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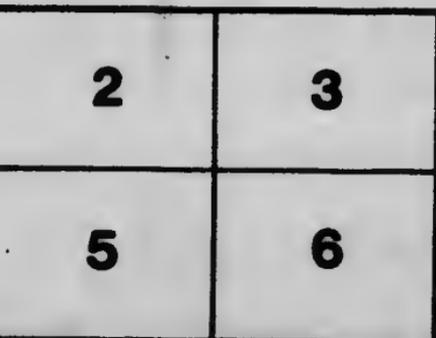
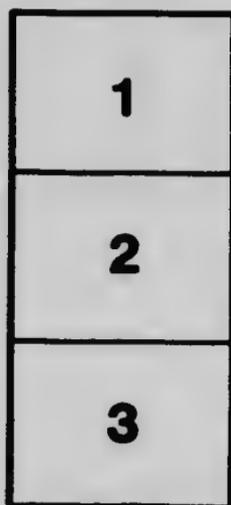
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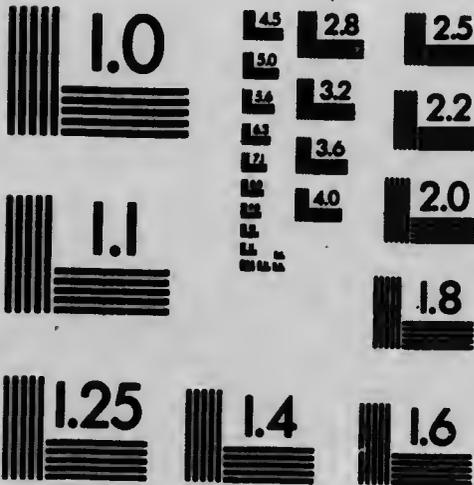
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**Canadian Pacific Railway
Company**

**GENERAL, TRAIN
AND
INTERLOOKING RULES**

**Approved by Order of the
Board of Railway Commissioners for Canada
No. 7563, dated July 12th, 1909.
Adopted by By-Law No. 96, Passed by the
Board of Directors on March 14th, 1910,
and approved by
His Excellency the Governor-General-in-Council**

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The rules herein set forth govern the railroads operated by the Canadian Pacific Railway Company. They take effect June 1st, 1910, superseding all previous rules and instructions inconsistent therewith.

Special instructions may be issued by proper authority.

D. W. Nicoll

Vice-President.

GENERAL NOTICE

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

Obedience to the rules is essential to the safety of passengers and employees, and to the protection of property.

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

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

Employees, in accepting employment, assume its risks.

GENERAL RULES

A. Every employee whose duties are prescribed by these rules, must have a copy of them accessible when on duty.

Every employee whose duties are connected with the movement of trains must have a copy of the current time-table accessible when 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.

C. Employees must pass the required examinations.

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

E. Employees must render every assistance in their power in carrying out the rules and special instructions.

F. Any violation of the rules or special instructions must be reported.

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. Persons authorized to transact business at stations or on trains must be orderly and avoid annoyance to patrons.

- 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. When an employee leaves the service, all equipment supplied by the Company must be returned. The Company reserves the right to withhold from the wages due the employee the value of such equipment not returned.
- O. Equipment, supplies and material must be properly and economically used and cared for. Scrap and other material of value must be turned in to the Company.
- P. Unless authorized to do so, employees must not receive or pay out money on the Company's account or use the Company's credit.
- Q. All accidents involving injuries to persons, or damage to track, structures or rolling stock, must be reported promptly by telegraph to the proper officer, and confirmed by mail. In cases of injury to persons, the names and addresses of as many witnesses as possible must be obtained.

DEFINITIONS

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, displaying green signals or for which green signals are displayed.

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

“**WORK EXTRA**”—for a work train.

“**PASSENGER EXTRA**”—for an extra passenger train.

“**EXTRA**”—any other extra train.

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 in the direction in which regular trains are superior to trains of the same class in the opposite direction, as specified in the time-table.

NOTE.—Superiority by direction is limited to single track.

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

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

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

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

SUBDIVISION.—A part of a division so designated on a time-table.

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

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

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

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

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

STATION.—A place designated on the time-table or by a sign board by name, at which a train may stop for traffic; or to enter or leave the main track; or from which fixed signals are operated.

INITIAL STATION.—A station at which a regular train is first timed on any subdivision is an initial station for that train.

PASSING TRACK.—A track auxiliary to the main track for meeting or passing trains, limited to the distance between two adjoining telegraph stations.

SIDE TRACK.—A track auxiliary to the main track, used for purposes other than for meeting and passing trains.

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

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

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

PILOT.—A person assigned to a train when the Engineer, or Conductor or both, are not fully acquainted with the physical characteristics, or running rules of the road, or portion of the road, over which the train is to be moved.

TRAIN RULES FOR SINGLE TRACK

STANDARD TIME

1. Standard Time obtained from McGill observatory will be telegraphed to all points from designated offices at 11.55 a.m. daily.

2. Watches that have been examined and certified to by a designated Inspector, must be used by Train Masters, Road Foremen of Locomotives, Locomotive Foremen, Road Masters, Bridge and Building Masters, Conductors, Engineers, Firemen, Motormen, Train Baggage-men, Brakemen, Yard Masters and Yard Foremen and such other employees as the Railway Company may direct. The certificate in prescribed form must be renewed and filed with the Superintendent every January and July.

(Form of Certificate.)

CERTIFICATE OF WATCH INSPECTOR.

This is to certify that on.....19....
the watch of..
employed as.....
on the Canadian Pacific Railway was examined by
me. It is correct and reliable and in my judgment

will, with proper care, run within a variation of thirty seconds per week.

Name of maker.....
 Brand.....
 Number of movement.....
 Open or hunting case.....
 Metal of case.....
 Stem or key winding.....
 Signed,

.....
 Inspector.
 Address.....

3. Watches of Conductors, Engineers and Motormen must be compared before starting on each trip, with a clock designated as a Standard Clock. The time when watches are compared must be registered on a prescribed form.

Employees who are required to use Standard Watches must submit them to a designated Inspector for comparison and record during the first and the third week of every month, or if no designated Inspector is accessible, during any such period as soon as possible thereafter.

They must not regulate them, or, unless they stop owing to failure to wind, set them themselves.

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

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TIME TABLES

4. Each time-table, from the moment it takes effect, supersedes the preceding time-table. A train on the preceding time-table which has left its initial station, on any subdivision before the new time-table takes effect, must retain its train orders and complete the run by using the schedule of the train of the same number of the new time-table, unless that train is scheduled to leave its initial station on that subdivision within twelve hours after the new time-table takes effect, in which case, the train of the preceding time-table loses both right and schedule at the moment the new time-table takes effect, and thereafter may proceed only by train order.

A train of the preceding time-table must not leave its initial station on any subdivision after the hour the new time-table takes effect.

A train of the new time-table which has not the same number on the preceding time-table, must not run on any subdivision until it is due to start from its initial station on that subdivision after the new time-table takes effect.

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 time.

Unless otherwise indicated, 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 fixed signals are operated; where there is neither siding nor fixed 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 signs in the time-table indicate :

" * " See foot note.

" s " Regular stop.

" f " Flag stop to receive or discharge passengers or freight.

" ? " Stop for meals.

" L " Leave.

" A " Arrive.

" D " Day telegraph station.

" N " Night telegraph station.

" T " Telephone station.

" W " Water station.

" C " Coaling station.

SIGNALS

7. Employees whose duties may require them give signals, must provide themselves with the proper appliances, keep them in good order and ready for immediate use.

8. Flags of the prescribed color must be used by day, and lamps of the prescribed color by night.

9. Night signals are to be displayed from sunset to sunrise. When weather or other conditions obscure day signals, night signals must be used in addition.

VISIBLE SIGNALS

10.

Color Signals

Color	Indication
a) Red. (b) Green. (c) Yellow. (d) Green and white. (e) Blue.	Stop. Proceed, and for other uses prescribed by the rules. Proceed with caution, and for other uses prescribed by the rules. Flag stop. See Rule 28. See Rule 26.

11. A fusee on or near the track burning red must not be passed until burned out. When burning yellow it is a caution signal.

13. Hand, Flag and Lamp Signals
(Illustrated by diagram)

Manner of Using	Indication
(a) Swung across the track.	Stop.
(b) Raised and lowered vertically.	Proceed.
(c) Swung vertically in a circle at half arm's length across the track when the train is standing.	Back.
(d) Swung vertically in a circle at arm's length across the track when the train is running.	Train has parted.
(e) Swung horizontally above the head when the train is standing.	Apply air brakes.
(f) Held at arm's length above the head when the train is standing.	Release air brakes.

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

AUDIBLE SIGNALS

14. Engine Whistle Signals

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

Sound	Indication
(a) o	Stop. Apply brakes.
(b) <u>o</u> —	Release brakes, or ready to proceed.
(c) — o o o	Flagman go out to protect rear of train.
(d) — — — — —	Flagman return from west or south.
(e) — — — — —	Flagman return from east or north.
(f) — — — —	When running, train parted; to be repeated until answered by the signal prescribed by Rule 12 (d).
(g) <u>o</u> o o	Answer to 12 (d).
(h) o o o	Answer to any signal not otherwise provided for.
(i) o o o o	When train is standing, back. Answer to (12 c) and 16 (c). When train is running, answer to 16 (d).
(j) o o o o	Call for signals.

Sound	Indication
(k) — o o	To call attention of extra trains and of trains of the same or inferior class or inferior right to signals displayed for a following section.
(l) — — o o	Approaching public road crossings at grade and at whistle posts.
(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.
(o) o o —	Answer to 14 (n); to be given by second engine as soon as it has control of air brakes. Answer to 14 (k).

A succession of short sounds of the whistle is an alarm for persons or animals on the track.

15. The explosion of one torpedo is a signal to stop; the explosion of two not more than 200 and not less than 100 feet apart is a signal to reduce speed, and look out for a stop signal.

Torpedoes must not be placed near stations or public crossings, nor where persons are liable to be injured by them.

16. Communicating Signals

Sound	Indication
(a) Two.	When train is standing, start.
(b) Two.	When train is running, stop at on
(c) Three.	When train is standing, back.
(d) Threc.	When train is running, stop at n
(e) Four.	station. When train is standing, apply
(f) Four.	release air brakes. When train is running, redu
(g) Five.	speed. When train is standing, call
(h) Five.	flagman. When train is running, increa
(i) Six.	speed. When train is running, increa
(j) Seven.	steam heat. When train is running, release a
	brakes, or sticking brake.

TRAIN SIGNALS

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

18. Yard engines will display the headlight to 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.

Under conditions not requiring display of markers, road engines without cars will display a white light on the rear of tender by night.

(Illustrated by diagram.)

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; by day, green flags; by night, green lights to the front and side and red lights to the rear, except when the train is clear of the main track, when green lights must be displayed to the front, side and rear.

(Illustrated by diagram.)

Where the cupola of a caboose is provided with indicators for designating the train, the proper indication must be shown and must be removed as soon as the run is completed.

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.

(Illustrated by diagram.)

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.

(Illustrated by diagram.)

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

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

24. When cars are pushed by an engine (except when shifting or making up trains in yards) a white light must be displayed on the front of the leading car by night.

(Illustrated by diagram.)

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

26. A blue flag by day and a blue light by night 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 other cars, and other cars must not be placed on the same track so as to intercept the view of the blue signals, without first notifying the workmen.

Workmen will display the blue signals and the same workmen are alone authorized to remove them.

USE OF SIGNALS

27. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown, must be regarded as a stop signal, and the fact reported to the proper officer.

28. A combined green and white signal is to be used to stop a train only at the flag stations indicated on its schedule. When it is necessary to stop a train at a point that is not a flag station on its schedule, 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, and while moving about stations.

