



SOUTHERN BELL TELEPHONE COMPANY

RULES AND REGULATIONS

TRANSMISSION DEPARTMENT

FEBRUARY 15, 1943

No. 10610

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SOUTHERN PACIFIC COMPANY

(PACIFIC LINES)

RULES AND REGULATIONS
OF THE
TRANSPORTATION DEPARTMENT

Effective Feb. 15, 1943

The rules herein set forth govern the railroads operated by the Southern Pacific Company (Pacific Lines). They supersede all previous rules and instructions inconsistent therewith.

Special instructions may be issued by proper authority.

C. F. DONNATIN,
General Manager.

Approved:
L. B. McDONALD,
Vice-President
in Charge of Operations.

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

PHYSICS 101

LECTURE 1

Introduction to Physics

What is Physics?

Physics is the study of matter and energy.

It seeks to understand the fundamental laws of nature.

Physics is a quantitative science.

It uses mathematics to describe the physical world.

Physics is the foundation of all other sciences.

GENERAL NOTICE

Safety is of the first importance in the discharge of duty.

Obedience to the rules is essential to safety and is required.

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

The service demands the faithful, intelligent and courteous discharge of duty. Courtesy is the outward expression of an inward consideration for others.

To obtain promotion, ability must be shown for greater responsibility. One of the best recommendations for promotion is that an employe has so performed his duties as to win the good will and friendship of patrons for the railroad and for himself.

Suggestions from employes intended to promote safety, economy, or service, are solicited and will receive consideration.

The public judges a railroad by the appearance and conduct of its employes, quality of service, and condition of the property. Courteous, considerate treatment of patrons is of first importance in retaining and increasing our volume of business, and also governs the extent of opportunity for employment in the railroad's service.

GENERAL RULES

A. Employes whose duties are prescribed by these rules must provide themselves with a copy.

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

B. Employes must be conversant with and obey the rules, special instructions, and time-table bulletins. If in doubt as to their meaning, they must apply to proper authority for an explanation.

C. Employes must pass the required examinations.

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

E. Employes must render every assistance in their power in carrying out the rules and special instructions and must report to the proper official any violation thereof.

F. Accidents of any nature, also failure in the supply of water or fuel, defects in track, bridges, signals, or any unusual condition which may affect the movement of trains, must be promptly reported to chief train dispatcher from first available point of communication, and, if first reported orally, confirmed by telegram, and also by mail when required, to the proper authority.

G. The use of intoxicants or narcotics is forbidden. Their use is sufficient cause for dismissal.

H. The use of tobacco by employes in uniform while on duty, or by those serving patrons in or about stations or on passenger trains, is forbidden.

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

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

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

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

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

They must expect trains or cars to move or be moved at any time, on any track, in either direction.

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

DEFINITIONS

Engine—Motor—A machine propelled by any form of energy and used in train or yard service.

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

Regular Train—A train authorized by a time-table schedule.

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

Extra Train—A train not authorized by a time-table schedule. It may be designated:

Extra—For any extra train, except work extra;

Work Extra—For work train extra.

Superior Train—A train having precedence over another train.

Train of Superior Right—A train given precedence by train order.

Train of Superior Class—A train given precedence by time-table.

Train of Superior Direction—A train given precedence in the direction specified by time-table as between opposing trains of the same class.

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

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

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

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

Main Track—A track extending through yards and between stations, upon which trains are operated by time-table or train order, or both, or the use of which is governed by signals.

Single Track—A main track on which trains are operated in both directions.

Double Track—Two main tracks, on one of which the current of traffic is in a specified direction, and on the other in the opposite direction.

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

Current of Traffic—The movement of trains on a main track, in one direction, specified by the rules.

Station—A place designated in the timetable by name.

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

Crossover—A connection between two adjacent parallel tracks.

Fixed Signal—A signal of fixed location indicating a condition affecting the movement of a train, such as switch, train-order, block, interlocking, stop boards, yard limit boards and slow boards.

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

Yard Engine—An engine assigned to yard service and working within yard limits.

Pilot—An employe assigned to a train when the engineer or conductor is not acquainted with the rules or portion of the railroad over which the train is to be moved.

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

With Caution—To run at reduced speed, according to conditions, prepared to stop short of a train, engine, car, misplaced switch, derail, or other obstruction, or before reaching a stop signal. Where circumstances require, train must be preceded by a flagman.

Note—Where, in these rules, special instructions in a time-table, or in time-table bulletin or train order, the following terms appear, they will apply as follows:

Engine—to either engine or motor.

Train or Trains—in connection with speed restrictions or the observance of signals (except train-order signals), also applies to engines.

Enginemen—to engineers and firemen.

Trainmen—to conductors and brakemen; yard-engine foremen and yardmen.

Outside of Block System Limits—also applies to movement on any track which is provided with block signals for movement in one direction only, when movement is being made in the direction for which block signals are not provided.

RULES FOR SINGLE AND DOUBLE TRACK

Rules will apply as follows:

Without Prefix—To both single and double track.

Prefix "S"—To single track only.

Prefix "D"—To double track only.

STANDARD TIME

1. Standard time obtained from an authorized observatory will be transmitted to all points from designated offices daily except Sundays and legal holidays.

1 (A). Clocks bearing the prescribed sign "Standard Clock" will be maintained at designated places, and employes charged with the duty of receiving time signals must record, and display when required, the correct information on prescribed form as to variation of these clocks.

2. Watches used while on duty by yardmasters, trainmen, enginemen, hostlers, train-order and signal operators, signal maintainers, linemen, track and bridge foremen, and such other employes as may be designated, must be inspected and certified periodically by a designated inspector. Such employes must obtain a standard watch certificate from a designated inspector between the first and fifteenth of October of each year, which they must carry while on duty.

2 (A). Watches subject to inspection must be presented to a designated inspector for comparison and certification on standard watch certificate between first and fifteenth and between sixteenth and last day of each month, with not less than a ten-day period intervening between comparisons.

3. Except as hereinafter provided, conductors, engineers and main-track hostlers must compare their watches with a standard clock before commencing each day's work. The time when watches are compared must be registered on a prescribed form.

3 (A). When conductors and engineers tie up at a point where there is no standard clock, correct time must be obtained from train dispatcher, when possible, before commencing each day's work. If this cannot be done, time must be compared with conductor or engineer of first available train.

3 (B). Conductors and yard-engine foremen must compare time with their engineers before commencing each day's work, and with their brakemen and yardmen, and engineers with their firemen, as soon thereafter as practicable.

TIME-TABLES

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

Schedules on each subdivision date from their initial station on such subdivision.

Not more than one schedule of the same number and day shall be in effect on any subdivision.

4 (A). Special instructions in a time-table supersede any rule or regulation of the book of rules with which they conflict.

Special instructions appearing on a schedule page of a time-table apply only to the page on which they appear.

Notice of new time-table, or a supplement, must be bulletined at least twenty-four hours prior to the time it is to take effect. During a period commencing twenty-four hours before and continuing until six days after it becomes effective, notice by train order, Form "Q", must be given to conductors and engineers.

Yardmasters must know that yard-engine foremen, yardmen, yard enginemen, hostlers, herders, and switch tenders are in possession of new time-table, and supplements if any, before becoming effective.

Before commencing a trip on any subdivision upon which they have not been working, or after an absence of six days or over, trainmen and enginemen must inquire for and know that they have the current time-table, and supplements if any.

4 (B). Bulletin boards or books will be provided at stations designated by time-table. Time-table bulletins will contain only information or instructions relating to the rules or movement of trains, supersede special instructions in the time-table or any rule or regulation of the book of rules with which they conflict, and expire with the current time-table.

Conductors, engineers, yardmen, and others concerned in the movement of trains, must review time-table bulletins and instructions before commencing each day's work.

Time-table bulletins will be issued by authority and over the signature of the superintendent, and will be numbered consecutively during the effectiveness of each time-table, and, in addition to the bulletin number, will bear the number of current time-table.

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

Schedule time, and train-order time, unless otherwise provided, applies at the switch where an inferior train enters the siding; where there is no siding, it applies at the place from which train-order signal is operated; where there is neither siding nor train-order signal, it applies at the location of the station sign.

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

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

Where there are one or more trains to meet or pass a train between two times, or more than one train to meet or pass a train at any station, it will be indicated by a heavy dash under figures, thus:

5.45 or 7.10

7.30

6. The following symbols when placed before the figures of a schedule indicate:

- "s" —regular stop
- "f" —flag stop to receive or discharge traffic.

6 (A). The following symbols when placed at left of station name indicate:

- "TO" —train-order office
- "R" —train-register station.

The following symbols when placed at left of page indicate:

- "B" —bulletin station
- "K" —standard clock
- "W" —water station
- "C" —coal station
- "O" —fuel oil station
- "I" —interlocking
- "T" —turn-table
- "Y" —wye or turning-track
- "P" —telephone.

Double track or centralized traffic control limits will be indicated within brackets at the right of station column.

Automatic block system or automatic train control limits will be indicated within brackets at the left of station column.

The following abbreviations may be used in conjunction with brackets opposite station column in the time-table:

- D.T. —double track
- C.T.C.—centralized traffic control
- A.B.S.—automatic block system
- A.T.C.—automatic train control.

SIGNALS

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

7 (A). When practicable, all signals by hand must be given on the engineer's side; flag and lamp signals (when not by hand), fuses and torpedoes must also be placed on that side, but they must be respected when received from or displayed on either side.

7 (B). Signals must be given and acted upon strictly in accordance with the rules. Trainmen, enginemen, and others must keep a constant lookout for signals. Those giving signals must locate themselves so as to be plainly seen; signals must be given in such a manner that they cannot be misunderstood.

Precaution must be exercised by trainmen and enginemen to avoid acting upon signals that are not understood, or that may be intended for other trains or engines. In case of doubt, movements must not be made until verbal understanding has been reached. In backing a train or cars, or shoving cars ahead of engine, the disappearance from view of trainmen or lights by which signals are given will be construed as a stop signal.

Hand, flag, and lamp signals to proceed do not supersede the superiority of trains, nor dispense with the observance of fixed signals, unless otherwise provided.

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

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

Night signals must be displayed from sunset to sunrise.

COLOR	INDICATION
(a) Red.	Stop.
(b) Yellow.	Proceed with caution, and for other uses prescribed by the rules.
(c) Green.	Proceed, and for other uses prescribed by the rules.
(d) Green and white.	Flag stop. See Rule 28.
(e) Blue.	See Rules 26 and 291.

10 (G). When an unattended red flag or red lamp is displayed on or near the track, train, after stopping, must be preceded, for a distance of three-fourths mile from point where the signal is displayed, by a flagman who must carefully examine track and structures and if signal is displayed on the track it must be replaced on the track after train has passed.

A signal so displayed will not apply to the track on which the train is running if displayed beyond the first rail of an adjoining main track.

A green metal signal will be displayed to the right of each track at the limit of restriction, and trainmen will give signal 12 (c) after rear of train has passed it.

Trains must not exceed the speed specified by train order, or time-table bulletin, or fifteen miles per hour if no different speed is so specified, while passing over the structure or track affected, until the rear of train clears the restricted limit.

Where yellow signals are displayed within limits of a length of track over which a maximum speed is designated in train order or time-table bulletin and no maximum speed is otherwise specified for the particular section of track protected by these yellow signals, trains must not exceed fifteen miles per hour thereover.

(Rule 10(H)—8-30-43) Page 15.

A green metal signal will be displayed to the right of each track at the limit of restriction, and trainmen will give signal 12 (c) after rear of train has passed it.

Trains must not exceed the speed specified by train order, or time-table bulletin, or fifteen miles per hour if no different speed is so specified, while passing over the structure or track affected, until the rear of train clears the restricted limit.

10 (J). A slow board, when used, will be placed to the right of track in direction of approach, three-fourths mile from structure or track over which speed of trains must be restricted. On double track where trains keep to the left it will similarly be placed to the left of track.



FIG. 1



FIG. 2

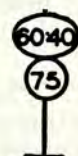


FIG. 3

Trains, while passing over such structure or track, must not exceed the speed indicated on the slow board, the higher number indicating the maximum for trains consisting entirely of passenger equipment, and the lower number indicating the maximum for all other trains. Where but one number is shown, it indicates the maximum for all trains.

Round yellow slow boards indicate by black figures the speed restriction applying only to certain passenger trains designated by special instructions. Speed indicated by oval white slow board applies to these trains unless a round yellow slow board authorizing a higher speed is displayed on same post below the oval slow board.





11. When an unattended fusee is burning on, or near, a track within block system or centralized traffic control limits, train may proceed without stopping, but must run with caution, not exceeding fifteen miles per hour, for three-fourths mile.



When a fusee is burning on, or near, a track outside of block system or centralized traffic control limits, train must stop, and not proceed until fusee has burned out.

A fusee burning beyond the first rail of an adjoining main track will not apply to the track on which train is running.

11 (A). Fusees must not be placed in timber-lined tunnels, nor on bridges, road crossings, or sign-boards, nor at places where damage from fire may result, and must not be placed between rails of a track when practicable to avoid it.

12. HAND, FLAG AND LAMP SIGNALS

MANNER OF USING	INDICATION
(a) Swung at right angles to track.	<p data-bbox="1151 274 1218 299"><i>Stop.</i></p> 
(b) Slight horizontal movement at arm's length at right angles to track.	<p data-bbox="1151 492 1244 543"><i>Reduce speed.</i></p> 
(c) Raised and lowered vertically.	<p data-bbox="1151 706 1284 807"><i>Proceed. Trainmen's Answer to 14 (k).</i></p> 
(d) Swung vertically in a circle at right angles to track.	<p data-bbox="1151 958 1218 984"><i>Back.</i></p> 

MANNER OF USING	INDICATION
(f) Swung horizontally above the head at right angles to track, when standing.	<p>Apply air brakes.</p> 
(g) Held at arm's length above the head, when standing.	<p>Release air brakes.</p> 

12 (H). Any object waved violently by anyone on or near the track is a signal to stop.

14. ENGINE WHISTLE SIGNALS

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

Steam whistle will be used in sounding signals, except that when engine is so equipped, air whistle instead of steam whistle will be used in sounding signals 14 (l) and 14 (p).

