



"Minuteman Service"

BOSTON ^{A_ND} MAINE CORPORATION

Robert W. Meserve and Benjamin H. Lacy, Trustees

INTERPRETATIONS AND EXPLANATIONS OF OPERATING RULES

For Employees Only



INTRODUCTION

The questions and answers and interpretations contained in this manual are based on the Operating Rules of the Boston and Maine Corporation which took effect March 1, 1980 and supersedes all previous rules, instructions and interpretations inconsistent therewith.

One or more questions and answers are given for each Operating Rule selected, but interpretations (comments) are given only for rules that experience has shown to be necessary.

If an employee needs additional interpretation of selected rules, such employee must apply to the Rules Examiner, or other proper officer, for such interpretation. This is a vital requirement because our railroad cannot be operated safely unless each employee understands and obeys the rules. Any employee who does not know and understand the rules, or who does know and understands, but fails to obey the rules, may cause an accident, injury or death to another employee, and is a hazard to those who are obeying the rules.

It should be understood that advancement in the service does not depend entirely upon seniority. Ability, character, reputation and work record comprise the yardstick by which one is measured. Knowledge of the rules is of the greatest importance and one's work record is kept clear by obedience to the rules. An employee cannot obey the rules, nor can he pass the required examinations, unless he knows the rules. Unless he performs on a day-to-day basis in the manner provided for by the rules, he will not demonstrate ability for greater responsibility.

INTRODUCTION

The purpose of this report is to provide information concerning the results of the study on the Learning Styles of the British Army. The study was conducted in order to determine the learning styles of British Army personnel and to identify the factors that influence these styles.

The study was conducted using a questionnaire method. The questionnaire was distributed to a sample of British Army personnel and the results were analyzed using statistical methods.

The results of the study indicate that British Army personnel have a variety of learning styles. The most common learning style is the visual style, followed by the auditory style. The study also found that there are significant differences in learning styles between different ranks and branches of the Army.

The implications of these findings are that training and development programs should be designed to accommodate the different learning styles of British Army personnel. This will ensure that all personnel are able to learn effectively and that training resources are used efficiently.

DEFINITIONS

Q. What is an absolute block?

A. A block in which no train is permitted to follow another train within the limits.

Q. What are absolute block limits?

A. A length of track of defined limits designated by interlockings, station signs or mile posts. When non-interlocking stations are used as defined limits they will be designated by the use of train order Form S or Form U.

COMMENT: An absolute block will be used:

1. when the marker fails during the time period illumination is required.
2. when relief from flag protection is required.
3. to protect a track car.

The limits of an absolute block will normally extend between two interlockings. When absolute block limits cannot be established with the use of two interlockings then station signs or mile posts will be used. When station signs or mile posts are used they must be designated by train order Form S.

Q. What is an approach signal?

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

Q. What is an automatic block signal system (ABS)?

A. A series of consecutive blocks governed by block signals activated by train or engine or by certain conditions affecting the use of a block.

Q. When are interlocking signals made a part of the automatic block signal system?

A. Interlocking signals coming within the block signal limits may be made part of the automatic block signal system and when so arranged they will be semi-automatic.

Q. What is a block?

A. A length of track of defined limits, the use of which by trains and engines is governed by block signals.

Q. What is a blocking device?

A. A device that prevents the operation of a switch or signal lever of an interlocking machine.

Q. What is a block signal?

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

Q. What is a block station?

A. A place from which block signals are operated.

COMMENT: Generally, a block is that portion of track between two block signals or a block signal and a sign denoting end of signal territory. A series of such blocks in succession with each block governed by an automatic block signal constitutes an automatic block signal system. These signals are actuated automatically by track circuits and are spaced to display aspects so as to provide sufficient breaking distance for following and/or opposing movements. An ABS system does not have a control operator as all signals are actuated automatically by an interruption of the track circuits, such as a train or engine entering the block, the opening of a switch, derail in open position, broken rail, etc.

When interlocking signals are included within the automatic block signal system, they can be controlled to display a stop or a permissive indication. Automatic signals will be distinguished from non-automatic signals by the display of a number plate.

Q. What is a centralized traffic control system (CTC)?

A. A term applied to a system of railroad operation by means of which the movement of trains and engines over routes and through blocks on a designated section of track or tracks is directed by signals controlled from a designated point without requiring the use of train orders and without superiority of trains.

Q. What is a control station?

A. A place from which an interlocking is operated.

Q. What is current of traffic?

A. The movement of trains on a main track in one direction specified by the rules.

Q. What is a directional track?

A. A track located within the limits of a centralized traffic control system, the direction of which is shown in the special instructions of the timetable.

Q. What is a neutral track?

A. A track in centralized traffic control system territory (CTC) which is signaled for movement in either direction.

COMMENT: A CTC system is also a series of consecutive blocks but differs in several respects from an ABS system. Some of the signals in a CTC system are automatic, while others (including interlocking signals) are controlled from a control station. Within CTC territory there are two kinds of tracks—neutral track and directional track. A neutral track is a track which is signaled for movements both ways on the track by signal indication. A directional track is one which is signaled one way. The direction of a directional track will be designated in the timetable of special instructions. Movements on a directional track against the established direction must be made under the provisions of Rule 266.

Locations of control stations are listed in the station pages of the timetable.

Q. What is an interlocking?

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

Q. What are interlocking signals?

A. The fixed signals of an interlocking.

Q. What are interlocking limits?

A. The track between the extreme opposing home signals of an interlocking.

Q. What is an operator?

A. At stations, the employee who handles train orders at interlocking stations; the operator of an interlocking may be a towerman, train director or train dispatcher.

COMMENT: An interlocking is not a piece of track. It is an arrangement of signals and signal appliances that govern train or engine movements within interlocking limits. Such limits are identified as the tracks between the extreme outer opposing home signals. A manual interlocking is one where the signals and switches are actuated by a control operator either electrically or by means of levers and pipe lines.

Q. What is a main track?

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

COMMENT: The main track is not a yard track, nor part of a yard. To use a main track, trains must be authorized by timetable or by train order, and sometimes both; or in territory such as CTC, authority to use the main track is conferred by block signals. Where two main tracks are in service trains must keep to the right unless otherwise provided. With three or more main tracks in service, they shall be designated by numbers and their use by special instructions.

Q. What is current of traffic?

- A. The movement of trains on a main track in one direction specified by the rules.

Q. What are two or more tracks?

- A. Two or more main tracks upon any of which the current of traffic may be in either specified direction. Two main tracks may be referred to as double track.

Q. What is a single track?

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

COMMENT: A single track may be found within ABS territory or unsignaled territory.

Q. What is a siding?

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

Q. What is a running track?

A. A track designated in the timetable upon which movements may be made subject to prescribed signals and rules, or special instructions.

COMMENT: The location and capacity of the siding are shown on the schedule pages of timetable. At meeting or passing points, this is the track a train will use to clear the main track. On a running track and/or siding, unless designated as neutral track, movements will be made at yard speed as prescribed by Rule 105.

Q. What is a yard?

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

COMMENT: As indicated by the definition, a yard consists of tracks other than main tracks. While the main track is used for the operation of trains through yards and between stations, the purpose of a yard is to make up trains, store cars and other purposes. Since a yard is not a main track, movements do not require authorization from a timetable schedule or train order, but movements in yards are subject to prescribed signals, special instructions and certain rules. One such rule is Rule 105 which provides that movement on any track except the main track must be at yard speed. When using any track other than a main track, an engineman must be able to stop his train or engine within one-half the range of vision and can not rely on flagman for advance warning.

Q. What is an engine?

A. A unit propelled by any form of energy or a combination of such units operated from a single control used in train or yard service.

COMMENT: As the term engine is used in the rules, it can be a single unit or may be two or more units that are operated from a single control. When the control car of a passenger train is on the headend of the train that control car will be considered the engine.

Q. What is a train?

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

Q. What is a regular train?

A. A train authorized by timetable schedule.

Q. What is an extra train?

A. A train not authorized by timetable schedule.

COMMENT: An engine alone, displaying markers, is a train. An engine and cars with caboose is not a train, unless markers are displayed. A train is not complete without both the engine and markers. When the authority to proceed depends upon the proper identification of another train, the satisfactory explanation of the basis of either the engine or markers must be obtained before the other trains may proceed.

A regular train is a train authorized by a timetable schedule. A train designated by a Transportation Notice will be operated as a passenger extra. Trains designated by a Bulletin Notice will be operated as an extra. All extra trains must be operated as prescribed by rules S-97 and D-97. A work extra is a train authorized to work between two designated points.

It may or may not be assigned to the Engineering Department to perform Engineering work, but may be a local freight with a work order or under the provisions of Rule D-97.

Q. What is a superior train?

A. A train having precedence over another train.

Q. What is a train of superior right?

A. A train given precedence by train order.

Q. What is a train of superior class?

A. A train given precedence by timetable.

Q. What is a train of superior direction?

A. A train given precedence in the direction specified by timetable as between opposing trains of the same class.

COMMENT: Precedence is the priority given for one train to move against or ahead of another train. A train may be established as superior to another train in three ways; (1) by right; (2) by class; (3) by direction. "Right" is conferred only by train

orders; without a train order there is no "Right." "Class" and "Direction" are conferred by timetable.

Q. What is a train register?

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

Q. What is a register station?

A. A station in which a train register is located.

COMMENT: Train registers are in use for train and engine crew to determine whether overdue trains, which are superior, have arrived or left. Be sure that the information called for by the train register is properly recorded by the conductor of each train. If this is not done, the information that is recorded may not be complete enough for it to be accepted by the conductor of an inferior train. Regular trains must be registered on the page of the book assigned to the day on which the train is due to leave its initial station on any division. Examples: Number 732 is scheduled to leave A, its initial station on the division, at 2355 hours January 2 but does not depart from A until 0100 January 3. The conductor would register on the page for January 2 and show in the column caption DATE that the train actually departed on January 3 at 0100 hours.

Extra trains are to be registered on the page assigned to the day the extra leaves its starting place. Example: an extra is called to leave A at 2300 hours on January 2 but does not depart until 0100 hours January 3. The conductor would register the train's departure on the page dated January 3.

Work extras must register as of the date such work extra actually arrives or leaves the register station.

Q. What is a timetable?

A. The authority for the movement of regular trains subject to the rules. It contains classified schedules with special instructions relating to the movements of trains.

Q. What is a schedule?

A. That part of a timetable which prescribes class, direction, number and movement for a regular train.

COMMENT: The authority for the movement of regular trains is provided by the timetable and is found in the schedule pages. As far as the rules are concerned, it is not necessary for a train to have running orders to assume a schedule at an initial station. Verbal permission by the train dispatcher is the authority to assume a schedule of another train.

Timetables are changed as necessary to provide for changed conditions and each timetable, from the moment it takes effect, supersedes the preceding timetable. The time and date a timetable becomes effective are shown on the inside cover with the timetable number.

In addition to schedules, the timetable also contains special instructions which in reality are an extension of the Operating Rules as they apply to specific conditions. The timetable also contains instructions required by the Operating Rules; for example, Rule S-72 requires the designation of a superior direction on single track as between opposing regular trains of the same class. Rule 1 requires designation of the location of standard clocks; other rules require designation of limits of ABS and CTC districts, maximum speeds and lowered speed restrictions, etc.

The station pages of the timetable show the location and capacity of sidings; the distance between stations; mile posts, etc. The schedules in the timetables provide for the operation of regular trains. Each schedule has; 1) a number, which is the identity of the train; 2) a class, either first, second or third, Rules 72 and S-72 outline which class is superior; 3) a direction, usually even numbers for inward trains and odd numbers for outward trains; 4) a movement, which includes the time (S) shown at each station, and the "day of leaving." The "day of leaving" prescribes the days of the week of which the schedule is in effect. Unless otherwise provided, trains that run Monday thru Friday will be shown on the yellow schedule pages, trains that run on Saturday will be shown on the blue schedule pages, trains that run on Sundays and Holidays designated in the timetable will be shown on the pink schedule pages unless otherwise provided. Trains that run daily will be shown on all three of the color pages.

COMMENT: The following questions are based on the information provided in the passage. Each question has a correct answer, but the correct answer is not necessarily the only one that is correct. The correct answer is the one that is most likely to be correct.

1. How are most fish kept in a tank?

A. By using a special kind of water.

B. By using a special kind of food.

C. By using a special kind of light.

D. By using a special kind of air.

STANDARD TIME

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OPERATING RULES

- Q. How are rules that apply to both single and double track identified?
- A. Rules without a prefix apply to both single and double track.
- Q. How are rules that apply only to single track identified?
- A. By prefix "S".
- Q. How are rules that apply only to double track identified?
- A. By prefix "D".

STANDARD TIME**Rule 2.**

- Q. Name the class of employees who must use watches that have been examined, and certified to, by a designated inspector?
- A. Employees designated in timetable general special instructions.
- Q. Must a prescribed watch certificate be on file with the railroad?
- A. Yes.
- Q. When must watches of designated employees be compared with a standard clock?
- A. Before commencing each day's work.
- Q. How will the location of standard clocks be designated?
- A. By timetable.

Rule 2.

- Q. How must conductors, engineers, hostlers, and engine foremen, whose duties prevent access to a standard clock, obtain time or compare and regulate their watches?
- A. They must obtain time from train dispatcher, or compare and regulate their watches daily with those of conductors and engineers who have compared time with a standard clock.

- Q. After obtaining standard time, when must conductors, engineers and other crew members compare time?
- A. Before commencing each day's work.

COMMENT: The railroad is operated on a "time" basis, even in block signal territory; therefore, correct time is vital for safe operation. Employees required to use certified watches must have them in their possession while on duty and comply with instructions with respect to inspection and certification.

TIMETABLES

Rule 4.

- Q. When does each timetable supersede the preceding timetable?
- A. From the moment it takes effect.
- Q. Who must have a copy of the current timetable with them while on duty?
- A. Employees whose duties are in any way affected by it.
- Q. What happens to a train authorized by the preceding timetable, which is on the road, when a new timetable takes effect?
- A. It loses its schedule, unless the schedule of the preceding timetable corresponds in number, class, day of leaving, direction, and initial and terminal stations with a schedule of the new timetable, a train authorized by the preceding timetable will retain its train orders and assume the schedule of the corresponding number of the new timetable.
- Q. How can such train proceed after losing its schedule?
- A. Only as authorized by train order, or as authorized by Rule D-97.
- Q. After the effective time and date of new timetable, what is required of crew members before their train or engine may occupy the main track?
- A. Each crew member must have a copy of new timetable in his possession.