31. Signal 14 (l) must be sounded at least 80 rods ($\frac{1}{4}$ mile) from every public road crossing at grade, and the engine bell be kept ringing until the crossing is passed.

Signal 14 (l) must be sounded at every whistle post.

Signal 14 (m) must be sounded one mile from stations, watering and fueling points, junctions, the end of double track, drawbridges and railway crossings at grade.

Signal 14 (k) must be sounded by a train displaying green signals for a following section, to call attention of extra trains or trains of the same or inferior class or inferior right to signals displayed, and must hear the answer 14 (o), or stop and notify them of green signals displayed.

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

33. Watchmen stationed at public road crossings must use green signals to prevent persons and vehicles from crossing the track when trains are approaching. Red signals must be used by them only when necessary to stop trains.

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

35. A yellow flag or a yellow light placed beside the track on the same side as the engineer of an approaching train, indicates that the track 3,000 feet distant is in condition for speed of but six miles an hour unless otherwise instructed, and the speed of a train will be controlled accordingly. A green flag or a green light, placed beside the track, on the same side as the Engineer of an approaching train, at a point beyond the slow track, indicates that full speed may be resumed.

A "SLOW" sign placed beside the track on the same side as the Engineer of an approaching train, may be used to mark a point where a slow order is in effect.

36. A red or yellow fusee, as the case may require, will be used for protection of a train which is not making the speed required by schedule or train order and is liable to be overtaken by a following train

MOVEMENT OF TRAINS BY TIME-TABLE AND TRAIN ORDER.

SUPERIORITY.

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 class; trains of the second class are superior to those of the third class; trains of the third class are superior to those of the fourth class.

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.

RULES FOR TRAIN MOVEMENT.

82. 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.

83. Trains must be registered at the register stations designated in the time-table.

A train must not leave its initial station on a subdivision or a junction, or pass from double to single track, until it has been ascertained whether trains due, which are superior, or of the same class, have arrived or left.

A train must not leave its initial station on a subdivision nor pass from double to single track without a Terminal Clearance, unless otherwise directed.

At bulletin stations designated in the time-table Conductors and Engineers 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.

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

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

86. An inferior train must clear the time of a superior train in the same direction not less than five minutes; but must clear the time of a first-class train in the same direction ten minutes, unless it is clear before the first-class train is due to leave the next station in the rear where time is shown.

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

Extra trains must clear the time of regular trains not less than five minutes, unless otherwise provided,

and will be governed by train orders with respect to opposing extra trains.

88. At meeting points between trains of the same class, the inferior train must clear the main track before the leaving time of the superior train.

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

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

89. At meeting points between trains of different classes the inferior train must take the siding and clear the superior train at least five minutes, and must pull into the siding when practicable. If necessary to back in, the train must first be protected as prescribed by Rule 99, unless otherwise provided.

90. Trains must stop at schedule meeting stations, if the train to be met is of the same class, unless the switch is right and the track clear.

When the expected train of the same class is not found at the schedule meeting station, the superior train must approach all sidings prepared to stop, until the expected train is met.

Trains must not pass any meeting point without knowing positively that the train or trains met are those which had right to track over them.

The Conductor of every train except passenger trains, must, one mile from every station at which it is not required to stop, give proceed signal to Engineer, who must, if he does not receive such signal, approach the siding cautiously and stop clear of the switch that an opposing train would use in taking the siding.

Conductors and Engineers of freight, mixed and work trains will see that Brakemen be in position to exchange signals while approaching and passing junctions, railway-crossings, draw-bridges, points where trains may be required to stop, and on heavy grades and to do whatever is required for safety and expedition, and must exchange signals when passing and leaving stations.

Trainmen will not be required to ride on top of trains unless it is necessary for safety.

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

The Conductor of every passenger train must be between one and three miles from every station at which it is to meet a train by train order arrangement, or which is superior to it, either by class or direction, give communicating signal 16 (d) and receive steam whistle signal 14 (g) and the Engineer will immediately make running test of brake.

Trains must stop clear of the switch used by the train to be met in going on the siding.

91. Unless some form of block signals is used, trains in the same direction must keep at least five minutes apart, except in closing up at stations, but a train must not follow a train carrying passengers or operating a snow plow until a report is received of its arrival at a station ahead, except that a train may follow twenty minutes after the departure of a train carrying passengers or operating a snow plow when either the station from which it is to follow or the next station ahead is not a telegraph station, or when communication with the Train Despatcher is interrupted, and the wire failure is noted on the Clearance.

The train order signal will be used by Operators to maintain the intervals required by this rule.

Schedule speed must not be exceeded by sections of trains other than the first section, nor may a train following a train carrying passengers, exceed the schedule speed of such train unless Clearance shows arrival at a station ahead.

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

When only the leaving time 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 yards defined by yard limit boards, the main track may be used, keeping clear of first and second-class trains.

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

All trains except first and second-class trains must, unless otherwise directed, approach and pass through yard limits prepared to stop, unless the main track is seen or known to be clear.

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

94. A train which overtakes another train so disabled that it cannot proceed will pass it, if practicable, and if necessary will assume the schedule and take the train orders of the disabled train, proceed to the next open telegraph office, and there report to the proper authority. The disabled train will assume the right or schedule and take the train orders of the last train with which it has exchanged, and will, when able,

proceed to and report from the next open telegraph office.

When a train, unable to proceed against the right or schedule of an opposing train, is overtaken between telegraph stations by an inferior train or a train of the same class having right or schedule which permits it to proceed, the delayed train may, after proper consultation with the following train, precede it to the next telegraph station, where it must report to Train Despatcher. 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.

96. When signals displayed for a section are taken down at any point before that section arrives, the Conductor will, 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. Extra trains must not be run without train orders.

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

At railway crossings at grade and drawbridges not interlocked, trains must stop and not proceed until the proper signal has been given.

When clear signals are shown where one railway crosses another at grade, the speed of passenger trains must be reduced to thirty-five miles an hour and freight trains to twenty miles an hour, until the entire train has passed the crossing.

When clear signals are shown where a railway crosses a drawbridge, the speed of passenger trains must be reduced to twenty-five miles an hour and the speed of freight trains to fifteen miles an hour, until the entire train has passed the drawbridge.

99. When a train stops or is delayed on the main track under circumstances in which it may be overtaken by another train, the Flagman must go back immediately with stop signals, a sufficient distance from the train to insure full protection, at least :

In day time, if there is no down grade toward train within one mile of its rear, and there is a clear view of its rear of 2,000 yards, (40 telegraph poles) from an approaching train.	}	500 yards, 10 telegraph poles.
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At other times and places, if there is no down grade toward train, within one mile of its rear.	}	1,200 yards, 24 telegraph poles.
---	---	-------------------------------------

If there is a down grade toward train, within one mile of its rear.	}	1,800 yards, 36 telegraph poles.
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The Flagman must, after going back a sufficient distance from the train to insure full protection, take

up a position where there will be an unobstructed view of him from an approaching train of, if possible, 500 yards (10 telegraph poles), first placing two torpedoes not more than 200 or less than 100 feet apart on the rail on the same side as the Engineer of an approaching train, 100 yards (2 telegraph poles) beyond such position. The Flagman must remain in such position until recalled or relieved.

If recalled before another train arrives he must at night, or when weather or other conditions obscure day signals, or when snow plows or flangers may be running, in addition to the two torpedoes, leave a fusee burning red at the point he returns from and at such other points on his return as may be necessary to insure full protection.

The front of a train must be protected in the same way when necessary by the front Brakeman, or if there be none, by the Fireman.

Flagmen 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 100 yards (2 telegraph poles) nearer the protected point.

Flagmen must each be equipped for day time with a red flag and four torpedoes, and for night time and when weather or other conditions obscure day signals, with a red light, a white light and four torpedoes, three red fusees, and a supply of matches.

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

100. When the Flagman goes out to protect the train his place will be filled by the person designated by the Conductor.

101. If a train should part while in motion, trainmen must, if possible, prevent damage to the detached portions. The signals prescribed by Rules 12 (d) and 14 (f) must be given.

When for any reason an engine leaves its train or a part of its train on the main track, every precaution must be taken to protect the train against the returning engine. Torpedoes must be placed in advance of the train, and at night, or during stormy weather, a red light must be prominently displayed on the forward car. The Conductor and Engineer will be held equally responsible for this rule.

The detached portion must not be moved or passed until the front portion comes back.

102. 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) a Flagman must take a conspicuous position on the front of the leading car.

Whenever in any city, town or village, cars are passing over or along a highway at grade, not headed by an engine moving forward, in the ordinary manner, a man must take a conspicuous position on the foremost car or tender, if that is in front, 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.

Whistle posts will be placed at least 80 rods ($\frac{1}{4}$) mile from every public road crossing at grade, except at public road crossings within the limits of towns or cities.

103. Messages or orders respecting the movement of trains or the condition of track or bridges must be in writing.

104. The target of a switch parallel with the main track or a green light, indicates the switch is set for the main track; the target at right angles to the main track or a red light indicates the switch is set for a diverging track.

Switches must be left in proper position after having been used.

Except where Switchtenders are stationed, Conductors are responsible for the position of the switches used by them and their Trainmen. This will not relieve Trainmen of responsibility for the proper position of switches used by their train.

Main track switches must be locked and other switches secured. After a switch is turned, the points must be examined to know that they are in proper position.

Employees must stand on opposite side of track and keep at least 20 feet from the stand while a train is closely approaching, or passing over a switch.

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

When a train is standing on a passing track to meet or to be passed by a train, the Engineer and Fireman must see that switches at the front of their train are in proper position.

Trainmen 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 Switchtender or a Trainman of the other train.

Derails on side tracks must be set and secured to protect the main track.

If a switch has been run through, it must be protected, the Section Foreman notified and the fact reported to the proper authority by telegraph, immediately.

105. 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 Engineer will perform the duties of the Conductor.

Both Conductors and Engineers are responsible for the safety of their trains, and under conditions not provided for by the rules, must take every precaution for their protection.

Immediate precaution must be taken to protect all trains against any obstruction or defect in the track.

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

107. Conductors and Brakemen must know that the cars in their trains 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.

108. A train must not be detached while in motion. When necessary to make running switches the train must first be stopped.

109. When stopping to take water, freight trains of more than fifteen cars, must stop not less than fifty feet before reaching the water tank or standpipe and

the engine must be cut off before water is taken. Brakes must not be released on the train until the engine is again coupled on and ready to proceed.

RULES FOR USE OF TRAIN ORDERS

201. For movements not provided for by timetable, train orders will be issued by authority and over the signature of the Superintendent or designated Train Dispatchers. They must contain neither information nor instructions not essential to such movements.

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

The different forms of train orders may be combined in one, provided there is no movement in such combination which does not directly affect the train first named in the order.

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

203. Train orders will be numbered consecutively each day, beginning with No. one at midnight.

204. Train orders must be addressed to those who are to execute or observe them, naming the place at which each is to receive his copy.

Train orders addressed to trains must be regarded as addressed to Conductors, Engineers, and Pilots. A copy for each person addressed must be supplied by the Operator. Train orders addressed to Operators, restricting the movement of trains, must be respected by Conductors and Engineers, the same as if addressed to them.

Conductors and Engineers must require Brakemen and Firemen to know the contents of all train orders.

205. 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, and with it recorded the names of those who have signed for the order; the time and the signals which show when and from what offices the order was repeated and the responses transmitted; and the Train Despatcher's initials. These records must be made at once, and never from memory or memoranda.

206. Regular trains will be designated in train orders by their numbers and the numbers of their engines: as "No. 10. Eng. 715," or "second No. 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 engine numbers and direction, as "Extra 795 East." Other numbers and time will be stated in words followed by the figures.