SOUND	INDICATION
(a) o	Apply brakes. Stop.
(b) — —	Release brakes. Proceed. Must be given after stopping at a railroad crossing not protected by an interlocking.
(c) — o o o	Flagman protect rear of train.
(c-a) o o o —	Flagman protect front of train.
(d) — — — —	Flagman may return from west as prescribed by Rule 99.
(e) — — — — —	Flagman may return from east as prescribed by Rule 99.
(f) — — — —	Train parted.
(g) o o	Answer to 14 (k) or any signal not otherwise provided for. Not to be given in answer to a yellow signal or the explosion of two torpedoes.
(h) o o o o	When standing, back. Answer to 12 (d) and 16 (c). When running, answer to 16 (d).
(j) o o o o o	Call for signals.

SOUND	INDICATION
(k) — o o	To call the attention of yard engines, extra trains, and trains of the same or inferior class or inferior right, to signals displayed for a following section; to be acknowledged by 14 (g) and 12 (c). 14 (k) also to be sounded when passing rear of freight trains.
(l) — — o —	Approaching public crossings at grade, tunnels and obscure curves; to be commenced sufficiently in advance to afford ample warning, but not less than one-fourth mile before reaching a crossing, and prolonged or repeated until engine has passed over the crossing.
(m) — — —	One mile before reaching stations, junctions, drawbridges, railroad crossings at grade, and mail cranes located between stations. When standing, apply air from rear of train, such application to be answered by 14 (g).
(n) — — o	Approaching meeting or waiting points. (See Rule S-90 (A)).
(o) o —	Inspect brake pipe for leaks or for brakes sticking.

SOUND	INDICATION
(p) Succession of short sounds.	Alarm for persons or live stock on the track.
(r) o o —	Engineer of second engine take control of air brakes. When second engineer has taken control, he must repeat the signal.
(s) o o o o	Engineer of second engine assist in recharging brake pipe.
(t) — o	When running against the current of traffic: (1) Approaching stations, curves, or other points where view may be obscured. (2) Approaching passenger or freight trains and when passing freight trains.
(u) — o — o o o	Flagman protect rear of train on both tracks.
(v) — o o o o —	Flagman protect front of train on opposite track.
(w) — o — — — —	Flagman discontinue protection of rear on eastward track but continue protection on westward track.
(x) — o — — — — —	Flagman discontinue protection of rear on westward track but continue protection on eastward track.

Note—The prefix signal “—o” in Rules 14 (u), (v), (w) and (x) should be followed by an interval of five seconds before remainder of signal is sounded.

15. The explosion of one torpedo is a signal to stop. When an unattended torpedo is exploded, train, after stopping, may then proceed with caution to a point not less than three-fourths mile from point where torpedo was exploded.

The explosion of two torpedoes is a signal to proceed with caution for not less than one mile.

Torpedoes must not be placed on public crossings, and must not be placed near station buildings, nor on yard tracks, except in an emergency. (6-26-45)

16. COMMUNICATING SIGNALS

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

SOUND	INDICATION
(a) oo	When standing—start.
(b) oo	When running—stop.
(c) ooo	When standing—back.
(d) ooo	When running—stop at next station.
(e) ooooo	When standing—apply or release air brakes.
(f) ooooo	When running—reduce speed.
(g) oooooo	When standing—recall flagman.
(h) oooooo	When running—increase speed.
(j) ooooooo	Increase train heat.
(k) ————	When running—look back for hand signals.
(l) o	Approaching meeting or waiting points. (See Rule S-90 (A)).
(m) ————o	Shut off train heat.

17. The headlight must be displayed to the front of every train by night, and by day when range of vision is impaired by fog, rain, or other adverse weather conditions. It must be extinguished when train is clear of main track to meet another train and has stopped; or is standing to meet a train at end of double track or a junction.

Headlight must be displayed through tunnels and sheds.

17 (A). When an engine without cars is standing or running, headlight, or white light if no headlight, must be displayed by night to the front and rear.

17 (B). If headlight fails, a white light must be substituted. Headlight failures must be reported by wire to the chief train dispatcher.

17 (C). When the rules require headlights to be displayed, electric headlights on road engines will be dimmed to the front, except when nearing street or highway crossings, as follows:

- (a) When standing or running on yard tracks.
- (b) When standing on main track at meeting points and switch has been set for the opposing train, but not until after approaching train dims its headlight as a signal for the standing train to do likewise.
- (c) When approaching stations where other trains are standing.

- (d) On double track, when approaching stations, momentary blink, followed by dimming of headlight, as a signal to an opposing train that speed will be reduced, or stop made if necessary, to permit opposing train to receive or discharge traffic.
- (e) When passing head end and rear end of trains on adjoining tracks.
- (f) At other points to permit passing of signals, delivery of train orders, or when the safety of employes requires.

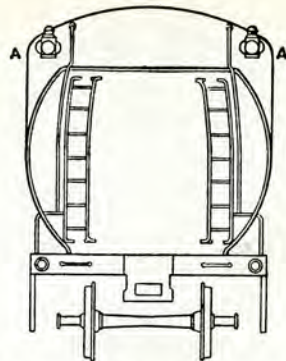
S-17. Until the headlight of a train turned out to meet another is extinguished, it is an indication that the main track is obstructed. The opposing train must approach with caution, and if the head end of train is clear of main track, it may proceed with caution to the point where the main track may be obstructed.

If, when on siding not clear of main track, to meet an opposing train, headlight is obscured by cars or other obstruction, or has failed, a flagman (fireman if brakeman not available), must immediately be sent ahead to insure protection.

18. A yard engine will display a headlight to the front, and dimmed headlight or a white light to the rear, by night. When coupled to a car, headlight next to car may be extinguished.

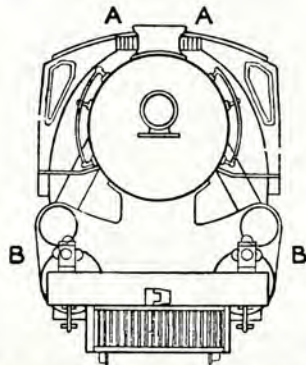
19. Markers must be properly displayed while train is authorized, and must be removed when train arrives at destination and has stopped clear of main track. Night indication must be displayed through tunnels and sheds. Markers must be displayed to indicate the rear of every train as follows:

Fig. 1.



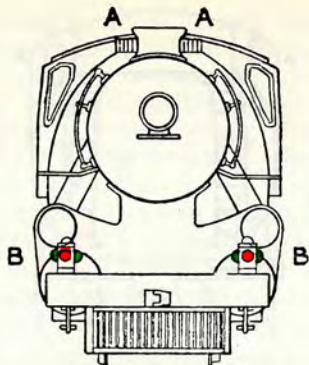
Engine Running Forward by Day, Without Cars or at the Rear of a Train Pushing Cars. Marker lamps not lighted at AA as markers.

Fig. 2.



Engine Running Backward by Day, Without Cars or at the Rear of a Train Pushing Cars. Indicators not illuminated at AA. See Rule 21(C). Marker lamps not lighted at BB as markers.

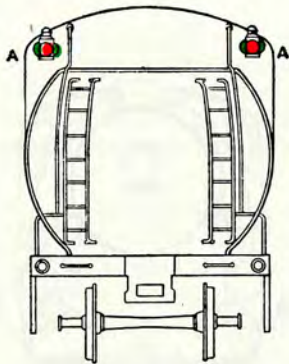
Fig. 3.



Engine Running Backward by Night, Without Cars, or at the Rear of a Train Pushing Cars.

Illuminated indicators at AA. See Rule 21(C).
Lights at BB as markers, showing green to side and in direction engine is moving and red in opposite direction.

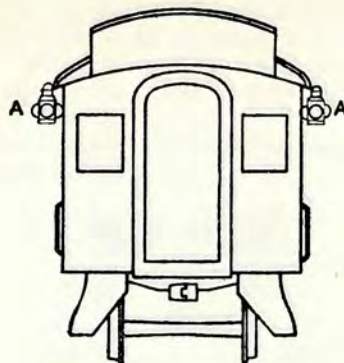
Fig. 4.



Engine Running Forward by Night, Without Cars or at the Rear of a Train Pushing Cars on Single Track, With the Current of Traffic on Double Track, and With the Current of Traffic on Passenger Tracks Where There Are Three or More Tracks.

Lights at AA as markers, showing green to the front and side and red to the rear.

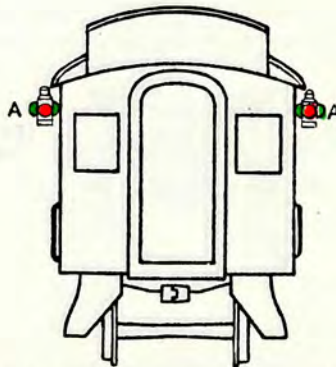
Fig. 5.



Rear of Train by Day.

Marker lamps not lighted at AA as markers.

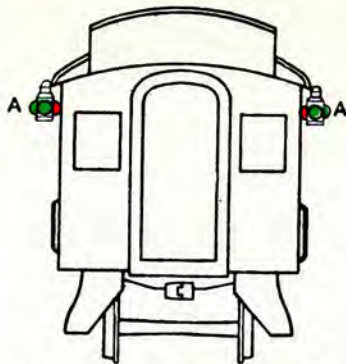
Fig. 6.



Rear of Train by Night While Running on Single Track, With the Current of Traffic on Double Track, and With the Current of Traffic on Passenger Tracks Where There Are Three or More Tracks.

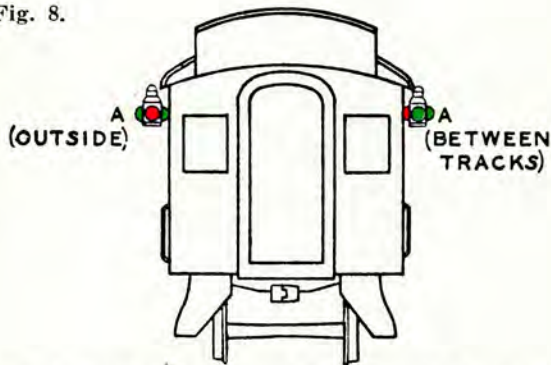
Lights at AA as markers, showing green to the front and side and red to the rear.

Fig. 7.



Rear of Train by Night When on Siding to Be Passed by Another Train.
Lights at AA as markers, showing green toward engine, side and to rear.

Fig. 8.

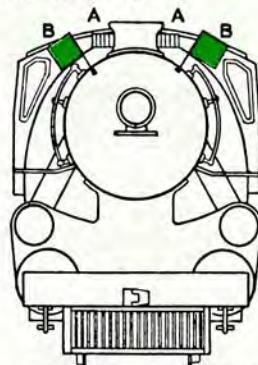


Rear of Train by Night, Turned Out or Running Against the Current of Traffic, on Double Track.
Lights at AA as markers, showing green to front and side and green to the rear on the side next to the main track on which the current of traffic is in the direction the train is moving and red to the rear on the opposite side.

19 (A). When the markers display red lights to the rear, it is an indication that the main track is obstructed. A following train must approach with caution and if the rear of train is clear of main track it may proceed with caution to the point where the main track may be obstructed.

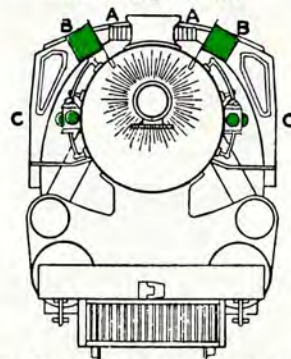
20. All sections, except the last, will display signals as follows:

Fig. 9.



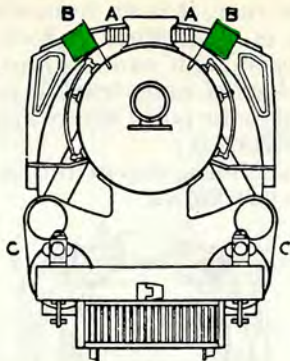
Engine Running Forward by Day Displaying Signals for a Following Section.
Indicators not illuminated at AA. See Rule 21(C).
Green flags at BB.

Fig. 10.



Engine Running Forward by Night Displaying Signals for a Following Section.
Illuminated indicators at AA. See Rule 21(C). Green flags at BB and green lights at CC.

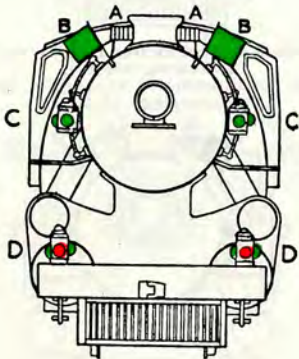
Fig. 11.



Engine Running Backward by Day, Without Cars or at the Rear of a Train Pushing Cars, and Displaying Signals for a Following Section.

Indicators not illuminated at AA. See Rule 21(C). Green flags at BB. Marker lamps not lighted at CC as markers.

Fig. 12.



Engine Running Backward by Night, Without Cars or at the Rear of a Train Pushing Cars, and Displaying Signals for a Following Section.

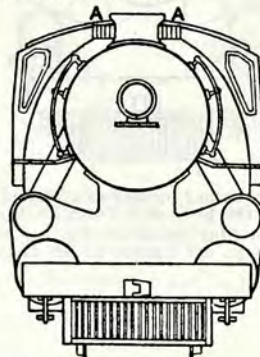
Illuminated indicators at AA. See Rule 21(C). Green flags at BB. Green lights at CC.

Lights at DD as markers, showing green to side and in direction engine is moving and red in opposite direction.

21. Trains will be identified by train indicators displayed on the engine when so equipped; if not so equipped, engine number must be used in train orders when known.

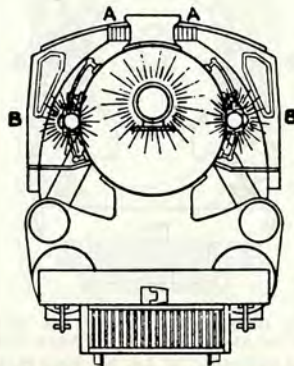
21 (A). Extra trains with engines equipped with train indicators will display identification as follows:

Fig. 13.



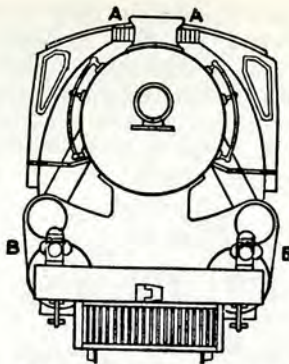
Engine Running Forward by Day as an Extra Train. Indicators not illuminated at AA. See Rule 21(C).

Fig. 14.