COMMENT: The timetable is one of the principal tools in railroad operations. Employees concerned must secure a copy of the new timetable sufficiently in advance of its effective time and date to determine how it may affect the movement of trains, not only because of possible changes in schedules but for possible changes in special instructions.

Rule 5.

Q. How many times may be given for a train at any station?

A. Not more than two.

Q. Where one time is given, what is it, unless otherwise indicated?

A. The leaving time.

Q. Where two times are given, what are they?

A. The arriving and the leaving time.

Q. On single track, where does the time apply?

A. Unless otherwise provided, the time applies at the switch (siding) where the opposing train clears. Where there is no siding, the time applies at the station.

Q. On double track, where does the time apply?

A. Unless otherwise provided, the time applies at the station.

Q. At the junction of two or more tracks, where does the time apply?

A. The time applies at the junction.

Q. How are schedule meeting or passing stations indicated in the timetable?

A. By figures in full-faced type with the numbers of the trains to be met or passed in adjoining figures.

Rule 5a.

Q. When will time at meeting or passing stations, located at the end of two or more tracks, at junctions and at terminal stations, be shown in schedule in full-faced type?

A. When the difference in the times of trains is five minutes or less.

COMMENT: On single track, the time, as indicated by timetable schedule, or by train order, applies at the siding switch where the inferior opposing train enters the siding, unless train order or special instructions specify differently. If there is no siding (see Definition) shown in the timetable at the location where time is shown, the time will then apply at the station sign even if there are other tracks at such location.

An inferior train must clear the time of an opposing superior train as required by Rules S-87 and S-89. An inferior train must clear a first class train, or train of superior right, in the same direction as required by Rule 86.

SIGNALS

Rule 7.

- Q. What must employees do whose duties may require them to give signals?
- A. Must provide themselves with the proper appliances, keep them in good order and ready for immediate use.

Rule 8.

- Q. When must flags of the prescribed color be used?
- A. By day.
- Q. When must lights of the prescribed color and type be used?
- A. By night.

Rule 9.

- Q. When must day signals be displayed?
- A. From sunrise to sunset.
- Q. When must night signals be used in addition to day signals?
- A. When day signals cannot be plainly seen.
- Q. When must night signals be displayed?
- A. From sunset to sunrise.

Rule 11.

Q. In block signal territory, what type of fusees will be used?

A. Fusees burning red five minutes.

Q. What action must a train or engine take when finding a fusee burning red on or near the track in ABS territory?

A. Stop, and may then proceed at restricted speed for not less than one mile.

Q. Are trains operating within the limits of a grade required to stop at a fusee burning red?

A. No.

Q. In territory where no form of block signals are in use, what type of fusees will be used?

A. Fusees burning five minutes and yellow five minutes or fusees burning red ten minutes.

Q. What action must a train or engine take when finding a fusee burning red or yellow on or near the track in non-signal territory?

A. Stop, and may then proceed at restricted speed for 10 minutes.

Q. Where must lighted fusees not be dropped?

A. On track bridges, trestles or public crossings at grade, except in some extreme emergency.

Q. May trains containing placarded inflammable tank cars be operated over burning fusees?

A. No.

Q. What must be done with such fusees?

A. Must be moved to the side of track.

Q. Who will advise engineman of the presence of such cars in trains?

A. The conductor.

COMMENT: A clear block or interlocking signal or proceed indication of other signals does not supersede the requirement for a train or engine to stop for a burning fusee. Even if signals convey a proceed indication, the burning fusee may

have been placed there to protect a track car, other obstruction, or washout that does not actuate the signal.

A train or engine is expected to stop short of a burning fusee if there is ample braking distance using a service application of the train brake. If there is insufficient distance to stop short of the fusee using a service application of the train brake, but the way ahead is seen to be clear, then fusee may be overrun rather than apply train brake in emergency, stopping as quickly as practical. If, however, a burning fusee is encountered and the view ahead is obstructed (curvature of track, hill, fog, etc.) then train or engine must be stopped as quickly as possible, applying train brake in emergency if necessary. In this connection, flagmen using fusees shall, where they have a choice, place them at points where the approaching train or engine will have the most advantage to stop short without emergency train brake application, reducing the possibility of damage to train. However, fusees must be placed anywhere, at any time, when there is the least doubt of safety. Trains or engines moving at RESTRICTED SPEED, or at YARD SPEED, are expected to stop short of a burning fusee.

A burning fusee, attended or unattended, must be acknowledged by two short sounds of the whistle as per 14g.

HAND, FLAG AND LANTERN SIGNALS

Rule 12.

What is the indication of hand, flag and lantern signals when used in the following manner:

- (a) Q. Swung horizontally at right angle to track?
A. Stop.
- (b) Q. Slow horizontal movement held at arm's length at right angle to track?
A. Reduce speed.
- (c) Q. Raised and lowered vertically?
A. Proceed.
- (d) Q. Swung in a circle at right angle to track?
A. Back.

- (f) Q. Swung horizontally above the head?
A. Apply air brakes.
- (g) Q. Held at arm's length above head?
A. Release air brakes.
- (h) Q. Any object waved violently by anyone on or near track?
A. Stop.

Rule 12i.

Q. Must hand, flag and lantern signals be used for the purposes described in Rules 12(a) through 12(g)?

A. Yes.

Q. May other hand, flag or lantern signals be used for other purposes?

A. Yes, providing such signals are understood by all members of the crew.

Q. Must employees in train, engine and yard service and others concerned keep a constant lookout for signals?

A. Yes.

Q. How must those giving signals locate themselves?

A. So as to be plainly seen.

Q. How must signals be given?

A. So as to be clearly understood.

Q. What must employees do to avoid acting on signals not intended for them?

A. The utmost care must be exercised to avoid taking signals that may be intended for other trains or engines.

Q. When backing or shoving an engine or cars, how must the disappearance from view of employee giving signals or light by which signals are given, be construed?

A. As a stop signal, except when employee on leading car has control of air brakes, or movement is being controlled by radio communication, or way is known to be clear.

Q. What are the restrictions in the use of rear view mirror?

A. It must not be used for observing hand signals.

COMMENT: Hand signals are simply a means of conveying information from one person to another when it is not practical to convey such information verbally. Instructions given verbally can easily be misunderstood if the person giving them does not speak plainly. There is an even greater possibility of hand signals not being understood unless they are given in such a manner and from a location that there can be no doubt for whom they are intended and the information they convey.

When radio communication is used instead of hand signals, instructions to "come ahead" or "shove until I tell you to stop" must never be given. The distance must be definite and given in car lengths, directly to the engineer. If radio communication is lost, the movement must be stopped in one-half the remaining distance. The engineer is responsible to require a trainman to give specific car lengths when radio is used to direct the movement and, until this is done, movement must not be made. When it is done, the movement must never exceed the car lengths specified. In giving car lengths as herein provided, trainmen must allow a tolerance to permit safe handling and not instruct the engineer to shove the entire distance required, but instead must stay in communication by radio and "talk" the engineer to a safe stop or coupling.

ENGINE WHISTLE SIGNALS

Rule 14.

COMMENT: Like hand signals, whistle signals are another means of conveying information when it is not practical to give verbal instructions. To prevent misunderstanding, engineers must sound whistle signals distinctly and with the intensity and duration proportionate to the distance signal is to be conveyed. The proper use of the whistle is conducive to a safer operation. Whistle signal 14(1), a warning signal approaching public grade crossings, must be prolonged until the crossing is OCCUPIED by engine or cars.

Rule 15.

- Q. What is the explosion of two torpedoes a signal to do?
- A. Proceed at RESTRICTED SPEED (see Definition) for not less than one mile.
- Q. What does the explosion of one torpedo indicate?
- A. The same as two, but the use of two is required.
- Q. How far apart must torpedoes be placed on the rail?
- A. Approximately 100 feet apart.
- Q. Where must torpedoes not be placed?
- A. Near public or private crossings, stations or other buildings, nor where persons may be injured by their explosion.

COMMENTS: Torpedoes must be acknowledged as provided by Rule 14(g).

When practical, torpedoes must be placed well in advance of where view is restricted in order to allow trains and engines to get down to RESTRICTED SPEED in advance of the restricted view. They must be placed at any location, however, when safety requires.

Rule 17.

- Q. Where and when must the headlight be displayed by trains?
- A. To the front of trains by day and night.
- Q. When must a train's headlight be extinguished?
- A. When a train turns out to meet another train and has stopped clear of the main track, or is standing to meet a train at the end of two or more tracks or at a junction.

COMMENT: When necessary to clear the main track, the engineer must know positively that his entire train is in the clear before he extinguishes the headlight. An extinguished headlight on the train in siding does not relieve a train on main track, that holds a Form S-A train order ("Positive Meet") with

the train in the siding, from stopping clear of switch used by train to be met, unless train to be met is clear of main track and switch properly lined as required by Rule S-89.

Q. When an engine is running backward, where must the headlight or a white light be displayed?

A. In the direction of movement.

Q. When must the headlight be dimmed?

A. Under the following conditions:

- (1) When safety permits it must be dimmed (except when approaching or passing over crossings at grade):
- (2) While passing through yards where yard engines are employed.
- (3) Approaching stations at which stops are to be made or where trains are receiving or discharging traffic.
- (4) Approaching train order signals, junctions, terminals, meeting points, or while standing on main tracks, or when closing up behind trains.
- (5) On two or more tracks, when approaching trains in opposite direction.
- (6) When an engine is running backward by night, without cars, or the front of a train pulling cars, a white light must be displayed on the leading end in the absence of a headlight.

COMMENT: The dimming of the headlight is not for signaling purposes, but is to prevent interference with vision. Neither is blinking the headlight an authorized signal and must not be used as such—a faulty electrical connection could cause the headlight to blink.

Rule 19.

Q. What signals will be displayed to the rear of every train, as markers, to indicate the rear of the train?

- A. (1) One or more lights displaying Red or Amber to the rear.
- (2) If a train is not equipped to display markers, a red signal will be displayed to indicate the rear of the train.

- (3) The marker must be illuminated from one hour before sunset to one hour after sunrise and during all other hours when weather conditions so restrict visibility that the end silhouette of a standard box car cannot be seen from one-half mile on tangent track. If the marker fails during the periods illumination is required the train may continue only under absolute block protection to the next forward location where the marker can be repaired or replaced.
- (4) On single track when a train takes siding to clear the main track, the marker must be extinguished and a white light displayed in its place after the switches are properly lined.

COMMENT: Markers are necessary at the rear of a train to show that all of the train has arrived. When a train is restricted for another train, such as a meeting or waiting point or right of track, etc., markers must arrive or be accounted for, or a train has not been met.

Rule 23.

- Q. What does one light displayed, where in Rules 19 and 21 two are prescribed, indicate?
- A. Will indicate the same as two; but the proper display of all train signals is required.

Rule 25.

- Q. What kind of communication system must be used to connect each car of a passenger train with the engine?
- A. A communicating signal appliance when engine and cars are so equipped. (See Rule 16)

COMMENT: When such appliance is inoperative, radio communication or hand signals will be used. Engineer must be on lookout for such signals where circumstances require.

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BLUE SIGNAL PROTECTION OF WORKMEN**Rule 26.**

- Q. What is an engine servicing track area?
- A. One or more designated tracks within an area, in which the testing, servicing, repair, inspection, or rebuilding of the locomotives is under the exclusive control of the Mechanical Department personnel.
- Q. What is the car shop repair track area?
- A. One or more designated tracks within an area, in which the testing, servicing, repair, inspection or rebuilding of railroad equipment is under exclusive control of the Mechanical Department personnel.
- Q. What is an effective locking device?
- A. A lock which is vandal resistant, tamper resistant, and capable of being unlocked only by the class, craft or group of employees for whom the protection is being provided.
- Q. What is a switch providing access?
- A. A switch which if traversed by engines or cars could permit them to couple to the equipment being protected.
- Q. What is the purpose of a blue signal?
- A. The blue signal displayed, in accordance with Rule 26, signifies that employees are on, under, or between engines or cars.
- Q. When so displayed, what does it signify?
- A. That such equipment must not be coupled too, and may be moved only within an engine servicing track area or car shop track area as prescribed by Rules 26b and 26c.
- Q. When so required, who must display blue signal?
- A. They must be displayed by each craft or crew or workmen prior to foiling equipment.
- Q. Who may remove them?
- A. They may only be removed by the same craft or group that displayed them.

Q. May engines or cars be placed on the same track so as to reduce or block the view of a blue signal?

A. No.

Q. What designates a group of workmen?

A. Two or more workmen of the same or different crafts assigned to work together as a unit under a common authority, and who are able to be in communication with each other during the period work is being performed.

Q. What is meant by the term fouling equipment?

A. Any employee going on, under, or between an engine or car is considered to be fouling equipment.

Q. What are the exceptions to this?

A. Except when such employee is supplying cabooses, engines, or passenger cars with items such as ice, drinking water, tools, sanitary supplies, stationary, and flagging equipment, or when making visual observations from positions inside or alongside engines or cars.

Q. What employees are required to be protected as prescribed by Rule 26?

A. Those employees assigned to inspect, test, repair or service engines or cars.

Q. Are train and yard crews required to be protected?

A. Train and yard crews are excluded except when assigned to perform inspection, repair, service or test of engines or cars not part of their train or yard movements they were called to operate.

Q. How must this protection be provided?

A. A blue signal must be displayed by a clearly distinguishable blue flag or blue light by day or by a blue light at night.

Q. Must a blue signal being attached to the operating controls have an engine lighted?

A. It need not be lighted if the inside of the cab area of the engine is sufficiently lighted so as to make the blue signal clearly distinguishable.

Q. May engines or cars pass a blue signal?

A. No.

Q. Before fouling equipment on main, and other than main tracks what is required?

A. A blue signal must be displayed at each end of the train or engine.

Q. If the equipment to be protected includes one or more engines what must be provided?

A. A blue signal must be attached to the controlling engine at a location where it is readily visible to the engineman and employee at the controls of that engine.

Q. When emergency repair work is to be performed on, under, or between an engine or one or more cars coupled to an engine and blue signals are not available, prior to fouling equipment, what is required?

A. The engineman and other employees assigned to duty on the engine must be fully informed that employees will be fouling equipment.

Q. May such engines or cars be moved or coupled to?

A. Not until the same employee who requested protection reports to the engineman that all employees are clear of equipment.

Q. When the employee, being protected is relieved from duty, what is required?

A. The fact that the employee is being relieved, and the name of that relieving employee must be reported to the engineman.