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

208. A train order to be sent to two or more offices must be transmitted simultaneously to as many of them as practicable.

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

When not sent simultaneously to all, the order must be sent first to the Operator at the meeting or waiting point and then to trains in the order of their superiority.

Copies of the 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.

Train orders should not be sent an unnecessarily long time before delivery, or to points unnecessarily distant from where they are to be executed. No orders (except those affecting the train at that point) should be delivered to a train at a point where it has much work until after the work has been done.

209. Operators receiving train orders must write them in manifold during transmission and if they cannot at one writing make the requisite number of copies, must trace others from one of the copies first made.

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

The Conductor of the train addressed will read the order aloud to the Operator and sign it. The Operator will then send the signature, preceded by the number of the order, to the Train Despatcher. The response "Complete," and the time, with the initials of Train Despatcher will then be given by the Train Despatcher. After receiving this response, the Operator will write on each copy, the word, "Complete," the time, and his last name in full, and deliver a copy to each person addressed, except Engineers. The copy for each Engineer must be delivered to him personally by the Conductor, who will require the order to be read aloud for comparison, and Engineer will then sign Conductor's copy.

211. When a "19" train order has been transmitted, Operators must (unless otherwise directed) repeat it at once from the manifold copy in the succession in which the several offices have been addressed. Each Operator receiving the order should observe whether the others repeat correctly. When the order has been repeated correctly by the Operator, the response "Complete," and the time, with the initials of the Train Despatcher will be given by the Train Despatcher. The Operator receiving this response will then write on each copy the word "Complete," the time, and his last name in full, and personally deliver a copy to each person addressed, without taking his signature. But when delivery to Engineer will take the Operator from the immediate vicinity of his office, the Engineer's copy will be delivered by the Conductor.

A "19" order must not be used when by its use the rights of a train are to be restricted.

212. A train order may, by the direction of the Train Despatcher, be acknowledged without repeating, by the Operator responding "X" (Number of train order) to (Train) with the Operator's initials and the office signal. The Operator must then write on the order his initials and the time.

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

"Complete" must not be given to an order for delivery to a train advancing it against a train carrying passengers, until the signature of the Operator at the meeting or waiting station, or the signature of the Conductor of the passenger train has been received,

except that when an order is sent for delivery to a passenger train at the meeting point the signature of both Conductor and Operator must be received, except at the initial station of that train.

214. When a train order has been repeated "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 line fail before an office has repeated the 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.

215. The Operator who receives and delivers a train order must preserve the lowest copy.

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

217. A train order to be delivered to a train at a point not a telegraph station, or at one at which the telegraph office is closed, must be addressed "..... at..... care of....." and forwarded and delivered by the Conductor or other person whose care it is addressed. When Form "31" is used, "Complete" will be given upon the signature of the person by whom the order is to be delivered, who must be supplied with copies for the Conductor and Engineer addressed, and a copy upon which he shall take their signatures. This copy he must deliver to the first Operator accessible, who must preserve it and at once transmit the signatures of the Conductor and Engineer to the Train Despatcher.

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

When Form "31" 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 Engineer of the superior train have been sent to the Train Despatcher.

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

219. Unless otherwise directed, an Operator must not repeat or give the "X" response to a train order for a train which has been cleared or of which the engine has passed his train-order signal until he has obtained the signature of the Conductor and Engineer to the order.

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

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

When Conductors or Engineers change off, they must transfer all orders affecting their trains. Each must know that the orders transferred are correctly understood by the other, and obtain his written receipt therefor. Before either train proceeds, the Engineer must read his orders to the Conductor.

221. A fixed signal must be used at each train order office, which shall indicate "stop" when trains are to be stopped for train orders. When there are

no orders, the signal must indicate "proceed," except as provided in Rule 91.

When an Operator receives the signal "31" or "19" followed by the direction, he must immediately display the "stop" signal for the direction indicated and then reply "stop displayed," adding the direction and until the orders have been delivered or annulled the signal must not be restored to "proceed" except by train order.

A train stopped by a train order signal must not proceed without a Clearance Card Form "A" or a Caution Card Form "C," although train orders may have been received.

Operators must have the proper appliances for hand signaling ready for immediate use if the fixed signal should fail to work properly. If a signal is not displayed at a night office, trains which have not been notified must stop and ascertain the cause, and report the facts to the Superintendent from the next operating telegraph office.

222. Operators will promptly record and report to the Train Despatcher the time of arrival and departure of all trains.

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

Initials for signature of the Train Despatcher.
Such office and other signals as are arranged by the Superintendent.

X—Train will be held until order is complete

Com.—for Complete.

O. S.—for Train Report

No.—for Number

Eng.—for Engine.

Psgr.—for Passenger

Frt.—for Freight.

Mins.—for Minutes.

Jct.—for Junction.

Despr.—for Despatcher.

Opr.—for Operator.

Cy.—for Copy.

S D—for "Stop Displayed."

B C—for Block Clear.

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 and stations.

FORMS OF TRAIN ORDERS.

Form A—Fixing Meeting Points for Opposite Trains.

- (1) meet at
- (2) meet at
- (and so on).

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

A meeting order must not be sent for delivery to a train at the meeting point if it can be avoided. When it cannot be avoided, the following additional notice to the opposite train to approach the meeting point with care, under control.

"This order to..... at....."

EXAMPLES.

- (1) *No. 1 meet No. 2 at "B."*
No. 3 meet second No. 4 at "B."
No. 5 meet Extra 95 east at "B."
Extra 652 north meet Extra 231 south at "B."
- (2) *No. 2 and second No. 4 meet No. 1 and No. 3 at "C" and Extra 95 west at "D."*
No. 1 meet No. 2 at "B," second No. 4 at "C" and Extra 95 east at "D."

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

- (1) pass at
- (2) pass when overtaken.
- (3) run ahead of to.....
- (4) run ahead of until overtaken
- (5) pass at and run ahead of to

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.

EXAMPLES.

(1) No. 1 pass No. 3 at "K."

When under this example a train is to pass another, both trains will run according to rule to the designated station, and there arrange for the rear train to pass promptly.

(2) No. 6 pass No. 4 when overtaken.

Under this example, 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 594 east run ahead of No. 6, "M" to "B"

Under this example, the second named train will run with such caution as will prevent accident with the first named train.

(4) Extra 95 west run ahead of No. 3, from "B," until overtaken.

Under this example, the first named train will run ahead of the second named train from the designated station until overtaken, and then arrange for the rear train to pass promptly.

(5) No. 1 pass No. 3 at "K," and run ahead of No. 7 "M" to "Z."

From C.—Giving Right to a Train Over an Opposing Train.

.....has right over.....to.....

This order gives right to the train first named over the other train between the points named.

EXAMPLES.

(1) No. 1 run twenty (20) mins. late "A" to "G"

(2) No. 1 run twenty (20) mins. late "A" to "G" and fifteen (15) mins. late "G" to "K," etc.

Examples (1) and (2) make 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 time-table schedule time. The time in the order should be such as can be easily added to the schedule time.

(3) No. 2 wait at "H" until ten (10.00) A. M. for No. 1.

Under this example the train first named must not pass the designated station before the time given, unless the other train has arrived. The train last named may use the specified time to reach the designated station, or any intermediate station, clearing time of first named train as required by rule.

(4) No. 1 and No. 3 wait at :

"N" until ten (10.00) A.M.

"P" until ten thirty (10.30) A.M.

"R" until ten fifty-five (10.55) A.M., etc.

Under this example the train (or trains) named must not pass the designated stations before the times given.

Other trains receiving the order are required to run with respect to the time specified at the designated stations 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.

Form F.—For Sections.

- (1)display signals and run as.....
to.....
- (2)run as..... to.....
- (3)display signals..... to..... for.....
- (6)is withdrawn as..... at.....
- (7)instead of..... display signals and run
as..... to.....
- (8)take down signals at.....
- (9)and..... reverse position as..... and
..... to.....

The character of a train for which signals are displayed may be stated.

Each section affected by the order must have copies, and must arrange green signals accordingly.

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

EXAMPLES.

(1) Eng. 20 display signals and run as first No. 1 "A" to "Z."

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

(2) Eng. 25 run as second No. 1, "A" to "Z,"

Under this example, engine 25 will not display green signals.

(3) No. 1 display signals "A" to "G" for Eng. 65, or second No. 1 display signals "B" to "E" for Eng. 99.

Under these examples engine 65 (or engine 99) will not display green signals.

These examples may be modified as follows :

(4) *Engs. 20, 25 and 99 run as first, second and third, No. 1, "A" to "Z."*

Under this example engine 99 will not display green signals.

For changing sections :

To add an intermediate section the following modification of example (1) will be used :

(5) *Eng. 85 display signals and run as second No. 1 "N" to "Z." Following sections change numbers accordingly.*

Under this example, engine 85 will display green signals and run as directed and following sections will take the next higher number.

To drop an intermediate section, the following example will be used :

(6) *Eng. 85 is withdrawn as second No. 1 at "H." Following sections change numbers accordingly.*

Under this example, engine 85 will drop out at "H" and following sections will take the next lower number.

To substitute one engine for another on a section, the following will be used :

(7) *Eng. 18 instead of Eng. 85 display signals and run as second No. 1 "R" to "Z."*

Under this example, engine 85 will drop out at "R" and engine 18 will run as directed. Following sections need not be addressed. If engine 85 is last section, the words "display signals and" will be omitted.

To discontinue the display of green signals, the following example will be used :

(8) *Second No. 1 take down signals at "D."*

Under this example, second No. 1 will take down green signals as directed and a following section must not proceed beyond the station named.

To pass one section by another, the following will be used :

(9) *Engs. 99 and 25 reverse positions as second and third, No. 1, "H" to "Z."*

Under this example, engine 99 will run ahead of engine 25, "H" to "Z," exchange train orders, and, if necessary, arrange green signals accordingly. Following sections need not be addressed.

Form G.—Extra Trains.

- (1) Eng..... run extra..... to.....
- (2) Eng..... run extra..... to..... and return..... to.....
- (3) Eng..... run extra leaving..... on..... as follows, with right over all trains :
 LeaveM.
 M.
 M.
 ArriveM.

EXAMPLES.

- (1) *Eng. 99 run extra "A" to "F."*
- (2) *Eng. 99 run extra "A" to "F" and return to "C"*
 Under (2), the extra must go to "F" before returning to "C."
- (3) *Eng. 77 run extra leaving "A" on Thursday Feb. 17th, as follows, with right over all trains:*
 Leave "A" eleven thirty (11.30) P.M.
 "C" twelve twenty-five (12.25) A.M.
 "E" one forty-seven (1.47) A.M.
 Arrive "F" two twenty-two (2.22) A.M.

This order may be varied by specifying the character of the extra 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 five minutes.

Form H.—Work Extra.

(1) Eng. work M. to M. between and

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

Whenever extra trains are run over working limits, they must be given a copy of the order sent to the work extra.

Should the working order instruct a work extra to not protect against extra trains in one or both directions, extra trains must protect, as prescribed by rule, against the work extra; if the order indicate that the work extra is protecting itself against other trains, they will run expecting to find the work extra protecting itself.

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

Conductors of work extras must report each evening by telegraph to the Train Dispatcher the time when their trains are laid up for the night and their working limits for the following day.

EXAMPLES.

(1) Eng. 292 work seven (7) A. M. to six (6) P. M. between "D" and "E."

Under this example the work extra must, whether standing or moving, protect itself against extras

within the working limits in both directions, as prescribed by rule. The time of regular trains must be cleared.

This may be modified by adding :

(2) *Not protecting against eastbound extras.*

Under this example, the work extra will protect only against westbound extras. The time of regular trains must be cleared.

