeg and Pacific Railway,
Central Vermont Railway.

They take effect July 1st, 1929, unless notice given to the contrary, and supersede all previous rules and all instructions inconsistent therewith.

Special instructions may be issued by proper authority.



Vice-President.

Approved for use on lines in Canada by Board of Railway Commissioners for Canada. Order No. 42252, dated 27th day of February, 1929.

GENERAL NOTICE

NOTE—Wherever the word "Rules" appears in this book it applies to the "Operating Rules" as contained herein.

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.

Employees, in accepting employment, assume its risks.

GENERAL RULES

A. Employees whose duties are prescribed by these Rules must have a copy of them accessible when on duty.

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

NOTE—Special Instructions will be found in the current time table and bulletin books and on bulletin boards.

C. Employees must pass all prescribed examinations.

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

E. Employees must co-operate to the fullest extent in carrying out the Rules and special instructions, and must report to the proper official any violation thereof.

F. Accidents, failure in the supply of water or fuel, defects in track, bridges or signals, or any unusual conditions which may affect the movement of trains, must be promptly reported by wire to the proper authority and confirmed by mail. In cases of injury to persons the names and addresses of as many witnesses as possible must be obtained.

G. The use of intoxicants by employees while on duty is prohibited. Their use, or the frequenting of places where they are sold, is sufficient cause for dismissal.

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

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

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

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

M. Employees must always be vigilant to protect and must promptly report anything detrimental to the Company's interest.

N. Employees are required to exercise care to avoid injury to themselves and others.

They must not ride on top or sides of cars or engines passing structures or obstructions where there is not sufficient clearance, and are required to inform themselves respecting the location of such structures and obstructions.

They are also required to know, so far as practicable, that all appliances used in line of their duties are in safe condition before using.

They must expect trains to run at any time, on any track, in either direction, and when a train is approaching must stand clear of all running tracks.

They must not stand on the track in front of an approaching car or engine for the purpose of boarding the same, and must not ride on the front of an engine except when necessary to the performance of their duties.

GENERAL DEFINITIONS

ENGINE—Any self-propelled unit used in train or yard service.

ENGINEMAN—The employee in charge of and responsible for the operation of an engine.

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

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

SECTION—One of two or more trains running on the same time table schedule.

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

Work Extra—for a work train,

Passenger Extra—for an extra passenger train,

Extra—for any other extra train, the character of which may also be specified.

SUPERIOR TRAIN—A train having precedence over another train.

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

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

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

TIME TABLE—The authority for the movement of regular trains subject to the Rules; it contains their classified schedules, special instructions relating to the movement of trains, and other important information.

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

DISTRICT—That portion of the railway assigned to the supervision of a General Superintendent.

DIVISION—That portion of the railway assigned to the supervision of a Superintendent.

SUBDIVISION—A portion of a division so designated by time table.

MAIN TRACK—A track extending through yards and between stations, upon which the movement of trains is governed by time table, train order, or both, or the use of which is governed by a block system or other fixed signals.

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

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

THREE OR MORE TRACKS—Three or more main tracks, upon any of which the current of traffic may be in either specified direction.

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

STATION—A place so designated in the time table by name at which a train may stop for traffic, or to enter or leave the main track, or from which a train order signal is operated.

INITIAL STATION—The station at which a schedule is first timed on any subdivision is an initial station for that schedule and for any extra train whose movement on that subdivision commences at that station.

SIDING—A track auxiliary to the main track for meeting or passing trains limited to the distance between two adjoining stations.

FIXED SIGNAL—A signal of fixed location indicating a condition affecting the movement of a train.

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

YARD LIMITS—That portion of the main track or tracks, defined by yard limit boards.

YARD ENGINE—An engine assigned to yard service and working within yard limits.

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

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

TRAIN RULES

NOTE—Unless otherwise specified, these rules are applicable without respect to the number of tracks.

STANDARD TIME

NOTE—Either the 12-hour (ordinary) or 24-hour system may be used for stating time, and that system as indicated by times shown in the current time tables will be used for all purposes in connection with the movement of trains on the portions of the railway on which the respective time tables are effective. For convenience, all times shown herein are on the 12 hour system.

1. Standard Time obtained from the observatory will be transmitted over the various portions of the railway at the times specified in the current time tables.

2. Standard watches which have been examined and certified to by a designated Inspector must be used by Assistant Superintendents, Trainmasters, Road Foremen of Engines, Road Masters, Bridge and Building Masters, Conductors, Enginemen, Firemen, Helpers, Train Bag-gagemen, Brakemen, Yardmasters, Yard Foremen, Yardmen, and such other employees as the Company may direct.

3. Employees who are required to use standard watches must submit them to a designated Inspector for comparison and record during designated semi-monthly periods and at intervals of not less than ten and not more than twenty days. They must not regulate them; but may set them themselves only if they stop owing to failure to wind.

Watches of Conductors and Enginemen must be compared, before commencing each day's work, with a clock designated as a Standard Clock. The time when watches are compared, with variation from standard time, must be registered on a prescribed form.

If a Standard Clock is not accessible, standard time must be obtained from the Train Despatcher, or by comparing time with a Conductor or Engineman who has had access to a standard clock and has registered.

Conductors, Yard Foremen and Enginemen are required to compare time with each other before starting on each trip or commencing each day's work, and also with their brakemen, firemen and helpers as soon as practicable thereafter.

TIME TABLES

4. Each time table from the moment it takes effect supersedes the preceding time table, but when a schedule of the preceding time table corresponds with a schedule of the new time table in number, direction and day of leaving, a train authorized by a schedule of the preceding time table will retain its train orders and assume the schedule of the corresponding number of the new time table, except that if the schedule of the new time table is due to leave its initial station on the subdivision within twelve hours after the new time table takes effect the train of the preceding time table which has left its initial station on the subdivision before the new time table takes effect loses both right and schedule at the moment the new time table takes effect and thereafter can proceed only as authorized by train order.

A schedule of the new time table which has not the same number on the preceding time table cannot be used until it is due to leave its initial station on that subdivision after the new time table takes effect.

4a. Notice of a new time table will be given by bulletin prior to the time it takes effect, and train despatchers must by 31 train order require each conductor before starting on any subdivision, also each yard foreman or each yardmaster where employed, to acknowledge receipt.

Each conductor and each yard foreman signing the order will be held responsible for knowing that his engineman has a copy of the new time table and will obtain his receipt therefor on his copy of the order, but where yardmasters are employed they will be held responsible for knowing that each yard foreman and yard engineman has a copy of the new time table and for obtaining his receipt therefor on a prescribed form.

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 leaving times.

The time applies to the switch where an inferior train enters the siding; where there is no siding it applies to the place from which the train order signal is operated; where there is neither siding nor train order signal it applies to the place where traffic is received or discharged.

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

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

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

Where there are one or more trains to meet or pass a train between two times, or more than one train to meet a train at any station, attention is called to it by small figures showing numbers of trains to be met or to pass.

6. The following symbols in the time table indicate:

* See footnote.

A Arrive.

B Bulletins and Train Register.

C Coal.

F Flag stop.

K Standard Clock, Bulletins and Train Register.

L Leave.

P 'Phone.

R Train Register.

S Regular stop.

T Train Order Office.

W Water.

Y Wye.

SIGNALS

7. Employees whose duties may require them to give signals must have 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 by night.

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

Night signals must be displayed from sunset to sunrise

Color Signals

10. (Color)	(Indication)
(a) Red	Stop, except as otherwise provided for by the Rules.
(b) Yellow	Proceed with caution, and for other uses prescribed by the Rules.
(c) Green	Proceed, and for other uses prescribed by the Rules.
(d) Green and White, (Combined).	Flag stop. (See Rule 28).
(e) Blue	Workmen under or about an engine, car or train. (See Rule 26).
(f) Purple	Derail on other than main track in derailing position. (See Rule 104a).
(g) Lunar White	Identifies certain fixed signals. (See fixed signal illustrations).

11. On track protected by automatic block signals a train approaching a fusee burning red on or near its track must stop before any part of the train has passed it and extinguish the fusee, and then proceed with caution prepared to stop short of train or obstruction.

On track not protected by automatic block signals a train approaching a fusee burning red on or near its track must stop before any part of the train has passed it, and not proceed until the fusee is burned out.




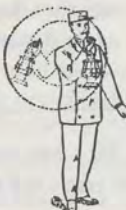
On double, three or more tracks a train approaching a fusee burning red on or beyond an adjoining track will respect it as a caution signal only.


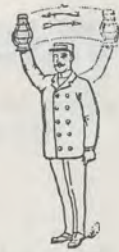
A train approaching a fusee burning yellow on or near its track will proceed with caution.

Fusees should not be placed on public road crossings at grade nor where they might communicate fire.

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.

(Manner of Using)	(Indication)	
(a) Swung across the track.	} Stop.	
(b) Held horizontally at arm's length.	} Reduce Speed.	
(c) Raised and lowered vertically.	} Proceed.	
(d) Swung vertically in a circle at half arm's length across the track.	} Back.	

(Manner of Using)	(Indication)	
(e) Swung vertically in a circle at arm's length across the track.	Train has Parted.	
(f) Swung horizontally above the head when the train is standing.		
(g) Held at arm's length above the head when the train is standing.	Apply Air Brakes.	
	Release Air Brakes.	

13. Any object waved violently by anyone on or near the track is a signal to stop.

14. Engine Whistle Signals

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

(Sound)	(Indication, Purpose or Use)
(a) o	Apply brakes. Stop.
(b) — —	Release brakes. Ready to proceed.
(c) — o o o	Flagman protect rear of train.
(d) — — — —	(SINGLE OR DOUBLE TRACK) Flagman may return from West or South.
(da) — — — — o	(THREE OR MORE TRACKS) Flagman for track No. 2 may return.
(e) — — — —	(THREE OR MORE TRACKS) Flagman for track No. 4 may return.
(e) — — — —	(SINGLE OR DOUBLE TRACK) Flagman may return from East or North.
(ea) — — — — o	(THREE OR MORE TRACKS) Flagman for track No. 1 may return.
(e) — — — —	(THREE OR MORE TRACKS) Flagman for track No. 3 may return.
(f) — — — —	When running, train parted; to be repeated until answered by the signal prescribed by Rule 12 (e). Answer to 12(e).
(g) o o	Answer to any signal not otherwise provided for.

(Sound)	(Indication, Purpose or Use)
(h) o o o	When train is standing, back. Answer to 12(d) and 16(c). When train is running, answer to 16(d).
(j) o o o o	Call for signals.
(k) — o o	To call attention to signals displayed for a following section as prescribed by Rule 31.
(l) — — o o	Approaching public road crossings at grade, and as prescribed by Rule 31.
(m) —————	Approaching stations, and as prescribed by Rule 31.
(n) o —	When double heading, air brakes have failed on leading engine and second engine is to take control of them. The same signal to be given in answer by the second engine as soon as it has control of air brakes.
(o) o o —	Answer to 14 (k). (See Rule 31).
(p) Succession of short sounds.	Alarm for persons or animals on the track.

(Sound)	(Indication, Purpose or Use)
(q) — o	(DOUBLE, THREE OR MORE TRACKS) To be sounded by trains running against the current of traffic (See Rule 31).
(r) o o o o o o	To notify track forces of fire on or near the right of way.

15. The explosion of one torpedo is a signal to stop and, in the absence of flagman or instruction of track forces, proceed prepared to stop for the distance which torpedoes would be placed from a preceding train.

The explosion of two torpedoes is a signal to reduce speed and look out for a stop signal.

Torpedoes must not be placed near stations or public road crossings, or where persons are liable to be injured by them.

16. Air Communicating Signals

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

(Sound)	(Indication)
(a) — —	When standing—start.
(b) o o	When running—stop at once.
(c) o o o	When standing—back.
(d) o o o	When running—stop at next station; where a train is required to stop on flag between stations it indicates stop at next flag stop for that train.
(e) o o o o	When standing—apply or release air brakes.
(f) o o o o	When running—reduce speed.
(g) o o o o o	When standing—recall flagman.
(h) o o o o o	When running—increase speed.
(i) o o o o o o	When running—increase steam heat.
(j) o o o o o o o	When running—release sticking brake.
(k) —————	Approaching points where steam hose is to be disconnected—shut off steam heat.
(l) o o —	Approaching meeting or waiting points (See Rule 90).

Train Signals

17. A headlight will be displayed to the front of every train by night, but must be concealed or extinguished when a train turns out to meet another train and has stopped clear of the main track with switches closed, or is standing to meet trains at the end of double track or at junctions with switches properly set for the approaching train.

17a. On engines equipped for the purpose the headlight will be dimmed while passing through yards where yard engines are employed; when standing; approaching stations at which stops are to be made, where trains are receiving or discharging passengers, or where train orders or clearances are to be picked up; at meeting points; and on two or more tracks when approaching trains in the opposite direction; except that the full power of the headlight must be used approaching all public road crossings at grade and until such crossings are reached, regardless of their location.

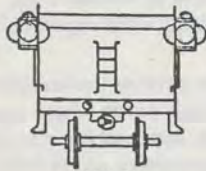
17b. When an engine, not equipped with a headlight at the rear, is running backward by night, a white light will be displayed to the front in the direction in which the engine is moving. This must be concealed or extinguished under conditions specified in Rule 17.

17c. When an engine is running backward by night, displaying markers, the headlight then to the rear must be concealed. (See Figs. 11 and 15).

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

Other engines under conditions not requiring display of markers will display a white light to both the front and rear by night.

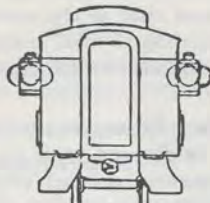
19. The following signals will be displayed, one on each side of the rear of every train, as markers to indicate the rear of the train:



(FIG. 1)

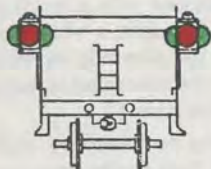
ENGINE RUNNING FORWARD BY DAY, WITHOUT CARS OR AT THE REAR OF A TRAIN PUSHING CARS.

Marker lamps not lighted.