Rule 26b.—Engine Service Track Area

Q. What is required before fouling equipment in an engine service track area?

A. A blue signal must be displayed at or near each switch providing entrance to or exit from the area.

Q. Must a blue signal be attached to each engine at a location where it is readily visible to the engineman or employee at the controls of that engine?

A. Yes.

- Q. In an engine service track area, when is a derail required?
- A. When the maximum authorized speed is restricted to five miles per hour a derail, capable of restricting access to that portion of a track on which rolling equipment is located, must be positioned a minimum of 50 feet from the end of the equipment to be protected by the blue signal, and locked in derailing position with an effective locking device. A blue signal must be displayed at the derail.
- Q. In an engine service track area what is required when maximum authorized speed exceeds five miles per hour or when a derail is not in use?
- A. Each switch providing entrance to, or exit from the area, must be lined against a movement to the area and locked with an effective locking device.
- Q. May an engine be moved to an engine servicing area track after the blue signal has been removed from the entrance switch to the area?
- A. Yes, but it must not couple to another engine.
- Q. Must blue signals which have been removed from an area departure switch be restored immediately after the engine has cleared the switch?
- A. Yes.
- Q. May an engine be moved from an engine servicing area track after the blue signal has been removed from the controlling engine and from the area departure switch?
- A. Yes.
- Q. What must then be done with the blue signals?
- A. Blue signals which have been removed from an area departure switch must be restored immediately after the engine has cleared the switch.
- Q. May an engine, protected by blue signals, be repositioned within the engine servicing track area after the blue signals have been removed from the engine to be repositioned and the employees on the affected track have been fully informed of the movements?

- A. Yes, when operated by an employee authorized by and under the direction of the person in charge of the Mechanical Department personnel.

Rule 26c.—Car Shop Repair Track Area

Q. What is required in the car shop repair track area before fouling equipment?

- A. A blue signal must be displayed at or near each switch providing entrance to or exit from the area.

Q. What is required when the maximum authorized speed is restricted to five miles per hour in a car shop repair track area?

- A. A derail capable of restricting access to that portion of a track on which rolling equipment is located, must be positioned a minimum of 50 feet from the end of the equipment to be protected by the blue signal, and locked in derailing position with an effective locking device.

Q. What is required to be displayed at this derail?

- A. A blue signal.

Q. When the maximum authorized speed exceeds five miles per hour in a car shop repair track area, or when a derail is not in use, what is required?

- A. Each switch providing entrance to, or exit from the area, must be lined against a movement to the area and locked with an effective locking device.

Q. May a car mover be used to position rolling equipment in such an area?

- A. Yes, when operated by an employee authorized by and under the direction of the person in charge of Mechanical Dept. personnel, and after employees on the affected track have been fully informed of the movement.

Rule 26d—All Other Tracks

Q. Before fouling equipment on all other tracks, what is required?

- A. A blue signal must be displayed at or near each manually operated switch providing access to that track.

- Q. When a derail is used, how must it be positioned?
- A. A derail, capable of restricting access to that portion of a track on which the equipment is located, must be positioned a minimum of 150 feet from the end of the equipment to be protected and locked in derailing position with an effective locking device.
- Q. What must be displayed at each derail?
- A. A blue signal must be displayed at each derail.
- Q. When a derail is not used and properly applied as prescribed by this rule, how must each manually operated switch providing access to the track on which the equipment is located be lined?
- A. It must be lined against the movement to that track and locked with an effective locking device.
- Q. What is required of the person in charge of employees scheduled to foul equipment?
- A. He must notify the operator or any remotely controlled switch that work is to be performed.
- Q. What must be done with each remotely controlled switch which provides access to the track on which the equipment is located?
- A. Each remotely controlled switch must be lined against a movement to that track, and be locked as prescribed by Rule 26e.
- Q. What is required of the operator?
- A. The operator must report this fact to the person in charge before equipment is fouled.
- Q. What is required of the person in charge of employees being protected when he is relieved from duty?
- A. That fact and the name of the relieving employee must be reported to the operator of remotely controlled switches.
- Q. When engine or cars requiring blue signals protection are on a track with one or more crossovers, what is required?
- A. Both switches of each crossover must be lined against the movement through the crossover toward the equipment requiring protection, and the

switch at the end of each crossover which connects directly to the protective track must be locked.

Q. What is required to be displayed at that locked switch?

A. A blue signal.

Q. If the equipment to be protected includes one or more engines, what is required?

A. A blue signal must be attached to the controlling engine at a location where it is readily visible to the engineman or employee at the controls of that engine.

Q. When emergency repair work is performed on, under or between an engine or one or more cars coupled to an engine, and blue signals are not available, prior to fouling equipment, what is required?

A. The engineman, and other employees assigned to duty on the engine, must be fully informed that employees will be fouling equipment.

Q. When may such engines and cars be moved or coupled to?

A. Not until the same employee that requested protection reports clear of equipment to the engineman.

Q. When the employee being protected is relieved, what is required?

A. The fact and the name of the relieving employee must be reported to the engineman.

Rule 26e—Remotely Controlled Switches

Q. After the operator of remotely controlled switches has been notified that protection is requested as required by Rule 26d, what is required?

A. Each remotely controlled switch providing access to the track on which the equipment is located must be lined against a movement to that track.

Q. What must then be applied to the controls governing such switches?

A. An effective blocking device must be applied to the controls governing such switches before the operator may state that protection has been provided for fouling equipment.

- Q. When may these blocking devices be removed?
- A. A blocking device may not be removed until the same employee who requested protection reports to the operator that all employees are clear of equipment.
- Q. What records must be maintained by the operators of remotely controlled switches?
- A. Operators must maintain for thirty days an accurate and legible written record which contains the following information: (1) The date and time the operator receives notification that protection was required as specified by Rule 26d. (2) The name and occupation of the employee in charge who requested protection for fouling equipment. (3) The number or other designation of the track involved. (4) The date and time the operator notified the employee in charge that protection was established as prescribed by this rule. (5) The name, occupation, date and time the employee in charge reported to the operator that all employees are clear of equipment.

Rule 27.

- Q. How must a signal imperfectly displayed, or which is evidently out of order, or the absence of a signal at a place where a signal is usually shown be regarded?
- A. A signal imperfectly displayed, or which is evidently out of order, or the absence of a signal at a place where a signal is usually shown, must be regarded as the most restrictive indication that can be given by that signal, except that when the day indication is plainly seen it will govern.
- Q. When correct indication cannot be determined how may a train proceed?
- A. When sufficient lights are displayed to determine a permissive indication, train or engine may proceed at restricted speed without stopping.

COMMENT: The absence of lights and signals where such are required, or a white light displayed where a color light should be displayed, is an imperfectly displayed signal. Such

must be regarded as the most restrictive indication that can be displayed by that signal. An interlocking signal imperfectly displayed must be regarded as a stop signal.

Rule 28.

- Q. When main tracks are temporarily unsafe for trains to pass, except at reduced speed, what will be required?
- A. A reduced speed sign, slow sign and resume speed sign will be required to be displayed in accordance with instructions as shown under Aspects of Signals.
- Q. On two or more tracks, how will each track involved be protected?
- A. It will be protected in the same manner as if it were single track.

COMMENT: These signs will be displayed in a position where employees on approaching trains will have a clear view of them. Reduced speed signs are located approximately 4000 feet in advance of the point to be protected, and upon the right of an adjoining track to which it refers. Slow sign is located 100 feet in advance of a point to be protected, and upon the right of an adjoining track to which it refers. The resume speed sign is located 100 feet beyond the point to be protected and upon the right of an adjoining track to which it refers.

Trains and engines must approach slow signs not exceeding the speeds shown on reduced speed signs. Speed between slow sign and resume speed sign must not be in excess of speed shown on the reduce speed sign. Train or engines may resume speed after the rear of train has passed resume speed sign if other conditions permit.

Rule 29.

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

COMMENT: Remember the definition of a fixed signal. Such signals conveying a Stop indication are not to be acknowledged by whistle signal, Rule 14(g).

Burning fusees, attended or unattended, are not fixed signals, but are signals to Stop; therefore, they must be acknowledged by whistle signal. (See comment under Rule 11)

Rule 30.

Q. When must the engine bell be rung?

A. When an engine is about to move, while approaching and passing over public grade crossings, stations and through tunnels, and to prevent accidents.

Q. When a momentary stop and start, forward or backward, is a continuous switching movement, and such movement is not to be made at any of the locations named in the preceding question, must the engine bell be rung?

A. No.

Rule 31.

Q. When must the engine whistle be sounded?

A. Where required by rule or law.

Rule 32.

Q. Is the unnecessary use of the whistle or the bell prohibited?

A. Yes.

Rule 32a.

Q. Should it be sounded while passing or being passed by a passenger train?

A. No, except in case of emergency.

Rule 34.

Q. What is required of all members of a crew in cab of engine in connection with signals affecting the movement of their train or engine?

- A. They must communicate to each other, by its name, the indication of each signal affecting the movement of their train or engine, as soon as it becomes clearly visible or audible.
- Q. What is required of other crew members not in cab or engine?
- A. When practical, they must also communicate to each other by its name the indication of each signal affecting the movement of their train or engine, as soon as it becomes clearly visible or audible.
- Q. Why must each fixed signal be watched until such signal is passed?
- A. So that if it displays an indication other than that first communicated, the change must be communicated as soon as it becomes clearly visible.
- Q. Is it the responsibility of the engineer to know that these requirements are complied with in cab of engine?
- A. Yes.

COMMENT: All signals affecting the movement of trains and engines are included in this rule. Some examples of visible signals are fusees and block, interlocking, hand, flag and lantern signals. Some examples of audible signals are torpedoes, communicating signals, and engine whistle signals.

The purpose of block and interlocking signals is to provide a safe and efficient movement of trains. Their indications, in most cases, tell an engineer what route he is to take and, to some extent, the speed limitations; however, the signals alone do not furnish the safety factor. The safety factor will be provided when the crews know and obey the meaning of the aspects and indications. Communication of signal indications, between crew members, confirms that each crewman sees the same aspect and understands the indication the same.

The proper way to communicate the name of block and interlocking signals is:

- Aspects as per Rule 281,
Communicate "Clear".
- Aspects as per Rule 283,
Communicate "Medium Clear".
- Aspects as per Rule 285,
Communicate "Approach".

The name of the signal, as given in the rules, will indicate to the engineer how he must control the speed of his train. Crew members are responsible for watching signals that affect the movement of their train until such signal is passed, and to communicate any change of indication other than that previously communicated.

Rule 35.

- Q. What day signal equipment will be used by flagmen?
A. Red flag, 8 torpedoes and 7 fusees.
- Q. What night signal equipment will be used by flagmen?
A. White light, 8 torpedoes and 7 fusees.

COMMENT: The flagging signal equipment must be kept in good order and ready for instant use.

SUPERIORITY OF TRAINS

Rule S-71.

Q. On single track, how is a train superior to another train?

A. By right, class or direction.

Q. How is right conferred?

A. By train order.

Q. How are class and direction conferred?

A. By timetable.

Q. Which one — right, class or direction — is superior to the others?

A. Right is superior to class or direction.

Rule S-72.

Q. On single track, how is superiority determined between opposing regular trains of the same class?

A. Regular trains in the direction specified in the timetable are superior to regular trains of the same class in the opposite direction.

Q. Are regular trains superior to work extras?

A. Yes.

Rule 73.

Q. Are extra trains inferior to regular trains?

A. Yes.

COMMENT: On single track, there are three ways in which a train is made superior to another train — by right, class or direction. Right is the highest form of superiority and is conferred only by train order; class and direction are conferred only by timetable. First class trains are superior to second class trains, third class trains and extras; whether opposing or moving in the same direction. These inferior trains must clear first class trains in accordance with Rules 86 and S-87. Second class trains are superior only to OPPOSING third class trains and to OPPOSING extras, but are not superior to third class trains and extras moving in the same direction. Third class trains are superior only to OPPOSING extras, but

are not superior to extras moving in the same direction. Between opposing regular trains of the SAME CLASS, the timetable special instructions will specify which train is superior by naming the direction which is superior. (Also see Rule 85)

On two main tracks, there are two ways in which a train is made superior to another train — by right and class. Again, right is conferred ONLY by train order and is superior to class. Class is conferred by timetable. The only superiority by class on two main tracks (except as provided in Rule 72) involves first class trains and they are superior to second class trains, third class trains and extras in the same direction. Since trains move with the current of traffic, there are no opposing trains. Trains may be moved against the current of traffic; however, this is done by train order (Form D-R) and there would still be no opposing trains between the points a train is to move against the current of traffic.

Work extras, whether on single or two main tracks, are inferior to all regular trains.

Q. Do extras have superiority by direction?

A. Only at meeting points.

Q. How can an extra be made superior to another extra?

A. Only by train order.

COMMENT: Since extras have no timetable schedule, they will be governed by train orders with respect to opposing extras, and at meeting points between extra trains, the train in the inferior timetable direction will take siding unless otherwise provided.

MOVEMENT OF TRAINS

Rule 82.

Q. Unless fulfilled, how long are schedules in effect?

A. For twelve hours after their time at each station.

Q. A regular train more than twelve hours behind either its schedule arriving or leaving time at any station loses its schedule. How may it proceed when this occurs?

A. Only as authorized by train order, or Rule D-97.

Rule S-83

- Q. Before a train leaves its initial station on a district or a junction, or passes from one of two or more tracks to single track, or passes from CTC to single track, or leaves an intermediate register station, what must be determined about other trains?
- A. Whether all trains due, which are superior, have arrived or left.

COMMENT:

It must be known that *superior trains only* have arrived or left insofar as a train's authority to leave is concerned.

Rule 83a.

- Q. Which member of the crew has the primary responsibility to check the train register?
- A. The conductor.
- Q. Who must be furnished copy of the register check Form 'E'?
- A. The engineer.
- Q. What information must be shown on the check of the train register?
- A. All overdue trains which are superior.
- Q. Who must enter the information called for by the train register?
- A. The conductor, or the engineer if there be no conductor.
- Q. How can they be relieved of entering required information in the train register?
- A. By timetable special instructions, in which case register slip may be accepted by the operator.
- Q. When register slip is used, who will make entry in the train register?
- A. The operator.

COMMENT: At all register stations, regular trains are to be registered on the page of the book assigned to the day on which the train is due to leave its initial station on any division, although the trip may extend into the following day, in which

case the later date must be entered in the column headed "Date."

Example: No. 10 due to leave Z at 2030 on January 1st and at W 0030 January 2nd. No. 10 would register on page dated January 1st at Z and at W, and must enter January 2nd in column headed 'Date.'

Extra trains are to be registered on the page assigned to the day the extra leaves its starting place.