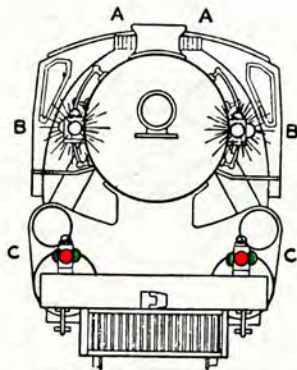
Engine Running Forward by Night as an Extra Train. Illuminated indicators at AA. See Rule 21(C). White lights at BB.

Fig. 15.



Engine Running Backward by Day as an Extra Train, Without Cars or at the Rear of a Train Pushing Cars. Indicators not illuminated at AA. See Rule 21(C). Marker lamps not lighted at BB as markers.

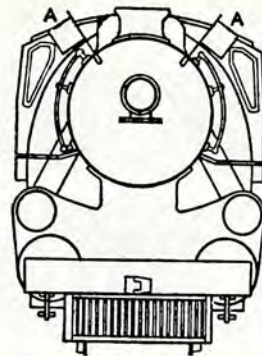
Fig. 16.



Engine Running Backward by Night as an Extra Train, Without Cars or at the Rear of a Train Pushing Cars. Illuminated indicators at AA. See Rule 21(C). White lights at BB. Lights at CC as markers, showing green to side and in direction engine is moving and red in opposite direction.

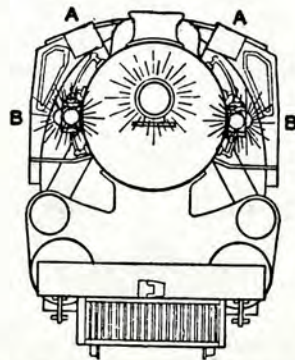
21 (B). Extra trains with engines not equipped with train indicators will display identification as follows:

Fig. 17.



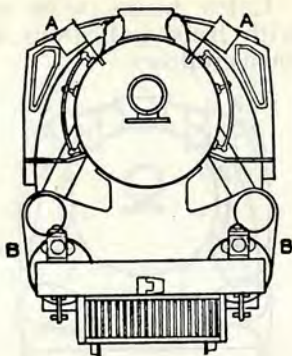
Engine Running Forward by Day as an Extra Train. White flags at AA.

Fig. 18.



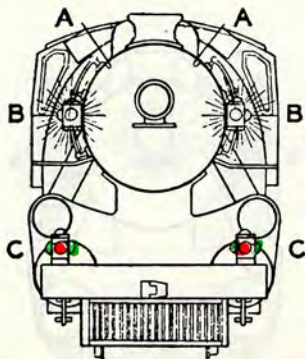
Engine Running Forward by Night as an Extra Train. White flags at AA and white lights at BB.

Fig. 19.



Engine Running Backward by Day as an Extra Train, Without Cars or at the Rear of a Train Pushing Cars. White flags at AA. Marker lamps not lighted at BB as markers.

Fig. 20.

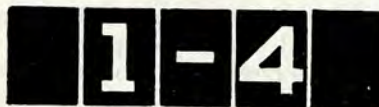


Engine Running Backward by Night as an Extra Train, Without Cars or at the Rear of a Train Pushing Cars. White flags at AA. White lights at BB. Lights at CC as markers, showing green to side and in direction engine is moving and red in opposite direction.

21 (C). Indicators must be properly displayed while train is authorized, and must be removed when train arrives at destination and has stopped clear of main track. Indicators must be displayed as follows:



NO. 2.



FIRST 4.



EXTRA 2795.

Before making change in indicators, such action as may be necessary must be taken to protect other trains.

21 (D). When an engine of another railroad is used, the initials of that road must precede the engine number in train orders.

22. When two or more engines in service are coupled at the head of a train, the leading engine only will display signals and train indicators; except that when helper engines are coupled ahead of road engine, helper engines will duplicate signals and train indicators displayed by road engine.

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

24. When cars are pushed by an engine, except when switching or making up trains in yards, a member of the crew must be on leading car by night displaying a white light.

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

26. A blue signal or sign reading "Men at Work" displayed on engineer's side of cab of an engine or at one or both ends of a car, cut of cars, or at the rear of a train, indicates that workmen are under or about same and the engine, car, cut of cars or train must not be coupled to nor moved by any method, nor other equipment placed so as to obstruct the view of the blue signal or sign.

Blue signal or sign must not be removed by any person except the one placing the signal or sign, or someone authorized by him to do so.

On designated tracks (repair, cleaning, servicing, etc.) where employes work, a sign reading "Stop—Men at Work" must be placed on the track and switches leading to such track locked; and from sunset to sunrise a blue light must also be displayed. Employes placing such sign and locking switches, *only* are authorized to change same.

When repair work is to be done under or about an engine or cars in a train, where movement of same would endanger employes engaged in such work, and a blue signal or sign is not available, the enginemen of engine handling train must be notified by employe engaged in such work and a complete understanding had to prevent movement. After work is completed the same employe must notify enginemen. (12-29-45) (2-21-46)

USE OF SIGNALS

27. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown, must be regarded as the most restrictive indication that can be given by that signal, and the fact reported to the chief train dispatcher. Conductors and engineers using a switch where the switch light is imperfectly displayed or absent must correct or replace the light if practicable.

28. A green and white signal must be used to stop a train at authorized flag stops.

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

29 (A). When the cause for a flagman's stop signal is fully explained to the engineer, and circumstances do not require the train to stop, it may proceed, being governed by the instructions of the flagman.

30. The engine bell must be rung when an engine is about to be moved; while passing through tunnels; while approaching public crossings at grade, beginning sufficiently in advance to afford ample warning, but not less than one-fourth mile before reaching such crossing, and continuing until the engine has passed over the crossing; and otherwise when necessary as a warning signal.

31. The whistle must be sounded at all places where required by rule or law, or to prevent accidents.

32. The unnecessary use of either the whistle or the bell is forbidden.

32 (A). Whistle signal must be sounded and bell rung by the leading engine.

33. Watchmen stationed at highway crossings must use stop signals when necessary to stop trains. When no special signal device is authorized, they must use a red signal to stop highway traffic.

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

35. The following signals must be used by flagman:

Day signals—A red flag,
torpedoes and
fusees.

Night signals—A red light,
a white light,
torpedoes and
fusees.

SUPERIORITY OF TRAINS

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

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

Right is superior to class or direction.

Direction is superior as between trains of the same class.

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

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

Right is superior to class.

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

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

73. Extra trains are inferior to regular trains.

MOVEMENT OF TRAINS

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

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

82 (A). Regular trains, unless otherwise provided, will be authorized at their initial stations by clearance, which must bear the OK, time, and initials of the chief train dispatcher. At an intermediate station the following form of train order must be used:

"ENG..... RUN AS NO..... FROM....."

83 (D). When a train is restricted for an extra train, the restricted train must not leave unless the extra train has been identified by the conductor or engineer, or a train order is received superseding or annulling the restriction, or a train order Form V, Example (3), is received.

A train may check the register against an extra when authorized by train order Form W, Example (4).

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

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

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

A section may pass and run ahead of another section of the same schedule, first exchanging train orders, signals, and numbers, with the section to be passed. The change in sections must be reported from the first available point of communication.

86. CLEARANCE OF TRAINS WITHIN BLOCK SYSTEM LIMITS:

(a) At meeting points the inferior train must clear the main track before the leaving time of the superior train.

(b) When arriving time is designated for a first-class train, or a train of superior right, an inferior train in the same direction must clear that time sufficiently to avoid delay to the superior train.

(c) When only one time is designated at a point at which an inferior train is to be passed by a first-class train, or a train of superior right, the inferior train must clear that time sufficiently to avoid delay to the superior train.

87. CLEARANCE OF TRAINS OUTSIDE OF BLOCK SYSTEM LIMITS:

(a) At a meeting point between trains of the same class, the inferior train must clear the main track before the leaving time of the superior train.

(b) At a meeting point between trains of different classes, the inferior train must clear the main track not less than five minutes before the leaving time of the superior train.

(c) Extra trains must clear the time of opposing superior trains not less than five minutes.

(d) An inferior train must clear the time of a first-class train or a train of superior right in the same direction, before the superior train is due to leave the next station in the rear where time is shown, but not less than ten minutes.

S-88. Extra trains will be governed by train orders with respect to opposing extra trains.

At a meeting point between extras or between work extras, the train in the inferior time-table direction must take the siding, unless otherwise provided.

At a meeting point between an extra and a work extra, the work extra must take the siding, unless otherwise provided.

88 (A). Firemen must remind engineers, and when practicable brakemen must remind conductors or engineers, of the time of a superior train which must be cleared.

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

S-90. At meeting points trains must stop short of fouling point of switch to be used by the train entering the siding, and will provide such additional clearance to fouling point as is consistent with operating conditions.

Outside of block system limits, trains must stop at schedule meeting points, if the train to be met is of the same class, unless the switch is properly lined and the track clear. When the expected train of the same class is not found at the schedule meeting point, the superior train must approach all sidings prepared to stop, until the expected train is met.

S-90 (A). Approaching a schedule meeting point with a train of the same or superior class, or a point where by train order the train is to meet or wait for an opposing train, the engineer must sound signal 14 (n) immediately after sounding signal 14 (m). On a train of passenger equipment the conductor must also sound signal 16 (l) at least one mile before reaching the station. Should the engineer fail to sound signal 14 (n), fireman must immediately remind engineer of the requirement, and should engineer fail to prepare to stop short of fouling point, when required, the conductor must take immediate action to stop the train.

Should a stop be made after signal 14 (n) has been sounded and before the expected train is met, signal 12 (c) or 16 (a) must not be given for further movements until such train has been met, or authority is held to proceed against it.

91. Outside of block system limits, trains in the same direction must keep not less than ten minutes apart. Lighted fuseses must be thrown off for this purpose when necessary.

91 (A). Outside of block system limits, when the view is obscured, trains must approach stations at a rate of speed that will enable them to stop should an emergency arise.

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

93. Within yard limits the main track may be used, protecting against first-class trains.

Second and inferior class trains, extra trains, and engines, must move with caution within yard limits.

When not protected by block signals or when moving against the current of traffic, first-class trains must move with caution within yard limits.

Note—Second and third paragraphs of this rule apply to all tracks within yard limits.

95. Two or more sections may be run on the same schedule. Each section has equal time-table authority.

A train must not display signals for a following section without train-order authority, except as prescribed by Rule 85.

96. A train order must not be issued creating a section to an intermediate point of the schedule, nor to take down signals at an intermediate point of the schedule. When it is desired to discontinue the last section Form K must be used.

When a following section is created at an intermediate point of a schedule, a copy of the order must be given to inferior trains and to trains of the same class in both directions, at or before reaching such point, until the following section has left.

97. Unless otherwise provided, extra trains must not be run without train-order authority.

D-97. Work extras must move with the current of traffic, unless otherwise directed.

D-97 (A). When authorized by special instructions in the time-table, trains moving with the current of traffic may run extra or work extra without train-order authority, except when a train order Form *D-S* is in effect, but must obtain a clearance before commencement of trip if at an open train-order office.

98. Trains must approach the end of double track, junctions, railroad crossings at grade, and drawbridges, with caution.

Except where otherwise provided, trains and engines must stop before crossing a railroad at grade, or a drawbridge, unless protected by interlocking.

99. Conductors and engineers are responsible for the protection of their trains in both directions.

When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure protection.

If recalled from a point less than one-half mile from rear of his train, he must, if safety to train requires, leave lighted fusee at proper intervals and, if conditions warrant, also place two torpedoes on the rail three rail-lengths apart.

If not recalled, one-half mile from rear of train he must place one torpedo on the rail; one mile from rear of train, or when recalled, if one-half mile or more from rear of train, he must place two torpedoes on the rail three rail-lengths apart. If conditions such as curves, foggy or stormy weather or descending grade require, he must continue back a greater distance, placing two additional torpedoes. (6-26-45)

When a train is seen or heard approaching when flagman is recalled, or before he has reached required flagging distance, he must immediately place one torpedo on the rail, and go toward the approaching train, displaying stop signals. Lighted fusee must be displayed when conditions warrant.

When flagman has reached the required flagging distance and has placed torpedoes as required, he may then return to the single torpedo where he must remain until relieved by another flagman or recalled. When recalled, he may remove the single torpedo and return, leaving lighted fusee at such intervals as conditions warrant. (1st and 2nd paragraphs, page 48 (6-26-45))

The front of the train must be protected in the same way, when necessary, by the brakeman; if not available, the fireman.

When circumstances require, train must be moved forward a sufficient distance to afford protection.

When a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure protection. By night, or by day when the view is obscured, lighted fusees must be thrown off at proper intervals.

Before a train or engine fouls the main track in moving out of a siding or other track, flagman must, if necessary, go back with stop signals a sufficient distance to provide necessary protection.

When day signals cannot be plainly seen, owing to weather or other conditions, night signals must also be used.

99 (A). During station stops, flagman of a train carrying passengers will take position not less than thirty feet behind rear of train except when required to go farther to afford protection.

S-99 (B). When a flagman is sent with specific instructions affecting the superiority of an opposing train such instructions must be in writing on the prescribed form. When sent by train, he must ride on the engine and show the flagging order to the engineer who must let him off at the point at which opposing train is to be restricted.

Flagging instructions must be written in duplicate, one copy given to the flagman and the other retained by the conductor, or engineer if no conductor, until movement is completed, and then mailed to the superintendent. Flagging orders issued by conductor must be shown to his engineer.

An engineer must not carry a flagman flagging against an opposing train, unless he presents his flagging instructions written on prescribed form. After reading the flagman's hold order, engineer must return it to the flagman.

99 (C). When a regular train, in territory designated by superintendent, receives a train order, Form I, Example (1), protection against extra trains in the direction specified is not required until the time named. Extra trains in the direction specified must not follow the regular train until the time named.

When an extra, in territory designated by superintendent, receives a train order, Form I, Example (2), protection against extra trains in the direction specified is not required until the time named. Other extra trains in the direction specified must not enter the territory named until the time named.

FLAGMAN'S HOLD ORDER

Station..... Date..... 19.....

Conductor and Engineer.....

TRAIN..... ENGINE.....

will flag from..... to.....

WAIT AT..... until it arrives.....

..... Conductor of

Note—SEE RULE S-99 (B)

100. When the flagman goes back to protect the rear of the train and is left behind, another trainman must take his place on the train.

101. Trains must be protected against any known condition which interferes with their safe passage at normal speed.

When conditions are found which may interfere with the safe passage of trains at normal speed and no protection has been provided, such action must be taken as will insure safety.