(FIG. 2)

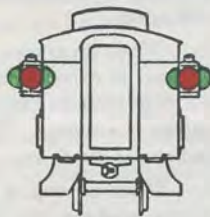
REAR OF TRAIN BY DAY.



(FIG. 3)

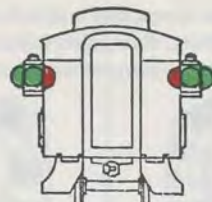
ENGINE RUNNING FORWARD BY NIGHT WITHOUT CARS OR AT THE REAR OF A TRAIN PUSHING CARS ON SINGLE TRACK, WITH THE CURRENT OF TRAFFIC ON DOUBLE TRACK, AND WITH THE CURRENT OF TRAFFIC ON PASSENGER TRACKS WHERE THERE ARE THREE OR MORE TRACKS.

Lights showing green to the front and side, and red to the rear.



(FIG. 4)

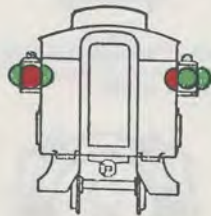
REAR OF TRAIN BY NIGHT WHILE RUNNING ON SINGLE TRACK, WITH THE CURRENT OF TRAFFIC ON DOUBLE TRACK, AND WITH THE CURRENT OF TRAFFIC ON PASSENGER TRACKS WHERE THERE ARE THREE OR MORE TRACKS.



(FIG. 5)

REAR OF TRAIN BY NIGHT WHEN CLEAR OF THE MAIN TRACK.

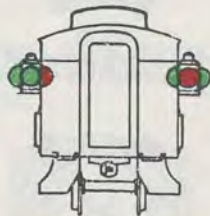
Lights showing green to the front, side and rear.



(FIG. 6)

REAR OF TRAIN BY NIGHT WHEN USING A MAIN TRACK AGAINST THE CURRENT OF TRAFFIC ON EITHER DOUBLE TRACK OR THREE OR MORE TRACKS.

Lights showing green to the front and side, green to the rear on the side nearest 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.



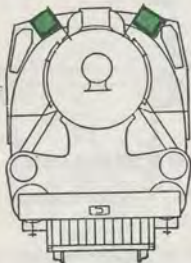
(FIG. 7)

REAR OF TRAIN BY NIGHT USING FREIGHT TRACKS WITH THE CURRENT OF TRAFFIC WHERE THERE ARE THREE OR MORE TRACKS.

Lights showing green to the front and side, green to the rear on the side next to the passenger track in the direction of the current of traffic, and red to the rear on the opposite side.

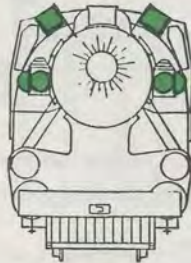
19a. Trains with rear car (or engines under conditions where the display of markers is required) if not equipped to display markers as prescribed by Rule 19 will display a red flag by day and a red light by night on rear of train.

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.



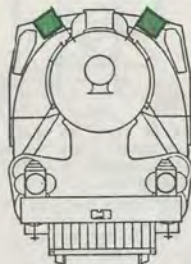
(FIG. 8)

ENGINE RUNNING FORWARD BY DAY DISPLAYING SIGNALS FOR A FOLLOWING SECTION.



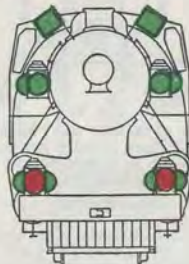
(FIG. 9)

ENGINE RUNNING FORWARD BY NIGHT DISPLAYING SIGNALS FOR A FOLLOWING SECTION.



(FIG. 10)

ENGINE RUNNING BACKWARD BY DAY, WITHOUT CARS OR AT THE REAR OF A TRAIN PUSHING CARS, AND DISPLAYING SIGNALS FOR A FOLLOWING SECTION.



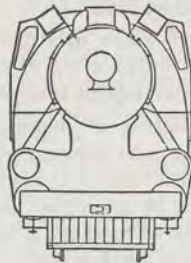
(FIG. 11)

ENGINE RUNNING BACKWARD BY NIGHT, WITHOUT CARS OR AT THE REAR OF A TRAIN PUSHING CARS, AND DISPLAYING SIGNALS FOR A FOLLOWING SECTION.

NOTE—Markers will be displayed as illustrated in Figs. 5, 6 and 7 when conditions require them.

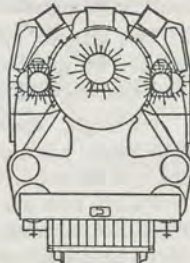
NOTE—Headlight not displayed.

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



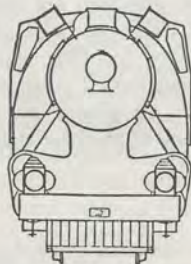
(FIG. 12)

ENGINE RUNNING FORWARD BY DAY AS AN EXTRA TRAIN.



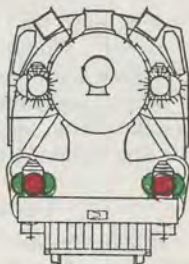
(FIG. 13)

ENGINE RUNNING FORWARD BY NIGHT AS AN EXTRA TRAIN.



(FIG. 14)

ENGINE RUNNING BACKWARD BY DAY AS AN EXTRA TRAIN, WITHOUT CARS OR AT THE REAR OF A TRAIN PUSHING CARS.



(FIG. 15)

ENGINE RUNNING BACKWARD BY NIGHT AS AN EXTRA TRAIN, WITHOUT CARS OR AT THE REAR OF A TRAIN PUSHING CARS.

NOTE—Markers will be displayed as illustrated in Figs. 5, 6 and 7 when conditions require them.

NOTE—Headlight not displayed.

22. When two or more engines are coupled, the leading engine must, unless otherwise directed, display the signals prescribed by Rules 20 and 21, and announce and answer the signals as prescribed by Rule 14.

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

24. By night, except when shifting or making up trains in yards; when cars are being pushed by an engine a white light must be displayed on the front of the leading car, and when cars are being pulled by an engine, under conditions not requiring the display of markers, a white light must be displayed on the rear of the last car.

25. Each car on 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. 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.

Use of Signals

27. Enginemen and snow plow foremen must know the indication of all fixed signals before passing them. Approaching interlocking plants, railway crossings at grade, drawbridges, junctions and train order offices, firemen and brakemen, when present on engines, are required to communicate to enginemen the indication of signals.

Trainmen are required to know the indication of all train order signals before passing them.

Except as otherwise provided, lights must be used on all fixed signals whenever the signal indications cannot be plainly seen without them.

A fixed signal imperfectly displayed or the absence of a fixed signal at a place where one is usually shown must be regarded as the most restrictive indication which can be given by that signal for the train or engine affected, except that when the day indication is unmistakable it will govern.

Imperfectly displayed signals must be reported to the proper officer.

Employees using a switch where the switch light is imperfectly displayed or absent must, if practicable, correct or replace the light.

On such portions of the railway over which trains are not run during the hours of sunset to sunrise, as may be specified in special instructions, lights need not be used on switches and other fixed signals (except the signals of an interlocking plant) providing that in the event of an occasional movement having to be made trains moving on such subdivisions must ascertain and be governed by the day indications.

28. A combined green and white signal will be used to stop a train only at the flag stops indicated for it in the time table or by bulletin; when necessary to stop a train at a point which is not a flag stop for it a red signal must be used.

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

30. The engine bell must be rung when an engine is about to move, while moving about stations, and from 80 rods ($\frac{1}{4}$ mile) from every public road crossing at grade until the crossing is passed.

31. Signal 14(k) must be sounded by a train displaying signals for a following section to call the attention of extra trains or trains of the same or inferior class or inferior right on single track, of extra trains or trains of the same or inferior class or inferior right in the same direction on double, three or more tracks, also of yard engines, to signals displayed for a following section, and must hear the answer 14(o) or stop and notify trains of green signals displayed.

Signal 14(l) must be sounded at least 80 rods ($\frac{1}{4}$ mile) from every public road crossing at grade (except within the limits of such towns or cities as may be prescribed in special instructions), approaching obscure places and at whistle posts; to be prolonged or repeated according to the speed of the train.

Signal 14(m) must be sounded approaching stations, watering and fueling points, junctions, the end of double track, drawbridges, railway crossing at grade and interlocking plants.

Signal 14 (q) must be sounded at frequent intervals by a train running against the current of traffic as a warning to employees and others on or about to cross the track.

32. The unnecessary use of either the whistle or the bell is prohibited. They will be used only as prescribed by Rule or by law, or to prevent accident.

33. Watchmen stationed at public road crossings must use stop signals when necessary to stop trains. They will display, by day the prescribed metal disc, and by night a red light, to warn pedestrians and persons in vehicles that a train is approaching, and where gates are provided a red light will be displayed by night; in both cases such light shall be hooded so as to show along the highway only.

34. In emergency cases when track is suddenly found defective, any employee shall by the use of flags, lights, torpedoes, fuses or other signals, make every possible effort to stop trains in both directions.

PROTECTION OF IMPASSABLE TRACK

40. Before undertaking any work which will render the main track impassable, or if rendered impassable from any cause or defect, trackmen, bridgemen, or other employees of the Company must, except as otherwise provided in Rules 42 and 44, protect the same as follows:

41. Send out a flagman in each direction with stop signals, at least—

1,500 feet in daytime, if there is no down grade towards the obstruction within one mile, and there is a clear view of 6,000 feet from an approaching train.

3,600 feet at other times and places, if there is no down grade towards the obstruction within one mile.

5,400 feet if there is a down grade towards the obstruction within one mile.

The flagman must, after going the required distance from the obstruction to insure full protection, take up a position where there will be an unobstructed view of him from an approaching train of, if possible, 1,500 feet, first placing two torpedoes on the rail (not less than 100 nor more than 200 feet apart) on the same side as the engineman of an approaching train, 300 feet beyond such position. The flagman must display a red flag by day and a red light by night, and remain in such position until recalled or relieved.

When day signals cannot be plainly seen, night signals must be used in addition.

Flagmen must each be equipped for daytime with a red flag on a staff, at least six torpedoes and five red fuses, and for night time and when day signals cannot be plainly seen with a red light, a white light, a supply of matches, at least six torpedoes and five red fuses.

42. On single track specified in the time table (which is not in mountain territory and on which there is neither frequent nor fast train service), the protection prescribed by Rule 41 may be modified as follows, except that from sunset to sunrise and when day signals cannot be plainly seen, Rule 41 must be observed:—

(a) By day place a red flag on the same side of the track as the engineman of an approaching train, at a point 600 feet from the defective or working point, with two torpedoes placed on the rail opposite each other so as to cause but one explosion, 150 feet in advance of the red signal, and provide further protection as follows:—

(b) By day place a red flag five feet above rail level on the same side of the track as the engineman of an approaching train so that it will be clearly in his view, at least—

3,600 feet from the defective or working point, if there is no down grade towards the obstruction within one mile.

5,400 feet if there is a down grade towards the obstruction within one mile, or as much further as may be necessary to insure full protection.

(c) Place two torpedoes (not less than 100 nor more than 200 feet apart) on the rail on the same side as the engineman of an approaching train, 300 feet in advance of the red signal.

43. Trains stopped by flagman as per Rule 41 will be governed by his instructions, and on reaching the working point will there be governed by signal or instructions of the foreman in charge.

Trains stopped by red signal as per Rule 42(b) will replace the torpedoes exploded and proceed to the working point signal, and there be governed by signal or instructions of the foreman in charge unless in the meantime stop signal has been removed.

44. In the event of train order protection being provided the defective or working point must be marked by signals placed in both directions, on the same side of the track as the engineman of an approaching train, as follows:—

Yellow flags five feet above rail level by day and, in addition, yellow lights by night, 3,600 feet from the defective or working point; red flags by day and, in addition, red lights by night, 600 feet from the defective or working point.

PROTECTION OF SLOW TRACK

45. A yellow flag five feet above rail level by day and, in addition, a yellow light by night, placed to the right of and adjoining the track to which it refers, indicates that from a point 3,000 feet distant and continuing to a point where a green flag by day and, in addition, a green light by night are similarly placed, the track is in condition for a speed of but ten miles per hour unless otherwise directed.

46. A sign-board bearing figures indicating permissible speeds or the word "SLOW", placed to the right of and adjoining the track to which it refers, will be used to indicate where a permanent slow order is in effect; its location and the speeds permitted will also be specified in the time table, or by bulletin.

SUPERIORITY OF TRAINS

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.

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

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

73. Extra trains are inferior to regular trains.

MOVEMENT OF TRAINS

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

Regular trains 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.

82. Unless otherwise directed, trains must be registered at the register stations designated for them in the time table. This must be done by the conductor, except that when a train is not otherwise required to stop at a register station where an operator is on duty the conductor will deliver a register ticket to the operator who must register the train and preserve the ticket; should the operator fail to obtain the ticket he must not enter

any information on the train register except such as may be authorized by the train dispatcher in message form.

A train must not leave its initial station on any subdivision, or any station where a schedule which is superior or of the same class originates or terminates, or a junction, or pass from double to single track, or return to its own track after detouring, until it has been ascertained whether all trains due which are superior or of the same class have arrived or left.

A train must not leave its initial station on any subdivision, or other stations as may be designated in the time table, or pass from double to single track, without obtaining a Terminal Clearance, unless otherwise directed.

83. At bulletin stations designated in the time table conductors and enginemen must read and sign for the bulletins posted before starting.

All bulletins affecting the movement of trains will be re-issued the first of each month.

84. A train must not start until the proper signal is given. On passenger trains this will be given by means of the air communicating signal.

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

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

85a. (DOUBLE, THREE OR MORE TRACKS) A section may pass and run ahead of another section of the same schedule, first exchanging train orders, signals and numbers with the section to be passed. The change in sections must be reported to the train dispatcher from the next available point of communication.

86. Unless otherwise provided; an inferior train must clear the time of a first class train in the same direction not less than ten minutes, unless it is clear before such train is due to leave the next station in the rear where time is shown (in which case clearing time must be not less than five minutes), and must clear the time of any other superior train in the same direction not less than five minutes; failing to clear the main track as required, the train must be protected as prescribed by Rule 99.