Example: Extra west called to leave Z at 2330 of January 1st, but did not leave Z until 0100 January 2nd. Extra would register at Z on page dated January 2nd.

Rule 84.

- Q. May a train start before the proper signal is given?
A. No.

COMMENT: This rule has reference to signal from the conductor or from another member of the crew at the direction of the conductor, that the train is ready to start. Such "signal" may be by hand, by verbal information to the engineer, or other prior understanding.

Rule 86.

- Q. Unless otherwise provided, how must an inferior train clear a superior train in the same direction?
A. By not less than five minutes.
- Q. Under the preceding question what is an example of "unless otherwise provided"?
A. In Rule D-251 territory preceding inferior trains will run with the current of traffic by block signals whose indications will supersede the superiority of trains.

COMMENT: An inferior train must clear a superior, in the same direction, not less than five minutes before the superior train is due to leave the next station in the rear where time is shown.

In Rule D-251 territory; or when the inferior train holds a Form S-B ("Run Ahead") train order, then the inferior train will be governed by those rules.

Rules S-87

- Q. By how many minutes must an inferior train clear the time (in timetable or train order) of an opposing superior train?
- A. Not less than five minutes before the leaving time of the superior train.
- Q. If the inferior train clears the opposing superior train by the time the superior train is due to leave the next station in advance, does this always comply with Rule S-87?
- A. No, because sometimes there is less than five minutes schedule time between stations.

Northward	Timetable No. 1 Effective March 1, 1980	Southward
First Class	Stations	First Class
21 Daily		20 Daily
05 01	A	A 10 20
05 15	B	09 55
05 40	C	09 40
05 55	D	09 20
06 05	E	08 40
06 20	F	08 10
06 35	G	07 15
07 01²⁰	H	07 01²¹
07 20	I	06 45
07 35	J	06 30
A 07 59	K	06 10

Order No. 6: NO 20 WAIT AT K UNTIL 08 30

J 08 50

I 09 05

FOR NO 21

Q. Using the sample schedules, and train order shown above, if No 21 was unable to make I for No. 20 and clear not less than five minutes, what would be the latest time that No. 21 could clear No. 20 at any station E to H?

A. No. 20 cannot leave I before 09 05, therefore the time at I will apply at all stations where the schedule time of No. 20. is earlier than 09 05.

Q. Using the same examples, if No. 21 is unable to make E for No. 20 and be in the clear not later than 09 00, what would be the latest time that No. 21 could be in the clear at D for No. 20?

A. 09 15. At this station the schedule time of No. 20 is later than the "wait" time at I.

COMMENT: Failure to be in the clear (which means with switch lined for main track) at least five minutes before the leaving time of the superior train requires protection by Rule 99a or b to the front, against the opposing train. Radio contact with the opposing train, is not "protection" under these circumstances.

Rule S-88.

Q. Must a Form S-A ("Positive Meet") train order, establishing a meeting point between extras, specify which train will take siding?

A. No.

COMMENT: Extra trains will be governed by train orders with respect to opposing extras, and at meeting points between extra trains, the train in the inferior timetable direction will take siding unless otherwise provided.

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

The superior train must stop at schedule meeting points with trains of the same class unless switch is properly lined and track is clear.

Rule S-89.

Q. Unless otherwise provided, must the inferior train take siding at meeting points?

A. Yes.

Q. In the preceding question, what is an example of "unless otherwise provided"?

A. A train order may direct the superior train to take siding.

Q. Must train taking siding pull into the siding when practical?

A. Yes.

Q. If necessary for a train to back into a siding, how must the move be protected?

A. The front of the train must first be protected by Rule 99a or b, unless authority for occupancy of main track is otherwise provided.

Q. What is an example of where authority for occupancy of main track may be otherwise provided?

A. A train could back in the siding without flag protection to the front, if the schedule time or wait order on the opposing train would not permit that train to leave the preceding station before train taking siding was in the clear. (See comment below)

COMMENT: Remember that at the moment a train is due to leave one station, it is, at that moment, due to arrive at the next station; therefore, when a train is occupying any part of the main track beyond the point where the rule requires that train to enter the siding, the governing time for the train backing into the siding to clear will be the time at the next station and that time will have to be cleared by five minutes.

Information from the train dispatcher that opposing train has been informed that train taking siding will have to back in siding does not relieve the train backing in siding from providing flag protection to the front, except under the conditions outlined above; namely, protection by schedule time or wait order at the next station to the front.

It is not only an obligation on the part of the train holding the main track to know that the entire other train has been met (engine and markers), but it is also the obligation of train in siding to know it has met the entire train that is on main track.

- Q. How far from the clearance of facing point switch over which expected train will pass, must the train awaiting the arrival of the other train stop, if practical?
- A. Train must not be left standing to foul the clearance of the facing point switch.

COMMENT: This is a safety factor. Trains moving over switches, whether on straight track or through the turn out, are somewhat vulnerable to derailments and the farther the standing train is from the switch lessens the likelihood of that train becoming involved in a derailment. Also, to attempt to stop just in the clear leaves too much chance for an overrun and possible collision. The rule applies, whether stopped train is in siding or on main track.

Rule S-90.

- Q. On trains equipped with communicating signal system, what signal must the conductor give to the engineer as train approaches meeting or waiting points?
- A. Sound signal 16 (S-I), two long and one short.
- Q. When must this be done?
- A. Between one and two miles before reaching the meeting or waiting point.
- Q. What will the engineer do upon receiving this signal from the conductor?
- A. Immediately reply with signal 14 (n), two longs and one short.
- Q. If the engineer fails to answer by signal 14 (n), what must the conductor do?
- A. Take immediate action to stop the train.
- Q. On trains not equipped with communicating signal system, what will be done before reaching meeting or waiting point?

- A. Engineer will sound signal 14 (n) at least one mile before reaching a meeting or waiting point.
- Q. On trains not equipped with communicating signal system, should the engineer fail to sound signal 14(n) or fail to prepare to stop short of fouling point, what should conductor do?
- A. Take immediate action to stop the train.

COMMENT: On trains not equipped with communicating signal system, the conductor, or crewman on the rear of train, must alert himself and listen for the engineer to sound signal 14(n), however, he will not necessarily stop the train when he does not hear the signal unless it is evident that the engineer is not preparing to stop short of fouling point.

If radio communication is available it may be used as a means of communication, but its use does not dispense with strict compliance with the requirements of this rule.

It is extremely important that the rear end crew and the head end crew communicate with each other by radio and have a thorough understanding as near as possible to two miles before reaching the point where their train is restricted. The intent of this rule is that it be applied in situations as covered in Rule S-90, but it applies equally in multiple track territory; for example, a train moving against the current of traffic to a definite point, the rule would apply two miles before reaching that point. The rule is intended to apply to restrictions involving other trains—not to Form V, example (1) train orders.

Rule 91.

- Q. In non-block signal system territory, trains in the same direction must keep how many minutes apart?
- A. Ten, except in closing up at stations.

COMMENT: Unless some form of block system is used, this rule means that the switch must not be opened until the expiration of ten minutes from the time the preceding train passed. Trains closely following a regular train should watch the schedule time of the preceding train and not get closer

than ten minutes of that schedule. Trains will be spaced by the use of interlocking signals; train order signals and remotely controlled fixed signals, where provided; and ten minute fuses between stations.

Rule 92.

Q. May a train leave a station in advance of its schedule leaving time?

A. No.

Q. May a train arrive at a station in advance of its schedule arriving time?

A. Yes.

COMMENT: This means that, for all practical purposes, a train is due to arrive at the next station in advance where time is shown at the time it is due to leave the next station in the rear where time is shown. A train may arrive at a station as much in advance of its schedule time as it can, not to exceed any speed restrictions, but must not leave a station in advance of its schedule leaving time.

Rule 93.

Q. How will yard limits be designated?

A. In the timetable and by bulletin order.

Q. How will the limits be defined?

A. By yard limit signs.

Q. How will the main track be used within yard limits?

A. Clearing the time an approaching first class train is due to leave the nearest station where time is shown, but not less than 5 minutes.

Q. Is flag protection required against second class, third class, extra trains and engines?

A. No.

Q. In case of failure to clear the time of an approaching first class train what protection must be provided?

A. As prescribed by Rule 99a for non-signal territory or Rule 99b for ABS territory.

Q. What speed may first class trains operate within yard limits?

A. Normal Speed.

Q. How must all trains except first class trains operate within yard limits in non-signal territory?

A. Yard Speed.

COMMENT: Rule 93 provides for use of the main track within yard limits without protection against all trains except first class trains. First class trains must be cleared by 5 minutes before they are due at the nearest station. All movements must be made at yard speed except in ABS territory where movements will be governed by block signal indications. All trains, except first class trains must move on main track at YARD SPEED, unless the main track is known to be clear by signal indication. In ABS territory known to be clear means a clear signal indication (Rule 281) may be accepted as indication that track is clear, but only to the next signal or End of Signal Territory sign. (Rule 298b.)

Q. How will all trains, except first class trains, approach the next signal after passing a permissive indication other than a clear indication (Rule 281)?

A. At yard speed.

Q. How must all trains, except first class trains approach the next signal after having accepted a clear indication (Rule 281)?

A. At yard speed.

Q. How must all trains, except first class trains proceed by signal indication other than a clear indication Rule 281?

A. At Yard speed.

COMMENT: Yard speed means that all trains move not exceeding 15 MPH, prepared to stop within one-half the range of vision. This is a judgment rule on the man controlling the speed of the train. The train must be able to stop short of opposing moves such as trains, engines, track cars or obstruction on the track.

Q. Within ABS territory, does Rule 513 apply?

A. Yes.

Q. What is required, before entering the main track within ABS territory?

A. Permission from the dispatcher or operator.

Q. Is this permission required in non-signal territory?

A. No.

COMMENT: Yard speed means that all trains must move prepared to stop within one-half the range of vision. Crews concerned must understand that Rule 513 is applicable within yard limits where ABS rules are in effect; it requires a member of the crew to operate the switch and wait five minutes at the switch before the train or engine fouls the main track. It is important that the trainman giving hand signals, as authority for the train or engine to occupy the main track, be stationed at the switch to be used and he must know the main track is clear of any conflicting train or engine movements.

Q. Within yard limits how must movements against the current of traffic be made?

A. Only as authorized by train order or as prescribed by Rule 99a.

Q. Movements against the current of traffic must be made at what speed?

A. Yard speed.

COMMENT: Special attention must be given to the requirement that trains must not be moved against the current of traffic within yard limits until fully protected by train order or Rule 99a and that when such movement are made against the current of traffic, the movement must be made at YARD SPEED. This restriction applies to all trains regardless of their superiority. Those concerned should take this delay into consideration when moving trains against the current of traffic through extended yard limits. In some instances, it may result in less delay to wait until train movements will permit movement with the current of traffic.

The provision that within yard limits the main track may be used, even on the time of second, and third class and extra trains, does not mean that yard engines, or other trains, may delay those trains. The rules require that crews keep themselves informed as to expected arrival of first class trains to avoid delaying them.

Rule 93 is not effective in CTC limits because authority to use main track in that territory is dependent upon signal indication without requiring the use of train orders and without superiority of trains or permission from control operator.

Rule S-97.

- Q. On single track, unless otherwise provided, may extras and work extras be run without train orders?
A. No.

COMMENT: Train dispatchers must keep in mind that on single track, before opposing extras are authorized to run, superiority between them or provisions for their meet must first be established by train order.

Rule D-97.

- Q. May extras be run without being created by train order?
A. Yes.
- Q. How will such trains be cleared?
A. Extra trains on two or more tracks may be cleared from initial station and proceed without train orders. Where interlocking signals govern, a proceed signal indication, or when conductor is personally given permission by the train dispatcher, or operator.
- Q. Will operators clear trains as above mentioned without authority from the train dispatcher?
A. No.
- Q. Must work extras move with the current of traffic, unless otherwise directed?
A. Yes.
- Q. Must work extras be authorized by train order?
A. No.

COMMENT: Work extras on two or more tracks must move with the current of traffic, unless otherwise directed.

Work extras on two or more tracks may work in assigned limits without train orders. When verbal permission is given to

work train by the train dispatcher to the operator or conductor, work extras may work in assigned limits with current of traffic, and when through work will advise train dispatcher.

Rule 98.

Q. How must trains and engines approach the end of two or more tracks, junctions, railroad crossings at grade, and drawbridges?

A. Prepared to stop, unless the switches are properly lined, signals indicate Proceed, and the track is clear.

Q. Where required by law or stop sign, what must trains do?

A. They must stop.

Q. Unless otherwise provided, may trains, engines or cars be permitted to stand across another railroad, when practical to avoid it?

A. No.

Rule 99a.

Q. When a train is moving on a main track at less than one-half the maximum authorized speed (including slow order limits) for that territory, is flag protection required against following trains on the same track?

A. Yes.

Q. How must this be provided?

A. By crew member dropping off lighted fusees at intervals that do not exceed the burning time of the fusee.

Q. When a train is moving on a main track at more than one-half the maximum authorized speed (including slow order limits) for that territory, under circumstances in which it may be overtaken by a following train, what must the flagman do?

A. Crew member responsible for providing protection must consider the grade, curvature of track, weather conditions, sight distance and speed of

train relative to that of following trains when deciding if lighted fusees should be dropped.

- Q. When a train stops on main track, how far must flagman go out to provide protection against following trains on the same track?
- A. A crew member with flagmans' signals must immediately go back at least one mile, unless otherwise prescribed by timetable special instructions or bulletin order for that territory.
- Q. After going out the required distance, *what* must be placed on the rail?
- A. Two torpedoes, 100 feet apart.
- Q. What must be displayed?
- A. A lighted fusee.
- Q. What may the flagman then do?
- A. He may then return one-half of the distance to his train and remain until he has stopped a train or is recalled.
- Q. When recalled, what is required before returning to his train?
- A. He must leave a lighted fusee and drop lighted fusees at intervals that do not exceed the burning time of the fusee.
- Q. When the train departs, what is required?
- A. Leave a lighted fusee at intervals that do not exceed the burning time of the fusee until the train resumes a speed not less than one-half of that authorized speed (including slow order limits) for any train in that territory.
- Q. How must the front of the train be protected when required?
- A. By the forward trainman or engineman in the same way rear is protected.

COMMENT: Torpedoes provide restrictive speed protection for one mile. When flagman goes out one mile, a second set of torpedoes should be placed one half the distance to the rear of the train.

Rule 99b.