101 (A). Instructions respecting the movement of trains or the condition of track or bridges must be in writing.

102. If a train should part while in motion, trainmen must take necessary precaution to prevent damage to the detached portions.

Should there be a sudden application of brakes, which may cause damage to train or obstruct an adjacent track, train-parted signal 14 (f) must be given, and enginemen and trainmen must immediately display stop signals to trains on the other track. Trains receiving these signals must stop and not proceed until it is known that the track is not obstructed.

102 (A). When an engine leaves part of its train on main track by night, or by day where the view is obscured, two torpedoes must be placed on the rail two rail-lengths apart, one-fourth mile in advance of the rear part of the train to warn enginemen, and by night a red light must be placed on the front of the rear part of the train. When circumstances require, a flagman must protect engine when returning.

103. When cars are pushed by an engine, except when switching or making up trains in yards, and even then when conditions require, a member of the crew must take a conspicuous position on the leading car.

103 (A). Before kicking or dropping cars over a public crossing not protected by a watchman, or by gates, a member of the crew must take position at the crossing to afford protection to traffic while movement is being made.

Switches must not be left open nor cars left standing longer than necessary, on main or other tracks, within operating limits of wigwags, crossing bells, or other automatic warning devices.

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

103 (B). Passenger trains when backing, or work extras pushing with caboose as leading car, must be equipped with back-up hose or pipe with whistle attached.

104. Trainmen are responsible for proper setting of switches and derails to be used by their train, and for their return to proper position after use, except where switch tenders are stationed, and, when practicable, engine-men must see that the switches and derails nearest the engine are properly set.

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

104 (A). Main track switches, and other switches equipped with switch locks, must be left locked. Switches not equipped with locks must be left hooked. When a switch cannot be properly locked or hooked, as the case may be, it must be secured and immediately reported to proper authority.

104 (B). If a rigid switch is run through, it is thereafter unsafe and must be protected. If an engine or car is run partly through a rigid switch, the movement must be continued.

Switches damaged in this way must be reported by wire to the proper authority and, when practicable, section foreman notified. They must be spiked unless section foreman takes charge.

104 (C). When a train or engine is clear of main track, to be met or passed by a train, employes must not unlock derails or switches, nor take position in the vicinity of any main track switch. They must not be between the fouling point and switch until the approaching train or trains have passed.

When necessary to go beyond the switch in flagging, flagman must remain at least 150 feet away from the switch while the approaching train is passing over it.

When a train or engine is on main track to be met by a train and a switch is to be set for the approaching train to enter siding, employe, after securing the switch must take position at least 150 feet away from the switch while approaching train is passing over it.

When a switch is thrown, the employe setting it must see that both points have moved to the proper position. A switch must be fastened as soon as thrown either way; and when locked, the chain pulled to insure that lock is securely fastened.

Both switches of a crossover must be kept closed and secured when there is a car or engine on or immediately approaching either switch, except for a direct cross-over movement.

An employe, alighting from a moving train to change position of a switch behind such train, must get off rear of rear car when practicable, or, when not practicable, on opposite side of track from switch stand, unless it is unsafe to do so. While a train is moving over a switch, any employe in the vicinity of such switch must take position on opposite side of track from switch stand when practicable, and, when not practicable to do so, must take position not less than twenty feet from the switch stand.

104(D). Running switches will be made only when necessary, and, when practicable, the engine must be kept on straight track. Before making a running switch, stop must be made, brakes tested, and switch tried.

Running switches must not be made with scale test cars, or work equipment such as pile-drivers, locomotive cranes, steam shovels, ditchers, spreaders and steam derricks.

Passenger cars, occupied outfit cars, cars containing livestock, explosives, or inflammable liquids, or open top cars on which load is likely to shift, must not be kicked nor dropped against other cars, and other cars must not be kicked nor dropped against them. At points where cabooses lay over, they must not be kicked nor dropped against other cars or cabooses, and other cars must not be kicked nor dropped against cabooses. (2-3-47).

105. Before entering a siding or other track, it must be known that switch, and derail if any, is properly lined, and when practicable, stop must not again be made until train is clear of main track. All movements on sidings must be made with caution.

Where trains are to meet or pass, train taking siding will, after clearing main track, provide such additional clearance to fouling points as is consistent with operating conditions.

A siding assigned for use by trains of a specified direction must not be used by a train in the opposite direction except in emergency, or when authorized by train order; and a train so using must take necessary precaution to insure safety.

106. Both the conductor and the engineer are responsible for the safety of the train and the observance of the rules, and, under conditions not provided for by the rules, must take every precaution for protection. This does not relieve other employes of their responsibility under the rules.

107. When a passenger train is receiving or discharging traffic at a station, a train or engine must not pass between it and the station platform unless proper safeguards are provided, and movement made with caution.

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

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

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

RULES FOR MOVEMENT BY TRAIN ORDERS

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

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

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

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

203. Train orders must be numbered consecutively each day, beginning at midnight. Duplicate numbers of the same date must not be used over the signature of the same chief train dispatcher.

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

204 (A). A copy of each train order affecting movement of a train having helper engines must be given to engineer of each helper engine.

If helper engine is not in train when orders are to be delivered, operator must be instructed to make an additional copy and to deliver it to road engineer or to conductor for delivery to helper engineer when helper engine is added. Comparison to be

made by helper engineer with road engineer or conductor, when practicable, to insure that he has a copy of each order that affects the movement of the train.

205. Each train order must be written in full in a book provided for the purpose at the office of the chief train dispatcher; and with it recorded the time and the signals which show when and from what offices the order was repeated and the responses transmitted. These records must be made at once, and never from memory or memoranda.

206. In train orders regular trains will be designated by number, thus: NO 10, and sections, thus: SECOND 10. Extras will be designated by engine number and the direction, thus: EXTRA 798 EAST.

Even hours must not be used in stating time of day in train orders.

206 (A). In transmitting and repeating train orders by telephone, the names of stations, sections, and direction of extras, must be plainly pronounced, and then spelled, letter by letter, thus: Aurora, A-u-r-o-r-a; Second, S-e-c-o-n-d; East, E-a-s-t; order numbers, train, engine, and other numbers must first be pronounced and then followed by pronouncing each figure, thus: One hundred five, 1-0-5; Twenty-seven fifty-six, 2-7-5-6, except where the number is but one figure, when it must first be pronounced, thus: One, figure 1; then spelled, thus: O-n-e; time must first be pronounced, thus: Nine fifty; then spelled, letter by letter, thus: N-i-n-e-f-i-f-t-y, followed by pronouncing each figure, thus: 9-5-0.

In transmitting and repeating train orders by telegraph, time must be stated in words and duplicated in figures.

The names of stations, sections, direction of extras, order numbers, train, engine, and other numbers, and time, must be written in train orders and in train-order book, thus: AURORA, SECOND, EAST; 105, 2756, 1; NINE FIFTY 950.

206 (B). When transmitting by telephone, the train dispatcher must write the train order in the train-order book as he transmits it and underscore each word and number as repeated by each office. When transmitted by telegraph, the order must be written in train-order book as repeated by the first office and each word and number must be underscored as repeated by each succeeding office.

206 (C). To relay a train order, it must be transmitted in the usual manner to the relaying office. The operator at relaying office must transmit the order to destination. The person receiving the order at destination must repeat the order to the operator at relaying office, who must underscore on his copy each word and number as repeated. He must then repeat the order to the train dispatcher, by whom "complete" will be given to the relaying operator, who will transmit it to destination.

If the order is also addressed to a superior train at the relaying office, the "X" response must be given before it is transmitted to the inferior train.

206 (D). Before transmitting an order to a conductor or engineer over a telephone circuit, the person who is about to receive the order must give his name, train identification, and location.

The "X" response must not be used when handling train orders direct with conductor or engineer.

A copy of the train order, bearing the name of the person who receives and repeats it, must be promptly mailed by him to the superintendent.

Each telephone booth must be supplied with necessary blanks and carbon sheets.

Telephone receivers and switches must be left in proper position to avoid interference with circuit.

Booths must be kept locked when not in use.

207. To transmit a train order, the direction must be given to each office addressed, and the number of copies stated.

208. A train order to be sent to two or more offices must be transmitted simultaneously to as many of them as practicable. When not sent simultaneously to all, the order must be sent first to the superior train.

209. Operators receiving train orders must write or typewrite them in manifold during transmission.

When necessary to make additional copies of a train order, operator, after repeating the new copy to train dispatcher, must sign his own name on new copies. Operator must file the copy from which he made copies, together with one of the new copies, showing thereon date and time made.

210. When a train order has been transmitted, unless otherwise directed, operators must repeat it in the succession in which the several offices have been addressed. Each operator receiving the order must observe whether the others repeat correctly, unless relieved of this duty by train dispatcher. After the order has been repeated correctly, the response "complete", and the time, will be given by the train dispatcher. Each operator receiving this response will then write or typewrite in the space provided on the order the word "COMPLETE", or the abbreviation "COM", the time, and his last name, and, unless otherwise instructed, deliver a copy to each person addressed. But when delivery to an engineer will take the operator from the immediate vicinity of his office, it may be delivered by a member of the train or engine crew.

When a train order is delivered to any member of train or engine crew, the employe making delivery must not orally inform the person to whom delivered the contents thereof, nor read the order to him.

Train orders, clearances, and check of train register must be shown by conductor to at least one brakeman, and to others when practicable. They must be shown by engineer to fireman, and, when practicable, to forward brakeman. Brakemen and firemen must read and return them, comparing their understanding of the orders with conductor or engineer, call their attention to errors or omissions, and should there be occasion to do so, remind conductor or engineer of their contents.

211. Under the following conditions, a train order restricting the superiority of a train must not be repeated, nor the "X" response sent, until the train dispatcher has received assurance from the operator that the engineer, also the conductor when practicable, is in the office and that it is understood by them that the train is to be restricted:

- (a) When a train has received a clearance, or the engine of which has passed the train-order signal indicating "proceed".
- (b) To annul the authority of a work extra, unless the movement is otherwise safeguarded.
- (c) When it is necessary for train dispatcher to know that an order has been delivered to a train before its use by another train may be authorized, unless the movement is otherwise safeguarded.

211 (D). When a train order restricting the superiority of a train is to be transmitted by telephone direct to a train, the train dispatcher before transmitting the order must have a personal understanding with the conductor and engineer, or with the engineer if there is no conductor, that the train is to be restricted.

211 (E). A train order restricting the superiority of a train for an opposing movement must not be sent to the train at the point of restriction if it can be avoided. When so sent, to a point other than its initial station, the following must be added: "ORDER TOAT.....", and additional stop signals must be given by operator, and the inferior train must take special precautions to insure safety.

The order must not be delivered to any member of the crew until train has stopped, and outside of block system limits dispatcher must not give OK to the clearance until he has been assured by the operator that the train has stopped.

212. When directed by the train dispatcher, a train order may be acknowledged by operator before repeating it, by responding:

(Number of Train Order) (Train Number)
"..... to, X",

with the operator's initials and office designation. The operator must then write on the order his initials and the time.

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

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

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

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

217. A train order to be delivered to a train at a point not a train-order office, or at one at which the office is closed, must be addressed to "C & E.....AT.....CARE OF", and forwarded and delivered by the employe in whose care it is addressed. When sent in care of the conductor or engineer of a train, the number of the order must be shown in the usual manner on clearance for the train making delivery the same as if addressed to it. Copies of the order must be provided for conductor and engineer of the train making delivery and copies for conductor and engineer of the train addressed.

Orders must not be sent, in the manner herein prescribed, to a train, the superiority of which is thereby restricted.

218. When a train is designated in a train order by its schedule number alone, as "NO 10", all sections of that schedule are included, and each must have copies delivered to it.

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

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

When a conductor or engineer, or both, are relieved before the completion of a trip, all train orders and instructions held must be delivered to the relieving conductor or engineer. Relieving conductor or engineer must compare such orders and instructions with his engineer or conductor before proceeding.

220 (A). Train orders relating to track conditions, unless annulled, must be respected by conductor and engineer on all trips made during the tour of duty on which such orders are received.

A train order that does not restrict the train addressed may be made applicable to an additional trip by adding to the order creating the train for the additional trip, the words: "**RESPECT ORDER NO.....**".

221. A train-order signal must be provided at each train-order office, except at stations where all trains are required to obtain a clearance.

The train-order operator must keep the signal in stop position while on duty, except when he clears it for an immediately approaching train.

When a train order is to be delivered to an approaching train, or orders are held for any other train in the same direction (except orders addressed to train originating at such station) the operator must not clear the signal; he may, with permission of the train dispatcher, clear the signal when orders are held only for trains which originate at that station. If the operator does not hold an order for the train, or for any other train in the same direction, unless otherwise directed, he must clear the signal after the train has reached a point from which the signal can be plainly seen. After having been cleared for a train the signal must be restored to stop position as soon as practicable after the rear of train has passed.

(Rule 221—10-30-44) 1st paragraph - Page 65.

When the signal indicates "stop" the train must not leave the station without a clearance; and, until the engineer has ascertained that he is not to receive an order which restricts his train at that point, it must not pass the fouling point of the switch at which an opposing train may enter the siding. If the operator has no order restricting the superiority of any train in the same direction at that point, he may lower train-order signal arm twice and immediately return it to stop position as an indication that the train is to receive orders which do not restrict it at that station, or is to receive a clearance without orders; but outside of block system limits, except when a clearance only is to be delivered, the operator must obtain permission from the train dispatcher before thus operating train-order signal for an approaching train. The operator will then make delivery without causing the train to stop. After receipt of clearance, and orders if there be any, train may proceed without stopping, unless restricted by time-table, or by train orders previously received.

When it is apparent that orders are to be received without stopping, the train-order office must be passed at a speed not exceeding thirty miles per hour.

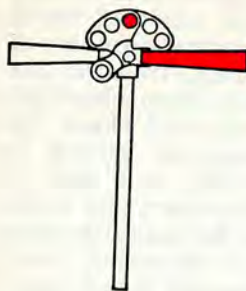
If the signal is first seen in proceed position, or if after changing to "proceed" it is changed to "stop" before the train passes it, the train must not proceed without a clearance.

Outside of block system limits, operators must space trains ten minutes apart when moving in the same direction, using the train-order signal and clearance for that purpose. When necessary to space trains in this manner the time the following train will be permitted to proceed must be shown on the clearance in the space provided for that purpose, and conductor and engineer must respect that time.