(3) *Not protecting against extras.*

Under this example, protection against extras is not required. The time of regular trains must be cleared.

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

(4) *Work extra 292 clears (or protects against) extra 76 east between "D" and "E" after two ten (2.10) P.M.*

Under this example, extra 76 east must not enter the working limits before 2.10 P.M., and will then run expecting to find the work extra clear of the main track (or protecting itself) as the order may require.

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

(5) *Work extra 292 protects against No. 55 (orclass trains) between "D" and "E"*

Under this example, 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) as prescribed by rule. The regular train (or trains) receiving the order will run expecting to find the work extra protecting itself.

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

(6) Work extra..... has right over all trains between..... and..... M to.....M.

EXAMPLE.

(6) *Work extra 292 has right over all trains between "D" & "E," seven (7) P.M. to twelve (12) night.*

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

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.

Form J.—Holding Order.

Hold.....

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

These orders will be addressed to the Operator and acknowledged in the usual manner, and will be delivered to Conductors and Engineers of all trains affected.

EXAMPLES.

Hold No. 2.

Hold all (or eastbound) 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."

Form K.—Annulling a Schedule or a Section.

(1)of.....is annulled.....to.....

(2)due to leave..... is annulled
.....to.....

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

EXAMPLES.

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

Form L.—Annuling an Order.

Order No. is annulled.

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

EXAMPLE.

Order No. ten (10) is annulled.

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

"Annulled by Order No."

Form M.—Annuling Part of an Order.

That part of Order No. reading. is annulled.

EXAMPLES.

- (1) *That part of order No. ten (10) reading Extra 263 west pass No. one (1) at "S" is annulled.*
 (2) *That part of order No. ten (10) reading No. 1 meet No. 2 at "S" is annulled.*

Form P.—Superseding an Order or Part of an Order.

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

- (1) meet (or pass) at instead of
 (2) has right over to instead of
 (3) display signals for to instead of

An order which has been superseded must not be re-issued under its original number, and the original order must not be superseded more than once.

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

EXAMPLES.

(1) *No. 1 meet No. 2 (or pass No. 3) at "C" instead of "B."*

(2) *No. 1 has right over No. 2 "G" to "R" instead of "X."*

(3) *No. 1 display signals for Eng. 85 "A" to "Z" instead of "G."*

Form T.—Line Clear Order.

Line clear to..... for.....

EXAMPLE.

Line clear to "C" for No. 3 (or extra 597 east.)

This order gives the train named the right to track over all trains from the station at which the order is received to the station named, but it must, when necessary, be protected as prescribed by Rule 99, and must follow trains as prescribed by Rule 91. The order must be addressed to the train named and also to the Operator at the station to which the line is clear, and he must repeat it, and then hold all trains in the opposite direction until the train named has arrived. "Complete" must not be given to the order for the train until "Complete" has been given to the order for the Operator at the station to which the line is clear. This form of order must not be used unless authorized by the Superintendent.

Form U.—Protection Against Following Trains.

- (1) Opr. hold all trains following
(except) until M.
- (2) Opr. hold all trains following
(except) until arrives at

This order must be addressed to the Operator of "G" and to the train to be protected, and the Operator will deliver copies to all trains affected; and it gives the train to be protected, right to occupy the main track without rear flag protection until the order is fulfilled.

EXAMPLES.

- (1) Opr. "G" hold all trains following No. 64 (or extra 301 east) (except No. 6) until ten (10) A.M.
- (2) Opr. "G" hold all trains following No. 4 (or extra 306 east) (except No. 6) until No. 4 (or extra 306 east) arrives at "F."

Form V.—Specifying the Speed of a Train.

- (1) Do not exceed miles per hour to
- (2) Run miles per hour to

EXAMPLES.

- (1) Do not exceed six (6) miles per hour, "A" to "B."

This order will be used when main track is reported unsafe for usual speed.

- (2) Run forty (40) miles per hour, "A" to "B."

Under (2) the train addressed will not run at the speed specified unless safe to do so.

Following

.....
.....
.....

Operator at
Operator
it gives
the main
order is

. 64 (or
A.M.
. 4 (or
extra

in.
to....
.....
A" to

ported

B."
t the

TRAIN RULES FOR DOUBLE TRACK

NOTE. Double Track rules marked "D" differ in language from corresponding Single Track rules, or are applicable only to Double Track.

STANDARD TIME.

1. Standard Time obtained from McGill observatory will be telegraphed to all points from designated offices at 11.55 a.m. daily.

2. Watches that have been examined and certified to by a designated Inspector, must be used by Train Masters, Road Foremen of Locomotives, Locomotive Foremen, Roadmasters, Bridge and Building Masters, Conductors, Engineers, Firemen, Motormen, Train Baggage-men, Brakemen, Yard Masters and Yard Foremen and such other employees as the Railway Company may direct. The certificate in the prescribed form must be renewed and filed with the Superintendent every January and July.

(Form of Certificate.)

CERTIFICATE OF WATCH INSPECTOR.

This is to certify that on 19....
the watch of.....
employed as.....
on the Canadian Pacific Railway, was examined by

me. It is correct and reliable and in my judgment will, with proper care, run within a variation of thirty seconds per week.

Name of maker.....
 Brand.....
 Number of movement.....
 Open or hunting case.....
 Metal of case.....
 Stem or key winding.....
 Signed,

 Address..... Inspector.

3. Watches of Conductors, Engineers and Motormen must be compared, before starting on each trip, with a clock designated as a Standard Clock. The time when watches are compared must be registered on a prescribed form.

Employees who are required to use Standard Watches must submit them to a designated Inspector for comparison and record during the first and third week of every month, or, if no designated Inspector is accessible during any such period, as soon as possible thereafter.

They must not regulate them, or, unless they stop owing to failure to wind, set them themselves.

If a Standard Clock is not accessible, standard time must be obtained from Train Dispatcher, or by comparing time with a Conductor, Engineer or Motorman who have had access to a Standard Clock and registered.

TIME TABLES.

4. Each time-table, from the moment it takes effect, supersedes the preceding time-table. A train of the preceding time-table which has left its initial station, on any subdivision before the new time-table takes effect, must retain its train orders and complete the run by using the schedule of the train of the same number of the new time-table, unless that train is scheduled to leave its initial station on that subdivision within twelve hours after the new time-table takes effect, in which case, the train of the preceding time-table loses both right and schedule at the moment the new time-table takes effect, and thereafter may proceed only by train order.

A train of the preceding time-table must not leave its initial station on any subdivision after the hour the new time-table takes effect

A train of the new time-table which has not the same number on the preceding time-table, must not run on any subdivision until it is due to start from its initial station on that subdivision after the new time-table takes effect.

D. 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 time.

Unless otherwise indicated, 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 fixed signals are operated; where there is neither siding nor fixed signal, it applies to the place where traffic is received or discharged.

Schedule 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 passing times, or when one or more trains are to pass it between those times.

When trains are to be 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 pass a train between two times, attention is called to it by small figures showing numbers of trains to pass.

6 The following signs in the time-table indicate :

"^h" — See foot note

"s" — Regular stop.

"f" — Flag stop to receive or discharge passengers or freight.

"¶" — Stop for meals.

"L" — Leave.

"A" — Arrive.

"D" — Day telegraph station.

"N" — Night telegraph station.

"T" — Telephone station.

"W" — Water station.

"C" — Coaling station.

SIGNALS.

7. Employees whose duties may require them to give signals, must provide themselves with the proper appliances, keep them in good order and ready for immediate use

8. Flags of the prescribed color must be used by day, and lamps of the prescribed color by night .

9. Night signals are to be displayed from sunset to sunrise. When weather or other conditions obscure day signals, night signals must be used in addition.

VISIBLE SIGNALS.**10. Color Signals.**

Color	Indication
(a) Red.	Stop.
(b) Green.	Proceed, and for other uses prescribed by the rules.
(c) Yellow.	Proceed with caution, and for other uses prescribed by the rules
(d) Green and white.	Flag stop. See Rule 28.
(e) Blue.	See Rule 26.

11. A fusee on or near the track burning red must not be passed until burned out. When burning yellow it is a caution signal.

12. Hand, Flag and Lamp Signals

(Illustrated by diagram.)

Manner of Using.	Indication.
(a) Swung across the track.	Stop.
(b) Raised and lowered vertically.	Proceed.
(c) Swung vertically in a circle at half arm's length across the track when the train is standing.	Back.
(d) Swung vertically in a circle at arm's length across the track when the train is running.	Train has parted
(e) Swung horizontally above the head when the train is standing.	Apply air brakes.
(f) Held at arm's length above the head when the train is standing.	Release air brakes.

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

AUDIBLE SIGNALS.

4. Engine Whistle Signals

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

Sound	Indication.
(a) o	Stop. Apply brakes.
(b) — —	Release brakes, on ready to proceed.
(c) — o o o	Flagman go out to protect rear of train.
(d) — — — —	Flagman return from west or south.
(e) — — — — —	Flagman return from east or north.
(f) — — — —	When running, train parted; to be repeated until answered by the signal prescribed by Rule 12 (d).
(g) o o	Answer to 12 (d).
(h) o o o	Answer to any signal not otherwise provided for.
(i) o o o o	When train is standing, back. Answer to 12 (c) and 16 (c).
(j) o o o o o	When train is running, answer to 16 (d). Call for signals.

Sound.	Indication.
(k) — o o	To call attention of extra trains and of trains of the same or inferior class or inferior right to signals displayed for a following section.
(l) — — o o	Approaching public road crossings at grade and at whistle posts.
(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.
(o) o o —	Answer to 14 (n); to be given by second engine as soon as it has control of air brakes. Answer to 14 (k).

A succession of short sounds of the whistle is an alarm for persons or animals on the track.

15. The explosion of one torpedo is a signal to stop; the explosion of two not more than 200 and not less than 100 feet apart is a signal to reduce speed, and look out for a stop signal.

Torpedoes must not be placed near stations or public crossings, nor where persons are liable to be injured by them.

16. Communicating Signals.

Sound	Indication
(a) Two.	When train is standing, start.
(b) Two	When train is running, stop at once.
(c) Three	When train is standing, back
(d) Three.	When train is running, stop at next station.
(e) Four	When train is standing, apply or release air brakes.
(f) Four.	When train is running, reduce speed.
(g) Five.	When train is standing, call in flagman.
(h) Five.	When train is running, increase speed.
(i) Six.	When train is running, increase steam heat.
(j) Seven.	When train is running, release air brakes, or sticking brake.

TRAIN SIGNALS.

D—17. A headlight will be displayed to the front of every train by night, but must be concealed when the train is standing to meet trains at the end of double track or at junctions, and switch properly set for the approaching train.

18. Yard engines will display the headlight to 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.

Under conditions not requiring display of markers, road engines without cars will display a white light on the rear of tender by night.

(Illustrated by diagram.)

D—19. The following signals will be displayed, one on each side of the rear of every train as markers, to indicate rear of train; by day green flags; by night to the front and side green lights; by night to the rear, if the train is running with the current of traffic, red lights; if standing on passing track clear of main track, green lights; if running against the current of traffic, a green light on the inside and a red light on the opposite side. The lights displayed to the rear must be changed from green to red before a train fouls the main track when leaving a passing track, or returns to the main track with the current of traffic.

(Illustrated by diagram.)

Where the cupola of a caboose is provided with indicators for designating the train, the proper indication must be shown and must be removed as soon as the run is completed.

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.

(Illustrated by diagram.)

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.

(Illustrated by diagram.)

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

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. When cars are pushed by an engine (except when shifting or making up trains in yards) a white light must be displayed on the front of the leading car by night.