- Q. Unless otherwise provided, when a train stops under circumstances in which it may be overtaken by another train in ABS or CTC territory with the protection of two block signals to the rear, what action must the flagman take?
- A. He must take a position on the ground from which stop signals may be plainly seen by an approaching train from a distance 300 yards from the train being protected.

Rule 99c.

- Q. Will crew members permit other duties to interfere with the protection of their train?
- A. No.
- Q. Who are responsible for protection of their train?
- A. Conductor and engineman.

COMMENT: Flag protection against following trains on the same track is not required when:

- (a) The rear of the train is within interlocking limits.
- (b) The rear of the train is protected by an absolute block.
- (c) The rear of the train is protected by train order.

When a train operating against the current of traffic, flag protection is not required. See Rule 91a. Following movement must not be permitted except under absolute block protection.

In non-block signal system territory, flagmen must be especially alert to provide full flag protection against following train movements. They must never assume that there will be no following movements because of their familiarity with normal train operation over the territory in which their train is moving. Instead, they must assume that there is a following train at all times and provide full flag protection whenever train stops or is moving under conditions in which it may be overtaken by following train. The conductor and/or engineman are responsible to know that proper protection is being afforded.

Within ABS or CTC limits, flag protection may not be required against following movements on the same track if designated

in timetable special instructions. Within such territory, the engineer of the following train is fully responsible to comply with block signal indications and to stop short of a train standing within such territory without flag protection.

Rule 101.

Q. When there is any known condition not covered by the rules, which interferes with the safe passage of trains and engines at normal speed, what must be done?

A. Trains and engines must be fully protected.

Q. When conditions are found which may interfere with the safe passage of trains or engines at normal speed and no protection has been provided, may the radio or telephone be depended on to notify other trains?

A. No; prompt action must be provided in accordance with Rule 99.

Q. To whom must report be made?

A. To the train dispatcher.

Q. If any member of the crew has reason to believe that their train or engine has passed over any dangerous defect, what precautions must be taken?

A. The train or engine must be stopped at once and protection provided.

COMMENT: Any "known condition" that may interfere with the safe passage of trains at normal speed is usually protected by the train dispatcher issuing the proper train orders addressed to all trains which may be affected. Known conditions usually mean when track forces are working on track in a manner to make the track unsafe for normal speed, or any other condition that may have been reported to the train dispatcher.

Conditions which are "found" that may interfere with the safe passage of trains at normal speed must be protected by the employee or train who "found" the condition. Flag protection is required under such circumstances until the flagman is assured by the train dispatcher that all trains affected have

been notified, or a train order to protect the condition has been placed for delivery to all trains. If necessary, a train finding such a condition must leave a flagman to protect until safety is assured.

Rule 102.

- Q. When a train is disabled or stopped suddenly by an emergency application of the air brakes, or other causes, how must adjacent tracks as well as tracks of other railroads that are liable to be obstructed be protected?
- A. As prescribed by Rule 99a.

COMMENT: When a train is disabled or is stopped suddenly by an emergency application of the brakes, or other causes, the crew must assume that adjacent tracks are obstructed by derailed equipment and must immediately throw a burning fusee off engine and caboose on adjacent track or tracks to stop any train that may be approaching. There is a possibility that derailed equipment fouling an adjacent track will not activate block signals on the adjacent track. Immediate effort must be made to make radio contact with other trains that might be involved.

These actions must not be permitted to delay proper flag protection as required. Many very serious accidents have occurred due to failure to provide immediate protection for trains moving on adjacent tracks under such circumstances. Delay in providing proper protection could well result in approaching trains colliding with derailed equipment, causing extensive damage, and/or possible loss of life or injury to employees and passengers.

Rule 102a.

- Q. What must be done when, for any reason, a portion of a train is left on the main track?
- A. Every precaution must be taken to protect the remaining portion against the returning movement.
- Q. How must this be done at night, or when the view is obscured?
- A. Torpedoes must be used and in addition a light must be displayed on the forward car.

- Q. What is the engineman's responsibility?
- A. He must know the protection required is afforded and is not relieved from using necessary caution to avoid accident in returning.
- Q. When an engine leaves a portion of its train on a main track, how will that portion be secured to keep it from moving?
- A. Sufficient hand brakes must be applied, if necessary.
- Q. On heavy grades, when an engine is detached under circumstances in which the efficiency of the air brake system may be impaired, how will the cars be secured?
- A. Sufficient hand brakes must be applied.

COMMENT: When an engine leaves a portion of its train on a main track, it has the authority to return on that track to recover the rear portion. This rule does not relieve the crew of protecting its train as required by Rule 99a or b. Crews must understand that the markers on rear of train protect them on return move only when these markers are on a main track. If necessary for a train to double from a siding, the flagman must protect until the head end returns. There have been costly accidents and fatal injuries because crews failed to take proper precautions as required by this rule.

Rule 103.

- Q. When cars are pushed by an engine and the conditions require, where should trainman ride?
- A. He must take a conspicuous position on leading car being shoved.
- Q. What kind of signal will trainmen display at night under above circumstances?
- A. A white light.
- Q. Why must a trainman take a conspicuous position on the leading car?
- A. To be in position to give signals and properly control the movement.

Q. When cars are left standing on a track, how must they be secured?

A. By applying sufficient hand brakes when necessary.

Q. Must they be clear of other tracks?

A. Yes, when practical.

Q. Must they be coupled to other cars?

A. Yes, when practical.

Q. If on heavy grade, what precautions, in addition to applying hand brakes, must be taken?

A. The wheels must be blocked.

Q. When cars are picked up, must hand brakes be released?

A. Yes.

Q. When necessary to secure or control cars by hand brakes, what precautions must be taken?

A. It must be known that such brakes are working properly.

Q. When cars with defective hand brakes are left, what precautions must be taken?

A. The cars must be blocked securely and the train dispatcher or yardmaster notified.

Q. Before coupling to cars where derailment, damage or injury might result if coupling should miss and cars should roll, what precautions must be taken?

A. Sufficient hand brakes must be applied on standing cars to prevent them from rolling.

Q. When coupling, shoving or switching cars, what must be done?

A. Precaution must be taken to prevent damage, or from fouling of other tracks.

Q. Must it be known that there is sufficient room in track to hold the cars?

A. Yes.

Q. When necessary, what must be done to determine that cars are coupled?

A. The slack must be stretched.

- Q. When there is a possibility of cars being shoved, or rolling, the entire length of a track, what must trainmen do?
- A. Must go ahead to protect the movement, unless otherwise protected.
- Q. When an engine is coupled to a train, what must be done?
- A. The coupling must be tested by slacking the engine ahead.

COMMENT: Violation of the provision that a trainman must go ahead to protect a movement when shoving the entire length of a track has resulted in substantial loss to this Company, due to shove-outs and sideswipes. In addition, there is no more dangerous situation than engines working at both ends of a yard and one or the other shoves out a track. When shoving cars in a track or doubling over or placing additional cars on a track, unless the foreman in charge of the movement knows that the track has capacity for the number of cars being placed in it, a member of the crew must be stationed on the leading car or at the end of the track as required by the rule.

Rule 103a.

- Q. How must trains and engines be operated when backing over any public crossing at grade?
- A. At restricted speed.
- Q. What is the exception?
- A. Unless crossing is protected by gates, crossing tender, or automatic crossing signals known to be properly protecting crossing.

Rule 103b.

- Q. How long may a train or engine obstruct a public crossing at grade?
- A. For a period not longer than five consecutive minutes.
- Q. If found necessary to remain longer, what must be done?
- A. Train must be uncoupled and crossing cleared.

COMMENT: As vehicular traffic increases, the railroad becomes more and more vulnerable to crossing accidents. Leaving cars far enough away from crossings to provide more view for vehicular traffic to see oncoming trains is important. When cars are parted at a crossing and an oncoming motorist sees the train crew in the vicinity of the crossing, they are inclined to be less cautious about movements being made on adjacent tracks, and, in most cases, they probably would never think about there being other tracks involved; therefore a member of train crew must protect the crossing, when practical, if there is a train approaching on an adjacent track.

Unnecessary operation of automatic grade crossing warning devices due to engines or cars standing on circuit, especially at certain locations where it is done frequently, tends to cause motorists to disregard those warning devices, and must be avoided. It is extremely important to see that automatic crossing warning devices are operating a sufficient time in advance to warn vehicular traffic, or the crossing is protected by a member of the crew. Frequently, the circuits controlling grade crossing warning devices in sidings, house tracks and other auxiliary tracks are short. When a train stops in advance of automatic grade crossing warning devices that are equipped with "restart", the warning devices will stop and gates will raise; then when train starts moving again, it must go slow enough to permit the warning devices to operate a sufficient time to warn vehicular traffic. If a crossing is equipped with warning devices and they are not in operation, the motorist would not take the precautions he would take if there were no warning devices.

Automatic grade crossing warning devices are so controlled that they cease operating as soon as movement clears the crossing; therefore, a reverse movement may not activate the warning devices in time to give adequate warning.

Rule 104.

Q. What is the normal position for a main track switch?

A. For main track movement. (Note: The normal position for spring switches is specified in timetable.)

Q. Must it be locked in that position?

A. Yes, except when in use.

Q. Under what conditions may a switch be left open for a following train or engine?

A. If left in charge of a member of the crew of such train or engine or an employee assigned to handle switches.

Q. May unauthorized persons be permitted to handle switches?

A. No.

Q. Must employee handling switch know that switch is properly lined for the movement and that switch point fits in proper position?

A. Yes.

Q. Must members of the crew on the engine keep in mind the location of switches?

A. Yes.

Q. Must members of the crew on the engine see that switches near the engine are properly lined?

A. Yes.

Q. In what position must switches be left after having been used?

A. In proper position.

Q. How must switches equipped with switch locks or hooks be secured while trains, cars or engines are passing over them?

A. By placing locks or hooks in hasp.

Q. After being used, how must switches be secured?

A. Those equipped with locks must be locked, and those equipped with hooks must be hooked in normal position.

Q. After locking a switch or derail, what precautions must be taken to know that the lock is secure?

A. It must be tested.

Q. If a switch lock is missing or defective, to whom must this fact be reported?

A. Train dispatcher.

Q. May a track be fouled until switches connected with the movement are properly lined, or, in the case of spring switches, the normal route is seen to be clear?

A. No.

Q. May switches be restored to normal position before movement is completed or clear of track involved?

A. No. (Note: "Clear" means beyond the fouling point.)

Q. May switches be unlocked or unsecured under conditions in which mishandling might cause an accident?

A. No.

Q. May trainmen or other employees stand near switches under conditions in which mishandling might cause an accident?

A. No.

Q. Must both switches of a crossover be properly lined before a crossover movement is started?

A. Yes.

Q. Must the movement through a crossover be completed before either switch is restored to normal position?

A. Yes.

Q. Must both switches of a crossover be left in normal position after having been used?

A. Yes.

Q. May a switch of a crossover be unlocked or lined for crossover movement while a train or engine is closely approaching or passing on the other track?

A. No.

Q. How must switches at scale tracks be left lined when scales are not in use?

A. For the dead rails.

Q. When may an employee change the position of a switch behind moving equipment?

A. Not until the entire movement is clear of the switch.

- Q. Employee alighting from a moving train to restore main track switch to normal position must, when practical, get off which end of rear car?
- A. The rear end.
- Q. When may trains, that are required to report clear of the main track, make that report?
- A. Not until clear of the main track and switch has been locked in normal position.
- Q. When an employee has changed the position of a switch for facing point train movement, where must he then position himself?
- A. If practical, he should cross to the opposite side of the track from the switch stand.
- Q. If not practical to cross to the opposite side of the track from the switch stand, where should he position himself?
- A. Not less than twenty feet from the switch stand.
- Q. When may he return to the switch stand?
- A. Not until the train is clear of the switch.
- Q. When a train is approaching or passing on a main track, may employees unlock or take a position in the vicinity of a main track switch?
- A. No.
- Q. When a train or engine is on a siding or other track to be met or passed by a train, how far must the employee, who is to attend the switch, remain from the switch while waiting for the train to pass?
- A. Must not go beyond the clearance point for the purpose of attending the switch until the expected train has passed over the switch.
- Q. If a switch is damaged by running through it or is otherwise defective, to whom must report be made?
- A. To train dispatcher or yardmaster.
- Q. If it cannot be made safe, what precautions must be taken?
- A. Protection must be provided.

Q. What precautions must be taken when employees use a switch where switch light or target is imperfectly displayed?

A. Must report it to train dispatcher.

COMMENT: Frequently the wrong switch is lined simply because the employee handling the switch does not take time to look at the switch point. It is especially important that the employee handling switches and derails look at the switch points to know they fit properly, to know that derail is properly positioned and that he has the route properly lined. He must also know that the switch is properly secured. Failure to see that the switch is properly secured may result in the switch changing position when movement is made over the switch. Hand signal for movement over the switch or derail must not be given until the employee handling the switch or derail has fully complied with all requirements of these rules.

The switch must not be restored to normal position until the movement over the switch is completed and is clear of the track involved. "Clear" means beyond the fouling point. Failure to wait until the movement is clear of the track involved may result in side collision or cars being cornered. Another movement may think the route is clear if switch target shows switch restored to normal position before movement is clear, and collision result. Getting off rear end of rear car to restore switch to normal position precludes the possibility of throwing switch under car and lessens the hazard of employee falling under car.

When waiting to make crossover movement, employees must not open the switch on the end of the crossover immediately ahead of their engine or cars while train is approaching or passing on adjacent track.

A train must not be reported clear until the train is actually in clear of main track and the switch lined in normal position.

A member of one crew must not ask a member of another crew to leave a switch lined for them when both crews expect to use the same switch. This practice is a violation of Rule 104 and could result in leaving a switch not properly lined and

secured in normal position when for any reason the expected movement of the following train is changed.

When a train pulls into a siding to meet an opposing train and stops clear of the switch at the leaving end of the siding, employees must not go beyond the clearance point for the purpose of attending the switch to be used while the expected train is approaching or passing the switch. While most unusual, trainmen have been known to open a switch immediately in front of an approaching train and head such train in on their own train. For this reason, it is extremely important that employees stay away from the vicinity of the switch until the expected train has passed. While train is in the siding awaiting the arrival of a train to be met there are normally no duties for the head brakeman to perform beyond the clearance point anyway and he should not go beyond that point until expected train has passed. If head brakeman should attempt to go beyond the clearance point under these circumstances, the engineer should call him back.

When a train is holding the main track and is awaiting the arrival of an opposing train, it is desirable that the head brakeman line the switch for the opposing train to head in the siding. After lining the switch, he must go to the opposite side of the track, if practical, or if not practical must remain at least twenty feet from the switch. These precautions are to prevent the same hazards as explained in the preceding paragraph.