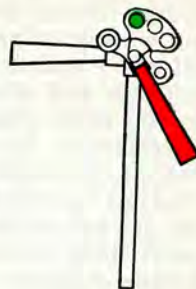
Train-order office hours may be shown in the time-table. When not so shown, and the train-order signals for both directions indicate "proceed", and in addition a green light is displayed by night, it will indicate that the train-order office is closed.

When light is not displayed in a train-order signal at night, where under the rules one should be displayed, unless a clearance is received or both arms of the signal can be plainly seen in proceed position, train must stop and determine indication. If either arm be in stop position, a clearance must be obtained when train-order operator is on duty; if no operator on duty train dispatcher must be consulted before proceeding.

TRAIN ORDER SIGNAL



Stop



Proceed

The arm to the right, as seen from an approaching train, is the one which governs. When the arm is extended horizontally, or in addition a red light is displayed, it indicates "stop". When the arm is inclined downward at an angle of 60 degrees, or in addition a green light is displayed, it indicates "proceed". See Rule 221.

The arms will be fastened to indicate "proceed" when a train-order office is closed.

221 (A). When a clearance is issued to a train the numbers of all train orders, if any, addressed to the train must be shown thereon, and conductor and engineer must know before leaving that the numbers shown correspond with the orders received, and that all information required on the clearance is properly shown thereon.

Before delivering train orders, operators must carefully read the address of each train order, fill out the clearance, entering thereon, without alteration or erasure, numbers of all train orders for the train, transmit the address and order numbers from clearance to the train dispatcher, who will check the correctness thereof against his record in train-order book; give the OK, time, and initials of the chief train dispatcher, and make proper record thereof, and the operator must enter this information on clearance, after which, clearance with orders will be delivered.

Space for time, following space for operator's name on clearance, will not be used when clearance bears OK, time, and initials of the chief train dispatcher.

If necessary to restrict a train as prescribed by Rule 211, after delivery of clearance to conductor or engineer, or both, all copies of the clearance must be destroyed by the operator and a new one issued showing thereon all orders for delivery to the train at that station.

If, after a clearance is delivered to conductor or engineer, or both, orders are issued for a train which do not restrict its superiority, the train dispatcher, without requiring the operator to destroy the clearance first issued, may authorize issuance of a second clearance which must be endorsed "Second" preceding the word "clearance" on top margin. All orders for delivery to the train at that station must be shown on second clearance.

CLEARANCE

.....Station..... 19.....

Conductor and Engineer.....

Orders for you are.....

.....
(If no orders, endorse "NONE" on first line of space provided for order numbers.)

O. K. at.....M.....

.....Chief Train Dispatcher

Do not leave before.....M.....

(Fill in this line only when necessary to comply with Rule 221)

.....Operator.....M.....

Conductor and each engineer must have a copy and see that their train is correctly designated in the above form, also that the numbers of all train orders received correspond with numbers inserted above.

Operators must retain a carbon copy.

222. Operators must promptly record, and report to the train dispatcher, the arrival and departure of all trains, reporting "no signals", or "green signals", as the case may be. If report of signals displayed is incorrect, the train dispatcher must immediately notify all trains affected until he has ascertained that the signals are properly displayed, and should "no signals" be registered when "green signals" should have been registered, he must require immediate correction in train register.

222 (A). Operators in relieving each other must make a transfer on prescribed form, of outstanding train orders and undelivered messages addressed to, or in care of, trains; also show on the transfer, except at train-register stations where all trains register, the numbers of all overdue trains and whether trains then in the yard or at station have or have not been cleared. The operator assuming duty must not handle train-order signal, nor deliver train orders, until transfer has been made and signed.

If an operator is permitted to close his office leaving track orders, annulments of schedules, or undelivered messages addressed to, or in care of, trains, for another operator coming on duty at a later time, he must list them in transfer book and operator coming on duty later will sign it.

223. The following abbreviations may be used:

Initials for signature of the chief train dispatcher

• Such office and other signals as are arranged for by the superintendent

C & E—for Conductor and Engineer

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

Com—for Complete

No—for Number

Eng—for Engine

Psgr—for Passenger

Frt—for Freight

Mins—for Minutes

Jct—for Junction

Opr—for Operator

Condr—for Conductor

Engr—for Engineer

Div—for Division

Subdiv—for Subdivision

MP—for Mile Post

MPH—for Miles Per Hour

The usual abbreviations for the names of the months.

FORMS OF TRAIN ORDERS

S-A.

Fixing Meeting Points for Opposing Trains.

- (1) *NO 1 MEET NO 2 AT B*
- (2) *NO 3 MEET SECOND 4 AT B*
- (3) *NO 5 MEET EXTRA 95 EAST AT B*
- (4) *EXTRA 562 EAST MEET
EXTRA 231 WEST AT B*
- (5) *NO 2 AND SECOND 4 MEET
NO 1 AND NO 3 AT C AND
EXTRA 95 WEST AT D*
- (6) *NO 2 MEET NO 3 NO 5 AND
NO 7 AT D*
- (7) *NO 1 MEET NO 2 AT B
SECOND 4 AT C AND
EXTRA 95 EAST AT D*
- (8) *NO 9 TAKE SIDING MEET NO 160
AT B NO 158 AT C AND
NO 152 AT D*

No. 9 will take siding at each of the designated points only for the trains named.

- (9) *NO 156 HOLD MAIN TRACK MEET
NO 5 AT E NO 7 AT F
AND NO 9 AT G*

No. 156 will hold main track at each of the designated points only for the trains named.

Examples (8) and (9) must not be combined with other examples of Form S-A.

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

B.

Directing a Train to Pass or Run Ahead of Another Train.

- (1) *NO 171 PASS NO 3 AT K*

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

- (2) *EXTRA 594 EAST RUN AHEAD OF
NO 6 M TO B*

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

- (3) *NO 273 PASS NO 3 AT K AND RUN
AHEAD OF NO 7 M TO Z*

When an inferior train receives an order to pass a superior train, right is conferred to run ahead of the train passed from the designated point. If a train be delayed after receiving authority to run ahead of a superior train, the first-named train may allow the second-named train to pass and the order will then become void.

S-C.

Giving Right Over an Opposing Train.

- (1) *NO 172 HAS RIGHT OVER NO 3 G
TO X*

If the second-named train reach the point last named before the other arrives, it may proceed, clearing the time of the opposing train as many minutes as that train was before required to clear its time under the rules. If the first-named train is met between the designated points, the conductor of the second-named train must inform it of his arrival.

(2) *EXTRA 37 EAST HAS RIGHT OVER
NO 3 F TO H*

The regular train must not go beyond the point last named until the extra train has arrived, unless authorized by train order.

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

D.

Giving Right Over Another Train in the Same Direction.

(1) *NO 9 HAS RIGHT OVER NO 19 A TO Z*

The second-named train must clear the time of the first-named train as prescribed by Rule 86 or 87.

(2) *EXTRA 95 WEST HAS RIGHT OVER
NO 59 A TO Z*

(3) *EXTRA 65 WEST HAS RIGHT OVER
EXTRA 75 WEST A TO Z*

Under examples (2) and (3) the second-named train must clear the train-order time, if any, of the first-named train as prescribed by Rule 86 or 87; otherwise it must not leave A ahead of the first-named train.

E.

Time Orders.

(1) *NO 1 RUN FIFTY 50 MINS LATE
A TO G*

(2) *NO 1 RUN FIFTY 50 MINS LATE
A TO G AND TWENTY 20 MINS
LATE G TO K*

This makes the schedule time of the train named, between the stations mentioned, as much later as stated in the order, and any other train receiving the order is required to run with respect to this later time, as before required to run with respect to the regular schedule time. The time in the order should be such as can be easily added to the schedule time.

(3) *NO 1 WAIT AT
N UNTIL NINE FIFTY 950 AM
P TEN THIRTY 1030 AM
R TEN FIFTY FIVE 1055 AM*

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

The station names must be written in column formation.

(4) *NO 1 RUN TWENTY 20 MINS LATE
ON ORDER NO 17*

This makes the time mentioned at each station in an order issued under example (3) as much later as specified and trains receiving this order are required to run with respect to this later time, as before required to run with respect to the time specified in the order under example (3).

(5) *NO 1 RUN TWENTY 20 MINS LATE
ON ORDER NO 17 FROM P*

If it be desired that an order issued under example (4) shall not apply to the time given at N in example (3), example (5) may be used and will have the same meaning as example (4), except that it applies only to the times given at P and R.

Examples (4) and (5) may be used in connection with a wait order of an extra when issued in the form of example (3).

Examples (1), (2), (3), (4) and (5) may be used in connection with an extra created by example (3) Form G, and the times at each point stated in that example have the same meaning as schedule times in the foregoing examples.

S-E.

Time Orders.

- (1) *NO 1 WAIT AT
H UNTIL NINE FIFTY 950 AM
FOR NO 272*

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

F.

For Sections.

- (1) *ENG 20 DISPLAY SIGNALS AND
RUN AS FIRST 1 A TO Z*

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

- (2) *ENG 25 RUN AS SECOND 1 A TO Z*
(3) *SECOND 1 DISPLAY SIGNALS B
TO Z FOR ENG 99*
(4) *ENGS 20 25 AND 99 RUN AS FIRST
SECOND AND THIRD 1 A TO Z*

To add any section other than the last, (5) will be used.

- (5) *ENG 85 DISPLAY SIGNALS AND
RUN AS SECOND 1 A TO Z
FOLLOWING SECTIONS CHANGE
NUMBERS ACCORDINGLY*

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

To drop any section other than the last, when there are more than two sections, (6) will be used.

- (6) *ENG 85 IS WITHDRAWN AS
SECOND 1 AT H
FOLLOWING SECTIONS CHANGE
NUMBERS ACCORDINGLY*

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

Under example (5) or (6) it is the duty of the train dispatcher to know that each conductor and engineer has in his possession all train orders affecting his train in its new position.

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

- (7) *ENG 18 INSTEAD OF ENG 85
DISPLAY SIGNALS AND RUN AS
SECOND 1 R TO Z*

The second-named engine will drop out at R, and be replaced by the first-named engine. Following sections need not be addressed.

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

To pass one section by another, (8) will be used.

- (8) *ENGS 99 AND 25 REVERSE
POSITIONS AS SECOND AND
THIRD 1 H TO Z*

Conductors and engineers of the trains addressed must exchange orders, and arrange signals accordingly. Following sections, if any, need not be addressed.

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

G.

Extra Trains.

- (1) *ENG 99 RUN EXTRA A TO F*
(2) *ENG 99 RUN EXTRA A TO F AND
RETURN TO C*

The extra must go to F before returning to C, unless authorized by train order to return before reaching F. If F be an open train-order office, a clearance must be obtained.

- (3) *ENG 77 RUN EXTRA LEAVING A
THURSDAY FEB 17TH AS
FOLLOWS WITH RIGHT OVER
ALL TRAINS
LEAVE A ELEVEN TEN 1110 PM
C TWELVE FIVE 1205 AM
E ONE FORTY 140 AM
ARRIVE F TWO TWENTY 220 AM*

This order may be varied by specifying the kind of extra and the particular trains over which the extra shall, or shall not, have right. Trains over which the extra is given right must clear the time of the extra as prescribed by Rule 86 or 87. Work extras, whether required to protect or not to protect against extras, must clear the time of this extra in the same manner.

This order must not be issued while example (9), Form S-H, or example (4), Form D-H, is in effect.

- (4) *AFTER TWO TEN 210 PM ENG 75
RUN EXTRA A TO H*

Engine 75 must not leave A as an extra before 2:10 p.m.

H.

Work Extra.

- (1) *ENG 292 WORKS EXTRA SIX
FORTY FIVE 645 AM UNTIL FIVE
FORTY FIVE 545 PM BETWEEN
A AND H AND ON EASTWARD
TRACK (or westward, or both tracks)
BETWEEN H AND K*

The work extra, whether standing or moving, must protect in both directions on single track against extra trains within the work limits, and on double track against extra trains moving with the current of traffic.

The time of regular trains must be cleared.

S-H.

Work Extra.

- (1) *ENG 292 WORKS EXTRA SIX FORTY FIVE 645 AM UNTIL FIVE FORTY FIVE 545 PM BETWEEN D AND E*

The work extra, whether standing or moving, must protect itself against extra trains within the work limits in both directions.

This may be modified by adding:

- (2) *NOT PROTECTING AGAINST EASTWARD EXTRA TRAINS*

The work extra must protect against westward extra trains.

-
- (3) *NOT PROTECTING AGAINST EXTRA TRAINS*

Protection against extra trains is not required.

-
- (4) *NOT PROTECTING AGAINST EXTRA TRAINS UNTIL TWO FORTY 240 PM*

Protection against extra trains is not required until 2:40 p.m., and extra trains must not enter the work limits before that time.

- (5) *NOT PROTECTING AGAINST EXTRA TRAINS EXCEPT PROTECTS AGAINST EXTRA 73 EAST AFTER TEN THIRTY 1030 AM AND EXTRA 85 WEST AFTER ONE THIRTY 130 PM*

The work extra will not protect against the extra trains excepted until the times specified and the extra trains excepted must not enter the work limits before those times. Protection against other extra trains is not required.

Under examples (1), (2), (3), (4) and (5), the time of regular trains must be cleared.

When a work extra has been instructed by train order not to protect against extra trains, and later it is desired that after a certain time it clear the track for, or protect against, a designated extra, an order may be given as in the appropriate example of the following form:

- (6) *WORK EXTRA 292 CLEARS EXTRA 76 EAST BETWEEN D AND E AFTER TWO TEN 210 PM*
- (7) *WORK EXTRA 292 PROTECTS AGAINST EXTRA 76 EAST BETWEEN D AND E AFTER TWO TEN 210 PM*

Under examples (6) and (7) extra 76 east must not enter the work limits before 2:10 p.m.

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

(8) **WORK EXTRA 292 PROTECTS AGAINST NO 55** (or.....
class trains) **BETWEEN D AND E**

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

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

(9) **WORK EXTRA 292 HAS RIGHT OVER ALL TRAINS BETWEEN D AND E SEVEN FIFTEEN 715 PM UNTIL ONE FIFTEEN 115 AM**

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

This order must not be modified or amplified, and must not be issued while an order, example (3), Form G is in effect.