87. (SINGLE TRACK) Inferior trains must clear the time of opposing superior trains as herein prescribed, unless otherwise provided; failing to clear the main track by the times specified, they must be protected as prescribed by Rule 99.

A regular train must be clear of the main track before the leaving time of a superior train of the same class, and must clear the leaving time of a train of superior class not less than five minutes;

An extra train must clear the leaving time of a regular train not less than five minutes, and will be governed by train orders with respect to other extra trains.

88. (SINGLE TRACK) At meeting points trains must take the siding as herein prescribed, unless otherwise provided.

Between trains of the same class or between extra trains, the train in the inferior time table direction must take the siding;

Between trains of different classes the inferior class train must take the siding;

Between regular and extra trains, the extra train must take the siding;

Between trains one of which holds right over the other (as prescribed in train order Form C), the train of inferior right must take the siding.

A train required to take siding for an opposing train must pull in when practicable. If necessary to back in the movement must first be protected as prescribed by Rule 99.

89. (SINGLE TRACK) Except when meet is arranged by train order a superior train must, until an opposing train of the same class is met, approach with caution any point at which the inferior train may be clearing, and stop unless the switch is properly lined and the track clear.

When necessary to stop to meet a train, the train holding the main track must stop clear of the switch to be used by the other train in taking the siding.

A train must not leave any point without knowing positively that the train or trains which it was required to meet or clear at that point have arrived.

89a. Unless a siding is seen to be clear, a train using it must proceed with caution, expecting to find it occupied.

90. (SINGLE TRACK) The conductor of every passenger train must give communicating signal 16 (l) between one and three miles from every station at which it is to meet or wait for a train, or to clear a train which is superior to it either by right, class or direction, when the engine-man must immediately make running test of the brake and then give whistle signal 14 (g) in acknowledgment. Should the engine-man fail to respond to signal 16 (l) as herein prescribed, immediate action must be taken to stop the train.

90a. Conductors and enginemen of freight, mixed and work trains will see that brakemen be in position to exchange signals while approaching and passing junctions, railway crossings, drawbridges, points where trains may be required to stop, and on heavy grades, and to do whatever is required for safety and expedition.

On all such trains hand signals will, when practicable, be exchanged when passing and leaving stations and junctions, but in the event of brake pipe pressure not being continuous throughout the train it must be definitely known by the engineman before passing or leaving such points that the train is complete.

The engineman and front brakeman of any such train must frequently look towards the rear to be sure that the train is in order.

There must be a trainman on the last car of any such train while in motion.

Trainmen will not be required to ride on top of cars unless necessary for the safety of the train.

90b. Trainmen, so far as practicable, are required to look for and exchange signals with trainmen on passing trains, operators, signalmen, sectionmen, bridgemen, and other employees as they pass, taking immediate action to stop their train in the event of "stop" signal being given on account of defects or other dangerous conditions which may be observed by them.

91. Unless some form of block signals is used and except when closing up at stations the following intervals must be maintained between trains in the same direction.

When the station from which a train is to follow and the next station ahead are open train order offices a train must not follow one carrying passengers or operating a snow plow, nor a snow plow or light engine follow any train, until the preceding train has arrived at the station ahead.

When either the station from which a train is to follow or the next station ahead is not an open train order office, or when advice of arrival at the station ahead cannot be obtained on account of failure of communica-

tion, a train must not follow a train carrying passengers or operating a snow plow, nor a snow plow or light engine follow any train, until not less than twenty minutes after the departure of the preceding train.

In all other cases trains must keep not less than ten minutes apart unless the preceding train has arrived at the station ahead.

91a. Except where automatic block signals are in operation or where other means are provided for block protection, it will be the duty of operators, unless otherwise instructed by train order, to maintain the intervals prescribed by Rule 91. The train order signal will be used for this purpose and the "Stop" signal must be displayed when the rear of a train has reached a point 300 feet beyond the signal. This must be restored to indicate "Proceed" as soon as the requirements of Rule 91 have been complied with unless train orders are on hand for delivery, in which case the operator must continue to display the "Stop" signal or change this to a "Caution" signal as may be required by Rule 220.

92. A train must not arrive at a station in advance of its schedule arriving time.

When the leaving time only is shown, a first class train must not arrive at a station more than five minutes in advance of its schedule leaving time.

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

93. Within yard limits the main track may be used, clearing first and second class trains as prescribed by the Rules, and without protecting against other trains.

The main track must not be so used within yard limits until it is known that all overdue first and second class trains have arrived or left.

On single track all, except first and second class trains, and on double, three or more tracks all, except first and second class trains running with the current of traffic, must, unless otherwise directed, approach and move within yard limits prepared to stop unless the main track is seen or known to be clear.

Yellow lights must be attached to yard limit boards, to be kept lighted from sunset to sunrise.

By night, or in foggy or stormy weather, proper lights must be placed on cars or engines obstructing the main track within yard limits.

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

94a. (SINGLE TRACK) When a train, unable to proceed against the right or schedule of an opposing train, is overtaken between communicating stations by an inferior train or a train of the same class having right or schedule of its own which permits it to proceed, or by a section of the same schedule holding a meet on or right over the opposing train, the delayed train may, after proper understanding with the following train, precede it to the next available point of communication where it must report to the train dispatcher. When opposing trains are met under these circumstances it must be fully

explained to them by the leading train that the expected train is following.

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

Each section has equal time table authority.

A train must not display signals for a following section without train orders, except as prescribed by Rules 85a and 94.

96. (SINGLE TRACK) When signals displayed for a section are taken down at any point before that section arrives, the conductor must, if there be no other provision, arrange in writing with the operator, or if there be no operator with the switchtender, or in the absence of both with a flagman left there for that purpose, to notify all opposing inferior trains or trains of the same class leaving such point that the section for which signals were displayed has not arrived.

97. (SINGLE TRACK) Extra trains must not be run without train orders.

97a. (DOUBLE, THREE OR MORE TRACKS) Extra trains must not be run without train orders, unless otherwise provided.

98. Trains must approach the end of double track, junctions, interlocked railway crossings at grade and interlocked drawbridges, prepared to stop unless the switches are properly lined, signals indicate proceed and track is clear.

Trains must stop at non-interlocked railway crossings at grade and non-interlocked drawbridges; they may then proceed when the proper signal is given.

At railway crossings at grade the speed of a passenger train must not exceed thirty five miles per hour and of any other train twenty miles per hour until the entire train has passed the crossing.

At drawbridges the speed of a passenger train must not exceed twenty five miles per hour and of any other train fifteen miles per hour until the entire train has passed the drawbridge.

99. When a train stops on the main track under circumstances in which it may be overtaken by another train a flagman must immediately go back with flagman's signals to protect the train. Under the conditions specified the distance should be at least:

In day time, if there is no down grade towards train within one mile of its rear, and there is a clear view of its rear of 6,000 feet from an approaching train, 1,500 feet (about 12 telegraph poles).

At other times and places, if there is no down grade towards train within one mile of its rear, 3,600 feet (about 28 telegraph poles).

If there is a down grade towards train within one mile of its rear, 5,400 feet (about 42 telegraph poles).

The flagman must, after going back the specified distance, take a position where there will be an unobstructed view of him from an approaching train of, if possible, 1,500 feet, first placing two torpedoes, not less than 100 nor more than 200 feet apart, on the rail on the same side as the engineman of an approaching train 300 feet beyond such position. The flagman must remain in such position until recalled or relieved

If recalled before another train arrives he must, in addition to the two torpedoes, leave a fusee burning red at the point he returns from, and while returning to his train (when snow plows or flangers may be running, curvature, weather, or other conditions governing) a fusee burning red must be placed at such points or times as the flagman may find necessary to insure full protection

To maintain the proper interval between trains a fusee burning red must be left by the protected train at the point from which it moves.

The flagman must always on the approach of a train display stop signals and, if not already done, place two torpedoes on the rail as before described, and then return 300 feet nearer the protected train.

The front of a train must be protected in the same way when necessary by the front brakeman or, if there is no front brakeman, by the fireman.

Flagmen must each be equipped for day time with a red flag 22" x 28", on a staff, at least six torpedoes and five red fusees, and for night time and when weather or other conditions obscure day signals with a red light, a white light, a supply of matches, at least six torpedoes and five red fusees.

A train should not stop between stations at a place where the view from a following train is obstructed.

When a train is moving under circumstances in which it may be overtaken by another train, such action must be taken as may be necessary to insure full protection; lighted fusees, red or yellow as the case may require, must be thrown off at proper intervals.

When a flagman goes out to protect a train his place will be filled by the person designated by the conductor.

100. Trains must be fully protected against any obstruction on, or defect in, the track; but when cars are left on a main track under train order protection torpedoes must also be placed a sufficient distance on each side of the obstruction as an additional warning to approaching trains, and should these torpedoes be exploded by other than the train removing the obstruction they must be replaced by them.

101. When an engine leaves its train or part of its train on the main track protection against the returning engine must be provided by placing torpedoes in advance of the remaining portion, and in addition, by night, by prominently displaying a white light on the front of the leading car.

On other than single track, the engine, with or without cars, must not return on the same track for the rear portion unless intermediate cross overs, if any, have been adequately protected.

Both the conductor and engineman will be held equally responsible for the observance of these requirements.

The remaining portion must not be moved or passed until the engine returns, unless the movement is adequately protected.

102. If a train should part while in motion everything possible must be done to prevent damage to the detached portions. The signals prescribed by Rules 12 (e) and 14 (f) must be given.

The engineman and trainmen of the detached portions must give the train-parted signal to trains running on adjacent tracks. A train receiving this signal, or being otherwise notified that a train on an adjacent track has parted, must immediately reduce speed and proceed with caution until the separated train is passed.

The front portion will go back to recover the detached portion, moving with caution, and by night, or when weather or other conditions require it, preceded by a flagman. The detached portion must not be moved or passed until the front portion returns, unless the movement is adequately protected.

103. When cars are pushed by an engine (except when shifting and making up trains in yards where there are no public highway crossings at rail level, or where there are public highway crossings at rail level adequately protected by gates, or otherwise) a flagman must take a conspicuous position on the front of the leading car.

Whenever in any city, town, or village, cars not headed by an engine are passing over or along a highway which is not adequately protected by gates, or otherwise, at rail level, a man must take a conspicuous position on the foremost car to warn persons on the highway.

No part of a car or engine may be allowed to occupy any part of a highway for a longer period than five minutes, and a highway must not be obstructed by switching operations for more than five minutes at a time.

Where the law prescribes a maximum permissible speed through any portion of any city, town or village, the location and the speed prescribed will be specified in the time table.

104. Main track switches; the target parallel with the main track, with a green light displayed by night, indicates that the switch is set for the main track and is in the normal position: the target at right angles to the main track, with a red light displayed by night, indicates that the switch is set for a diverging track.

All other switches; the target parallel with the track on which the switch is located, or a green light displayed by night, indicates that the switch is set for the straight

track or lead and is in the normal position: the target at right angles to the track on which the switch is located, or a yellow light displayed by night, indicates that the switch is set for a diverging track.

Switches must at all times be secured, and main track switches when not in use must be kept locked.

After a switch has been turned the points must be examined and the target or light observed to know that the switch is properly lined.

A trainman of a train occupying the main track at a meeting or passing point will, when practicable, open the switch for the expected train, and protect the switch until relieved by a trainman of the other train or by a switch-tender.

While a train is closely approaching or passing over a switch employees must keep not less than 20 feet from the switch stand, and on single track they must, in addition, whenever practicable, stand on the opposite side of the track from the switch stand.

Switches must be left in normal position after having been used, but may be left open for a following train only when left in charge of a trainman of such train or of a switchtender.

When a train turns out from a main track at any point the main track switch must not be restored to its proper position until the train has cleared the fouling point.

Except where switchtenders are stationed conductors are responsible for the position of switches used by them and their trainmen, but when a train is standing on a siding to be met or passed by a train the engineman must, when practicable, see that switches at the front of his train are properly lined; this will not relieve trainmen of responsibility for leaving in proper position the switches used by them.

If it is known or suspected that the points or any parts of a switch are damaged or broken the switch must be protected, the section foreman notified, and report made to the proper authority from the first available point of communication.

104a. Derails on tracks other than the main track must be inspected and known to be in proper position before signals are given for movements to be made on tracks so equipped, and, except while such tracks are being used, the derails must be kept set and secured in derailing position whether or not there are cars on the tracks.

Employees must know where such derails are located and be governed accordingly. When provided with lights these will, unless otherwise specified in the time table, show yellow when in non-derailing and purple when in derailing position.

105. Conductors and trainmen must know that the cars in their train are in good order before starting and inspect them whenever they have an opportunity to do so, particularly when entering or leaving sidings or waiting for other trains. All cars taken in their train at intermediate stations must be examined with extra care.

A sufficient number of hand brakes must be applied on cars left at any point to prevent them from moving. When necessary such cars must be blocked.

106. Trains must be run with caution when going by a train receiving or discharging passengers at a station or flag stop except where proper safeguards are provided, and must not pass between it and the platform at which the passengers are being received or discharged except with extreme caution and in such manner as to avoid possibility of accident.

107. Snow plows and flangers working must not be run at a speed exceeding fifteen miles per hour when passing station and other buildings which are liable to be damaged by snow and ice being thrown against them.

Snow plows working on other than single track when passing trains on another track must not be run at a speed exceeding fifteen miles per hour, and points must be lifted and wings closed; flangers must also be lifted when passing trains on another track.

108. Enginemen must exercise extreme care when making stops for water and fuel. Engines handling freight trains must be detached for this purpose unless stops at the required points can be made without risk of damaging equipment.

109. Messages or instructions respecting the movement of trains or the condition of track or bridges must be in writing.

110. Trains will run under the direction of their conductors, unless such directions conflict with these rules or involve any danger, in which case all persons participating will be held responsible.

When a train is run without a conductor the engineman will perform the duties of the conductor.

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

111. At a safe distance before commencing the descent of heavy grades, approaching railway crossings at grade, junctions, drawbridges, and other points where failure of air brakes might result in accident, enginemen on passenger trains must make running test of the air brakes and

conductors must take immediate action to stop their trains if enginemen fail to make this test.