After locking a switch or derail, employees must never leave until the lock has been tested and known to be secure.

No switch should be run through except spring switches; however, there are some switches, commonly referred to as "rubber" or "flop-over" switches, that are designed to avoid being damaged if trailed through.

Rule 104a.—Spring Switches

- Q. When a trailing movement is stopped before passing entirely through a spring switch, what must be done?
- A. A movement must not be reversed, nor slack taken until the switch has been properly set by hand.

- Q. When a train or engine is stopped by signal governing movement over a spring switch in the facing point direction, what must be done before move is completed?
- A. The points must be examined and if not properly closed then cannot be closed by hand, they must be spiked in proper position before being used.
- Q. After movement of a switch has been completed, what must next be done?
- A. Spike must be removed and train dispatcher notified immediately.
- Q. If switch points are found in proper position, how will trains be governed?
- A. Train will be governed by indication of signal.
- Q. Must trains or engines stop and examine main track spring switches before making facing point movement over them unless receiving a signal indication permitting them to proceed?
- A. Yes.

Rule 104b.—Semi-Automatic Switches

- Q. At certain locations are there semi-automatic switches which can be run through without damage to the mechanism?
- A. Yes.
- Q. What must be ascertained before running through these switches to avoid damage to the switch mechanism?
- A. That snow, ice or any other substance will not interfere with the switch traveling.
- Q. How may these switches be identified?
- A. The switch stands are orange in color.

Rule 104c.—Dual Control Switches

- Q. When a train or engine is stopped by a signal governing movement over a dual control switch what is required of the crew?

- A. If no conflicting movement is evident, a member of the crew must immediately communicate with the operator and be governed by his instructions.
- Q. What must these instructions contain?
- A. They must include information as to the route to be used.
- Q. How must these instructions be issued?
- A. The instructions must be in writing and repeated to ensure correct understanding.
- Q. When switching is to be done over a dual control switch, may the switch be operated manually by a member of the crew?
- A. Yes, after a member of the crew obtains authority to do so and work and time limits have been obtained from the operator.
- Q. What rule covers this move?
- A. Rule 266.
- Q. How must the lever be placed?
- A. The lever must be placed in hand position.
- Q. How long must the lever be left in hand position?
- A. Until switching movements have been completed.
- Q. During the time selector lever is in hand position, how will indication of stop signal governing movement over the switch be considered?
- A. Considered suspended.
- Q. Who must be notified after selector lever is restored and locked to "power" position?
- A. The operator.

COMMENT: When the selector lever is restored and locked to "power" position, it is necessary to notify the operator so he will know that he again has control of the switch; the engineer must be notified so that he will know to again be governed by the signal indication rather than hand signals by which he moved while the signal indication was suspended. When a signal governing movement over a dual controlled switch conveys stop indication, it may be that the switch points are not fitting up properly. In addition to obtaining permission to

pass the signal, instructions must be obtained from the operator if it is necessary to use the switch in hand throw position. If the operator advises that the machine indicates that the switch is lined for the route to be used, it will then not be necessary to operate the switch by hand. To use a dual control switch by hand, the first thing to be done is to remove the power from the switch by moving the selector lever from the position marked "power" to the position marked "hand," then use the hand throw lever to line the switch point for the route to be used. If a straight away move is to be made over the switch, the selector lever may be restored to "power" position as soon as the leading wheels are 100 feet past the signal. This will restore operation of the switch to the operator as soon as the movement clears the track circuit over the switch and eliminates the need to stop again. If switching moves are to be made over the switch, the selector lever must be kept in "hand" position until all movements over the switch have been completed.

Rule 104d.—Electrically Locked Switches

- Q. Before entering main track at an electrically locked hand operated switch, what must be done?
 - A. Member of crew must obtain permission from operator.
- Q. After permission is obtained what is done next?
 - A. Member of crew must, unless otherwise instructed, immediately unlock control box, and observe indicator.
- Q. If indicator displays "unlocked" what next must be done?
 - A. Lever must be moved 180 degrees to the right, and switch operated in accordance with Rule 104.
- Q. If the indicator displays "locked" what must be done?
 - A. Lever must be moved to a position approximately 45 degrees to the right and remain in that position until time element has expired.
- Q. What occurs if this lever is moved before the indicator displays "unlocked"?

- A. It will cause time element to begin again and unnecessary delay will occur.
- Q. How are electrically locked switches, which are controlled by operator, identified?
- A. They will be identified by a diagonal silver stripe on the lock door.
- Q. To enter a siding equipped with an electrically locked hand operated switch, where must the locomotive or cars be positioned to release the electric lock?
- A. Locomotives or cars must occupy releasing section within 50 feet of the switch.
- Q. Is it permissible to operate lock lever to unlock a hand throw switch while a main track train which is not to use a switch is occupying the track at the switch or an approach of the switch?
- A. No.

COMMENT: An electric lock is an added precaution to control movements from an auxiliary track to the main track, or from one main track to prevent such movements in the face of an approaching train on the main track. If no other train or engine is approaching, the electric lock should release when the electric lock lever is moved to the unlock position.

Rule 104f.—Derails

- Q. Where derails are provided on other than main tracks, must it be known that they are in proper position before signals are given for movement on tracks so equipped?
- A. Yes.
- Q. Except when such tracks are being used, how must the derails be set?
- A. They must be set in derailing position whether or not there are cars on the tracks.
- Q. Must employees know where such derails are located?
- A. Yes.

- Q. Where may employees expect to find derails?
- A. They must be on the lookout for them on industrial tracks and other such similar tracks.
- Q. May engines or cars be permitted to pass over derails, in derailing position from either direction?
- A. No.
- Q. Are derails kept in the derailing position and locked, when so equipped, except when removed to permit movement even though there may be no cars left on the track?
- A. Yes.

COMMENT: Many accidents on the railroad occur at switches and derails, especially in yards. Employees must realize the importance of properly handling a switch or derail. The employee handling them is responsible to know switches and derails have been properly set before giving hand signals for movement. The conductor and engineman must know that members of their crew are qualified to handle switches and derails, and be in compliance with the rules and special instructions. The engineman must know that the switch and/or derail is properly set for the movement of his train or engine, if he is in position to see them. He must not accept a hand signal for movement over the switch or derail, in his view, if they are not properly set. Accidents which result because of improper handling of switches and derails are often explained as oversights, but can be more accurately described as the result of the bad habit of continued rules violation.

Rule 107.

- Q. May a train pass another train receiving or discharging passengers at a station?
- A. Yes.
- Q. At what speed?
- A. Restricted speed.
- Q. Under what circumstances may a train or engine pass between a passenger train and the platform at which passengers are being received or discharged?
- A. Only when the movement is properly protected.

Rule 107a.

- Q. When a passenger train makes other than schedule stops or making schedule stops on other than its assigned track on an extra passenger train that is making stops to receive or discharge passengers, who must see that passengers are protected against other trains?
- A. Conductor, trainman and engineman.

COMMENT: The engineer, and other employees on the engine, must be vigilant and have train under full control when approaching stations on the time of passenger train, expecting to find a passenger train at the station with passengers being received and discharged. Scheduled passenger trains will not make any unauthorized stop without permission of the train dispatcher. Conductors of passenger extras before making any scheduled or unscheduled stop must contact train dispatcher and make arrangements for protection of same.

Rule 109.

- Q. Where will bulletin boards be maintained?
- A. At points designated in the timetable.
- Q. What will be posted on these bulletin boards?
- A. Instructions modifying the rules and timetable or special instructions.
- Q. Who must examine these bulletin boards?
- A. Conductors, enginemen, yardmen and others concerned in the movement of trains.
- Q. When must they examine them, and what must they do after they have examined them?
- A. They must examine them before going on duty and register on form provided, the number of the Bulletin Order and Bulletin Notice that they last read.

Rule 109a.

- Q. By whose authority and over whose signature are General Orders issued?
- A. The Vice President-General Manager-Transportation.

Q. Bulletin Orders and Bulletin Notices are issued by whose authority and over whose signature?

A. The Division Superintendent.

Q. How can it be determined where General Orders, Bulletin Notices and Bulletin Orders apply?

A. They contain a subheading which indicates in which territory they apply.

Q. How will they be numbered?

A. They will be numbered consecutively, the number being prefixed by the number of the current timetable and initial of division applicable.

Q. How long do General Orders and Bulletin Notices remain in effect?

A. They will expire with the timetable, unless previously annulled.

Q. How long do Bulletin Orders remain in effect after issued?

A. They remain in effect during the period of one calendar month and will expire at 00 01 on the first Sunday of each month.

Q. After Bulletin Orders expire what must be done with them?

A. They must be removed from the bulletin board.

Q. When will a new Bulletin Order, containing all Bulletin Order paragraphs which continue in effect from the previous month, be issued?

A. At 00 01 hours on the first Sunday of each month.

Q. What will be made effective by General Orders?

A. New rules, annulments and changes in rules approved for system practice.

Q. What must employees do when they receive a copy of a General Order?

A. They must place them in a proper place in their copy of the Operating Rules and/or Timetable.

Q. Where there is no bulletin board located at, or if the bulletins on the bulletin board do not cover the location in which employees are to operate, what must the employee do?

A. He must report to the train dispatcher or operator and receive instructions covering the General Orders or Bulletin Orders effective in that territory.

Q. Where are employees qualifications to be shown?

A. They must be shown on the qualified for service page of their timetable.

COMMENT: It should be stressed to all concerned that Bulletin Orders may contain information just as important as a train order, and there can be no excuse for their not being observed after having had the opportunity to read them. Bulletin boards must be examined as frequently as possible.

Rule 110.

Q. May trains and engines be operated in excess of a normal speed authorized in the timetable for the type of train or engine in the territory in which they are operating?

A. No.

Q. Must speed restrictions as shown in timetable, Bulletin Order, by wayside signs or by other means be strictly observed?

A. Yes.

Q. What do freight train speed restrictions apply to?

A. To all trains handling freight cars not equipped for passenger service, and to work and wreck trains.

Q. Must brakes be applied on draw bridges except in emergency?

A. No.

Rule 110a.

Q. What must trains or engines operating against the current of traffic in double track territory not exceed?

A. They must not exceed the speed restrictions applying on that track.

Q. What is a maximum speed they must not exceed?

A. 30 miles per hour.

Q. Must they operate prepared to stop before passing signals, if any, governing direction of movement on that track?

A. Yes.

Rule 111.

Q. In switching passenger equipment, must air brakes be used while handling occupied equipment?

A. Yes.

Q. May passenger cars be uncoupled while in motion?

A. No.

Q. What must engines or drafts coming onto passenger equipment do?

A. They must make full stop before coupling.

Rule 112.

Q. When may flying switches be made?

A. When necessary.

Q. When necessary, how must they be made?

A. By engine making move on straight track and not through siding or crossover, with all care necessary to prevent accidents.

Q. What tests are required before such movements are made?

A. Trains or drafts must be stopped and actual test made to show that the brakes on the detached cars, and the switch, are in good working order.

Q. When may detached engines or cars be run over any public crossing at grade?

A. Not until the crossing is protected.

Q. May cars containing explosives or dangerous materials be kicked or dropped, or other cars kicked or dropped into a track against such cars?

A. No.

D-151.

Q. Where two main tracks are in service, to which side must trains keep, unless otherwise provided?

A. To the right.

- Q. Where three or more tracks are in service, how will they be designated? And how will they be used?
A. By numbers, and their use by special instructions.

D-152a.

- Q. Whenever it is necessary to make single track, from whom, when practicable, must authority be obtained?
A. The train dispatcher.
- Q. If for any reason this can not be done, when must the circumstances be reported?
A. As soon as possible.
- Q. In making single track, where must flagman be placed and how instructed?
A. A sufficient distance beyond each of the detour crossovers to insure full protection, with instructions to hold all trains.
- Q. In addition to displaying stop signals, must he place torpedoes in the prescribed manner on all tracks leading into the area to be protected?
A. Yes.
- Q. Where else must a competent man with stop signals, properly instructed, be stationed before trains are authorized to proceed?
A. At each terminal or junction, if any, between detour crossovers.
- Q. When a pilot engine or Hy-Rail vehicle is used, what must it follow?
A. The last train to be moved in either direction.
- Q. When a pilot engine or Hy-Rail vehicle is not used, which train must the pilot ride in either direction?
A. The last train to be moved.
- Q. When communication is available when may following movement be made?
A. Only when the preceding train has cleared the detour track.
- Q. Who will be selected to serve as a pilot?
A. A trainmaster, yardmaster, conductor or other qualified employee.

Q. When communication is available, what must the train dispatcher do?

A. He must inform the pilot in charge regarding approaching trains and the trains to be given preference and when practicable notify approaching trains as to who is in charge of single track operation.

Q. When communication is not available how should the trains be moved?

A. They should be moved in accordance with their relative importance.

Q. Under the note, when making single track by Bulletin Order, under pilot operation, where trains enter or leave the track being used as single track at a point controlled by home interlocking signals, need flagman be provided?

A. No.

Q. How will operator of the interlocking be governed?

A. By instructions of the pilot.

Q. How will the method of operation be specified?

A. By Bulletin Order.

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RULES FOR MOVEMENT BY TRAIN ORDERS**Rule 201.**

- Q. For what movements will train orders be issued?
A. For movements not otherwise provided for.
- Q. By whom are train orders issued?
A. The train dispatcher.
- Q. Over whose signature will they be issued?
A. The Superintendent-Operations.
- Q. Must they be brief and clear and in the prescribed forms, when applicable?
A. Yes.
- Q. Must they be without erasure, alteration or interlineation?
A. Yes.

COMMENT: If nothing but regular trains were operated and all of them were operated on time, we would not have to issue many train orders because the timetable would provide for the movement of those trains. From a practical standpoint, however, it is virtually impossible to consistently operate the railroad in that manner. Extras and work extras have to be operated; all regular trains are not always operated and those schedules may have to be annulled; regular trains do not always run "on time," therefore, inferior trains must be given additional authority to move ahead of or against such trains, etc. These are movements "not otherwise provided for" and for which train orders are issued.

The rule book contains various examples of the "prescribed forms," such as: Form S-A—FIXING MEETING POINTS FOR OPPOSING TRAINS; Form S-B—AUTHORIZING A TRAIN TO RUN AHEAD OF A SUPERIOR TRAIN, etc. In issuing train orders, train dispatcher must use prescribed forms as closely as possible and each train order should be brief and clear. They may use combinations of the prescribed forms as may be necessary, unless prohibited by rule.