(Illustrated by diagram.)

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

26. A blue flag by day and a blue light by night 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, and other cars must not be placed on the same track so as to intercept the view of the blue signals, without first notifying the workmen.

Workmen will display the blue signals, and the same workmen are alone authorized to remove them.

USE OF SIGNALS.

27. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown

must be regarded as a stop signal, and the fact reported to the proper officer.

28. A combined green and white signal is to be used to stop a train only at the flag stations indicated on its schedule. When it is necessary to stop a train at a point that is not a flag station on its schedule, 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 D. 14 (g) or (h).

30. The engine bell must be rung when an engine is about to move, and while moving about stations.

D-31. Signal D. 14 (l) must be sounded at least 80 rods (1½ mile) from every public road crossing at grade, and the engine bell be kept ringing until the crossing is passed.

Signal D. 14 (l) must be sounded at every whistle post.

Signal D. 14 (m) must be sounded one mile from stations, watering and fueling points, junctions, the end of double track, drawbridges and railway crossings at grade.

Signal D. 14 (k) must be sounded by train displaying green signals for a following section, to call attention of trains in the same direction to signals displayed, and must hear the answer, D. 14 (o), or stop and notify them of green signals displayed.

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

33. Watchmen stationed at public road crossings must use green signals to prevent persons and vehicles from crossing the track when trains are approaching.

Red signals must be used by them only when necessary to stop trains.

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

35. A yellow flag or a yellow light placed beside the track on the same side as the Engineer of an approaching train, indicates that the track 3000 feet distant is in condition for speed of but six miles an hour, unless otherwise instructed, and the speed of a train will be controlled accordingly. A green flag or a green light, placed beside the track on the same side as the Engineer of an approaching train, at a point beyond the slow track, indicated that full speed may be resumed.

A "SLOW" sign placed beside the track on the same side as the Engineer of an approaching train, may be used to mark a point where a slow order is in effect.

36. A red or yellow fusee, as the case may require, will be used for protection of a train which is not making the speed required by schedule or train order, and is liable to be overtaken by a following train.

MOVEMENT OF TRAINS BY TIME TABLE AND TRAIN ORDER.

SUPERIORITY.

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

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

Right is superior to class.

D—72. Trains of the first class are superior to those of the second class ; trains of the second class are superior to those of the third class; trains of the third class are superior to those of the fourth class.

73. Extra trains are inferior to regular trains.

RULES FOR TRAIN MOVEMENT.

82. 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.

D—83. Trains must be registered at the register stations designated in the time-table.

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

A train must not leave its initial station on any subdivision without a Terminal Clearance, unless otherwise directed.

At bulletin stations designated in the time-table, Conductors and Engineers 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.

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

Trains of one schedule may pass trains of another schedule of the same class.

A section may pass and run ahead of another section of the same schedule, first exchanging orders, signals and numbers with the section to be passed. Extras may pass and run ahead of extras.

D—86. An inferior train must clear the time of a superior train not less than five minutes, but must clear the time of a first class train ten minutes unless it is clear before the first class train is due to leave the next station in the rear where time is shown.

87. Omitted. (Not applicable to Double-Track.)

88. " " " " " " "

89. " " " " " " "

D—90. Conductors and Engineers of freight, mixed and work trains will see that Brakemen be in position to exchange signals while approaching and passing junctions, railway-crossings, draw-bridges, points where trains may be required to stop and on heavy grades, and to do whatever is required for safety and expedition, and must exchange signals when passing and leaving stations.

Trainmen will not be required to ride on top of trains unless it is necessary for safety.

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

91. Unless some form of block signals is used, trains in the same direction must keep at least five minutes apart, except in closing up at stations, but a train must not follow a train carrying passengers or operating a snow plow until a report is received of its arrival at a station ahead, except that a train may follow twenty minutes after the departure of a train carrying passengers or operating a snow plow, when either the station from which it is to follow or the next station ahead is not a telegraph station, or when communication with the Train Despatcher is interrupted and the wire failure is noted on the Clearance.

The train order signal will be used by Operators to maintain the intervals required by this rule.

Schedule speed must not be exceeded by sections of trains other than the first section, nor may a train following a train carrying passengers, exceed the schedule speed of such train, unless Clearance shows arrival at a station ahead.

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

When only the leaving time 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 yards defined by yard limit boards, the main track may be used, keeping clear of first and second class trains.

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

All trains except first and second class trains must, unless otherwise directed, approach and pass through yard limits prepared to stop, unless the main track is seen, or known, to be clear.

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

D—94. A train which overtakes a superior train, so disabled that it cannot proceed, will pass it, if practicable, and, if necessary, will assume the schedule and take the train orders of the disabled train, proceed to the next open telegraph office, and there report to the proper authority. The disabled train will assume the right or schedule and take the train orders of the last train with which it has exchanged, and will, when able, proceed to and report from the next open telegraph office.

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

Each section has equal time-table authority.

A train must not display signals for a following section, except as prescribed by Rule D—85, without train orders.

96. Omitted. (Not applicable to Double Track).

D—97. Extra trains must not be run without train orders.

Work extras must move with the current of traffic unless otherwise directed.

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

At railway crossings at grade and drawbridges not interlocked, trains must stop and not proceed until the proper signal has been given.

When clear signals are shown where one railway crosses another at grade, the speed of passenger trains must be reduced to thirty-five miles an hour and freight trains to twenty miles an hour, until the entire train has passed the crossing.

When clear signals are shown where a railway crosses a drawbridge, the speed of passenger trains must be reduced to twenty-five miles an hour and the speed of freight trains to fifteen miles an hour, until the entire train has passed the drawbridge.

99 When a train stops or is delayed on the main track under circumstances in which it may be overtaken by another train, the Flagman must go back immediately with stop signals, a sufficient distance from the train to insure full protection, at least:

In day time, if there is no down grade toward train within one mile of its rear, and there is a clear view of its rear of 2000 yards (40 telegraph poles) from an approaching train.	} 500 yards, 10 telegraphs poles
--	--

At other times and places, if there is no down grade toward train within one mile of its rear.	} 1,200 yards, 24 telegraph poles.
--	--

If there is a down grade toward train, within one mile of its rear.	} 1,800 yards, 36 telegraph poles.
---	--

The Flagman must, after going back a sufficient distance from the train to insure full protection, take up a position where there will be an unobstructed

view of him from an approaching train of, if possible, 500 yards (10 telegraph poles), first placing two torpedoes not more than 200 or less than 100 feet apart on the rail on the same side as the Engineer of an approaching train, 100 yards (2 telegraph poles) beyond such position. The Flagman must remain in such position until recalled or relieved.

If recalled before another train arrives he must at night, or when weather or other conditions obscure day signals, or when snow plows or flangers may be running, in addition to the two torpedoes, leave a fusee burning red at the point he returns from and at such other points on his return as may be necessary to insure full protection.

The front of a train must be protected in the same way when necessary by the front Brakeman, or if there be none, by the Fireman.

Flagmen 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 100 yards (2 telegraph poles) nearer the protected point.

Flagmen must each be equipped for day time with a red flag and four torpedoes, and for night time and when weather or other conditions obscure day signals with a red light, a white light and four torpedoes, three red fusees, and a supply of matches.

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

100. When the Flagman goes out to protect the train, his place will be filled by the person designated by the Conductor.

D-101. If a train should part while in motion, Trainmen must, if possible prevent damage to the

detached portion. The signals prescribed by Rules 12 (d) and 14 (f) must be given.

When for any reason an engine leaves its train or a part of its train on the main track, every precaution must be taken to protect the train against the returning engine. Torpedoes must be placed in advance of the train, and at night, or during stormy weather, a white light must be prominently displayed on the forward car. The Conductor and Engineer will be held equally responsible for this rule.

The detached portion must not be moved or passed until the front portion comes back.

The Engineer and Trainmen with the front portion must give the train-parted signal to trains running on the opposite track. A train receiving this signal or being otherwise notified that a train on the opposite track has parted, must immediately reduce speed and proceed with caution until the separated train is passed.

When a train is disabled so it may obstruct the opposite track, trains on that track must be stopped.

102. 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) a Flagman must take a conspicuous position on the front of the leading car.

Whenever in any city, town or village, cars are passing over or along a highway at grade, not headed by an engine moving forward, in the ordinary manner, a man must take a conspicuous position on the foremost car or tender, if that is in front, 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.

Whistle posts will be placed at least 80 rods ($\frac{1}{4}$) mile from every public road crossing at grade, except at public road crossings within the limits of towns or cities.

103. Messages or orders respecting the movement of trains or the condition of track or bridges must be in writing.

D—104. The target of a switch parallel with the main track or a green light, indicates the switch is set for the main track; the target at right angles to the main track or a red light indicates the switch is set for a diverging track.

Switches must be left in proper position after having been used.

Except where Switchtenders are stationed, Conductors are responsible for the position of the switches used by them and their Trainmen. This will not relieve Trainmen of responsibility for the proper position of switches used by their train.

Main track switches must be locked and other switches secured. After a switch is turned, the points must be examined to know that they are in proper position.

Employees must keep at least 20 feet from the stand while a train is closely approaching or passing over a switch.

A switch must not be left open for a following train, unless in charge of a Switchtender or a Trainman of such train.

When a train is standing on a passing track to be passed by a train the Engineer and Fireman must

see that switches at the front of their train are in proper position.

Trainmen of a train occupying the main track at a passing point will, when practicable, open the switch for the expected train, and protect the switch until relieved by a Switchtender or a Trainman of the other train.

Derails on side tracks must be set and secured to protect the main track.

If a switch has been run through, it must be protected, the Section Foreman notified and the fact reported to the proper authority by telegraph, immediately.

105. 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 Engineer will perform the duties of the Conductor.

Both Conductors and Engineers are responsible for the safety of their trains, and, under conditions not provided for by the rules, must take every precaution for their protection.

Immediate precaution must be taken to protect all trains against any obstruction or defect in the track.

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

107. Conductors and Brakemen 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.

108. A train must not be detached while in motion. When necessary to make running switches the train must first be stopped.

109. When stopping to take water, freight trains of more than fifteen cars must stop not less than fifty feet before reaching the water tank or stand pipe and the engine must be cut off before water is taken. The brakes must not be released on the train until the engine is again coupled on and ready to proceed.

D—151. Trains must keep to the right unless otherwise provided.

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

D—153. Trains must use caution in passing a train receiving or discharging passengers at a station, and must not pass between it and the platform at which the passengers are being received or discharged.

RULES FOR USE OF TRAIN ORDERS.

201. For movements not provided for by timetable, train orders will be issued by authority and over the signature of the Superintendent or designated Train Dispatchers. They must contain neither information nor instructions not essential to such movements.

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

The different forms of train orders may be combined in one, provided there is no movement in such combination which does not directly affect the train first named in the order.

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

203. Train orders will be numbered consecutively each day, beginning with No. one at midnight.

204. Train orders must be addressed to those who are to execute or observe them, naming the place at which each is to receive his copy

Train orders addressed to trains must be regarded as addressed to Conductors, Engineers and Pilots. A copy for each person addressed must be supplied by the Operator. Train orders addressed to Operators, restricting the movement of trains must be respected by Conductors and Engineers the same as if addressed to them.

Conductors and Engineers must require Brakemen and Firemen to know the contents of all train orders.

205. 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 Dispatcher, and with it recorded the names of those who have signed for the order; the time and the signals which show when and from what offices the order was repeated, and the responses transmitted; and the Train Dispatcher's initials. These records must be made at once, and never from memory or memoranda.

206. Regular trains will be designated in train orders by their numbers and the numbers of their engines, as "No. 10, Engine 715," or "second No. 10, Engine 725." If the number of the engine cannot be ascertained, the word "Unknown" will be used, as "No. 10, Engine Unknown." Extra trains will be designated by engine numbers and direction, as "Extra 795 East." Other numbers and time will be stated in words followed by the figures.