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

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

Whenever extra trains are run over work limits they must be given a copy of the order sent to the work extra. Should the work order instruct a work extra not to protect against extra trains in one or both directions, extra trains must protect against the work extra; if the order indicates that the work extra is protecting itself against other trains, such trains must run expecting to find the work extra protecting itself.

D-H.
Work Extra.

(1) **ENG 292 WORKS EXTRA ON EASTWARD TRACK** (or westward, or both tracks) **SIX FORTY FIVE 645 AM UNTIL FIVE FORTY FIVE 545 PM BETWEEN D AND E**

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

This form may be modified by adding:

(2) **NOT PROTECTING AGAINST EXTRA TRAINS**

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

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

(3) **WORK EXTRA 292 PROTECTS AGAINST NO 55** (or.....*class trains*) **BETWEEN D AND E**

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

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

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

- (4) *WORK EXTRA 292 HAS RIGHT OVER ALL TRAINS ON EASTWARD AND WESTWARD TRACKS BETWEEN G AND H SEVEN ONE 701 PM UNTIL ONE ONE 101 AM*

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

This order must not be modified or amplified, and must not be issued while an order example (3), Form G is in effect.

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

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

Where extra trains are authorized to move with the current of traffic without running orders, a work extra must not be given an order under example (2) or (4), Form *D-H*, nor an order that all extra trains in a specified direction will wait at a designated point.

I.

Relief of Flag Protection.

- (1) *NO 697 NOT PROTECTING AGAINST WESTWARD EXTRA TRAINS UNTIL ONE THIRTY 130 PM*
- (2) *EXTRA 2345 EAST BETWEEN B AND D NOT PROTECTING AGAINST EASTWARD EXTRA TRAINS UNTIL THREE THIRTY 330 PM*

This form must not be used to relieve a train of flag protection to the rear against a regular train, and must not be used when a work extra in the territory named has been instructed not to protect against extra trains.

This form must not be combined with other forms; and must not be used in territory where, by special instructions in time-table, trains moving with the current of traffic may run extra or work extra without train-order authority, as prescribed by Rule *D-97 (A)*.

J.

Holding Order.

- (1) *HOLD NO 2*
- (2) *HOLD ALL (or eastward) TRAINS*

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

- (3)*MAY GO*

These orders will be addressed to the operator and acknowledged in the usual manner.

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

K.

Annulling a Schedule or a Section.

- (1) *NO 1 DUE TO LEAVE A FEB 29TH IS ANNULLED A TO Z*
- (2) *SECOND 5 DUE TO LEAVE E FEB 29TH IS ANNULLED E TO Z*

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

When a section is annulled from an intermediate point, opposing inferior trains must not leave that point until it is ascertained that the schedule has been fulfilled to that point or an order is received authorizing train to proceed.

It will be necessary to obtain the annulment of a schedule or section but once, provided conductor and engineer have a copy in their possession on each trip.

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

L.

Annulling an Order.

- (1) *ORDER NO 10 IS ANNULLED*

If an order which is to be annulled has been delivered to a train, the annulling order must be addressed to that train; if it has not been delivered, the annulling order may be addressed to the operator, who must then destroy all copies of the order annulled but his own, and write thereon number of the annulling order.

When an annulling order is addressed to a train, that train must have a copy of the order annulled.

- (2) *THIS ORDER ANNULLED AT TWO TEN 210 PM*

The above addition may be made to any order which is to be annulled at a predetermined time.

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

S-M.

Annulling Part of an Order.

- (1) *THAT PART OF ORDER NO 10 READING NO 1 MEET NO 2 AT S IS ANNULLED*
- (2) *THAT PART OF ORDER NO 12 READING NO 271 PASS NO 3 AT S IS ANNULLED*

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

D-M.

Annulling Part of an Order.

- (1) *THAT PART OF ORDER NO 10 READING EXTRA 263 WEST PASS NO 1 AT S IS ANNULLED*
- (2) *THAT PART OF ORDER NO 14 READING NO 273 PASS NO 1 AT S IS ANNULLED*

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

S-P.

Superseding an Order or a Part of an Order.

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

- (1) *NO 1 MEET NO 2 AT C INSTEAD OF B*
- (2) *NO 273 PASS NO 1 AT D INSTEAD OF C*
- (3) *NO 172 HAS RIGHT OVER NO 3 G TO R INSTEAD OF X*

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

When a train is directed by train order to take siding or to hold main track for another train, such instructions apply only to the point named in the order, and do not apply to the superseding order unless so specified.

D-P.

Superseding an Order or a Part of an Order.

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

- (1) *NO 271 PASS NO 3 AT C INSTEAD OF B*

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

Q.

Notice of Time-Table or Supplement.

- (1) *TIME-TABLE NO 73 EFFECTIVE TWELVE ONE 1201 AM JAN 1ST*
- (2) *SUPPLEMENT NO 1 TO TIME-TABLE NO 3 EFFECTIVE TWELVE ONE 1201 AM FEB 15TH*

D-R.

Providing for a Movement Against the Current of Traffic.

- (1) *NO 1 HAS RIGHT OVER OPPOSING TRAINS ON NO 2 (or eastward) TRACK C TO F*

The designated train must use the track specified between the points named and has right over opposing trains on that track between those points. Opposing trains must not leave the point last named, nor any intermediate point where the order is received, until the designated train arrives.

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

This order may be modified as follows:

- (2) *AFTER NO 4 ARRIVES AT C NO 1 HAS RIGHT OVER OPPOSING TRAINS ON NO 2 (or eastward) TRACK C TO F*

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

A train must not be moved against the current of traffic until the track on which it is to run has been cleared of opposing trains, or such trains have in their possession a copy of the order authorizing the movement.

Where trains moving with the current of traffic are authorized to run extra or work extra without train-order authority, Form D-R must not be used until all trains and detached engines, whether in service or tied up, which may use either track, have received a copy of the order.

D-S.

Providing for the Use of a Section of Double Track as Single Track.

- (1) *NO 1 (or westward) TRACK WILL BE USED AS SINGLE TRACK BETWEEN F AND G*

If it is desired to limit the time for such use, add:
FROM ONE ONE 101 PM TO THREE ONE 301 PM

All trains must use the track specified between the stations named and must be governed by rules for single track.

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

Where trains moving with the current of traffic are authorized to run extra or work extra without train-order authority, Form D-S must not be used until all trains and detached engines, whether in service or tied up, which may use either track, have received a copy of the order.

V.

Check of Trains.

- (1) *TRAINS DUE* *BEFORE*
HAVE ARRIVED AND LEFT
EXCEPT
- (2) *NO* *OF* *HAS ARRIVED*
(or left)
- (3) *EXTRA* *HAS ARRIVED (or*
left) *ON ORDER NO*

When necessary to make an exception of a train or trains, such exception will be added.

Where not required, the word "arrived" or "left" will be omitted.

Form V must not be combined with other forms of train orders. When this form is received train may register by ticket, provided it is not necessary to check the register against other schedules.

W.

Change in Clearance or Register Requirements.

- (1) *NEED NOT OBTAIN*
CLEARANCE AT
 - (2) *NEED NOT REGISTER AT*
.....
 - (3) *EXTRA* *REGISTER AT*
..... *ON ORDER NO*
- When example (3) is used, number and date of order named will be inserted in column of train register captioned "Signals".
- (4) *MAY CHECK REGISTER AT*
..... *AGAINST EXTRA* *ON*
ORDER NO

These examples may be combined.

TRAIN ORDER No. 19

To C & E

At Station X Opr M

Repeated M

Made Time M Opr

BLOCK SIGNAL AND INTERLOCKING RULES

DEFINITIONS

Automatic Block System—A series of consecutive blocks governed by block signals actuated by a train, or by certain conditions affecting the use of a block.

Interlocking—An arrangement of signal appliances so interconnected that their movements must succeed each other in a predetermined order. It may be operated manually or automatically.

Centralized Traffic Control System—A system of operation by means of which the movement of trains over routes and through blocks on a designated section of track or tracks is directed by signals and controlled from a designated point without requiring the use of train orders and without superiority of trains.

Absolute-Permissive Block System—A system of operation by means of which the movement of trains over routes and through blocks on a designated section of track or tracks is directed by signals automatically controlled and without the use of train orders and without superiority of trains.

Interlocking Limits—The tracks between the home signals of an interlocking.

Interlocking Station—A place from which an interlocking is operated.

Block—A length of track between consecutive home signals governing in one direction; or from a home signal to sign reading "End of Block", or "Block System Limit"; the use of which by trains is governed by block signals.

Block Signal—A fixed signal at the entrance of a block, or within a block, to govern trains entering and using that block.

Interlocking Signals—The fixed signals of an interlocking.

Home Signal—A fixed signal at the entrance of a route or block to govern trains entering and using that route or block.

Approach Signal—A fixed signal used in connection with one or more home signals to govern the approach thereto. (For example, see Rule 281 D.)

Distant Signal—A fixed signal in approach of a home signal to govern the approach thereto, and for other caution purposes. (For example, see Rule 282.)

Absolute Signal—A home signal governing the movement of trains without the use of train orders and without superiority of trains.

Dwarf Signal—A low fixed signal.

Grade Signal—An automatic block signal designated by a disc bearing the letter "G" on signal mast below arm or light.

Light Signal—A fixed signal displaying indications by means of colored lights only.

Dual Control Switch—A power operated switch which is also equipped for hand-throw operation.

Controlled Siding—A siding having a power operated switch at each end, and may, or may not, have block signal control.

Overlap Post—A post marking the limit of control of a block signal.

Dummy Mast—A short mast placed on top of a bracket post or bracketed to the side of a signal mast, to indicate another track between the bracket post or signal mast and the track or tracks for which signals are provided.

Spring Switch—A switch equipped with a spring so that when run through in trailing movement the switch points return to their original position.

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

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

D-253. The train dispatcher must be informed in advance of any known condition that will delay the train or prevent it from making usual speed.

D-254. Except as affected by Rule *D-251* all block signal rules and other rules remain in force.

FIXED SIGNALS

271. Automatic block signals will bear number plates attached to signal masts. Automatic semaphore home signal arms will be painted red and will be distinguished by white stripe near end of semaphore arm. The number plate on a distant light signal will bear the prefix "D".

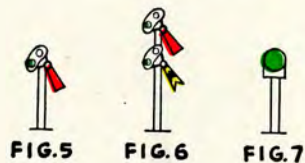
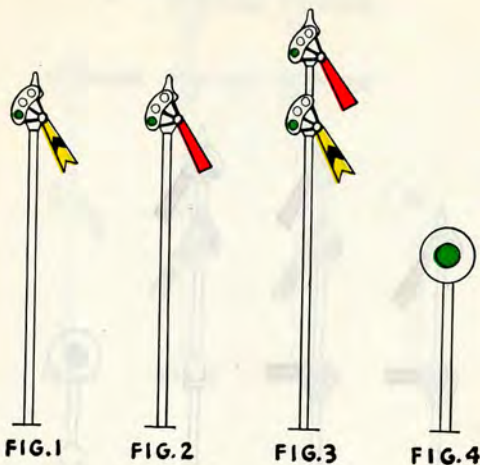
Interlocking signals will not bear number plates.

Absolute signals will not bear number plates, but will have plates bearing the letter "A".

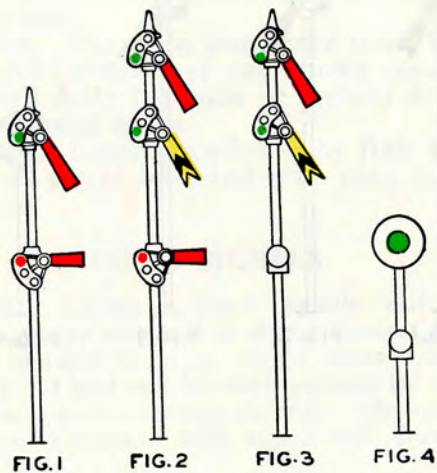
Interlocking and absolute semaphore home signal arms will be painted red.

Aspects as illustrated or referred to in these rules are shown by the position of semaphore arms or color of lights, or both, as seen from an approaching train. Other combinations may be used. (1-16-46)

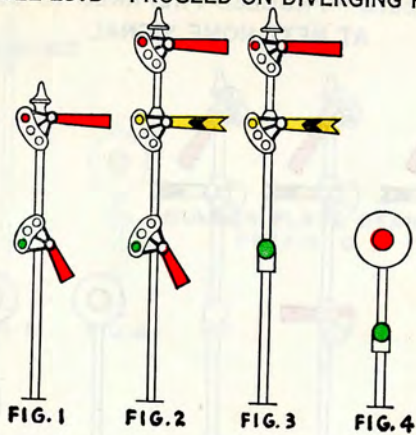
RULE 281—PROCEED



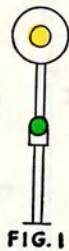
RULE 281A—PROCEED EXCEPT ON DIVERGING ROUTE



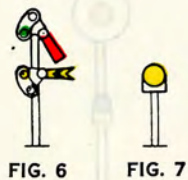
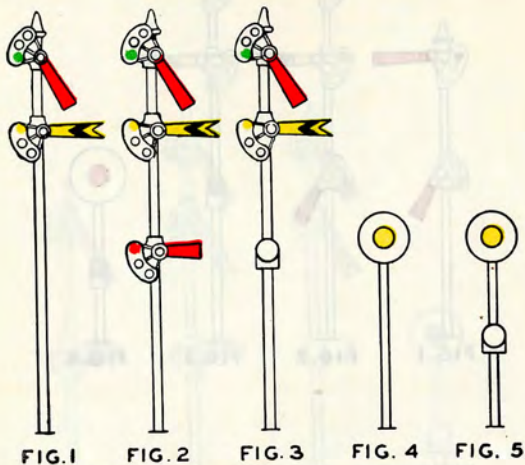
RULE 281B—PROCEED ON DIVERGING ROUTE



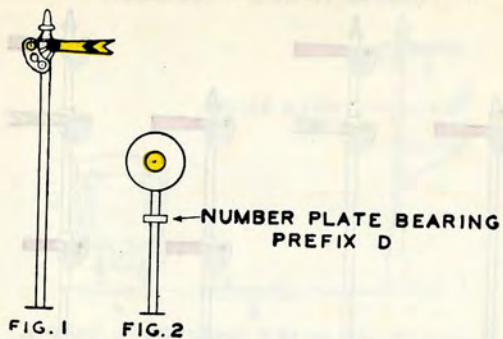
RULE 281C—PROCEED. NEXT SIGNAL INDICATES "PROCEED ON DIVERGING ROUTE"