Train orders must be legible, therefore, handwriting is of the greatest importance. Those copying train orders are prohib-

ited from erasing, altering a word or figure in an order, or to interline a word or words between other words or between lines. Questionable orders, or copies of illegible or dim orders, must not be accepted and should be called to the attention of the Rules Examiner so that he may handle for correction with the person responsible.

Rule 203.

- Q. How must train orders except those relating to track conditions, Form 54 and Form TC be numbered?
- A. They must be numbered consecutively each day, beginning at 00 01 hours.
- Q. How must train orders relating to track conditions be numbered?
- A. They must be numbered consecutively each week, using a separate series of numbers, and reissued each Sunday at 00 01 hours, if continuing in effect.

COMMENT: It should be understood that a train cleared prior to 24 00 hours on a Saturday need not receive a new issue of track restricting orders because a train order is in effect until it is fulfilled, superseded or annulled. However, if a train is cleared after 00 01 hours on Sunday it must have a new set of track restriction orders.

Rule 204.

- Q. To whom must train orders be addressed?
- A. To those who are to execute them.
- Q. Those for a train must be regarded as addressed to whom?
- A. To the conductor and engineman, and also to anyone who acts as the pilot.
- Q. To whom must copies be supplied by the operator?
- A. A copy for each employee addressed.
- Q. How must orders addressed to operators restricting the movement of trains be respected by conductors and engineers?
- A. The same as if addressed to them. (See Form J train order.)

COMMENT: When a train order is addressed to a train, the conductor and engineman must regard the train order as though being addressed to them. If, for example, a train order were issued to train NO 732 the conductor and engineer would be responsible to carry out the requirements of the order. If, for example, a train order were issued to "Extra 1717 west" or "Work Extra 1717" the same would apply.

Rule 205.

Q. What records must be made of each train order, Form 54, and Form TC?

A. They must be written in full in a book provided for the purpose in the office of the train dispatcher.

Q. What must be recorded with it?

A. The time and signals which show when, from what offices, and by whom the order was repeated and the response to transmit and the train dispatcher's initials.

Q. When must these records be made?

A. At once, and never from memory or memorandum.

Q. What must not be made after train orders have been repeated?

A. Additions to train orders.

Q. When an operator is relieved what must be transferred and to whom?

A. All incomplete and undelivered train orders to the party relieving him, and must obtain the signatures therefore on prescribed form.

COMMENT: It must be remembered that the "train order book" is a legal document. All train orders, Form 54's and Form TC's must be entered into the train order book without any erasure, alteration or interlineation (Rule 201 applies). It is illegal to remove pages, use any substance to "white or yellow out" for the purpose of "erasing" or "covering up" any information or to deface the "train order book". If a mistake is made when the train dispatcher is writing the train order into the book during transmission, he must VOID the train order and reissue a correct order under a DIFFERENT NUMBER. Once a train order has been repeated, no additions can be made.

Rule 206.

- Q. In train orders, how will regular trains be designated?
- A. By number, as "No. 732," adding engine number if known.
- Q. How will extra trains be designated?
- A. Extra trains will be designated by engine numbers, and the direction as "Extra 303 East or West," or "Psgr Extra 6212 East or West."
- Q. How will work extras be designated?
- A. Work extras will be designated by engine number as "Work Extra 303."
- Q. How will movement of an engine of another company be designated?
- A. The initials as well as the engine number will be used.
- Q. When two or more units are coupled, what unit will be used in train orders?
- A. When two or more units are coupled, the number of the unit to which the train order is addressed must be the **only** unit in the locomotive consist which displays lighted number boards.
- Q. In transmitting train orders, how will the numbers of trains and engines be stated?
- A. Plainly pronounced and then spelled, letter by letter.
- Q. How will all stations, numerals and directions in the body of an order be stated?
- A. They must first be plainly pronounced and then spelled, letter by letter.
- Q. What must a train dispatcher do when he transmits the order?
- A. The train dispatcher must write the order as he transmits it and underscore each word and figure as repeated by each operator.

COMMENT: Through the years, train orders addressed to the "leading" unit of a locomotive consist, have caused problems from time to time. For example, if a locomotive consist of five units was reported as having engine 1717 head out and then later it was discovered that engine 1717 was the last trailing unit, any train orders issued to that train would be in violation of the provisions dictated by the "leading" unit requirement. In the interest of avoiding confusion, the provision was incorporated into the rules that the **only** unit in the locomotive consist to display lighted number boards will be the engine addressed in train orders. If a train is required to "meet" or "wait for" a particular train by train order, then the crews on each train must look at the **only** lighted number board to identify the head end and the markers to identify the rear end. Further, this provides the train dispatcher with the option of addressing a unit in the locomotive consist which will remain on a train for its entire run in the event a train departs with the intention of head-pinning the lead unit to drop it at another yard. In train orders, regular trains are designated by the schedule number which identifies the train, with the engine number being added if known. In the situation where the train dispatcher orders a "meet" (Form S-A) or writes an "after order" (Form D-R), every effort must be made to know the engine number when issuing such orders. Extra trains are designated by engine number and direction of movement because they do not have a timetable schedule number. Work extras, because they have no direction, are designated as "Work Extra 303". All employees receiving the transmission of train orders, whether they be an operator, conductor, engineer or pilot, must, when repeating the order, plainly pronounce and then spell letter by letter all stations, numerals and directions in the body of the train order (see prescribed forms of train orders for underscored examples of items to be spelled.) The purpose of this requirement is to ensure that all employees affected by a train order clearly understand the intent of the order. Remember, your life can depend on a train order.

Rule 207.

- Q. To transmit a train order, what signal followed by the direction, must be given to each office addressed?
- A. "19" stating the number of copies, if more or less than 3.

Rule 208.

- Q. How must a train order be sent to two or more offices to be transmitted?
- A. Simultaneously to as many of them as practicable.
- Q. When not sent simultaneously to all, to which train must the first order be sent?
- A. To the superior train, unless the superior train is required to obtain clearance Form "A" at that point.
- Q. To what trains must copies of the order addressed to the operators at the meeting or waiting point be delivered until all have arrived from one direction?
- A. To trains affected.
- Q. May a train order restricting the movement of a train at the point where such movement is restricted be issued?
- A. Only if it can not be avoided.
- Q. When necessary to do so, what is required when the order is so sent?
- A. The facts will be stated in the order. The train will be brought to a stop before delivery is made and special precautions must be taken to insure safety.

COMMENT: Train orders provide the train dispatcher with the option of "reversing" superiority of trains (Right is conferred by train order). The rule of thumb to remember is "the superior train must be made inferior before the inferior train can be made superior."

Rule 209.

- Q. What is required of operators receiving train orders?
- A. Must write or typewrite them in manifold during transmission.
- Q. May photocopying machines be used, if available, when necessary to make additional copies of a train order?
- A. Yes.

Q. What are the requirements for reproduced train orders made from a photocopying machine?

A. Copies must be made from the original, be legible and all information must be reproduced.

Q. What are the responsibilities of the operator who reproduces a train order with the use of a photocopier machine?

A. He must make sure that all copies are made from the original, are legible, and all information is reproduced. He must write his initials on all duplicated copies below the name of the operator appearing on the original.

Q. Must a duplicate copy be kept on file?

A. Yes, a duplicate copy must be placed in file, showing thereon date and time made.

Q. What are the requirements for recopying a train order when photocopying machine is not available.

A. The operator must make additional copies from one previously repeated and repeat to the train dispatcher from new copy each time additional copies are made.

Q. Will the date of issue, complete time and the name of the operator who first copied the order be changed?

A. No. The name of the operator who first copied the order will be shown with the initials of the operator who made the additional copy.

COMMENT: When operators receive the signal "19" they must copy the number of manifold (duplicate) copies that the train dispatcher directs. If the operator should have need to make additional copies of a train order (e.g. Form V, example (1)), he may use a photocopying machine, if available. When using a photocopying machine, the operator must inspect each copy to make sure that all information is reproduced clearly and distinctly. Each operator, whether it be the operator who originally copied the order or a relieving order, must initial all of the duplicated copies below the name of the operator appearing on the original. When train orders are duplicated in this manner they need not be read back to the

train dispatcher. When a photocopying machine is not available the operator must apply the more traditional method. He must make additional copies from one previously repeated and repeat to the train dispatcher from a new copy each time additional copies are made. The train dispatcher must underscore each word and figure each time the order is repeated. The date of issue, complete time and the name of the operator who first copied the order will not be changed. If a relieving operator makes duplicate copies at a later time he must initial the order under the name of the operator who first copied the order.

It is important that train orders be legible, whether hand written, typewritten or reproduced on a duplicating machine. When hand written or typewritten, too many copies should not be made at one time because the bottom copy may not be clear. Thin carbon paper should not be used, especially when typewriting orders, because previous impressions on carbon paper can distort characters; for example, making an "8" or a "9" look like a "3", etc.

Rule 210.

- Q. When a train order has been transmitted, how will the operators repeat it?
A. Unless otherwise directed, they will repeat it at once from the manifold copy.
- Q. In what order will the operators repeat?
A. In the succession in which the several offices have been addressed.
- Q. What should each operator receiving the order do while the other operators are repeating?
A. He should observe whether the others repeat correctly.
- Q. When an order has been repeated correctly by an operator, what response will the train dispatcher make?
A. He will respond with "Complete", and the time, with the initials of the Superintendent—Operations.

Q. Then what will the operator do?

A. He will write in his own handwriting on the train order the above information and his last name in full, in the spaces provided. (Note: Even if the body of the train order is typewritten, the bottom part of train order with the above information must be in his handwriting.)

Q. To whom will the operator deliver copies of the train order?

A. To each person addressed.

Q. May the engineer's copy be delivered by a trainman?

A. Yes.

COMMENT: Operators receiving train orders may type the heading, address and body of the order. The operator must write in his own *handwriting* on the train order all information contained in the "closing" portion of the order, i.e. the word "Complete" (Com), the time and his *last* name in full. The initials of the Superintendent-Operations should be placed directly under the last word contained in the body of the order. If the operator types the "closing" of the order, a receiving employee must not accept the order because that order is incorrect and has no authority. Operators must not leave the immediate vicinity of their office. Therefore, it is permissible for a member of the crew to deliver the engineman's copy of a train order. Rule 106 places primary responsibility for the safety of the train and the observance of the rules on the conductor and engineer. The same rule also requires that other employees are not relieved of their responsibility under the rules. Therefore, enginemen must show train orders to all members of the crew in the cab of the engine. When practicable, conductors must show train orders to other crew members of the train. Crew members must insist on seeing all train orders when they are practicably accessible. If necessary they must remind the conductor and engineman of the requirements of all train orders and Form "A" clearances.

Rule 210a.

Q. To relay a train order, how must it be transmitted?

A. In the usual manner to the relaying operator, who must transmit the order to the addressee.

- Q. What must the addressee do with the relayed order?
A. He must repeat the order to the relaying operator.
- Q. While this is being done, what must the relaying operator do?
A. He must underscore upon his office copy each word and figure as repeated by the operator at the office addressed.
- Q. After this is done, what then must the relaying operator do?
A. He must then repeat the order to the train dispatcher.
- Q. What response will the train dispatcher make?
A. He will respond with time "Complete".
- Q. What will the relaying operator do with this information?
A. He will transmit the time "Complete" to the addressee.

COMMENT: An operator is an extension of and is directed by the train dispatcher. If an operator is used to relay a train order over the radio or telephone, the train dispatcher will transmit the train order in the usual manner. However, before the operator repeats the order to the train dispatcher, he will transmit it to the addressee. The addressee will then repeat the transmission from the written copy to the operator. While the operator is listening to the repeated transmission, he will *underscore* upon his office copy each word and figure while it is being repeated to ensure accuracy. When this process is accomplished the operator then repeats the train order to the train dispatcher who then will "Complete" the order in the usual manner. The operator will then transmit said information to the addressee in the usual manner, after repeating it to the train dispatcher.

Rule 211.

- Q. Who must fill out Clearance Form "A"?
A. The operator must fill out the Clearance Form "A".

- Q. How must Clearance Form "A" be filled out?
A. The operator before clearing a train, must without eraser or alteration show thereon the total number of train orders and the number of each train order, if any, addressed to a train.
- Q. What if there are no orders for the train, and a Form "A" is required, how will it be filled out?
A. It will be filled showing no orders for the train and an explanation for the stop signal being displayed, if any.
- Q. What will the operator do once he has filled out the Clearance Form "A"?
A. He will repeat from the clearance to the train dispatcher the information shown thereon.
- Q. Will the dispatcher make the required record in the train order book?
A. Yes.
- Q. What will the train dispatcher do if the operator has correctly repeated the numbers of all train orders addressed to a train?
A. He will respond by giving "Complete," the time and the initials of the "Superintendent-Operations."
- Q. What will the operator do with this information?
A. Write it on the clearance.
- Q. How will Clearance Form "A" be delivered?
A. It must be delivered together with all train orders to each person addressed.
- Q. What is the responsibility of conductors, engineman and train crew?
A. Conductors and enginemen, must and when practicable, other crew members will see the information shown on clearance corresponds with the train orders received.
- Q. Must operators obtain a copy of each clearance?
A. Yes.
- Q. Will this rule apply to train and engine crews who copy orders for their own train?
A. No.

COMMENT: It is important that the operator fill out clearance and transmit information to the train dispatcher directly from the clearance. He must not give information to the train dispatcher from orders and then fill out clearance because this presents too great a risk of incorrect information being shown on clearance.

In the space on the clearance for the total number of orders for the train, the number should be written, instead of the figure (s); for example, "I have *three* orders for your train", must be written on clearances. The months of the year must be written, not numbered, as "March 1, 1980" or "Mar. 1, 1980", instead of "3-1-80". Train crews should check the clearance received and know that it is properly dated and addressed; and that the numbers of the orders correspond with the numbers as listed on the clearance.

Operators are not permitted to clear a train without a complete time from the train dispatcher.

Rule 213.

- Q. When may "Complete" be given to a train order for delivery to an inferior train?
- A. Not until the order has been repeated by the operator who receives the order for the superior train.

COMMENT: This precludes the possibility of an inferior train receiving an order before the superior train, or a train whose movement is being restricted, has been properly restricted in the event communications fail or the train dispatcher becomes incapacitated.

Rule 214.

- Q. How will a train order be treated that has been repeated and before "Complete" has been given?
- A. As a holding order for the train addressed.
- Q. May it otherwise acted on until "Complete" has been given or the order has been annulled?
- A. No.