At the same places, also while descending heavy grades and when approaching points where failure of enginemen to apply, or where failure of, the air brakes might result in accident, trainmen on rear of freight, mixed and work trains must be in readiness to take whatever action may be necessary to reduce the speed of, or stop, their trains in the event of possible failure of enginemen to bring such trains under proper control.

112. In all cases of doubt or uncertainty the safe course must be taken and no risks run.

151. (DOUBLE, THREE OR MORE TRACKS) On double track trains must keep to the right unless otherwise provided, and on three or more tracks the tracks will be designated by numerals and their use indicated by special instructions.

152. (DOUBLE, THREE OR MORE TRACKS) When a train crosses over to or obstructs another track, unless otherwise provided it must first be protected as prescribed by Rule 99 in both directions on that track.

153. (DOUBLE, THREE OR MORE TRACKS) When a train is disabled so that it obstructs another track, trains on that track must be stopped.

When a train stops unexpectedly or meets with an accident the nature or extent of which is unknown, trainmen must, without waiting to determine what tracks, if any, are obstructed, stop trains on all tracks until it is known that such trains can move with safety.

RULES FOR USE OF TRAIN ORDERS

201. For movements not provided for by time table, train orders (forms 31 and 19) will be issued by the designated train despatchers and over the signature of the train despatcher originating each order. They must contain only such information and instructions as are essential to such movements.

They must be worded in the prescribed forms when applicable, and when not worded in the prescribed forms must be clear and as brief as possible.

They must be without erasure, alteration or interlineation, and figures therein must not be surrounded by brackets, circles or other marks.

The different word forms of train orders may be combined in one, provided that every movement in such combination directly affects the train first named in the order.

201a. Train orders issued in the same manner will also be used for giving instructions and information relating to the condition of track or bridges, water and fuel facilities, fixed signals and sidings, and for giving other similar details incident to train operation which are not provided for by special instructions.

202. In the issuance of train orders providing for train movements form 31 must be used to restrict right or schedule as follows:—

In every case where a train carrying passengers is concerned;

When a restricting order is to be sent to a train at a point which is not a train order office or at one at which the office is closed (see Rule 216);

When a restricting order is sent to a train to which the operator has delivered a clearance, or the engine of which has passed the "Proceed" indication of his train order signal (see Rule 211);

When a restricting order is sent direct to the conductor or engineman by telephone.

Under all other conditions form 19 may be used for any purpose, subject to the requirements of Rule 213b regarding delivery.

202a. In the issuance of all orders covering conditions provided for in Rule 201a, form 19 will be used (except under unusual circumstances when form 31 should be used) provided that when such an order covers track conditions interfering with the safe passage of trains, delivery of the order will be made only after trains affected have been brought to a stop.

203. Train orders must be numbered consecutively each day beginning with the lowest number of the same series at midnight; except that where a separate record is kept of "slow track" and other orders (as covered in Rule 201a) the only requirement is that the numbers run consecutively.

Each train order, or parts thereof, must be issued in the same words and under the same number to all persons or trains affected.

204. Each train order must be written in full in a book or on a printed form provided for the purpose at the office of the train despatcher; with it must be recorded the names of those who have signed for the order, the time and the symbols which show when and from what offices the order was repeated and the responses transmitted, and the train despatcher's initials. These records must be made at once and never from memory or memoranda.

When a train order is transmitted by telephone the

train dispatcher must write the order as he transmits it and underscore each word and figure at the time of each repetition; when transmitted by telegraph he must write the order as it is repeated by the first person repeating, and underscore each word and figure at the time of each subsequent repetition.

205. Train orders must be addressed to those who are to execute or observe them, prefacing the address with the name (or office symbol) of the place at which each is to receive his copy.

Train orders creating trains will be addressed to the engines, thus:—"Eng. 17" or "Engs. 20, 25 and 99", and trains will be addressed thus:—"No. 1", "Second 3", "Extra 17 South".

Train orders must not be addressed to "All concerned", but, when applicable, may be addressed thus:—"All trains", "Regular trains", "— class trains", "Extra trains", "Eastward or Westward, etc., trains", "Trains originating at —", "— trains except —", "Yardmasters" and "Yard Engs."

Train orders addressed to trains and engines must be regarded as addressed to conductors, enginemen and pilots; restrictions in train orders addressed to operators only and the contents of all orders addressed to Yardmasters must be respected by conductors and enginemen the same as if addressed to their train or engine.

205a. In the body of train orders; regular trains will be designated by their schedule numbers and the numbers of their engines, as—"No. 10 Eng. 715" or "Second 10 Eng. 725"; if the number of the engine cannot be ascertained the word "Unknown" will be used, as "No. 10 Eng. unknown";

Extra trains will be designated by their engine numbers and direction, as—"Extra 99 West" or "Work Extra 75";

All other numerals except dates must be in words and duplicated in figures; to express even hours the word "o'clock" will be used, as—"Nine o'clock 9.00 A.M.", and the word "Noon" or "Night" will be used instead of "A.M." or "P.M." where mid-day or mid-night is involved, as—"Twelve o'clock 12.00 noon (or night)".

206. When more than one engine is used on the head end of a train the number of the leading engine only will be used in the creation and designation of such train, except that if the leading engine is used for assisting the train over a portion of the subdivision the number of the engine taking the train through will be used for all purposes; but in every case each engineman must receive a copy of all orders issued.

206a. Engines of foreign lines will be designated by their initials and numbers, as "ABC Eng. 30".

207. Before transmitting a train order the symbol "31", "19R" or "19Y" followed by the direction must be given to each office addressed, the number of copies being stated if more or less than three, thus "31 North copy 4" or "19R east copy 7" or "19Y west copy 2", and the operator will display the required indication of his train order signal as prescribed in Rule 220.

208. In transmitting and repeating train orders by telephone, the names of stations and numbers of sections (except in the address) must be first pronounced and then spelled out letter by letter; all numerals which are required to be in words and duplicated in figures must be first pronounced, then spelled out letter by letter, and followed by the figures naming each figure separately; all other numerals must be first pronounced and then spelled out letter by letter for each figure separately. For example—

To Vancouver to Second 46 f-o-u-r s-i-x
To Winnipeg to Opr
To Chicago to Opr & No. 33 t-h-r-e-e t-h-r-e-e
To Montreal to Extra 715 s-e-v-e-n o-n-e f-i-v-e West
To Halifax to Westward Trains.

Second s-e-c-o-n-d 46 f-o-u-r s-i-x Eng. 20 t-w-o
n-o-u-g-h-t meet No. 33 t-h-r-e-e t-h-r-e-e Eng. 28 t-w-o
e-i-g-h-t at Winnipeg W-i-n-n-i-p-e-g wait at Chicago
C-h-i-c-a-g-o until seven fifteen s-e-v-e-n f-i-f-t-e-e-n
7-1-5 P.M. for Extra 715 s-e-v-e-n o-n-e f-i-v-e West
run one o-n-e 1 hour and thirty t-h-i-r-t-y 3-0 minutes
late Montreal M-o-n-t-r-e-a-l to Halifax H-a-l-i-f-a-x
and will not exceed twenty t-w-e-n-t-y 2-0 miles per
hour at mileage one twenty five point eight o-n-e
t-w-e-n-t-y f-i-v-e point e-i-g-h-t 1-2-5.-8.

The order as transcribed by the train despatcher and
on the different manifold copies will appear as follows,
being the same as if sent by telegraph;

"Second 46 Eng. 20 meet No. 33 Eng. 28 at Winnipeg
wait at Chicago until seven fifteen 7.15 P.M. for Extra
715 west, run one 1 hour and thirty 30 mins. late
Montreal to Halifax and will not exceed twenty 20
miles per hour at mileage one twenty five point eight
125.8."

209. 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 office copying for the
superior train.

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

Except at an initial station or a station at which the
restricted train is required by time table instruction to
obtain a terminal clearance; a train order must not be
sent for delivery to a train at the point at which its right
or schedule is being restricted by the order if it can be
avoided, but when an order is so sent the words "This
order to — at —" must be added to the order which
is notice to an opposing train to approach that point
with care and under control, and whenever practicable
and advisable the order should also provide for the
restricted train to hold the main track under conditions
where such train would otherwise be required to take
the siding.

210. An operator receiving a train order must write
or typewrite it in manifold during transmission, but the
response "complete", the time made "complete", and
the operator's name must be in his own handwriting.
If the requisite number of copies cannot be made at one
writing he must make others from the original copy and
repeat to the train despatcher from the new copies each
time additional copies are made. He must provide a
copy for each person addressed, including pilots, and
retain the lowest copy of each order.

The name of the despatching office from which the
order is received and the name of his station, both in
full, together with the date, must be shown in the spaces
provided on the form for the purpose.

211. When a train order has been transmitted operat-
ors 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.

A train order may, by the direction of the train despatcher, be acknowledged without repeating by the operator responding "X" (number of order) to (train) with the operator's initials and his office symbol. The operator must then write on the order his initials and the time.

An operator must not repeat or give the "X" response to a train order restricting the right or schedule of a train to which he has delivered a clearance or the engine of which has passed the proceed indication of his train order signal until the engineman has signed the order.

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

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

213. After a "31" train order has been correctly repeated the conductor of the train addressed will read the order aloud to the operator and sign it. The operator will then transmit the signature, preceded by the number of the order, to the train despatcher who will respond "complete" with the time and his initials, and the operator receiving this response will then write on the order the word "complete", the time, and his last name in full. The operator will then deliver a copy to each person addressed except enginemen, the copy for each engineman to be delivered personally by the conductor who will require the order to be read aloud for comparison, and enginemen will then sign conductor's copy.

213a. After a "19" train order has been correctly repeated the train despatcher will respond "complete"

with the time and his initials. The operator receiving this response will then write on the order the word "complete", the time, and his last name in full, and personally deliver a copy to each of those addressed without taking his signature; but when delivery to the engineman would take the operator away from the immediate vicinity of his office, or when he has a "31" order for the same train, delivery of all orders to the engineman will be made by the conductor.

213b. Delivery of a "19" train order to a train whose right or schedule is restricted by the order must not be made until the train has been brought to a stop, unless the "middle" order is issued.

213c. The personal delivery of "19" orders in accordance with Rules 213a and 213b will be made by the operator from the platform unless some approved device for the purpose is provided, and should either the engineman or conductor fail to secure his copy of the order the train must be stopped and must not proceed until the order has been obtained.

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

For train orders delivered by the train despatcher the requirements as to record and delivery are the same as at other offices, except that he will not be required to leave the office to deliver orders.

Conductors and enginemen must require their brakemen and firemen to read aloud and know the contents of all train orders.

215. "Complete" must not be given to an 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.

In every case where a train carrying passengers is concerned (except in territory equipped with an automatic block system controlling movements in both directions, or at the initial station of the superior train, or at a station where the superior train is required by time table instruction to obtain a terminal clearance), "complete" must not be given to an order advancing an opposing inferior train until the signature of the conductor of the superior train, or the signature of the operator at the restricted point, or the signature of both the conductor and operator when such order is sent for delivery to the superior train at the restricted point, have been received by the train despatcher.

216. A train order to be delivered to a train at a point which is not a train order office, or at one at which the train order office is closed, must be addressed to "— at (or between) — care of —". When "complete" is given (which in the case of a "31" order will be on receipt of the signature of the person by whom the order is to be delivered) the order will be forwarded and delivered by the conductor or other person in whose care it is addressed, who must be supplied with copies for the conductor and engineman of the train addressed and, when form 31 is used, with an additional copy on which he shall obtain their signatures. 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 despatcher, and preserve the copy.

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

When a train order is sent in the manner herein provided to a train the superiority of which is thereby restricted, "complete" must not be given to an inferior train until the signatures of the conductor and engineman

of the superior train have been received by the train despatcher.

216a. When a train order is sent to a train as provided for in Rule 216 a separate clearance (form A or B) must be sent to the train which is to receive the order.

216b. When delivery of a train order as provided for in Rule 216 is to be made by another train, the order must be addressed in care of the conductor of the delivering train who must personally deliver the order, and the engineman will be held responsible for stopping to enable him to do so.

217. When a train is designated in a train order by its schedule number alone (no section specified) all sections of that schedule are included, and copies of the order must be delivered to each section. Particular sections must be specified when it is known the schedule is, or is to be, in sections.

218. 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 81, or is annulled.

219. When conductors or enginemen change off or are relieved before completion of a trip they must transfer all train orders, clearances and instructions affecting their trains. Each must know that the orders transferred are correctly understood and obtain his written receipt therefor. Before either train proceeds the engineman must read his orders to the conductor.

219a. When a train despatcher is relieved he must make transfer written in ink in the train order book or

other book provided for the purpose of all outstanding and unfulfilled train orders (specifying those which have not been made "complete"), together with all necessary information. The relieving despatcher must carefully read and initial such orders as are transferred to him, checking the number and address of each in the transfer. Such transfer must be signed in ink by both despatchers concerned.

219b. When an operator or signalman is relieved he must make a transfer written in ink or indelible pencil, in a book or form provided for the purpose, of all undelivered and unfulfilled train orders, also of any messages and instructions awaiting delivery or transmission. Such transfer must be signed in ink or indelible pencil by both operators or signalmen concerned. Any undelivered or unfulfilled train orders providing for train movements must be annulled by train despatcher before an office is closed.

220. Where the display of a signal at a train order office is necessary in order to make delivery of a train order a fixed signal will be used which will indicate "Proceed" except when a train order is to be delivered or as provided for in Rule 91a.

At a train order office so equipped the operator, on receipt of the symbol "31" or "19R" followed by the direction, must immediately display the "Stop" signal for the direction specified, and on receipt of the symbol "19Y" must immediately display the "Caution" signal where a three position train order signal is used, or the "Stop" signal under any other conditions, for the direction specified, and in every case reply "SD" adding the direction. Until the order has been delivered or annulled the signal must not be restored to indicate "Proceed" except as may be authorized by train order form X.

220a. At a train order office not equipped with a three position train order signal the operator, before the arrival of a train to which he is to deliver a "19" train order (except as provided in Rule 220b) will display a yellow flag by day and a yellow light by night in addition to the "Stop" signal.