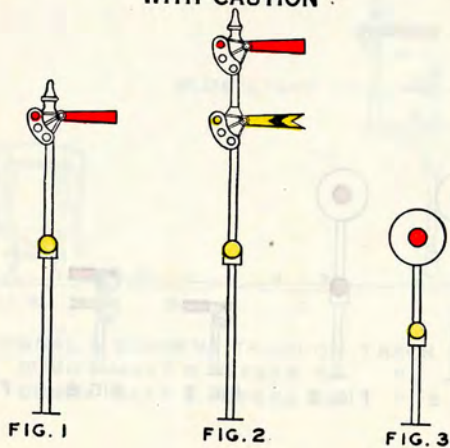
**RULE 281D—PROCEED PREPARED TO STOP
AT NEXT HOME SIGNAL**



RULE 282—PROCEED WITH CAUTION



**RULE 282A—PROCEED ON DIVERGING ROUTE
WITH CAUTION**



RULE 290—STOP

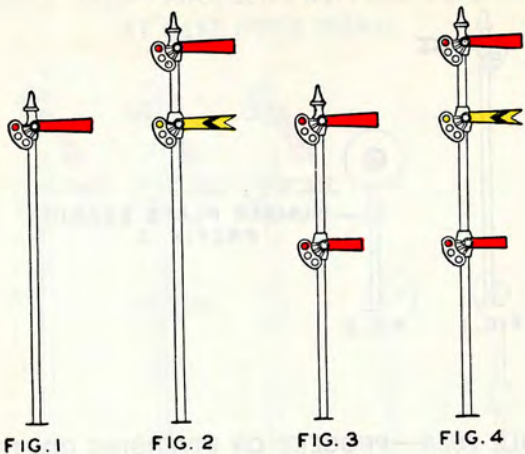


FIG. 1

FIG. 2

FIG. 3

FIG. 4

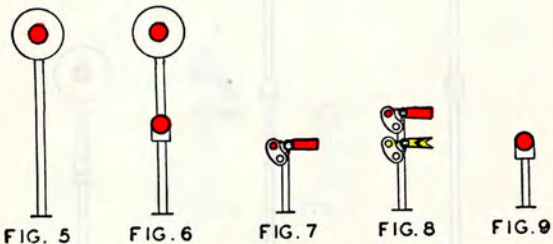


FIG. 5

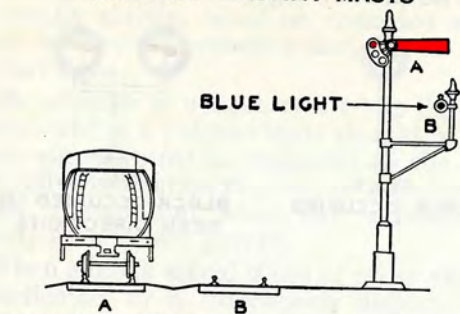
FIG. 6

FIG. 7

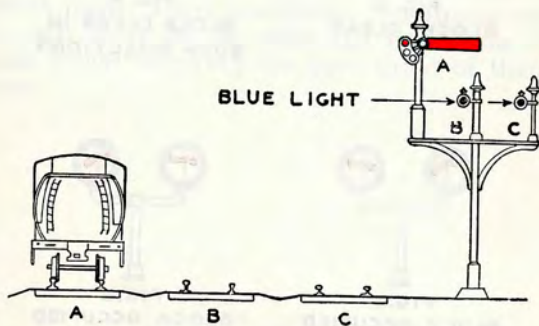
FIG. 8

FIG. 9

RULE 291—DUMMY MASTS



SIGNAL A GOVERNS TRAIN ON TRACK A
DUMMY MAST B REFERS TO " B



SIGNAL A GOVERNS TRAIN ON TRACK A
DUMMY MAST B REFERS TO " B
DUMMY MAST C REFERS TO " C

RULE 292—SWITCH INDICATORS



FIG. 1
BLOCK OCCUPIED



FIG. 2
BLOCK OCCUPIED IN
BOTH DIRECTIONS



FIG. 3
BLOCK CLEAR



FIG. 4
BLOCK CLEAR IN
BOTH DIRECTIONS



FIG. 5
BLOCK OCCUPIED
TO THE RIGHT
CLEAR TO THE LEFT



FIG. 6
BLOCK OCCUPIED
TO THE LEFT
CLEAR TO THE RIGHT

293. A signal improperly displayed, or the absence of a signal at a place where a signal is usually shown, must be regarded as the most restrictive indication that can be given by that signal.

The absence of a light, or a white light displayed where a colored light should be, in a block signal, must be regarded as the most restrictive indication that can be given by that signal, except that when day indication is plainly seen it will govern.

When a block signal is out of order and not so indicated, or is improperly displayed, or working improperly, or light is out at night, report must be made from the first available point of communication to the chief train dispatcher.

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

295. Interlocking or absolute signals may be made part of the automatic block system adjoining interlocking or centralized traffic control limits. When so arranged they will be designated "semi-automatic" and distinguished by a plate bearing the letters "SA". Trains stopped by such signals must observe interlocking or centralized traffic control rules within the interlocking or centralized traffic control limits, and Rule 509, 509(F) or 509(J), as the case may be, within the automatic portion of the block beyond interlocking or centralized traffic control limits. (1-16-46)

When the automatic control of a semi-automatic signal is to remain out of service for an indefinite time, the number plate will be removed.

296. As soon as arms are placed on semaphore signals, or covering removed from light signals, they must be regarded as in service.

When signals are to be put out of service for an indefinite time, time-table bulletin will be issued, and arms and lights removed from semaphore signals, or covering applied to light signals.

297. After passing a signal indicating "proceed", the indication of the next signal may change to "stop", and enginemen and trainmen must be on the alert to observe it.

A train, if delayed in the block, must proceed with caution to the next signal. (5-16-45)

AUTOMATIC BLOCK SYSTEM

505. Automatic block signals govern the use of the blocks, but unless otherwise provided, do not supersede the authority of trains; nor dispense with the use or the observance of other signals whenever and wherever they may be required.

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

509. When an automatic block signal indicates "stop", train, without stopping, may proceed with caution, not exceeding twelve miles per hour, under the following conditions:

- (a) To enter siding where the switch is not more than one thousand feet beyond the signal and it can be seen that no opposing train has passed the home signal governing such opposing train; or that an opposing or preceding train has stopped, or is moving prepared to stop, clear of the route to be used.
- (b) To enter a yard when the switch is set for the receiving track and the route is clear to the fouling point of the switch.
- (c) To continue on the main track when meeting or passing a train when the view of track is clear to the point where fouled by the train which is taking siding, or when the engineer is informed by a member of the crew of the train to be met or passed that the stop indication of the signal is caused by the train to be met or passed being partly in the siding and not clear of main track.
- (d) To continue within the limit of a grade signal.

509 (E). When an automatic block signal number plate is reversed, showing yellow, and signal indicates "stop", train, without stopping, may proceed with caution through the block.

509 (F). When an automatic block signal indicates "stop", train, after stopping, may proceed with caution, not exceeding twelve miles per hour, under the following conditions:

- (g) On single track, when a preceding train is seen in the block, and the intervening track is seen to be clear.
- (h) On single track, when view of track is clear to the end of block; or view of track is clear to a distant signal and such distant signal indicates "proceed".
- (i) On double track.

509 (J). Except as provided in Rule 509, 509 (E) or 509 (F), when an automatic block signal indicates "stop", train must stop and send a flagman ahead immediately, wait at least five minutes after he has started, and then follow, keeping at least one-fourth mile behind him until flagman reaches viewpoint as described in paragraph (g) or (h) of Rule 509 (F).

509 (K). Flagman must watch for broken rails or other defects in track while preceding his train as required by Rule 509 (J).

Except as provided in Rule 509 (E), when a train is proceeding after finding an automatic block signal displaying stop indication, enginemen must watch for broken rails or other defects in track.

The engineer of a train entering a block under conditions described by Rule 509, 509 (F) or 509 (J), will be held responsible for an accident caused by encountering a train or obstruction in the block.

When proceeding under provisions of Rule 509, 509 (F) or 509 (J), speed must not exceed twelve miles per hour until rear of train has passed out of block, or has passed a distant signal which was displaying proceed indication.

510. An automatic block signal with a triangular number plate bearing the letter "P" in addition to signal number, is also actuated by some special protective device, and when signal indicates "stop", Rule 509, 509 (F) or 509 (J), as the case may be, will govern; and in addition, careful examination must be made of track or structure for which protection is provided to assure that it is safe for passage of trains. Number and location of such signals will be shown in time-table, with description of the special protection provided.

511. Both switches of a crossover must be open before a train starts to make a crossover movement, and the movement must be completed before either switch is restored to normal position.

512. Where switch indicators are used, the indications displayed do not relieve enginemen and trainmen from protecting their train as required by the rules. Switch indicators for one track at a crossover will be located at the switch stand for the switch in the other track; at other switches they may be placed at the switch stand or at the derail.

512 (A). When single switch indicators indicate "block occupied", or when double indicators indicate "block occupied" in the direction in which the train intends to move, train may proceed only as prescribed by Rule 509, 509 (F) or 509 (J), as the case may be, but must be protected as prescribed by Rule 99.

512 (B). Where switch indicators and signals are used, movements to main track will be governed as follows:

If indicator indicates "block clear", switch may be set. After proper lineup has been made, signal will indicate "proceed" if block is clear.

When signal indicates "stop" after proper lineup has been made, movement must not be made to main track except as prescribed by Rule 509, 509 (F) or 509 (J), as the case may be, and protection provided as prescribed by Rule 99.

513. Before a train or engine fouls a main track or crosses from one main track to another, it must be known that there is no train or engine that may be moving toward the switch within or closely approaching the block to be occupied, unless flag protection is provided to safeguard the movement, as prescribed by Rule 99.

513 (A). A train, having passed a signal indicating "proceed", if delayed in the block, must proceed with caution to the next signal.

514. A train entering a block between signals must be protected as required by the rules, and must proceed with caution to the next signal.

515. A train having passed beyond the limit of a block must not back into that block except under protection as prescribed by Rule 99.

515 (A). When making a reverse movement on main track after moving out of a siding or other track, train will, unless movement be completed beyond the governing signal, proceed only as prescribed by Rule 509, 509 (F) or 509 (J), as the case may be.

516. Overlaps may be indicated by overlap posts, locations of which will be shown in time-table. A train holding main track at a meeting point must not enter the overlap, nor open a switch within the overlap, until the opposing train has entered the block. A preceding train must clear the overlap as soon as practicable to avoid delay to a following train.

517. Insulated joints are placed near the fouling point. Engines or cars must not be left standing between these joints and the track protected.

518. Where derrails are connected with block signals they will have a switch circuit controller attached to the derail.

SPRING SWITCHES

535. A spring switch will be identified by a target bearing the letters "S S". After trailing through a spring switch a reverse movement must not be made until it is known that both points have moved to proper position. When a stop is made before the entire movement is completed, a reverse movement must not be made, nor slack taken, until the switch has been set by hand.

536. When a trailing movement is to be made over a spring switch equipped with an oil buffer and a facing point lock, and the initial movement of the switch points is not to be actuated by the wheels of the engine, switch must be hand thrown for movement, and the trainman so setting the switch must again set it for normal position after movement has been completed, unless another trainman of his train has been notified to do so.

537. Running switches must not be made over spring switches; blow-off cocks, sanders or sprinkler valves must not be operated, and boosters or injectors must not be started, while engine is standing on, or passing over, spring switches.

538. Location and normal position of spring switches, and designation of spring switches equipped with facing point locks, will be shown in time-table.



FIG.1

INTERLOCKING

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

605 (A). Interlocking limits on main tracks will be designated in the time-table, except at railroad crossings, junctions and drawbridges where the limits are clearly defined by the interlocking home signals. Where necessary, limits will also be indicated by sign-boards.

605 (B). Automatic signals located within interlocking limits will be observed in accordance with Rule 509, 509 (F) or 509 (J), as the case may be, as applied to single track.

Signal Operators

611. Unless otherwise provided, signals must be kept in the position displaying the most restrictive indication, except when displayed for an immediate movement.

612. Appliances must be operated carefully, and only by those charged with that duty. If any irregularity affecting their operation is detected the signals must be displayed to give their most restrictive indication until repairs are made.

614. When the route is set, the signals must be operated sufficiently in advance of approaching trains to avoid delay.

615. When necessary to change any route for which the signals have been cleared for an approaching train, switches, movable point frogs or derails must not be changed, or signals cleared for any conflicting route, until the train for which the signals were first cleared has stopped.

616. The lever operating a switch, derail, movable point frog, or lock must not be moved when any portion of a train is standing on or closely approaching the switch, derail, or movable point frog.

617. Operating levers must be blocked, or marked, and should not be used, when a track, switch or signal is undergoing repairs, or when a track is obstructed.

619. If the force, whose duty it is to keep switches clear when snow or sand is drifting, is not on hand when required, the fact must be reported to the chief train dispatcher. During storms, high water, drifting snow or sand, special care must be used. During cold weather the levers must be moved as often as may be necessary to keep the connections from freezing.

620. If a signal fails to work properly its operation must be discontinued, and, until repaired, the signal secured so as to display its most restrictive indication.

621. Signal operator must observe, as far as practicable, whether the indications of the signals and the position of the derails and switches correspond with the position of the levers.

622. Signal operator must not make, or permit to be made, any unauthorized repairs, alterations or additions to the interlocking. Any defects in the interlocking must be reported promptly to the signal supervisor; also to the chief train dispatcher if trains may be delayed.

623. If there is a derailment, or if a rigid switch, movable point frog or derail is run through, or if any damage occurs to the track or interlocking, the signals must be restored so as to display their most restrictive indication, and no movement permitted until all parts of the interlocking and track subject to consequent damage have been examined and are known to be in safe condition.

624. When necessary to disconnect a switch, movable point frog, derail, lock, or electric locking circuit, all switches, movable point frogs and derails affected must be securely spiked or fastened in the required position and the levers blocked, or marked, in such manner that they cannot be operated, before any train is permitted to pass over them.

625. When any part of an interlocking is to be repaired, the signal operator must have an understanding of the scope of the work and what route or routes may be affected by such repairs.

When any part of an interlocking is undergoing repairs, signals must not be displayed for any movements which may be affected by such repairs until it has been ascertained from the repair man that the switches are properly set for such movements.