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

D—208. A train order to be sent to two or more offices must be transmitted simultaneously to as many of them as practicable. The several addresses must be in the order of superiority of trains, each office taking its proper address. When not sent simultaneously to all, the order must be sent first to the superior train.

Train orders should not be sent an unnecessarily long time before delivery, or to points unnecessarily distant from where they are to be executed. No orders (except those affecting the train at that point) should be delivered to a train at a point where it has much work until after the work has been done.

209. Operators receiving train orders must write them in manifold during transmission and if they cannot at one writing make the requisite number of copies, must trace others from one of the copies first made.

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

The Conductor of the train addressed will read the order aloud to the Operator and sign it. The Operator will then send the signature preceded by the number of the order, to the Train Dispatcher. The

response "Complete," and the time, with the initials of Train Dispatcher will then be given by the Train Dispatcher. After receiving this response, the Operator will write on each copy the word "Complete," the time, and his last name in full, and deliver a copy to each person addressed, except Engineers. The copy for each Engineer must be delivered to him personally by the Conductor, who will require the order to be read aloud for comparison, and Engineer will then sign Conductor's copy.

211. When a "19" train order has been transmitted, Operators must (unless otherwise directed) repeat it at once from the manifold copy, in the succession in which the several offices have been addressed. Each Operator receiving the order should observe whether the others repeat correctly. When the order has been repeated correctly by the Operator, the response "Complete," and the time with the initials of the Train Dispatcher will be given by the Train Dispatcher. The Operator receiving this response will then write on each copy the word "Complete," the time, and his last name in full, and personally deliver a copy to each person addressed, without taking his signature. But when delivery to Engineer will take the Operator from the immediate vicinity of his office, the Engineer's copy will be delivered by the Conductor.

A "19" order must not be used when by its use the rights of a train are to be restricted.

212. A train order may, by direction of the Train Dispatcher be acknowledged without repeating, by the Operator responding "X; (Number of train order) to (Train)" with the Operator's initials and the office

signal. The Operator must then write on the order his initials and the time.

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

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

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

215. The Operator who receives and delivers a train order must preserve the lowest copy.

216. For train orders delivered by the Train Dispatcher, the requirements as to the record delivery are the same as at other offices.

217. A train order to be delivered to a train at a point not a telegraph station, or at one at which the telegraph office is closed, must be addressed to "..... at.....care of....." and forwarded and delivered by the Conductor or other person in whose care it is addressed. When Form "21" is used, "Complete" will be given upon the signature of the person by whom the order is to be delivered, who must be supplied with copies for the Conductor and Engineer addressed, and a copy upon which he shall take their signatures. This copy he must deliver to the first Operator accessible, who must preserve it, and at

once transmit the signatures of the Conductor and Engineer to the Train Despatcher.

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

When Form "31" 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 Engineer of the superior train have been sent to the Train Despatcher

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

219. Unless otherwise directed, an Operator must not repeat or give the "X" response to a train order for a train which has been cleared or of which the engine has passed his train order signal until he has obtained the signatures of the Conductor and Engineer to the order.

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

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

When Conductors or Engineers change off, they must transfer all orders affecting their trains. Each must know that the orders transferred are correctly understood by the other, and obtain his written receipt.

therefor. Before either train proceeds, the Engineer must read his orders to the Conductor.

221. A fixed signal must be used at each train order office, which shall indicate "Stop" when trains are to be stopped for train orders. When there are no orders, the signal must indicate "Proceed," except as provided in Rule 91.

When an Operator receives the signal "31." or "19," followed by the direction, he must immediately display the "Stop" signal for the direction indicated and then reply "Stop displayed," adding the direction; and until the orders have been delivered or annulled the signal must not be restored to "Proceed," except by train order.

A train stopped by a train order signal must not proceed without Clearance Card Form "A" or Caution Card Form "C" although train orders may have been received.

Operators must have the proper appliances for hand signaling ready for immediate use if the fixed signal should fail to work properly. If the signal is not displayed at a night office, trains which have not been notified must stop and ascertain the cause, and report the facts to the Superintendent from the next open telegraph office.

222. Operators will promptly record and report to the Train Despatcher the time of arrival and departure of all trains.

223. The following signs and abbreviations may be used:

Initials for signature of the Train Despatcher.

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

- X.—Train will be held until order is complete
Com.—for complete.
O. S.—Train Report.
No.—for Number.
Eng.—for Engine.
Pagr.—for passenger.
Frt.—for Freight.
Mins.—for Minutes.
Jct.—for Junction.
Despr.—for Despatcher.
Opr.—for Operator.
Cy.—for Copy.
S. D.—for "Stop Displayed."
B. C.—for Block Clear.
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 and stations.

FORMS OF TRAIN ORDERS.

Form A.—Fixing Meeting Points for Opposing Trains.

Omitted—(Not applicable to Double Track.)

Form B.—Directing a Train to Pass or Run Ahead of Another Train.

- (1)pass.....at.....
- (2)pass.....when overtaken.
- (3)run ahead of.....to.....
- (4)run ahead of.....until overtaken.
- (5)pass.....at.....and run ahead of
.....to.....

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.

EXAMPLES.

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

When under this example, a train is to pass another, both trains will run according to rule to the designated station and there arrange for the rear train to pass promptly.

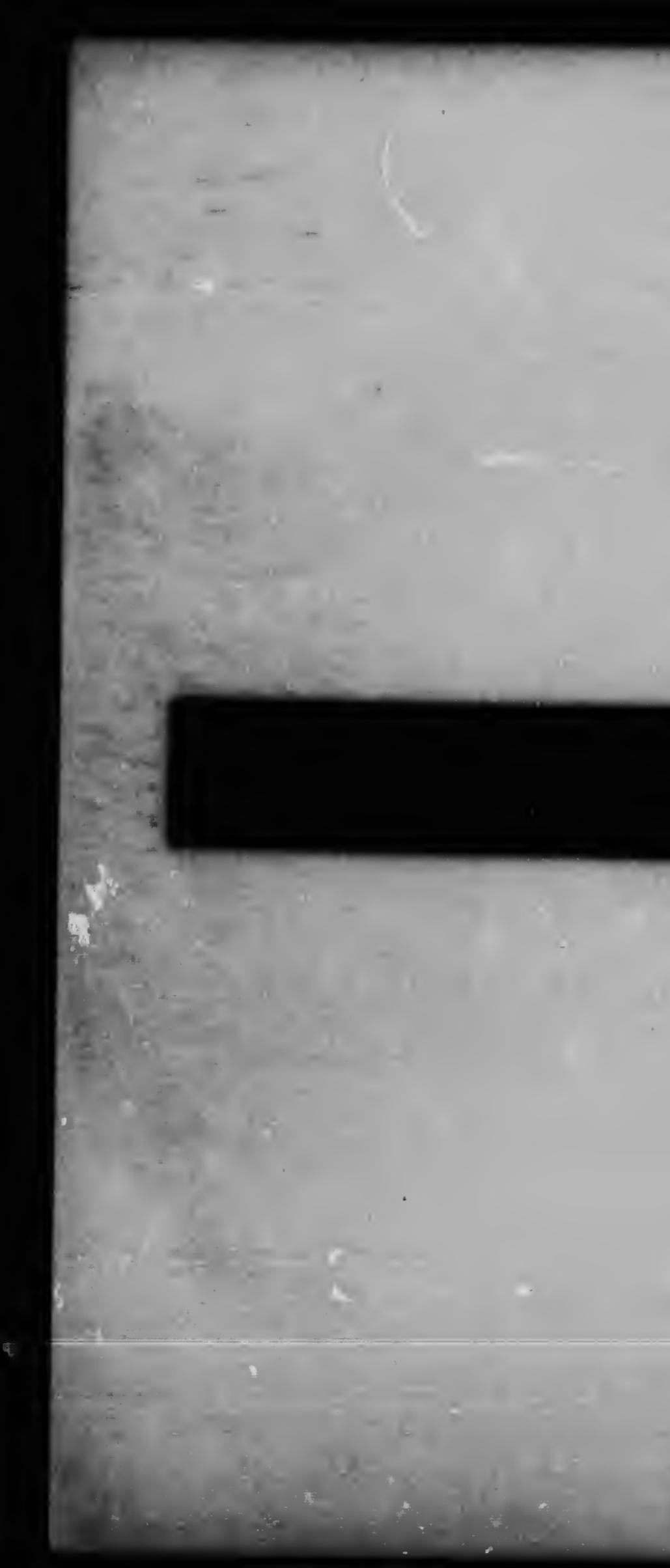
(2) *No. 6 pass No. 4 when overtaken.*

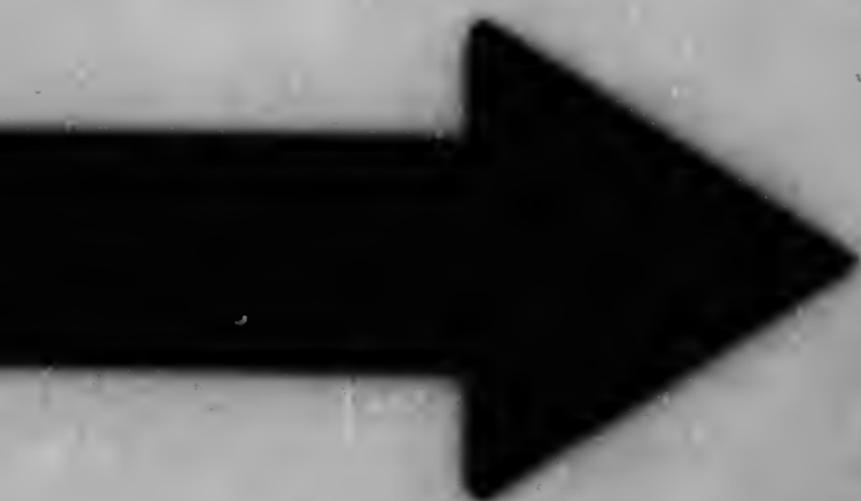
Under this example, both trains will run according to rule until the second named train is overtaken and then arrange for the rear train to pass promptly.

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

Under this example, the second named train will run with such caution as will prevent accident with the first named train.

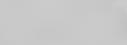
(4) *Extra 95 west run ahead of No. 3, from "B" until overtaken.*





MICROCOPY RESOLUTION TEST CHART

(ANSI and ISO TEST CHART No. 2)



APPLIED IMAGE Inc

1653 East Main Street
Rochester, New York 14609 USA
(716) 482 - 0300 - Phone
(716) 286 - 5989 - Fax

(4) *No. 1 and No. 4 wait at:*

"N" until ten (10.00) A.M.

"P" until ten thirty (10.30) A.M.

"R" until ten fifty-five (10.55) A.M., etc.

Under this example, the train (or trains) named, must not pass the designated stations before the times given.

Other trains receiving the order are required to run with respect to the time specified at the designated stations 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.

D-Form F.—For Sections.

(1).....display signals and run as.....
.....to.....

(2).....run as.....to.....

(3).....display signals.....to.....for

(6).....is withdrawn as.....at.....

(7).....instead of.....display signals and
run as.....to.....

(8).....take down signals at.....

The character of a train for which signals are displayed may be stated

Each section affected by the order must have copies, and must arrange green signals accordingly.

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

EXAMPLES.

(1) *Eng. 20 display signals and run as first No. "A" to "Z."*

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

(2) *Eng. 25 run as second No. 1 "A" to "Z."*

Under this example, engine 25 will not display green signals.