220b. The "Stop" instead of the "Caution" signal must be displayed for the delivery of any 19 train order when it is addressed to the operator at the restricted point or to a train at the point at which its right or schedule is restricted by the order, or when the order restricts the right or schedule of a train where the "middle" order is not issued, also when the "Stop" signal is required to be displayed for the delivery of an order to any train in the direction specified where a three position train order signal is used, or to a train in either direction where any other type of train order signal is used, and the despatcher must advise the operator accordingly.

220c. Operators must take extra precautions to ensure the delivery of train orders under unusual conditions; they must have the proper hand signalling equipment necessary for this purpose, for use in the event of the train order signal failing to work properly, and for use in the delivery of "19" train orders as provided for in Rule 220a. This equipment will consist of a red light and flag, a yellow light and flag, a green light, a white light, and a supply of torpedoes and red fuses.

221. Clearances must be issued for the conductor, each engineman and the pilot (if there is one) of the train addressed, with an additional copy which the operator must preserve. These must be made in manifold at one writing and must show the individual numbers of the train orders, if any, delivered to that train together with other information called for on the forms.

221a. When there are train orders to be delivered to a train, the operator after making out clearance (form A or B) will transmit the numbers of all orders shown thereon to the train despatcher in the form "Clear (No. 2) on orders (6, 9, 14)". The despatcher will check the numbers thus transmitted against the record of train orders, know that they comprise all the orders issued for that train at that station and make an entry of these numbers in the same manner in the train order book following the last order issued. He will then give O.K. with the time and his initials to the operator who will write on the clearance O.K. with the time and the initials of the despatcher, but if the line fails train orders which have been made complete may be delivered without the despatcher's O.K. to the clearance when endorsed by the operator "Circuit has failed".

If additional train orders are received after despatcher has given O.K. to the clearance, the old clearance must be destroyed and a new clearance issued.

If after train orders are delivered to the train it becomes necessary to issue a second clearance, when practicable the first clearance must be taken up and destroyed, and a new clearance delivered showing thereon all train orders the train receives at that point to which O.K. must also be given by the despatcher.

Clearances should be made out and O.K. given only sufficiently in advance of the train's arrival to avoid delay.

When there are no orders to be delivered to a train to which it is necessary to deliver a clearance, the operator will deliver the clearance without obtaining O.K. from the despatcher.

222. Except as otherwise provided or directed, operators must promptly record and report to the train

despatcher the time of arrival and departure of all trains. At register stations this information, together with green signals displayed, if any, must be reported from the train register.

Operators must also, when practicable, observe the front and rear of trains and report at once to the train despatcher if the proper signals are not displayed.

223. The following symbols and abbreviations may be used:—

Such office and other symbols as are arranged by the Superintendent.

Initials for signature of the train despatcher.

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

Com.....for Complete

O.S.....for Train Report

No.....for Number

Eng.....for Engine

Psgr.....for Passenger

Frnt.....for Freight

Mins....for Minutes

S.D.....for Train Order Signal indication displayed for "Stop" or "Caution"

Jct.....for Junction

Despr...for Despatcher

Opr.....for Operator

Cy.....for Copy

9.....to clear the line for train orders and for operators to ask for train orders.

The usual abbreviations for the names of the months.

In transmitting, repeating, copying and recording train orders the spelling of station names must be exactly as shown in the time table; no other abbreviations are authorized.

Forms of Train Orders

NOTE—In the following forms of train orders the names of places are, for convenience, represented by letters; these, with other words and figures in italics, are examples indicating the manner in which the orders are to be filled out.

Form A—(SINGLE TRACK) Fixing meeting points for opposing trains.

- (1) *No. 2 Eng. 402 meet No. 1 Eng. 401 at B.*
Second 4 Eng. 404 meet No. 3 Eng. 403 at B.
No. 5 Eng. 405 meet Extra 701 East at B.
Extra 702 North meet Extra 703 South at B.
-

- (2) *No. 1 Eng. 401 meet No. 2 Eng. 402 at B Second 4 Eng. 404 at C and Extra 701 East at D.*
Extra 701 East meet Extra 704 West and Extra 705 West at E.
-

Trains receiving these orders will run to the designated points and there meet in the manner prescribed by the Rules.

NOTE—This form is to be used only when the trains are to meet and identify each other.

Form B—Directing a train to pass or run ahead of another train.

- (1) *No. 1 Eng. 401 pass No. 3 Eng. 403 at K.*

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

- (2) *Extra 702 North pass No. 403 Eng. 755 when overtaken.*

Both trains will run according to Rule until the second named train is overtaken and then arrange for the rear train to pass promptly.

- (3) *Extra 701 East run ahead of No. 6 Eng. 406 M to B.*

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

- (4) *Extra 704 West run ahead of No. 3 Eng. 403 from B until overtaken.*

The first named train will run ahead of the second named train from the designated point until overtaken, and then arrange for the rear train to pass promptly.

- (5) *No. 385 Eng. 401 pass No. 3 Eng. 403 at K and run ahead of No. 7 Eng. 407 M to Z.*
-

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

In every case where a train is given the right to run ahead of another train, unless some form of block signals is used the following train will look out for the designated train ahead until the order is fulfilled. This will not relieve trainmen of a train given this right from the responsibility of properly protecting their train as prescribed by the Rules.

Form C—(SINGLE TRACK) Giving right to a train over an opposing train.

- (1) *No. 1 Eng. 401* has right over *No. 2 Eng. 402 G to S.*

If the second named train reaches the point last named before the other arrives, it may proceed, clearing the time of the opposing train as many minutes as such train was before required to clear it under the Rules. If the second named train reaches a point between those named in the order, the conductor must notify the first named train of the fact.

- (2) *Extra 701 East* has right over *No. 3 Eng. 403 F to C.*

The regular train must not go beyond the point last named until the extra train has arrived unless otherwise provided for by train order.

Under these orders, if the trains meet at either of the designated points the first named train must take the siding unless otherwise provided for by train order, and if the first named train reaches a point beyond that last named in the order the conductor must notify the second named train of the fact.

- (3) *Extra 701 East* has right over *Extra 702 West Z to J.*

The second named extra must not go beyond the point last named until the first named extra has arrived unless otherwise provided for by train order.

Right must not be given to an intermediate point within the running limits of the first named extra without adequate provision being made for the protection of its movement against the second named extra beyond the point last named in the order unless the second named extra has arrived at that point before the order is issued.

If the first named extra before meeting reaches the point last named in the order it must take the siding unless otherwise provided for by train order.

Form D—(SINGLE TRACK) Instructing a train to take siding or hold main track.

- (1) *No. 2* take siding at *B (or) B and C.*
(2) *No. 1* hold main track at *B (or) B and C.*

The above forms may be used, when applicable, to direct the superior train to take the siding or the inferior train to hold the main track, the prescribed words being added to the order, for example:

- (3) *No. 1 Eng. 401* meet *No. 2 Eng. 402* at *B* and *Psg. Extra 408 East* at *C. No. 1* hold main track at *B* and take siding at *C.*

When so directed such instructions apply only at the point named and in connection with the particular movement covered in that order, and do not apply to the superseding order, if any, unless so specified therein.

Form E—Time Orders.

- (1) *No. 1 Eng. 401* run *twenty 20 mins.* late *A to G.*
(2) *No. 1 Eng. 401* run *twenty 20 mins.* late *A to G* *fifteen 15 mins.* late *G to K* and *ten 10 mins.* late *K to Z (etc.)*

Either order makes the schedule time of the train named between the stations mentioned as much later as stated in the order, and any other train receiving the order is required to run with respect to this later time as before required to run with respect to the regular schedule time.

The time in the order should be such as can be easily added to the schedule time.

- (3) *No. 2 Eng. 402 wait at H until ten fifteen 10.15 A.M. for No. 1 Eng. 401.*

The train first named must not pass the designated point before the time specified unless the second named train has arrived. The second named train is required to run with respect to the time specified at the designated point, or at 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 first named train.

- (4) *No. 1 Eng. 401 and No. 3 Eng. 403 wait at N until ten o'clock 10.00 A.M.
P until ten thirty 10.30 A.M.
R until ten fifty five 10.55 A.M., etc.*

The train or trains named must not pass the designated points before the times specified. 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.

Examples 3 and 4 may be used in connection with an extra train which has been given right over another train or trains as follows:

- (5) *Extra 701 East has right over Extra 702 West and No. 79 Eng. 451 Z to J wait at N until three o'clock 3.00 P.M. for Extra 702 West and for No. 79 Eng. 451.*

The first named train must not pass the designated point before the time specified unless the other trains designated in the order have arrived, and the trains over which the extra is given right must clear its time not less than five minutes.

- (6) *Extra 701 East has right over westward extras Z to J wait at P until two ten 2.10 P.M. N until three o'clock 3.00 P.M., etc.*

The first named train must not pass the designated points before the times specified, and the trains over which the extra is given right must clear its time not less than five minutes.

- (7) *Extra 437 West run one hour late A to G and thirty 30 mins. late G to M on Order No. fifteen 15.*

This form may be used in connection with example 6 above, also in connection with an extra train created by example 6 of Form G. The order makes the times shown in these examples as much later as stated in the order, and any other train receiving the order is required to run with respect to these later times as before required to run with respect to the times shown in the original order.

Form F—For Sections.

- (1) *Eng. 423 display signals and run as First 1 A to Z.*

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

- (2) *Eng. 424 run as Second 1 A to Z.*

(3) *No. 1 Eng. 423* display signals *A* to *G* for *Eng. 424*
Second 1 Eng. 424 display signals *B* to *E* for *Eng.*
425.

(4) *Engs. 423 424* and *425* run as *First Second* and
Third 1 A to *Z.*

To add an intermediate section example 5 will
be used.

(5) *Eng. 427* display signals and run as *Second 1 A*
to *Z.* Following sections change numbers accord-
ingly.

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

To drop an intermediate section example 6
will be used.

(6) *Eng. 427* is withdrawn as *Second 1* at *H.* Following
sections change numbers accordingly.

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

To substitute one engine for another on a section
example 7 will be used.

(7) *Eng. 426* instead of *Eng. 427* display signals and
run as *Second 1 R* to *Z.*

The second named engine will drop out at the
point first designated 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 example 8
will be used.

(8) *Second 1 Eng. 427* take down signals at *D.*

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

To pass one section by another example 9 will
be used.

(9) *Engs. 430* and *431* reverse positions as *Second* and
Third 1 H to *Z.*

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

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

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

On single track the display of green signals to a point
which is not a register station must not be authorized
if the movement can otherwise be provided for (See
Rule 96).

When sections are authorized to an intermediate point
of a schedule, except under example 3, the train orders
must specify which engine or engines shall assume the
schedule beyond such point.

When trains are run as sections of a schedule the leading
section is responsible for preventing the following section
passing it without proper authority.

Form G—Extra Trains.

- (1) *Eng. 745* run extra A to Z.
- (2) *Engs. 745* and *746* run as *two* extras A to Z.

This form may be used, when applicable, to create two (or more) extras by means of one train order, but must not be used in combination with any other form of order.

- (3) *Eng. 745* run extra A to F and return to A.
- (4) *Eng. 745* run extra C to F and return to D.

Under examples 3 and 4 the extra must go to F before returning.

- (5) *Eng. 760* run extra M to A clear *Extra 745 West* at M.

This form will be used when creating an extra train if such extra has to remain at the originating point for an extra in the opposing direction the clearing of which is not otherwise provided for.

The extra thus created must not leave the point named until the opposing extra has arrived, and must clear the main track for that train unless otherwise provided.

- (6) *Eng. 437* run extra leaving A on *Thursday March 26th* as follows with right over all trains:
Leave A *eleven o'clock 11.00 P.M.*
C *eleven fifty seven 11.57 P.M.*
E *twelve forty two 12.42 A.M.*
Arrive F *one twenty five 1.25 A.M.*

This order may be varied by specifying the character of the extra, for example—“*Psgr. Extra*”, “*Silk Extra*”, etc., and the particular trains over which the extra shall or shall not have right.

Trains over which the extra is thus given right must clear the time of the extra not less than five minutes, and if it be a passenger extra (in which case the order must so specify) trains in the same direction must clear its time as prescribed in Rule 86 for an inferior train clearing the time of a first class train.

This order does not authorize the extra to disregard Rule 93.

Form H—(SINGLE TRACK) Work Extras.

- (1) *Eng. 733* work extra *seven thirty 7.30 A.M.* until *six o'clock 6.00 P.M.* between D and G.

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:

- (2a) Not protecting against *eastward* extras.

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

- (2b) Not protecting against extras.

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

- (3) *Engs. 733* and *734* work as *two* extras *seven thirty 7.30 A.M.* until *six o'clock 6.00 P.M.* between D and G protecting against each other.

Adding, when applicable: not protecting against other extras, etc.

When a work extra has been instructed by train order to not protect against extra trains, and afterward it is desired to have it clear the track for, or protect itself against, a designated extra train after a certain time, the following forms will be used:

- (4a) *Work extra 733 clear Extra 760 West between D and E after two ten 2.10 P.M. between E and F after two forty five 2.45 P.M. (etc.).*

The extra train must not enter the limits specified before the times stated, and will then run expecting to find the work extra clear of the main track.

- (4b) *Work Extra 733 protect against Extra 760 West between D and E after two ten 2.10 P.M. between E and F after two forty five 2.45 P.M. (etc.).*

The extra train must not, unless preceded by a flagman, enter the limits specified before the times stated, and will then run expecting to find the work extra protecting itself.

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

- (5) *Work Extra 733 protect against No. 79 Eng. 451 (or) third class trains between D and G.*

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.

A work extra may be given right over all trains by the use of a Form C order worded as follows—

- (6) *Work Extra 733 has right over all trains between D and G seven o'clock 7.00 P.M. until twelve o'clock 12.00 night.*

This may be varied by designating particular trains over which the work extra shall or shall not have right, and under this example the work extra will move within the limits named with right over the trains designated between the times stated.