COMMENT: After an operator has repeated a train order, the rule states that it is his duty to treat the order only as a holding order for the train(s) addressed. He must hold the train(s) to which the order is addressed while it exists as a train, regardless of the contents of the order, until "complete" is sent to him by the train dispatcher. Operators cannot show complete time on orders, without authority from the train dispatcher.

Rule 219.

- Q. May an operator repeat a train order restricting the movement of a train which has been cleared for which the engine has passed his train order signal, or signal being used as train order signal in a proceed position?
- A. No.
- Q. What must be done before the train order is repeated?
- A. The operator must obtain the signatures of the conductor and engineman to the order.
- Q. If necessary to issue a second Clearance, what must be done with the original Clearance?
- A. The original Clearance must be destroyed.
- Q. What will be shown on the second Clearance?
- A. It must show the numbers of all train orders addressed to the train, and be given "Complete" in a prescribed manner.

COMMENT: If the train order signal is at "STOP" position when the engine passes it, the train is held the same as though it had not passed, and until the train is cleared, the operator may continue to accept orders for it without obtaining signatures, but must not change train order signals to "Proceed" during that time.

If a train has been cleared, even though the engine has not passed the train order signal, the operator must not repeat a train order for such train, if the train order restricts the train involved, until he has secured the signature of the engineer and the conductor; nor may he do so if engine is under or by the train order signal. Operators must keep in mind that trains

can be held only once by the train order signal and after receiving clearance they are no longer restricted by the train order signal at that station.

Rule 220.

- Q. How long do train orders continue in effect?
A. Until fulfilled, superseded, annulled or become void.
- Q. When is a train order fulfilled?
A. When its requirements have been completely carried out.
- Q. When is a train order superseded?
A. When another train order is issued, which must include the words "instead of", changing the first order. (See Form P train order)
- Q. May any part of a train be superseded?
A. Yes, by use of Form P train order.
- Q. How may a train order be annulled?
A. By Form L train order.
- Q. May any part of a train order be annulled?
A. Yes, by use of Form M train order, but only when that part of the order not annulled is clear in its wording.
- Q. When do train orders held by, or issued for, or any part of a train order relating to a regular train, become void?
A. When such train loses its schedule as prescribed by Rules 4 or 82, or its schedule is annulled.
- Q. Are there any exceptions to train orders becoming void when a train loses its identity or has its identity or direction changed?
A. Yes. Train orders Form V issued to a crew must be retained and observed on all trips made by that crew, even though identity or direction of their train is changed, until crew is released from any further duty.

COMMENT: To determine if a train order is still in effect, a person must ask himself: "Has it been fulfilled? superseded? annulled? or become void?" If he cannot answer "yes" to any one of these conditions, the order must be considered as still in effect. The following examples will illustrate these conditions:

**Order No. 1: NO 12 ENG 1776
MEET NO 11 ENG 1777 AT C**

After No. 12 and No. 11 have met at C, the Order No. 1 has been FULFILLED.

**Order No. 2: NO 12 ENG 1776
MEET NO 11 ENG 1777 AT F
INSTEAD OF C**

The words "INSTEAD OF" identifies Order No. 2 as a "super-seding" order, meaning that it supersedes Order No. 1 which now is no longer in effect. The trains named must now meet at F.

Order No. 3: ORDER NO 2 IS ANNULLED

After this order is in effect, Order No. 2 is dead by virtue of having been annulled, and No. 12 and No. 11 no longer would have a train order "meet". Order No. 1 was dead after being superseded by Order No. 2; Order No. 2 was dead after being annulled by Order No. 3. After Order No. 3 is in effect, the inferior train would have to clear the time of the superior train in accordance with Rule S-87.

Referring again to Order No. 1, if No. 11 arrived at C and waited until No. 12 became more than 12 hours late on schedule at C, then No. 11 could go because the order would be VOID. Likewise, if No. 11 received an order annulling the schedule of No. 12 after having received the meet Order No. 11 could go because the meet order would become void after No. 12's schedule ceased to exist.

Rule 221.

- Q. Unless otherwise provided, what must be used at each train order office?
- A. Fixed signals.
- Q. What must the signal indicate when there are train orders to be delivered?
- A. It must indicate Stop when there are train orders.
- Q. When there are no train orders, what must the signal indicate?
- A. It must indicate Proceed.
- Q. When an operator receives the signal—"19", followed by the direction, what is the first thing he must do?
- A. He must immediately display the train order signal to indicate Stop.
- Q. What will be his reply to the train dispatcher?
- A. "Stop displayed," adding the direction.
- Q. When may the operator restore the train order signal to Proceed indication?
- A. When the train orders have been delivered or annulled.

Rule 221a.

- Q. What is required of an engineman encountering a "STOP" indication at interlocking stations where a separate train order signal is not provided?
- A. He will immediately sound whistle signal 14(o).
- Q. If interlocking signal then changes to a proceed indication, how will the train proceed?
- A. The train will proceed prepared to receive train orders, and/or clearance Form "A".
- Q. If interlocking signal is not changed when whistle signal 14(o) is sounded, what must be done?
- A. A member of the crew will promptly communicate with the operator.

Rule 221b.

Q. How may a temporary train order office be established?

A. By Bulletin Order.

Q. Will such Bulletin Order contain information as to hours and method of operation concerning this office?

A. Yes.

Rule 222.

Q. Who must promptly record and report to the train dispatcher the time of arrival and departure of all trains and the direction of extra trains?

A. Operators.

Q. Must operators observe train and report it once to the train dispatcher if the proper signals are not displayed?

A. Yes.

COMMENT: If a train passes an operator that is observed without proper display of marker, the operator must at once report to the train dispatcher.

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FORMS OF TRAIN ORDERS

Explanation to permit easy understanding of train order forms:

A to Z is Northward or Eastward (outward direction)

Z to A is Southward or Westward (inward direction)

Even numbers are Southward or Westward trains.

Odd numbers are Northward or Eastward trains.

Inward trains are superior to outward trains of the same class.

In the following train order examples, when more than one regular train is named in the same example, they will be of the same class.

NORTHWARD (or, EASTWARD)	TIMETABLE No. 1 Effective March 1, 1980 STATIONS	SOUTHWARD (or, WESTWARD)
↓	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	↑

Form S-A—FIXING MEETING POINTS FOR OPPOSING TRAINS.

**Order No. 1: No 2 Eng 402
meet No 1 Eng 401 at B.**

- Q. Where will these trains meet and which train takes siding?
A. Meet at B. No. 1 takes siding.
- Q. With Order No. 1, may No. 1 go to C if it can clear No. 2's schedule time not less than five minutes?
A. No. Order No. 1 must be fulfilled.
- Q. With Order No. 1, if No. 2 becomes more than 12 hours late on its schedule at B, may No. 1 go if the schedule of No. 5 is still in effect?
A. Yes. Under these circumstances the order has become void. (See Rules 82 and 220)
- Q. With Order No. 1, where must No. 2 stop at B, unless No. 1 is clear of the main track and switch is properly lined?
A. No. 2. must stop clear of the fouling point over which No. 1 will pass to enter siding.
- Q. With Order No. 1, if the train dispatcher annuls the schedule of No. 2 may No. 1 leave B without meeting No. 2?
A. Yes. Order No. 1 would become void. (See Rule 220)
- Q. With Order No. 1, if either train arrives at B without displaying markers, what must the other train do?
A. Remain at B until it is determined that the other train is complete.

**Order No. 2: No 789 Eng 405
meet Extra 701 West at B.**

- Q. Where will these trains meet and which train takes siding?
A. Meet at B. Extra 701 West would take siding because it is the inferior train. (See Rules S-71 and 104)

**Order No. 3: Extra 231 South
Meet Extra 652 North at B**

- Q. Where will these trains meet and which train takes siding?
- A. Meet at B. Extra 652 North takes siding. (See Rule S-88)

**Order No. 4: No. 2 Eng 402
Meet No 1 Eng 401 At C
No 2 take siding**

- Q. When will this example be used?
- A. When a superior train is to take siding at meeting point.

COMMENT: Trains receiving these orders (Form S-A) run with respect to each other to the designated point and there *meet* in the manner prescribed by the rules. Which train will hold main track and which one will take siding is determined by superiority and the information contained in the order. Form S-A train order meets are positive and the trains must meet at the point named whether it be inside or outside of yard limits or whether there is sufficient time (in timetable or train order) for one train to move against the other train to a station other than the one named.

Where meeting points established by Form S-A train order are within yard limits, a train holding a meet order, while waiting for the other train to arrive, may go beyond the switch where the opposing train is to be met to perform work under the provisions of Rule 93. This could also be done outside of yard limits if the train, while waiting for the opposing train to arrive, has sufficient time (in timetable or train order) against the opposing train to occupy the main track beyond the switch where the opposing train is to be met.

**Form S-B—DIRECTING A TRAIN TO RUN
AHEAD OF ANOTHER TRAIN**

**Order No. 7: Extra 701 East
run ahead of No 5 Eng 755
B to M.**

- Q. Does the order require extra 701 east to let No. 5 pass at M?
- A. Yes, unless extra 701 east can keep clear of the schedule time of No. 5 as required by Rule 86.
- Q. Does this relieve the extra from protecting the rear of his train against No. 5?
- A. No.
- Q. Does order No. 7 relieve the extra from complying with the requirements of Rule 93?
- A. No.

Form S-C—GIVING RIGHT OVER AN OPPOSING TRAIN

**Order No. 8: No 1 Eng 401
has right over No 2 Eng 402
B to M.**

- Q. What effect does this order have on Nos. 1 and 2?
- A. No. 1 has now been made superior to No. 2 by RIGHT *between* B and M.
- Q. At what points does this order entitle No. 1 to hold main track?
- A. At all points *between* B and M but not at B or M.
- Q. If No. 1 and No. 2 were to meet at B or M in connection with this order, which train would take siding?
- A. No. 1.
- Q. With this order, could No. 2 leave M before No. 1 arrives?
- A. Yes. No. 2 could proceed, clearing No. 1's schedule not less than five minutes, as required by Rule S-87.

COMMENT: This form of order does not establish a meet in the sense that a Form S-A order does. This form simply reverses the superiority of either class or direction as established by timetable. The trains named in the order will frequently meet at the station where the "right over" ends, but this will occur when neither train has sufficient time (in timetable or train order) against the other to move to some other station. Order No. 8 makes No. 1 superior to No. 2 *between* B

and M, but not at either station. If No. 2 has sufficient time on No. 1's schedule, it could leave M and go to any station between M and B, provided it cleared No. 1's leaving time at such station not less than five minutes. No. 2 would also be required to take siding for No. 1 at any of these stations between B and M as provided in Rule S-89. But, if No. 2 stayed at M for No. 1, or could go all the way to B against No. 1's time, No. 2 would hold the main track at M or B and No. 1 would be required to take siding at those points.

**Order No. 9: Extra 701 East
has right over No 402 Eng 456
A TO F**

- Q. May No. 402 go beyond F before Extra 701 East arrives at F?
- A. No, because Extra 701 East, not being a regular train, has no schedule for No. 402 to run against.
- Q. May No. 402 go beyond F before Extra 701 East arrives at F if No. 402 holds an order requiring Extra 701 East to wait at stations between A and F?
- A. Yes, but would be required to clear the time of Extra 701 East at those waiting points by not less than five minutes.

COMMENT: An extra train is a train not authorized by timetable schedule. However, an extra can be given wait time through the use of Form S-E. When an extra is directed by train order to "wait" at certain stations until specified times, then the regular train involved has train order information as to where the extra will be. If No. 402 did have such information, and the two trains met between A and F, No. 402 would take siding in accordance with the provisions of Rule S-87 (five minutes).

FORM S-E— TIME ORDERS

**Order No. 11: No 1 Eng 401
run 50 mins late A to G**

- Q. What effect does this order have on the schedule time of No. 1 between A and G?
- A. Makes its scheduled time 50 minutes later *between* A and G.

- Q. How is any other train receiving this order required to run with respect to this later time?
- A. They will add 50 minutes to the schedule time of No. 1 between A and G and run with respect to this later time instead of the schedule time.
- Q. Would this apply to trains moving in the same direction as No. 1 as well as to opposing trains?
- A. Yes. Trains in the same direction would be governed by Rule 86 and opposing trains would be governed by Rule S-87.
- Q. Does Order No. 11 affect the schedule leaving time of No. 1 at G?
- A. No. No. 1 is entitled to leave G on time.
- Q. With Order No. 11, how must an opposing inferior train clear No. 1 at G?
- A. It would have to clear No. 1's schedule leaving time. The schedule leaving time at G is not affected by the run-late.
- Q. With Order No. 11, how must an opposing inferior train clear No. 1 at F, E, D, C, B, and A?
- A. It would add 50 minutes to the schedule time of No. 1 and then clear this later time not less than five minutes.

Order No. 12: No 1 Eng 401
run 50 mins late
A to G and
20 mins late G to K

- Q. With Order No. 12, how must an opposing inferior train clear No. 1 at J, I, H or G?
- A. It would add 50 minutes to the schedule time of No. 1 and then clear this later time not less than five minutes.
- Q. With Order No. 12, how must an opposing inferior train clear No. 1 at K?
- A. It would have to clear No. 1's schedule leaving time. The schedule leaving time at K is not affected by the run-late.

COMMENT: The time in a run-late order applies only between the points named and, in Order No. 11, No. 1 must be considered *on time* at G and at any station beyond G. In Order No. 12, No. 1 must be considered only 50 minutes late at G and at intermediate stations up to K and *on time* at K.

**Order No. 13: No 1 Eng 401
and No 3 Eng 403 wait at**
N until 0959
P until 1030
R until 1055

Q. When may Nos. 1 and 3 pass N, P and R?

A. At or after the times given for *each* station.

Q. What are other trains receiving this order required to do?

A. They are required to run with respect to the time specified at the designated points or any intermediate station where the schedule time of No.1 and No. 3 is earlier than the time specified in the order.

Q. If No. 1 and No. 3's schedule time out of Q was earlier than 1025, what time would an opposing inferior train have to be in the clear at Q?

A. 1025. Since No. 1 and No. 3 cannot leave P before 1030 with Order No. 13, this time would have to be cleared not less than five minutes at Q.

Q. If No. 1 and No. 3's schedule time out of W was earlier than 1050, what time would an opposing inferior train have to be in the clear at W?

A. No later than 1050. Since No. 1 and No. 3 cannot leave R before 1055 with Order No. 13, this time can be used by inferior trains not only at R, but at stations south of R, clearing such time by not less than five minutes.

Order No. 14: No 2 Eng 402 wait at
H until 1015
for No 1 Eng 401

Q. Under what circumstances may No. 2 leave H before 1015?

A. If No. 1 clears at H before 1015.