(3) *No. 1 display signals "A" to "G" for Eng. 65, or, second No. 1 display signals "B" to "E" for Eng. 99.*

Under these examples, engine 65 (or engine 99) will not display green signals.

These examples may be modified as follows:

(4) *Engs. 20, 25 and 99 run as first, second and third No. 1 "A" to "Z."*

Under this example, engine 99 will not display green signals.

For changing sections:

To add an intermediate section the following modification of example (1) will be used:

(5) *Eng. 85 display signals and run as second No. 1 "N" to "Z." Following sections change number accordingly.*

Under this example, engine 85 will display green signals and run as directed and following sections will take the next higher number.

To drop an intermediate section, the following example will be used:

(6) *Eng. 85 is withdrawn as second No. 1 at "H."*
Following sections change numbers accordingly.

Under this example, engine 85 will drop out at "H" and following sections will take the next lower number.

To substitute one engine for another on a section, the following will be used;

(7) *Eng. 18 instead of Eng. 85 display signals and run as second No. 1 "R" to "Z."*

Under this example, engine 85 will drop out at "R" and engine 18 will run as directed. Following sections need not be addressed.

If engine 85 is last section, the words "display signals and " will be omitted.

To discontinue the display of green signals, the following example will be used;

(8) *Second No. 1 take down signals at "D."*

Under this example, second No. 1 will take down green signals as directed and a following section must not proceed beyond the station named.

Form G.—Extra Trains.

(1) Eng.....run extra.....to.....

(2) Eng.....run extra.....to.....and
 return to.....

(3) Eng.....run extra leaving.....on
as follows with right over all trains;

Leave.....M.

.....M.

.....M.

Arrive.....M.

EXAMPLES.

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

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

Under (2) the extra must go to "F" before returning to "C."

(3) Eng. 77 run extra leaving "A" on Thursday, Feb. 17th, as follows, with right over all trains:

Leave "A" eleven thirty (11.30) P.M.

"C" twelve twenty-five (12.25) A.M.

"E" one forty-seven (1.47) A.M.

"F" two twenty-two (2.22) A.M.

This order may be varied by specifying the character of the extra 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 five minutes.

D-Form H.—Work Extra.

(1) Eng.....work on.....track.....M
to.....M between.....and.....

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

Whenever extra trains are run over working limits they must be given a copy of the order sent to the work extra.

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.

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

Conductors of work extras must report each evening by telegraph to the Train Despatcher, the time when their trains are laid up for the night and their working limits for the following day.

EXAMPLES.

(1) *Eng. 292 work on eastbound track (or both tracks) seven (7) A.M. to six (6) P.M., between "D" and "E"*

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

This may be modified by adding:

(3) *Not protecting against extras.*

Under this example, protection against extras is not required. The time of regular trains must be cleared.

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

(5) *Work extra 292 protects against No. 55 (orclass trains) between "D" and "E."*

Under this example, 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) as prescribed by rule. The regular train (or trains) receiving the order will run expecting to find the work extra protecting itself.

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

(6) *Work extra.....has right over all trains on.....track between.....and.....M to....M*

EXAMPLE.

(6) *Work extra 292 has right over all trains on eastbound (and westbound) track, between "D" and "E" seven (7) P.M. to twelve (12) night.*

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

Form J.—Holding Order.

Hold.....

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

These orders will be addressed to the Operator and acknowledged in the usual manner, and will be delivered to Conductors and Engineers of all trains affected.

EXAMPLES.

Hold No. 2.

Hold all (or eastbound) 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."

Form K.—Annuling a Schedule or a Section.

(1)of.....is annulled.....to.....

(2)due to leave.....is annulled.....
to.....

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

EXAMPLES.

(1) No. one (1) of Feb. 29th is annulled "A" to "Z."

(2) Second No. five (5) due to leave "A" Feb. 9th is annulled "E" to "G."

Form L.—Annuling an Order.

Order No.....is annulled.

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

EXAMPLE.

Order No. ten (10) is annulled.

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

Annulled by Order No.....

D-Form M.—Annulling Part of an Order.

That part of Order No.....reading.....
is annulled.

EXAMPLE.

*That part of Order No. ten (10), reading extra
#63 west pass No. 1 at "S," is annulled.*

D-Form P.—Superseding an Order or Part of an Order.

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

- (1)pass.....at....."instead of....."
- (2) Omitted. (Not applicable to Double Track.)
- (3)display signals for.....to.....
instead of.....

An order which has been superseded must not be re-issued under its original number and the original order must not be superseded more than once.

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

EXAMPLES.

- (1) *No. 1 pass No. 3 at "C" instead of "B."*
- (2) Omitted. (Not applicable to Double Track.)
- (3) *No. 1 display signals for Eng. 85 "A" to
"Z" instead of "G."*

D-Form R.—Providing for a Movement Against the Current of Traffic.

.....has right over opposing trains on..... track.....to.....

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.

EXAMPLE.

(1) No. 1 has right over opposing trains on No. 2 (or eastbound) track "C" to "F."

Under this order the designated train must use the track specified between the stations named, and has right over opposing trains on that track between those stations. Opposing trains must not leave the station last named until the designated train arrives.

An inferior train between the stations 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.....arrives at.....has right over opposing trains on.....track.....to.....

EXAMPLE.

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

Under (2), the train to be moved against the current of traffic must not leave the first named station until the arrival of the first named train.

D-Form S.—Providing for the Use of a Section of Double Track as Single Track.

.....track will be used as single track between
.....and.....

(Adding, if desired,.....M to.....M.

Under this order, all trains must use the track specified between the stations named, and will be governed by rules for single track.

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.

EXAMPLE.

N. 1 (or westbound) track will be used as single track between "F" and "G."

(Adding, if desired) *one (1) P.M. to three (3) P.M.*

Form T.—Line Clear Order.

Omitted. (Not applicable to Double Track.)

Form U.—Protection Against Following Trains.

(1) Opr.....hold all trains following.....
(except.....) untilM.

(2) Opr.....hold all trains following.....
(except.....) until.....arrives at.....

This order must be addressed to the Operator at "G" and to the train to be protected, and the Operator will deliver copies to all trains affected; and it gives the train to be protected, right to occupy the main track without rear flag protection, until the order is fulfilled.

EXAMPLES.

- (1) Opr. "G" hold all trains following No. 64 (or extra 301 east) (except No. 6) until ten (10) A.M.
- (2) Opr. "G" hold all trains following No. 4 (or extra 308 east) (except No. 6) until No. 4 (or extra 308 east) arrives at "F."

Form V.—Specifying the Speed of a Train.

- (1) Do not exceedmiles per hour....to..
- (2) Runmiles per hour.....to.....

EXAMPLES.

- (1) Do not exceed six (6) miles per hour "A" to "B."

This order will be used when main track is reported unsafe for usual speed.

- (2) Run forty (40) miles per hour "A" to "B."

Under (2) the train addressed will not run at the speed specified unless safe to do so.

FIXED SIGNALS.

DEFINITIONS.

SEMAPHORE.—A device consisting of a movable arm supported on a pole. The signal indications are given by the position of the arm. At night an additional indication is given by lights of prescribed colors, corresponding to the positions of the arm. The arm is displayed to the right of the pole as seen from trains approaching in the direction in which it governs.

BLADE.—That a part of a semaphore arm which, by its position, gives the signal indications.

ARM CASTING.—That part of a semaphore arm which by its position, determines the color of the light which gives the additional night indications.

DISC SIGNAL.—A device consisting of a disc so supported that it may be displayed to view or withdrawn. The indications are given by the position of the disc. At night, an additional indication is given by lights of prescribed color, corresponding to the positions of the disc.

POLE.—The upright to which a signal is directly attached.

BRACKET POST.—An arrangement of main post with crossbeam upon which two or more poles are supported.

TARGET SIGNAL.—A disc supported in such a way that it may stand either parallel with or at right angles to a track on which it governs movements.

The indications are given by the position of the disc. At night, an additional indication is given by lights of prescribed colors corresponding to the positions of the disc.

Whenever a fixed signal is used of any form other than those herein described, the rules governing its observance will be found in the time-table.

RULES.

401. Engineers must know the indication of all fixed signals before passing them. At railway crossings, drawbridges, junctions, or train order offices, they will require the Firemen to observe and communicate the indications of signals.

402. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown, must be regarded as a stop signal, and the fact reported to the proper officer.

403. Lights must be used upon all fixed signals from sunset to sunrise, and whenever the signal indications cannot be clearly seen without them.

AUTOMATIC BLOCK SIGNALS.

DEFINITIONS AND INDICATIONS.

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.

HOME BLOCK SIGNAL.—A fixed signal at the entrance of a block to control trains entering and using the block.

A semaphore arm standing horizontal or a disc displayed, indicates "stop." When in this position at night, a red light is displayed.

A semaphore arm 60 degrees from the horizontal or a disc withdrawn, indicates "proceed." When in this position at night a green light is displayed.

DISTANT BLOCK SIGNAL.—A fixed signal used in connection with a Home Block Signal to regulate the approach thereto.

A semaphore arm standing horizontal, or a disc displayed, indicates "proceed with caution, prepared to stop at the Home Signal." When in this position at night, a yellow light is displayed.

A semaphore arm 60 degrees from the horizontal or a disc withdrawn, indicates "proceed." When in this position at night a green light is displayed.

INDICATOR.—A device (usually employed in connection with a switch) used to show the position of a signal to which it refers. A miniature arm or disc

is displayed, which assumes the stop position when the home signal protecting the block is in the stop position or a train is closely approaching it. At main track crossovers, the indicators at the switch in each track relate to the signal protecting the block on the other track.

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 the block.

RULES.

502. Block signals control the use of the blocks, but do not affect the movements of trains under the time-table or train rules, nor dispense with the use or the observance of other signals whenever or wherever they may be required. The protection afforded by the automatic signals does not relieve trainmen from protecting their trains as required by Rule 99.

503. Block signals apply only to trains running in the established direction.

504. When a train finds a distant signal indicating caution, it must proceed under such control as to be able to stop before reaching the home signal. When a train finds a home signal indicating stop, it must stop before reaching the signal, and not more than 200 feet from it. It may then proceed at once with caution, prepared to find the track occupied, a car foul, a switch open, a broken rail, or other obstruction in the block.

505. When a signal is out of service, the fact will be indicated by bulletin. Trains finding a signal out

of service must, unless otherwise directed, proceed with caution to the next signal.

506. Signals and switch indicators which are in service and are evidently out of order, must be reported by wire to the Superintendent. Signals must be designated by the number on the signal pole if possible, otherwise by their location, and reports must state the time at which it was observed.

A signal or indicator indicating stop or caution, when it should indicate proceed, must be reported from the first telegraph office where the train stops. A signal indicating proceed, when it should indicate stop or caution, must be reported from the next open telegraph office.

507. Engineers 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.

508. In order to avoid holding main track signals in the stop position, cars or engines must not be allowed to stand between a fouling block and a main track switch.

509. Both switches of a crossover between main tracks must not be closed while a car or engine occupies the connection between the switches of the crossover.

510. Switches at which indicators are in service must not be opened while the indicator is in stop position, except under flag protection.

511. A switch must not be used except under protection, if the indicator fails to assume the stop position, when the switch is opened.

512. When a crossover is to be used, the switch in the track on which the train is standing must be opened first.

513. Where no switch indicators are provided, a train which is to enter a block from a siding or crossover may do so only under protection; and unless it is known that the track between the switch and the next block signal in advance is clear, it must proceed with caution to that signal.

STATION PROTECTION SIGNAL:

A signal used to protect trains occupying the main track at a station or in a yard, the normal indication of which is "proceed."

A semaphore arm standing horizontal or a disc displayed, indicates "stop." When in this position at night, a red light is displayed.