Trains over which the work extra is thus given right must not enter the working limits between the times stated, except as may be authorized by train order (for which form A and examples 4a, 4b and 5 of form H may be used) in which case the signature of the conductor of the work extra must be obtained before the order is made complete to another train, or after thorough understanding with the conductor of the work extra.

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

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

A train holding an order to meet a work extra must proceed to the designated point and there arrange to meet without regard to any time limit held by the work extra.

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

Conductors of work extras must report to the train despatcher the time when their trains are laid up, and their working limits for the following day.

Form H—(DOUBLE, THREE OR MORE TRACKS) Work Extras.

- (7) Eng. 733 work extra on eastward (or) both (or) No. 1, 2, 3 (etc.) tracks seven thirty 7.30 A.M. until six o'clock 6.00 P.M. between D and E.

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

The same modifications may be used as are given in the examples for work extras on single track, and all instructions covering single track work orders apply except as provided for above.

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.

Form J—Holding Order.

- (1) Hold No. 2 Eng. 402.
(2) Hold all (or) northward 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.

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

Form K—Annuling a Schedule or a Section.

- (1) No. 1 due to leave A Thursday March 26th is annulled A to Z.
(2) Second 5 due to leave A Thursday March 26th is annulled E to G.

When applicable, example 2 may be modified as follows:—

- (3) No. 1 (or) Second 5 due to leave A Thursday March 26th has arrived at E and is annulled E to Z.

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

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

Form L—Annuling a Train Order.

- (1) Order No. ten 10 (or) ten 10 of March 26th is annulled.
(2) Order No. ten 10 (or) This order is annulled at ten o'clock 10.00 A.M.

This form will be used when it is desired that an order shall be annulled at a certain time, and under it the order mentioned becomes void at the time stated.

If an order which is to be annulled is not to be delivered to a train the annulling order will be addressed to the operator, who will destroy all copies of the order annulled except his own and write on that "annulled by Order No. —"; but if such order is to be delivered the annulling order will be addressed to the train and copies of both orders must be delivered to the train even when the annulling order is addressed to the operator also.

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

Form M—Annuling Part of a Train Order.

- (1) That part of Order No. *ten 10* reading *pass No 1 Eng. 401 at G and (or) and meet No. 2 Eng. 402 at J* is annulled.

The above example is based on the following combination:

Order No. 10—"Eng. 437 run Psgr. Extra E to K pass No. 1 Eng. 401 at G and meet No. 2 Eng. 402 at J."

A part of an order which has been annulled must not be re-issued or reinstated under its original number.

Form P—Superseding a Train Order or a Part Thereof.

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

- (1) *No. 1 Eng. 401 meet No. 2 Eng. 402 at C instead of B.*
- (2) *No. 1 Eng. 401 pass No. 3 Eng 403 at C instead of B.*
-

An order, or part of an order, which has been superseded must not be re-issued or reinstated under its original number, and an order, or part of an order, superseding a particular movement must not itself be superseded.

A superseding order must not be delivered prior to the delivery of the order which is superseded.

Form R—(DOUBLE, THREE OR MORE TRACKS) Providing for a Movement Against the Current of Traffic.

- (1) *No. 1 Eng. 401* has right over opposing trains on *eastward (or) No. 2 track C to F.*

The designated train must use the track specified between the points named and has right over opposing trains on that track between those points. Unless otherwise provided the right conferred extends only to the first cross over switch at the point last named. Opposing trains must not leave the point last named until the designated train arrives.

An inferior train between the points named, moving with the current of traffic in the same direction as the designated train, must receive a copy of the order and may then proceed on its schedule or right.

This order may be modified as follows:—

- (2) After *No. 4 Eng. 404* arrives at *C No. 1 Eng. 401* has right over opposing trains on *eastward (or) No. 2 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.

Form S—(DOUBLE, THREE OR MORE TRACKS) Providing for the Use of a Portion of Double, Three or More Tracks as Single Track.

- (1) *Westward (or) No. 3 track will be used as single track between F and G.*

When there are two or more cross overs at either or both of the points mentioned, the order must also specify between which cross overs such order is effective.

If it is desired to limit the time for such use add to the order "*nine thirty 9.30 A.M. until ten o'clock 2.00 P.M.*"

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

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

Form T—Receipt for New Time Table.

- (1) Time table No. *eighteen 18* effective *twelve nought one 12.01 A.M. Sunday May 2nd* received.

Form 31 must be used for this purpose, and signatures obtained as required by Rule 4a.

Form U—Protection Against Following Trains.

- (1) Opr G hold all trains following *No. 64 Eng. 764 (or) Extra 765 East (except No. 6 Eng. 406)* until *ten o'clock 10.00 A.M.*

- (2) Opr G hold all trains following *No. 4 Eng. 404 (or) Extra 765 East (except No. 6 Eng. 406)* until *No. 4 Eng. 404 (or) Extra 765 East* arrives at *F.*

These orders must be addressed to the operator at the station first named and to the train to be protected, and the operator must deliver copies to all trains affected.

They permit the train so protected to occupy the main track without rear flag protection against the trains specified until the time stated under Example (1) and until the train arrives at the station last named under Example (2).

Care must be exercised in the use of this form, having regard to trains ahead, work trains, junctions, cross overs, etc.

Form V—Specifying the Speed of a Train.

- (1) Do not exceed *ten 10* miles per hour *A to B.*

This form will be used when track is reported unsafe for usual speed, and may be varied to cover designated points, bridges, sidings, etc., as may be required.

- (2) *Extra 772 West* may run *forty 40* miles per hour *A to G.*

The train named will not run at the speed specified except where safe to do so.

Form W—Train Order Check of Trains.

- (1) All superior trains (and trains of same class) due at G before *seven fifteen 7.15 A.M.* have arrived (and left) except No. 9.

This form to be used when it is desired to give a train the information required by Rule 82.

Form X—Authorizing the Clearing of a Train Order Signal.

- (1) Hold signal at proceed until No. 2 Eng. 402 has passed.

This form may be used, when a train order signal is displayed for the delivery of a train order, to allow a train to pass for which the operator holds no orders and which otherwise is not required to stop, but must not be issued unless it is definitely known that the clearing of the signal can not result in failure to deliver the order to the train affected.

An operator receiving this order must hold (not fasten) the signal at "Proceed" until the designated train has passed when he must display the "Stop" indication in accordance with Rule 91a.

Blank for Form 31 Train Order

FORM 31	(NAME OF RAILWAY)					FORM 31
Train Order No. <u>10</u>						
<i>(Despr's Office) Sept. 28 19 29</i>						
To.....	At.....					
To.....						
To.....						
X.....	<i>(Initials)</i>	Opr. <u>1.45 a.m.</u>	Time			
Conductor and Engineman must each have a copy of this order.						
Repeated at <u>2.10 a.m.</u>						
Conductor	Engineman	Train	Made	Time	Operator	
<i>Black</i>		<i>No. 2</i>	<i>Com.</i>	<i>2.20 a.m.</i>	<i>Jones</i>	

Form as here illustrated, having a width of about 7 inches and blank space for body of order about 4 inches with lines.

Form 31A same as above, but with blank space for body of order about 7 inches with lines.

The mode of filling in the blanks is indicated by italics. (See also Rule 210)

FORM 19	(NAME OF RAILWAY)		FORM 19
Train Order No. <u>10</u> <i>(Despr's Office) Sept. 28 19 29</i>			
To.....		At.....	
X.....	<i>(Initials)</i>	Opr. <u>1.45 a.m.</u>	Time
<p>Conductor and Engineman must each have a copy of this order.</p> <p>Repeated at <u>2.05 a.m.</u></p> <p>Made <u>Com.</u> Time <u>2.05 a.m.</u> Opr <u>Brown</u></p>			

(Printed on pink paper)

Form as here illustrated, having a width of about 7 inches and blank space for body of order about 4 inches with lines.

Form 19A same as above, but with blank space for body of order about 7 inches with lines.

The mode of filling in the blanks is indicated by italics. (See also Rule 210).

(NAME OF RAILWAY) Clearance Form A		Station <u>9.05 a.m.</u> (Hour)	<u>Sept 28 19 29</u>
Train.....	<u>Second 12</u>		
Orders for your train are	{ <u>5, 17, 33</u>		
The train ahead from this station is <u>Extra 785 East</u>		It left at <u>8.35 a.m.</u>	Signal is
and arrived at <u>Liverpool</u>	at <u>8.55 a.m.</u>		
displayed for <u>No 472</u>	and does not now affect you.		
This clearance does not affect any train orders you may have received.			
Numbers O.K. at <u>9.05</u>	<u>a.m.</u>	<u>F.C.H.</u>	<u>Despr.</u>
		<u>H. Smith,</u>	<u>Operator.</u>
Every person addressed (see Rule 205) must have a copy and see that their train is correctly designated.			

NOTE.—The spaces are to be filled in as indicated by italics; when there are no orders the word "Nil," and if the train ahead has not reached the next open train order office, the words "Not yet," must be written in the respective spaces provided. (See also Rules 221 and 221a).
Where an Automatic Block System is in operation the information relative to the train ahead may be omitted.

(NAME OF RAILWAY)
Terminal Clearance Form B

Manchester

Station 10.30 a.m.
(Hour)

Sept. 28 19 29

Train Third 490

17, 25, 333

Orders for
your train
are

Train Order Signal displayed is for Other Trains and does not now affect you.
All trains which are superior, and all trains of the same class due to arrive and leave,
have arrived and left except Psg. Extra 432 West, No. 7, No. 491

The train ahead from this station is Second 490 It left at 9.50 a.m.
and arrived at Stockport at 10.20 a.m.

This clearance does not interfere with or countermand any orders received by you.

Numbers O.K. at 10.28 a.M. F.G.H. Despr. J. Robinson, Operator.

Every person addressed (see Rule 205) must have a copy and see that their train is correctly designated.

This clearance does not relieve the conductor from personally checking the train register and knowing that all trains which are superior to his train have arrived or left.

NOTE—The spaces are to be filled in as indicated by italics; when there are no orders, if the train order signal is not displayed, and if all trains which are superior and all trains of the same class due to arrive or leave have arrived or left, the word "Nil" must be written, and if the train ahead has not reached the next open train order office the words "Not yet" must be written, in the respective spaces provided. (See also Rules 221 and 221a).
Where an Automatic Block System is in operation the information relative to the train ahead may be omitted.

RULES COVERING THE MOVEMENT OF TRAINS BY SIGNAL INDICATION

NOTE—Wherever the words "train despatcher" appear herein, they apply to the supervisor or other person performing the train despatcher's duties, and wherever the word "signalman" appears it applies to the operator or other person performing the signalman's duties.

251. On portions of the railway so specified in the time table the use of the main track or tracks will be governed by fixed signals whose indications will supersede time table superiority and will take the place of train orders except as may otherwise be provided.

The location of the fixed signals used for this purpose will be specified in special instructions, and on single track when a train order signal is used for giving the required indications the normal position will be "Stop".

252. The movement of trains will be supervised by the train despatcher who will issue instructions to signalmen when required.

On double, three or more tracks such movements will be made with the current of traffic, train orders being used to authorize movements against the current of traffic unless otherwise provided for; on single track the movements must be protected against movements in the opposing direction by the use of a block system, rules governing which will be contained in special instructions.

253. A train must not leave its initial station on any subdivision, nor enter any portion of a subdivision where the movement is governed by these Rules, until permission or signal is received from the signalman. This permission must not be given without authority from the train despatcher, except that regular trains will be cleared without such authority when communication with the train despatcher is interrupted.

254. When permission or signal to proceed has been given to a train it may proceed until instructed by signal or message to take the siding.

Instructions by message to take siding will, when practicable, be given at a preceding station, and the signalman will deliver such instructions in the same manner as prescribed for the delivery of a "19" train order.

255. When a train is directed to take siding, it must do so with the least possible delay. The conductor will notify the signalman as soon as his train is clear of the main track with switches closed, and must not allow his train to proceed until permission or signal has been given by the signalman. The signalman must obtain authority from the train despatcher before allowing a train to proceed after taking the siding. Where telephones are provided the conductor may use them in communicating with the signalman or train despatcher.

Where a signal controlled by the signalman is placed at the exit of a siding, a train must not leave the siding until the signal indicates "Proceed" except on written authority of the signalman.

256. A train having work to do, or which is liable to be delayed by any cause, must report to the train despatcher and must not occupy the main track when on or near the time of a first or second class train unless otherwise directed.

257. Additional rules and such modifications as may be necessary to cover this method of operation will be contained in special instructions, and, except as affected by these and Rules 251 to 256 inclusive, all Train and Fixed Signal Rules remain in force.

RULES COVERING THE MOVEMENT OF TRAINS BY AUTOMATIC SIGNAL INDICATION

271. On portions of the railway so specified in the time table the use of the main track will be governed by automatic block signals whose indications will supersede time table superiority, and will take the place of train orders except as may otherwise be provided.

272. The movement of trains will, unless otherwise provided, be supervised by the train despatcher who will issue instructions as may be required to the signalman, operator or conductor, or by signal indication.

273. Except as affected by Rules 271 and 272 and such instructions and modifications as may be provided for by special instructions, all Train and Fixed Signal Rules remain in force.

ELECTRIC STAFF BLOCK SYSTEM

301. On portions of the railway so specified in the time table the use of the main track will be governed by the Electric Staff Block System which will supersede time table superiority and take the place of train orders except as may otherwise be provided.

302. The movement of trains will, unless otherwise provided, be supervised by the train despatcher who will issue instructions as may be required to the signalman, operator or conductor.

303. Additional rules to cover this method of operation will be contained in special instructions and, except as affected by such instructions and Rules 301 and 302, all Train and Fixed Signal Rules remain in force.

FIXED SIGNAL RULES

Covering Those Giving Two or More Indications

GENERAL TYPES AND DEFINITIONS

SEMAPHORE—A device consisting of a movable arm supported on a mast, the indications being given by day by the position of the arm, and by night by lights of prescribed color corresponding to the position of the arm.

The arm is displayed to the right of the mast as seen from a train approaching on a track on which it affects movements, and may operate either in the upper quadrant when it may assume any one of three positions, or in the lower quadrant when it can assume one of two positions only.