A semaphore arm 60 degrees from the horizontal or a disc withdrawn, indicates "proceed." When in this position at night a green light is displayed.

RULES.

551. A train finding a station protection signal indicating stop, must stop before passing it, and may proceed with extreme caution, sending a Flagman ahead if necessary for complete protection, and expecting to find a train moving in either direction.

552. Conductors of trains protected by such a signal must also send out a Flagman as an additional protection to the train if the condition of the weather, location of the train, with regard to grades or curves, makes it necessary for the absolute protection of the train.

FLAG STOP SIGNALS.

561. When flag-stop signals are of the semaphore type, the arm in a horizontal position, or a green and white light displayed, indicates that trains in either direction, scheduled to stop on signal, will make station stop.

INTERLOCKING SIGNALS.

DEFINITIONS AND INDICATIONS.

INTERLOCKING.—An arrangement of switch, lock and signal appliances so inter-connected 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.

HOME SIGNAL.—A fixed signal governing movements over a certain route or routes, and located at the point where trains are required to stop when the route is not clear.

A semaphore arm standing horizontal indicates "stop." When in this position at night a red light is displayed.

A semaphore arm 60 degrees from the horizontal indicates "proceed." When in this position at night a green light is displayed.

DISTANT SIGNAL.—A fixed signal used in connection with a home signal to regulate the approach thereto.

A semaphore arm standing horizontal indicates "Proceed with caution, prepared to stop at the home signal." When in this position at night, a yellow light is displayed.

A semaphore arm 60 degrees from the horizontal indicates "proceed." When in this position at night, a green light is displayed.

DWARF SIGNAL.—A low, small signal of semaphore type, used as a home signal, governing one or more diverging or unusual routes.

POT SIGNAL.—A small revolving signal, used to indicate the position of a switch or as a substitute for a dwarf signal.

ROUTE.—The course of way taken by a train in passing from one point to another, especially a customary or predetermined course, or any one of several possible combinations of turn-outs or crossovers by which a train may travel through an interlocking plant.

RULES.

602. Interlocking signals, unless otherwise provided, do not affect the movements of trains under the time-table or train rules; nor dispense with the use or the observance of other signals whenever and wherever they may be required.

Signalmen.

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

612. Levers, or other operating appliances, must be used only by those charged with the duty.

613. 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.

Signals must not be set for any route when cars or engines are standing between the derails of a conflicting route.

614. When the route is clear the signals must be cleared sufficiently in advance of approaching trains to avoid delay.

Levers must be tested before each regular train is due, to ascertain if the plant is in working order.

615. A signal must be restored so as to give the normal indication as soon as the train or engine for which it was cleared, has passed it.

The changing of any signal permits only one train or engine to pass that signal. The signal must be changed to "stop" after the passage of each train, and a following train must not proceed until the signal is again changed to "proceed."

616. If necessary to change any route for which the signals have been cleared for an approaching train or engine, switches and details 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.

617. A switch or facing point lock must not be moved when any portion of a train or an engine is standing on, or closely approaching, the switch or detector bar.

618. 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 give the normal indication and the connections examined.

619. During cold weather, the 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.

620. 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.

621. Signalmen must observe, as far as practicable, whether the indication of the signals corresponds with the position of the levers.

622. Signalmen must not make nor permit any unauthorized alterations or additions to the plant.

623. 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.

624. If necessary to disconnect a switch from the interlocking apparatus, the switch must be securely fastened and protected.

625. During storms or drifting snow, special care must be used in operating switches. 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.

626. If any electric or mechanical appliance fails to work properly, the Superintendent must be notified and only duly authorized persons permitted to make repairs. All glasses in signals must be kept clean and any cracked or broken, promptly renewed.

627. 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 and secured for such movements.

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

629. If a Signaller 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 Engineer.

630. Signalmen must have the proper appliances for hand signaling ready for immediate use. When hand signals are necessary for switch movements, they must be given only after the switches have been properly set and fastened, and from such a point and in such a way that there can be no misunderstanding on the part of Engineers or Trainmen as to the signals, or as to the train or engine for which they are given.

631. If necessary to discontinue the use of any fixed signal, hand signals must be used and Superintendent notified.

Whenever a home signal cannot be cleared, trains will be forwarded on Clearance Form "D."

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

633. Lights in interlocking stations must be so placed that they cannot be seen from approaching train.

NOTE TO RULE 630.—Hand signaling includes the use of lamp flag, torpedo and fusee signals.

634. Lights must be used upon all fixed signals from sunset to sunrise, and whenever the signal indications cannot be clearly seen without them.

635. If a train or engine overruns or disregards a stop signal, the fact, with the number of the train or engine, must be at once reported by telegraph to the Superintendent.

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

636. Only those whose duties require it shall be permitted in the interlocking station.

When a Signalman is relieved, he must make a transfer on the prescribed form and obtain thereon the signature of the Signalman relieving him.

Engineers and Trainmen.

661. Trains or engines may be run to, but must not be run beyond, a signal indicating stop.

Dwarf signals (and lower arm of two arm high signals) frequently govern more than one route. When the right to proceed is given by such signals, Engineers must observe carefully which route is set.

When a distant signal indicates caution, a train passing must be under control and prepared to stop before reaching the home signal.

662. If a clear signal, after being accepted, is changed to a stop signal before it is reached, the stop must be made at once. Such occurrence must be reported to the Superintendent.

663. Engineers and Trainmen must not accept clear hand signals as against fixed signals until they are fully informed of the situation and know that

they are protected. Where fixed signals are in operation, Trainmen must not give clear hand signals against them.

Hand Signals may be accepted for switching movements if given in such a way that there can be no misunderstanding as to the train or engine for which they are intended. Whenever the home signal cannot be cleared, trains will be forwarded on Clearance Form "D."

664. The Engineer of a train which has parted must sound the whistle signal for "train-parted" on approaching an interlocking station.

665. An Engineer receiving a train-parted signal from a Signalman must answer by the whistle signal for "train-parted."

666. When the train has been re-coupled, the Signalman must be notified.

667. Grates must not be shaken, ash pans cleaned, nor sand used over any part of an interlocking plant.

668. Conductors or men in charge of yard engines must report to the Superintendent any unusual detention at interlocking plants.

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

670. Running switch movements must never be made within an interlocking plant.

671. Engineers should, whenever possible, observe the position of all semaphore arms by night and endeavor to see that they correspond with the indications given by the lights.

672. When an interlocking plant is out of service temporarily, trains must be brought to a stop before reaching the home signal, and will proceed only when the switches and derails are known to be properly set, and upon receiving hand signal from the Signaller on the ground that the way is clear.

673. When a train is run against the current of traffic, it must stop before crossing any railway crossing or drawbridge, designated in the time-table, even though interlocking devices are used; and not proceed until the way is known to be clear.

(Print on Green Paper)

Form A

CANADIAN PACIFIC RAILWAY COMPANY.

CLEARANCE.

B Station 9.05 A. M. June 5 19 07
 Train No. 12 (Hour)

I have orders (5, 7 and 9) (Nil) for your train.

The next train ahead is Extra 751 It left this station at
 8.35 a. m., and arrived at C at 8.55 a. m. Signal is
 displayed for (Extra 576) (Block) and does not now affect you.

John Jones

Operator.

This does not affect any train orders you may have received.
 Conductors and Engineers must each have a copy, and see that their train is correctly designated
 in the above form.

NOTE.—The numbers of orders for the train must be filled in in figures. When there are no orders the
 word "Nil" must be written in. If the next train ahead has not reached the next telegraph office, the words
 "not yet" must be written in the blank space provided for the time of arrival at the next telegraph office.
 Where the Automatic Block Signals are to be filled in as indicated by small type. Operators must keep the lowest copy.
 to the train ahead may be omitted. Where the Automatic Block Signals are in service instead of Station Block the information relative

Form B
CANADIAN PACIFIC RAILWAY COMPANY.
TERMINAL CLEARANCE.

Dover Station 9.15 A. M. March 25 19 07
(Hour)

I have order s No. s
Train Order Signal displayed is for Extra 452 for No. 9
and does not now affect you.
All trains having right to track over you, and all trains of the same class due
to arrive and leave, have arrived and left, except No. 6
The next train ahead is Extra 691 It left this station at 8.35 A. M.
and arrived at Paris at 8.55 A. M.

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

..... W. A. Jones Operator.

Every person addressed (see Rule 204) must have a copy and see that the train is correctly designated.
This Clearance does not relieve the Conductor from personally checking Train Register and know-
ing that all trains which have right to track over his train have arrived or left.

NOTE.—The numbers of orders for the train must be filled in in figures. When there are no orders
the word "Nil" must be written in. If the next train ahead has not reached the next telegraph office,
the words "not yet" must be written in the blank space provided for the time of arrival at the next
telegraph office.

If the train order signal is not displayed at stop, the word "Nil" must be written in.
If all trains having right to track, and all trains of the same class due to arrive or leave, have arrived
or left respectively, the word "Nil" must be written in.

The other blank spaces are to be filled in as indicated by small type. Operators must keep the low-
est copy.
Green paper will be used for terminal clearances.

Form C

CANADIAN PACIFIC RAILWAY COMPANY.

CAUTION CARD NO. 9

Station D; 9.15 A. M. April 1 19 06
 (Hour)
 Conductor and Engineer No. 26 on Eastbound Track.
 No. Further orders for your train.

Proceed with caution expecting to find track obstructed.

..... John Jones
 **Signalman.**

This card does not interfere with or countermand any orders you may have received. It is authority to pass the signal and proceed prepared to stop within the range of vision. Engineer and Conductor must each have a copy and see that it is properly filled out and signed and that their train is correctly designated.

Form D

CANADIAN PACIFIC RAILWAY COMPANY. CLEARANCE CARD.

Station..... C 9.05 a.m. June 3 , 19 07
(Hour)

Train No. 12

Signal is inoperative. Proceed.

..... John Jones

..... Signalman.

This does not affect any train order you have received.

Uniform Train Order Blank for "19" Order.

Form
19

Form
19

CANADIAN PACIFIC RAILWAY COMPANY.

Train Order No. 10

..... March 11 19 .. 07

To..... | At.....

x..... Initials Opr. ; 1.45 A. M.

.....
Conductor and Engineer must each have a copy of this order.

Made..... Complete..... time 1.16 P. M. Black..... Opr.

SPECIFICATIONS FOR TRAIN ORDER FORM AND BOOKS FOR OPERATORS FOR "19" ORDERS

Form as here shown. Blank space for order (4) inches with lines. The mode of filling the blanks is indicated by small type.

Form ($6\frac{3}{4} \times 6$) inches beyond perforated line.
Book ($6\frac{3}{4} \times 7\frac{1}{2}$) inches.

300 leaves. Glued at top or side. Manilla cover on face and stiff back.

Paper opaque, pink, sized, and of such thickness as to admit of making (9) good manifold copies with stylus and double carbons.

To be used with double carbon paper ($6\frac{3}{4} \times 7$) inches, and a stiff tin, same size, corners rounded.

SPECIFICATIONS FOR TRAIN ORDER FORM AND BOOKS FOR OPERATORS FOR "31" ORDERS

Form as here shown. Blank space for order (4) inches with lines. The mode of filling the blanks is indicated by small type.

Form ($6\frac{3}{4} \times 9\frac{1}{4}$) inches beyond perforated line.
Book ($6\frac{3}{4} \times 10\frac{1}{2}$) inches.

300 leaves. Glued at top or side. Manilla cover on face and stiff back.

Paper opaque, white, sized, and of such thickness as to admit of making (9) good manifold copies with stylus and double carbons.

To be used with double carbon paper ($6\frac{3}{4} \times 9$) inches, and a stiff tin, same size, corners rounded.