TARGET—A device consisting of a disc so supported that it may stand either parallel with or at right angles to a track on which it affects movements, the indications being given by day by the position of the disc, and by night by lights of prescribed color corresponding to the position of the disc.

COLOR LIGHT—A device by which the indications, both by day and by night, are given by lights of prescribed color only.

DWARF—A low small signal of semaphore or color light type, and used only at interlocking plants (See Rules 601a, 601b, and 629).

Whenever a fixed signal is used of any type other than those herein described, its description and functions will be contained in special instructions.

GENERAL RULES

351. Engineman should, whenever practicable, observe the position of all discs and semaphore arms by night and endeavor to see that they correspond with the indications given by the lights. (See also Rule 27).

LOCATION

(except of switches and derails)

Wherever practicable, train order signals will be either attached to, or near, the building in which the train order office is located, and other signals will be to the right of the track as seen from an approaching train and adjoining the track on which they affect movements, but where conditions require other locations these will be described in special instructions.

Where bridge, bracket or cantilever signal structures are necessary the signals will be located with regard to the tracks on which they affect movements as shown in Figs. 1, 2, and 3, the dummy mast in Fig. 3 (which is identified by a lunar white marker light by night) indicating that there is a track between the active signal and the track on which it affects movements.

Fig. 1

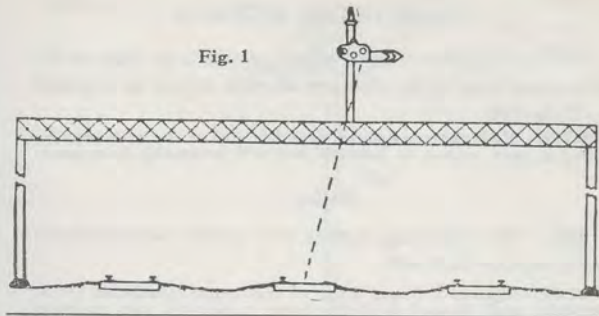


Fig. 2

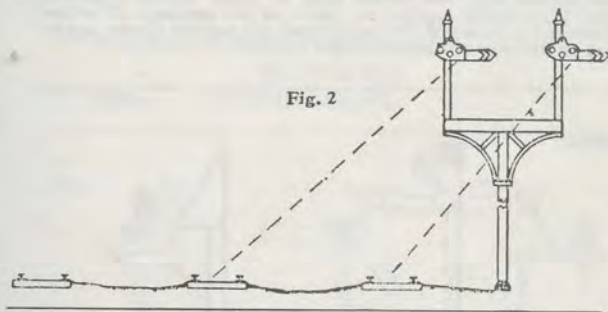
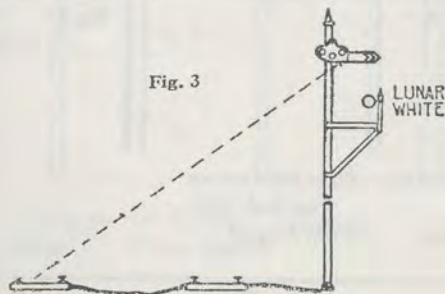


Fig. 3



TRAIN ORDER SIGNALS

DEFINITION—A fixed signal provided at train order offices and used in the delivery of train orders as required by Rule 220.

NOTE—With the semaphore type the end of the arm may be either square, round, or pointed, but will preferably be square.

Rules

401. The following signals will appear where conditions require their use:

NOTE—Figures 1, 3 and 4 are of the upper quadrant, three position, and figure 5 is of the lower quadrant, two position semaphore type; the dotted lines in these figures represent the arm which applies to trains in the opposite direction. Figures 2 and 6 are of the target type, the aspects shown applying to trains in either direction.

401a.

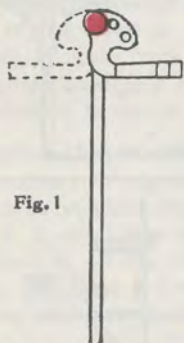


Fig. 1

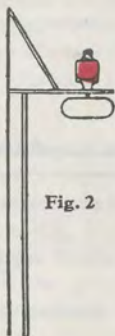


Fig. 2

Indication—Stop for Orders.

(See Rule 220)

Name —Stop Signal

401b.

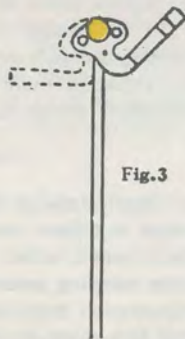


Fig. 3

Indication—Caution for 19 Order.

(See Rule 220)

Name —Caution Signal.

401c.

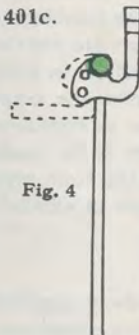


Fig. 4

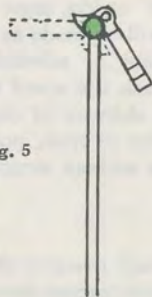


Fig. 5

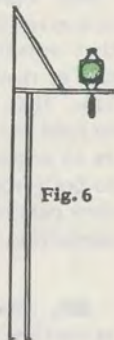


Fig. 6

Indication—No Orders. Proceed.

Name —Clear Signal.

402. Train order signals affect all movements in the direction in which the indications normally apply, and whether such movements are with or against the current of traffic on double, three, or more tracks, the normal indication being "Proceed" except as may be otherwise provided.

403. When the "Stop" signal is displayed a train in the direction in which it affects movements, if on the main track must be stopped before any portion passes it except that a train carrying passengers may pass the signal and make the station stop, and if on the siding may pass the signal but must be stopped before any portion of the train again fouls the main track.

404. When the "Caution" signal is displayed, also when a yellow signal is displayed in addition to the "Stop" signal, as prescribed in Rule 220a, it will indicate to a train in the direction in which it affects movements that delivery of "19" orders, none of which are restrictive at that point, will be made as provided for in Rule 213c, that when right or schedule permits the train to hold the main track the speed must be so regulated as to enable proper delivery of the orders to be made to both front and rear of train, and that the train may then pass the station without stopping, right or schedule permitting.

405. On single track portions of the railway specified in the time table, trains (except those carrying passengers) must not pass the "Proceed" indication of the train order signal at an open train order office between the hours of 10.00 p.m. and 8.00 a.m. without receiving a hand

signal to proceed, 12 (c), which will be given by the operator when the engine is approaching and again when rear of train is close. The engineman of the approaching train will give whistle signal 14 (j) as an indication to the operator that the train is approaching, and failing to receive signal 12 (c) the train must not proceed without obtaining a clearance.

406. Train order signals will also be used to maintain the intervals between trains as required by Rule 91a, and in every case where a train is stopped by, or any portion of which passes, a train order signal indicating either "Stop" or "Caution" it must not proceed without first obtaining a clearance (form A or B) whether or not train orders are also received.

STATION SIGNALS

DEFINITION—A fixed signal used to regulate movements of trains or engines approaching a station or switch.

NOTE—With the semaphore type the arm of a "Stop" signal has a square end; this by night, and the color light type at all times, will be distinguished by the display of a lunar white marker light located below and in the same vertical plane as the active light.

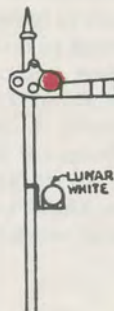
NOTE—With the semaphore type the arm of a "Stop and Proceed" signal has a pointed end; this by night, and the color light type at all times, will be distinguished by the display of the active signal light only.

Rules

451. The following signals will appear where conditions require their use:

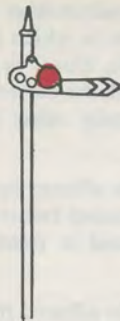
NOTE—The aspects of color light signals are the same as the night aspects of the semaphore signals illustrated.

451a.



Indication— Stop.
(See Rule 453)
Name —Stop Signal.

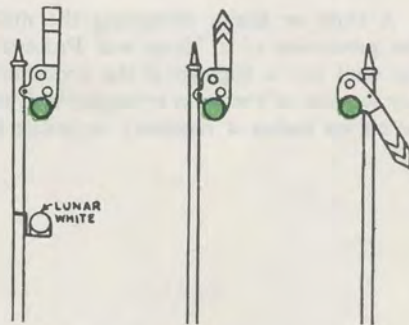
451b.



Indication—Stop; then proceed in accordance with Rule 454.

Name —Stop and Proceed Signal.

451c.



Indication— Proceed.
Name —Clear Signal.

452. On single track station signals affect all movements in the direction in which the indications normally apply, but on double, three, or more tracks they only affect movements with the current of traffic on the track to which they normally refer; their normal indication is "Proceed".

453. When a train affected by it approaches a "Stop" signal it must be stopped before any portion passes the signal. If not cleared it must stay until authorized to proceed.

454. When a train affected by it approaches a "Stop and Proceed" signal it must be stopped before any portion passes the signal and may then proceed at once with extreme caution, sending a flagman ahead if necessary to insure full protection and expecting to find the main track occupied, an open switch, a broken rail or other obstruction.

454a. A train or engine occupying the main track under the protection of a "Stop and Proceed" signal must also send out a flagman if the condition of the weather or location of the train or engine with regard to grades or curves makes it necessary to insure full protection.

Automatic Block Signals, Definitions and Rules, and
Interlocking Signals, Definitions and Rules, follow.

AUTOMATIC BLOCK SIGNALS

Definitions

BLOCK—A length of track of defined limits, the use of which by trains is controlled by block signals.

BLOCK SIGNAL—A fixed signal controlling the use of a block.

AUTOMATIC BLOCK SYSTEM—A series of consecutive blocks in which the signals are operated by electric, pneumatic or other agency actuated by a train, or by certain conditions affecting the use of a block.

SWITCH INDICATOR—A device usually employed in connection with a switch to show the condition of the block to which it refers.

NOTE—With the semaphore type the arm of a "Stop" signal has a square end; this by night, and the color light type at all times, will be distinguished by the display of a lunar white marker light located below and in the same vertical plane as the active signal light.

NOTE—With the semaphore type the arm of a "Stop and Proceed" signal has a pointed end; this by night, and the color light type at all times, will be distinguished where but one active light is used by the display of that light only, and where two active lights are used on the same mast by the display of the lower light on the opposite side of the mast.

Rules 501 to 513 inclusive will not be effective except by special instructions.

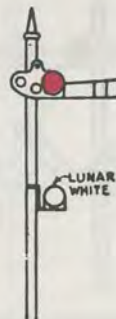
Rules

501. The following signals will appear where conditions require their use:

NOTE—The aspects of color light signals are the same as the night aspects of the semaphore signals illustrated.

102

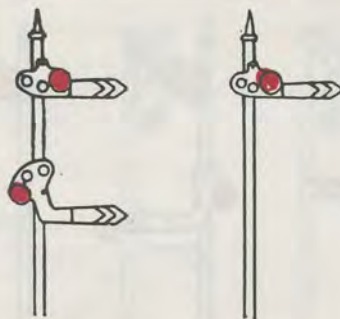
501a.



Indication— Stop.
(See Rules 503 and 505)

Name —Stop Signal.

501b.



Indication—Stop; then proceed in accordance with Rules 504 and 505.

Name —Stop and Proceed Signal.

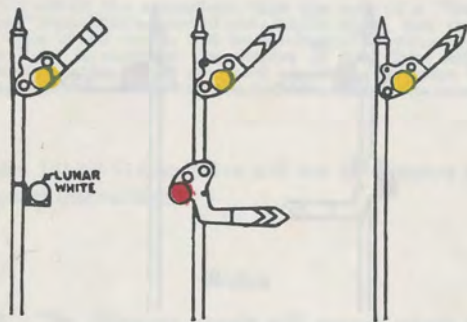
501c.



Indication—Proceed with caution via diverging route, prepared to stop at next signal.

Name —Approach Restricting Signal.

501d.



Indication—Proceed with caution via main route, prepared to stop at next signal.

Name —Approach Signal.

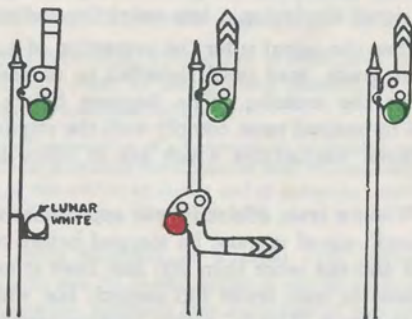
501e.



Indication—Proceed via diverging route.

Name —Clear Restricting Signal.

501f.



Indication— Proceed.

Name —Clear Signal.

502. Block signals control the use of the blocks, but, unless otherwise provided, do not supersede the superiority of trains; nor dispense with the use or observance of other signals whenever or wherever they may be required, nor relieve trainmen from the observance of Rule 99.

502a. On single track block signals affect all movements in the direction in which the indications normally apply, but on double, three or more tracks they only affect movements with the current of traffic on the track to which they normally refer.

503. When a train affected by it approaches a "Stop" signal it must be stopped before reaching the signal and not more than 200 feet from it. If not cleared it must—

(a) When the signal is part of an automatic block system, stay until authorized to proceed, or in case of absence or failure of communication it may, after waiting five minutes, proceed when preceded by a flagman to the next signal displaying a less restrictive indication.

(b) When the signal is for the protection of a railway crossing at grade, stay until signalled to proceed by a flagman at the crossing. The flagman before giving the signal to proceed must comply with the requirements of the special instructions which are in effect for that crossing.

504. When a train affected by it approaches a "Stop and Proceed" signal it must be stopped before reaching the signal and not more than 200 feet from it and may then proceed at once under full control; but when such a signal is also a "Grade" signal (distinguished by the letter "G" on a yellow disc attached to the signal mast) a train handling over 75 per cent of full tonnage may pass the signal without stopping and proceed at a speed not exceeding ten miles per hour.

505. When a train enters a block against a "Stop" or "Stop and Proceed" signal as provided for in Rules 503 and 504, the movement through that block must in every case be made in the expectation of finding the main track occupied, a broken rail, an open switch, or other obstruction.

506. Block signals and switch indicators can be declared out of service only by train order, and then only on the authority of the signal supervisor.

A block signal or switch indicator apparently out of order must be reported to the train dispatcher from the first available point of communication.

507. When a cross over is to be used the switch in the track on which the train is standing must be opened first, both switches of the cross over must be opened before the train starts to make the cross over movement, and the movement must be completed before either switch is restored to normal position.

Trains proceeding from other tracks to a main track must remain clear of the fouling point until the main track switch has been opened.

NOTE—The opening of any switch in or leading to the main track will set and hold the signals of that block at stop, and the opening of the switch at either end of a double track cross over will set and hold the signals on both main tracks at stop.

508. Both switches of a cross over between main tracks must not be closed while a car or engine occupies the connection between the switches of the cross over.

509. In order to avoid holding main track signals at stop cars or engines must not be allowed to stand between the fouling point and a main track switch.

510. Where switch indicators are provided the indicator must be observed before a main track switch is opened, the "block clear" indication showing that there is no train either in or closely approaching the block in which the switch is located, and the "block occupied" indication showing that there may be a train either in or closely approaching the block.

At main track cross overs the indicator at the switch in each track shows whether or not there is a train in or closely approaching the block on the other track.

511. A main track switch must not be opened until after the indicator has been observed as the opening of the switch gives the "block occupied" indication.

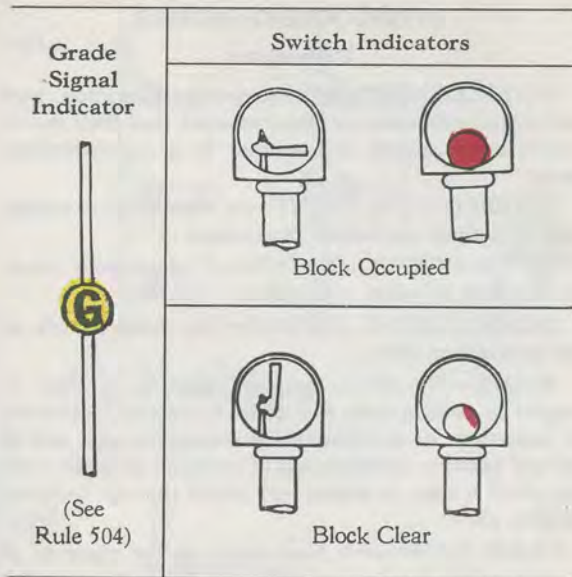
After a switch has been opened the indicator must again be observed, when the "block occupied" indication shows that the signals protecting the block are at stop, but if the "block clear" indication is then given it shows that the indicator is out of order, and the fact must be reported.

A main track switch must not be opened while an indicator shows the "block occupied" indication except under flag protection.

NOTE—Where indicators are of the push button type, the push button must be pressed in order to obtain these indications.

512. The indications displayed by switch indicators do not relieve enginemen and trainmen from protecting their train as required by the rules, unless otherwise provided.

513. Where no switch indicators are provided, or where the indicator is out of service or out of order, a train entering a block from a siding or cross over must proceed with caution to the next block signal unless it is known that the track between the switch and that signal is clear.



INTERLOCKING SIGNALS

Definitions

INTERLOCKING—An arrangement of switch, lock and signal appliances so interconnected that their movements must succeed one another in a pre-determined order.

INTERLOCKING PLANT—An assemblage of switch, lock and signal appliances, interlocked.

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

INTERLOCKING SIGNALS—The fixed signals of an interlocking plant.

ROUTE—The course or way taken by a train or engine in passing from one point to another, especially a customary or pre-determined course, or any one of several possible combinations of turnouts or cross overs by which a train or engine may travel through an interlocking plant.

HOME SIGNAL—A fixed signal at the entrance of a route or block to govern trains and engines in entering or using such route or block.

HOME SIGNAL LIMITS—The territory between home signals of any route.

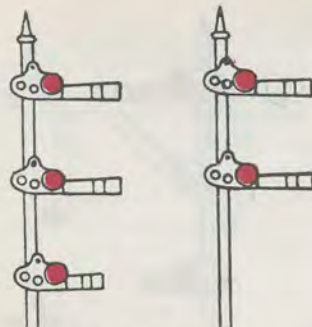
NOTE—Interlocking home signals will be distinguished as follows—Semaphore type, by day two or more arms with square ends, which by night and the color light type at all times will display two or more lights in the same vertical plane which may be all red or combinations of red with green or yellow; except that dwarf signals (used as home signals where conditions require) may display a single arm or light only, being distinguished by their location close to the ground within interlocking limits.

Rules

601. The following signals will appear where conditions require their use:

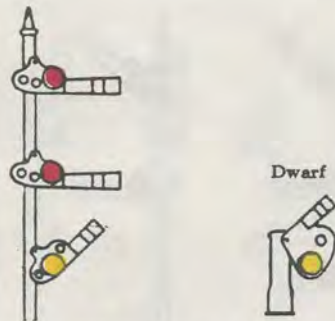
NOTE—The aspects of color light signals are the same as the night aspects of the semaphore signals illustrated.

601a.



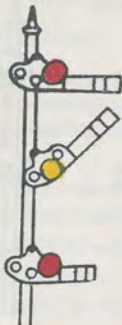
Indication— Stop.
Name —Stop Signal.

601b.



Indication—Proceed at slow speed
prepared to stop.
Name —Slow Speed Signal.

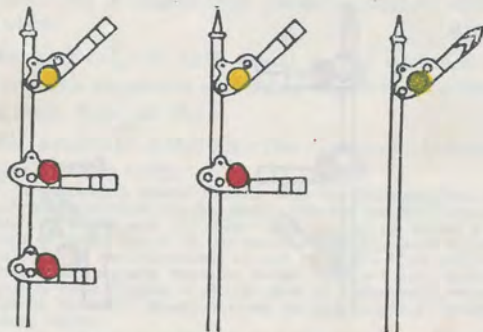
601c.



Indication—Proceed with caution via diverging route, prepared to stop at next signal.

Name —Approach Restricting Signal.

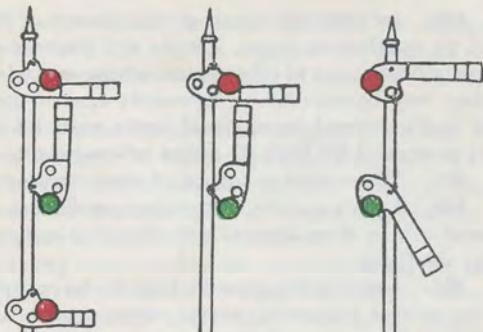
601d.



Indication—Proceed with caution via main route, prepared to stop at next signal.

Name —Approach Signal.

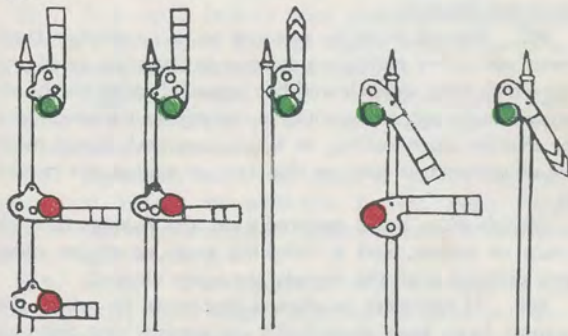
601e.



Indication—Proceed via diverging route.

Name —Clear Restricting Signal.

601f.



Indication—Proceed.

Name —Clear Signal.

602. Interlocking signals govern the use of the routes of an interlocking plant, but do not dispense with the use or observance of other signals whenever and wherever they may be required. Movements against the current of traffic beyond home signal limits must be protected as prescribed by Rule 99 unless otherwise provided for.

603. The normal indication of home signals is "Stop."

604. Levers or other operating appliances must be used only by those charged with that duty and as directed by the Rules.

605. Signal levers must be kept in the position giving the normal indication, except when signals are to be cleared for an immediate train or engine movement.

606. Signals must not be cleared for any route when cars or engines are standing within the home signal limits of that or any conflicting route.

When the route is set the signals will be operated sufficiently in advance of an approaching train or engine to avoid delay.

607. Signals must be restored so as to display their most restrictive indication as soon as the train or engine for which they were cleared has passed through the home signal limits unless the route is equipped with time locks or electric route locking, in which case each signal must be so restored as soon as the train or engine has passed it.

Signals must be so restored after the passage of each train or engine, and a following train or engine must not proceed until the signals are again cleared.

608. If necessary to change any route for which the signals have been cleared for an approaching train or engine, switches 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 in rear of its signal.

609. A switch, derail or lock must not be moved when any portion of a train or engine is standing on or closely approaching the switch, derail, detector bar or circuit.

610. Levers must be operated carefully and with a uniform movement. If any irregularity indicating disarranged connections is detected in their working the signals must be restored so as to display the normal indication and the connections examined.

611. During cold weather levers must be moved as often as may be necessary to keep connections from freezing. The use of salt is forbidden except as authorized by the Superintendent.

During storms, or while snow or sand is drifting, special care must be used in operating switches and derails. If the force whose duty it is to keep the switches clear is not on hand promptly when required the fact must be reported to the Superintendent.

612. If a signal fails to work properly its operation must be discontinued and the signal secured so as to give the normal indication until repaired.

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

614. Signalmen must not make or permit any unauthorized repairs or additions to the plant. Any defects in an interlocking plant must be promptly reported to the Superintendent.

615. If there is a derailment, or if a switch is run through, or if any damage occurs to the track or interlocking plant, the signals must be restored so as to give the normal indication, and no train or switching movement permitted until all parts of the interlocking plant and track liable to consequent injury have been examined and are known to be in a safe condition.

616. If necessary to disconnect a switch, derail, detector bar or its equivalent, or a lock, all switches or derails affected must be safely secured.

617. When switches or signals are undergoing repairs, signals must not be given for any movements which may be affected by such repairs until it has been ascertained from the repairman that the switches are properly set for such movements.

618. Signalmen must observe all passing trains and note whether they are complete and in order; should there be any indication of conditions involving danger they must take such measures for the protection of trains as may be practicable.

619. The engineman of a train which has parted must sound the whistle signal for "train parted" on approaching an interlocking plant.

If a signalman has information that an approaching train has parted he must, if possible, stop trains or engines on conflicting routes, clear the route for the parted train, and give the train-parted signal to the engineman.

An engineman receiving a train-parted signal from a signalman must answer by the whistle signal for "train parted".

When a parted train has been recoupled the signalman must be notified.

620. Hand signals must not be used when the proper indication can be displayed by the interlocking signals.

When hand signals are necessary they must be given only after the switches have been properly set and fastened, and 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 given.

When necessary to make a movement within or through an interlocking plant against a fixed signal which is inoperative (other than a home signal), such movement may be made only after the train or engine has been stopped, the engineman and trainmen have been informed of the situation, and then on hand signal from the signalman on the ground.

When a home signal cannot be cleared, unless bulletin notice or train order has been issued advising that interlocker is out of service, trains will be forwarded on clearance form D which must be delivered to the engineman by the signalman personally at a point beyond the derail in the direction from which the train is coming. If for any reason the signalman is unable to furnish clearance, or it is impossible to locate the signalman, the train may proceed only after the conductor or brakeman has inspected the track within the interlocking limits and reports to the engineman that the track is apparently in good condition.

When an interlocking plant is out of service temporarily and has been so bulletined, trains and engines must be brought to a stop before reaching the home signal and will proceed only upon receiving hand signal that the route is clear, given by the signalman located on the ground between the home signal and the fouling point on the track occupied by the train or engine.

Yellow flags by day and yellow lights by night will be used by signalmen in giving such signals at interlocking plants.

Enginemen and trainmen must not accept clear hand signals as against fixed signals except as provided for in this Rule.

621. Signalmen must have the proper appliances for hand signalling ready for immediate use, which includes the use of flag, lamp, torpedo and fusee signals.

622. Whenever it is necessary to discontinue the use of any fixed signal the Superintendent must be notified at once by wire.

623. Signalmen will be held responsible for the care of the interlocking station, tools, lamps and supplies, and, unless otherwise provided, of the interlocking plant.

624. Lights in interlocking stations must be so placed that they cannot be seen from approaching trains.

625. If a train or engine overruns or disregards a stop signal, the fact, with the number of the train or engine, must be immediately reported to the Superintendent by wire.

In all cases of apparent disregard of signals, signalmen must at once inspect the signals and see if the correct indication was displayed.

626. Signalmen must not permit unauthorized persons to enter the interlocking station.

627. When a signalman is relieved from duty he must make a transfer on a prescribed form and obtain thereon the signature of the signalman relieving him.

628. No portion of a train or engine shall pass a signal indicating "Stop" except as provided by Rule 620.

629. Dwarf signals, also the lower arm (or light) of high signals with two or more arms (or lights) frequently govern more than one route. When such signals indicate that a train or engine may proceed it must be carefully observed which route is set.

630. If a signal permitting a train to proceed, after being accepted, is changed to give the "Stop" indication before it is reached, the stop must be made at once. Such occurrence must be reported to the Superintendent.

631. Grates must not be shaken, ashpans cleaned, sand used, or in freezing weather injectors allowed to overflow, over any part of an interlocking plant.

632. Delays at interlocking plants must be reported to the Superintendent.

633. Trains or engines stopped by the signalman in making a movement through an interlocking plant must not move in either direction until they have received the proper signal from the signalman.

634. A running switch movement must never be made within the limits of an interlocking plant.

635. A reverse movement within the limits of an interlocking plant, or a forward movement after making a reverse movement, must not be made without the proper interlocking signal or permission from the signalman.

636. When a train or engine is running against the current of traffic it must approach home signal limits under such control as to be able to stop at a dwarf signal indicating "Stop".

637. Interlocking plants at which signalmen are not continuously employed will be designated by special instructions which will contain such modifications of these Rules as may be necessary; at such points, except as may be modified, all the foregoing Rules remain in effect.

(NAME OF RAILWAY)

Clearance Form D

Station }
or Place } *Wanup Tower*

12.30 p.m.
(Hour)

SEP. 28

19 *27*

Train No. *12*

Signal is inoperative. Proceed.

.....
W. Jones

Signalman.

This does not affect any train order you have received.

NOTE—The spaces are to be filled in as indicated by italics.

In the use of this form all employees concerned must be governed strictly in accordance with Rule 620.