When repairs or changes necessitate the removal of any part of the machine locking, the signal operator must ascertain what routes are affected, and must not clear the signals over any such affected routes. Trains must be moved over such routes by hand signals as prescribed by Rule 628, until the locking has been restored.

626. Signal operator must observe, as far as practicable, each passing train, and note whether it is complete and in order. Should he note any indication of conditions endangering that train, or any other train, the signal operator must take such measures for the protection of trains as may be practicable.

628. Hand signals must not be used when the proper indication can be displayed by the interlocking signals. When hand signals are necessary, the signal operator must assure himself that the switches are properly set and that the route is clear. Signals must be given by signal operator on the ground unless otherwise provided, and must be given in such a way that there can be no misunderstanding on the part of enginemen or trainmen as to the signals, or as to the train or engine for which they are given.

A yellow flag must be used by day, a yellow light by night, in giving hand signals.

629. Before granting permission in accordance with Rule 663, for trains or engines to pass an inoperative signal, a red tag must be applied to the signal lever, and the tag must not be removed until it is known that the train or engine has completed the authorized movement.

When a switch or signal must not be operated, because of track obstruction or other condition, signal operator must apply a red tag to control lever governing the switch or signal, and the tag must not be removed until the switch or signal is reported ready for use.

630. Signal operators will be held responsible for the care and cleanliness of the interlocking station, lamps, and supplies; and unless otherwise provided, of the interlocking and tools.

They must see that lamps and appliances for hand signaling, and, unless otherwise provided, tools and fire apparatus are ready for immediate use.

633. If a train overruns a signal indicating "stop" or fails to obey a hand signal, the fact must be reported to the superintendent.

634. Signal operators must not permit unauthorized persons to enter the interlocking station.

635. When signal operators relieve each other they must make a transfer of all unexecuted orders and instructions, and information as to train movements, overdue trains, and conditions of the interlocking.

636. A train-order signal within the limits of an interlocking must not be cleared for an approaching train until the preceding interlocking signals governing the movement of the train have been cleared.

637. Ordinarily, passenger trains must be given precedence over freight trains, but when a signal indicates "proceed" for an approaching train, it must not be changed, except as provided in Rule 615.

638. In case of failure of a lever indication, the signal operator must ascertain that all requirements affecting the safety of train movements are fulfilled before releasing the indication.

639. General instructions as may be required, governing the operation and manipulation of each interlocking will be placed at that interlocking station, and signal operators must familiarize themselves therewith.

Enginemen and Trainmen

661. If a signal indication permitting a train to proceed has been accepted, and is changed to indicate "stop" before it is reached, stop must be made at once. Such occurrences must be reported to the superintendent.

663. A train must not pass an interlocking signal indicating "stop", without stopping. Train, after stopping, may proceed through the interlocking limits of the interlocking signal with caution, not exceeding twelve miles per hour, under the following conditions:

- (a) Upon receiving hand signal as prescribed by Rule 628.
- (b) Upon receiving authority by telephone or otherwise orally from signal operator, and after a member of the crew has made careful examination of facing point switches.

- (c) If no signal operator on duty, by flagman preceding the train, if interlocking cannot be operated by a member of the train crew. At railroad crossings and junctions flag protection must be provided on the intersecting tracks unless interlocking signals, or derails, thereon be known to be in position to protect the movement.

Flagman must watch for broken rails or other defects in track while preceding his train; and when not required to send a flagman in advance under these conditions, enginemen must watch for such defects.

667. Running switches must not be made, blow-off cocks, sanders or sprinkler valves must not be operated, and boosters or injectors must not be started, over movable parts of an interlocking.

669. Trains stopped by the signal operator in making a movement through an interlocking, must not move in either direction until they have received the proper signal from him.

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

LETTER TYPE INDICATORS

705. Within block system limits, at locations specified in time-table, letter type indicators may be used. These indicators will be attached to an automatic block signal mast, and will display indications by illuminated letters, which will supersede the superiority of trains within defined limits.

S—Take siding (Fig. 1)

M—Proceed on main track (Fig. 2)

Other letters, or combinations of letters may be used. (1-3-46)

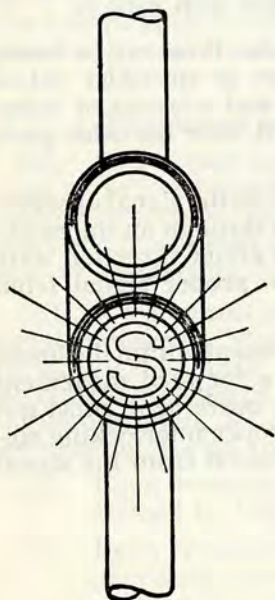


FIG. 1.

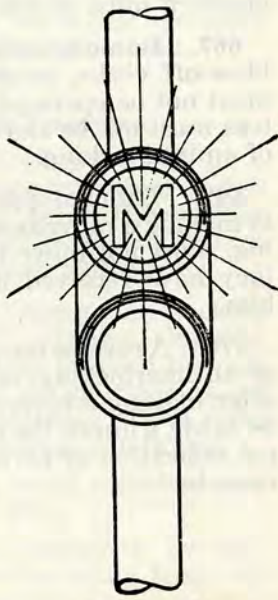


FIG. 2.

706. When the letter "S" is displayed at a terminal yard, trainman or engineman will call yard office from telephone located near initial switch and obtain instructions before proceeding. At all other stations train must take siding.

S-707. When the letter "M" is displayed, train is thereby given superiority over all trains to the fouling point of the switch at which an opposing train may enter siding or receiving track, and will hold main track at the station, but must observe any restriction that may be imposed by automatic block or other signals.

D-707. When the letter "M" is displayed approaching a siding, or at the initial switch of a siding, train will hold main track; when displayed on a siding near the leaving end of siding, train will enter main track and in either case train is thereby given superiority over all following trains to the point designated in time-table but must observe any restriction that may be imposed by automatic block or other signals.

708. When neither the letter "S" nor the letter "M" is displayed the train may proceed on its time-table or train-order authority.

709. At stations where the indicator is operated by a train-order operator, the operator must not display either the letter "S" or "M" without authority from the train dispatcher or yardmaster. (1-3-46) Replace 707, 708, 709.

AUTOMATIC TRAIN CONTROL

715. On trains operating within automatic train control limits, engine from which air brakes are controlled must have automatic train control apparatus cut in, unless otherwise authorized.

At engine terminals where track magnets are provided for test purposes, engineer must, before accepting engine for road service in automatic train control territory, make the required tests to assure himself that the train control apparatus is functioning properly.

716. When passing a signal displaying any indication except "proceed", or a signal with number plate reversed, the engineer must operate the forestalling valve while passing over the track magnet.

717. When stopped by an automatic train control application at a signal indicating "proceed", the train must proceed with caution to the next block signal.

718. When an automatic control application occurs in train service, either inside or outside of automatic train control limits, report must be made on the prescribed form from the next open train-order office.

719. When the train control apparatus on the engine fails and cannot immediately be repaired, it must be cut out of service, and the train may then proceed, but must not pass an engine terminal, if entering or continuing in automatic train control limits, without permission from the chief train dispatcher. While moving in train control limits with train control apparatus cut out of service, the engineer and fireman must communicate to each other the indication of each signal affecting the movement of their train.

STAFF SYSTEM

726. Within limits designated by special instructions in the time-table, the staff system will be used.

At each end of a staff block a staff machine is located, in which the train staffs of that block are contained.

The two machines are so electrically connected that when a staff is withdrawn from one machine another staff cannot be withdrawn from either until that staff is placed in the machine at the other end of the block or replaced in the machine from which withdrawn.

727. A staff block must not be entered or fouled without possession of the proper staff, except as provided in Rules 734 and 735.

728. The possession of the proper staff obtained in the prescribed manner is authority for the use of the block governed by that staff, and within the limits of that block supersedes the superiority of trains and the observance of Rule 99.

729. Staffs must be obtained only from the staff machine and only by a member of the crew of the train which is to use the block.

730. A staff must not be exchanged between trains but must be restored to the staff machine by a member of the crew of the train which obtained it, and a new one obtained from the machine by the other train.

731. On receipt of a staff the engineer must ascertain that it is the proper one by reading the names stamped thereon.

732. In obtaining staffs and again in restoring them, the staff machine must be handled carefully, particularly avoiding rapid or rough movement of the staff through the machine.

733. When train holding staff stops on main track at staff station, staff must not be restored to staff machine until the train is ready to proceed, and (except when leaving staff limits) staff for block in advance has been obtained.

734. Staff must not be taken from staff machine until the train is ready to proceed. If the train will be delayed at a staff station doing station work, or from any other cause, the block must be released for other trains by restoring the staff to staff machine, first protecting in each direction as prescribed by Rule 99.

735. If staff cannot be obtained from staff machine, train must send a flagman ahead, wait ten minutes after he has started, and then follow at safe distance through the block. Before sending flagman ahead train will communicate with train dispatcher if practicable, and if not will wait five minutes to permit a preceding or opposing train to clear the block, unless it can be seen that there is no train in the block.

736. When staff apparatus fails, the train dispatcher must be notified from the next available point of communication.

ABSOLUTE-PERMISSIVE BLOCK SYSTEM

740. On portions of the railroad within limits specified in the time-table and designated as absolute-permissive block system, trains will be governed by block signals whose indications will supersede the superiority of trains for both opposing and following movements on the same track.

741. Absolute signals govern the use of the routes within absolute-permissive block system limits, and confer authority to the limit of the absolute-permissive block system; but do not dispense with the use or the observance of other signals whenever and wherever they may be required.

742. The train dispatcher must be informed of any known condition that will delay the train, or prevent it from making usual speed through absolute-permissive block system limits.

Within such limits, second and inferior class trains, and extra trains, must not occupy a block, or overlap in connection therewith, when it is known that a first-class train will be delayed thereby.

744. When an absolute signal indicates "stop", train must stop, and if after waiting ten minutes no train is seen or heard approaching, flagman must be sent ahead and train may follow, keeping at least one-half mile behind flagman until he reaches next signal indicating "proceed", or when he has reached opposite end of absolute-permissive block system limit.

CENTRALIZED TRAFFIC CONTROL SYSTEM

Note—Where, in these rules the term “dispatcher” is used, it has reference to the train dispatcher or signal operator, or some employe acting upon authority of the train dispatcher.

760. On portions of the railroad within limits specified in the time-table and designated as centralized traffic control system, trains will be governed by block signals whose indications will supersede the superiority of trains, unless otherwise provided.

761. Absolute signals govern the use of the routes within centralized traffic control limits; and confer authority to the next absolute signal, except that the last absolute signal confers such authority only to the centralized traffic control limit; but do not dispense with the use or the observance of other signals whenever and wherever they may be required.

762. Protection of rear of train is required as prescribed by Rule 99, within centralized traffic control limits, except when standing between absolute signals at a station.

Within centralized traffic control limits, Rule 93 will not apply.

763. Train indicators, signals and markers be displayed through centralized traffic control limits. Rule S-17, Fig. 7 of Rule 19, and Rule 19 (A) will not apply on controlled sidings. (12-30-44)

764. Initial and terminal points of centralized traffic control will not affect the initial and terminal stations of schedules, nor of extra trains created by train order. Rule 96 must be observed in creating sections.

Train Dispatchers

766. When permission is granted to operate a dual control switch by hand, or for a train to foul main track or controlled siding to perform work, dispatcher must notify conductor as to clock time during which train may use the switch or track, and designate the track limits. Before granting such permission, the dispatcher must protect the work limits by proper absolute signal in each direction, and immediately apply a red tag to each lever controlling these signals; thereafter he must not clear these signals, nor remove the red tags, until conductor reports the track clear and selector lever restored to motor position, if the dual control has been used.

When a switch, or signal, must not be operated because of track obstruction or other condition, dispatcher must apply a red tag to control lever governing the switch or signal, and the tag must not be removed until the switch, or signal, is reported ready for use.

768. Signals must be restored to display stop indication immediately upon the passage of the train for which cleared unless there is a closely following movement in the same direction, and in the meantime no occasion to operate a switch.

769. Instructions relating to track conditions will be issued in the usual manner.

Enginemen and Trainmen

772. The main track and controlled sidings must not be fouled, unless authorized by an absolute signal indication, or by permission from the dispatcher.

When the movement is not authorized by an absolute signal indication, but is made by permission of the dispatcher, the following will govern:

- (a) Before fouling the main track at a dual control switch to perform switching, secure permission from the dispatcher, who will designate working limits and time limits. After this is obtained, throw the selector lever to hand-throw position and lock it. When the selector lever is in hand-throw position the dispatcher has no control over the switch, and all absolute signals governing movements over the switch will indicate "stop". Under these conditions the train may pass these signals without stopping and make movements over the switch within the limits authorized.

When switching operations within the limits authorized require movement over a dual control switch but do not require setting the switch by hand, the selector lever must nevertheless be locked in hand-throw position until all movements over the switch have been completed, unless each movement is authorized by the proper absolute signal indication.

- (b) Where power operated switch is equipped with crank instead of selector lever, similar permission must be obtained from dispatcher, after which switch may be cranked by hand. Instructions posted at the switch must be observed.

- (c) Before fouling the main track at any switch, except a dual control switch, after securing permission from the dispatcher, close the derail or open the cross-over switch in siding or other track and then open the main track switch. If no signal governs the movement, or if an automatic dwarf light signal governing the movement does not indicate "proceed" or "proceed prepared to stop at next home signal", train may proceed in accordance with Rule 509, 509 (F) or 509 (J), as the case may be, as applied to single track.
- (d) Before fouling a controlled siding, permission must be obtained from dispatcher. All movements on sidings must be made with caution.
- (e) Except as provided in paragraph (a), when an absolute signal indicates "stop", Rule 776 will govern.

773. When authorized to operate a dual control switch by hand, the selector lever must be kept in hand-throw position until all movements over the switch have been completed. All movements within the working limits must be made with caution, and if the work is not finished within the time specified, or if the track is cleared and the selector lever restored to motor position before the expiration of that time, new authorization must be obtained before again using the dual control or fouling the track. Trainmen must notify engineer when the selector lever is in hand-throw position, and also notify him when it is returned to motor position, so he may know when to be governed by the absolute signals governing movements over the switch.

774. The selector and hand-throw levers must not be forced. They will move easily when properly in mesh, although some manipulation of first one and then the other may be necessary to get them in proper mesh. If the switch was set for siding when use of dual control was started, it must be again set for siding before selector lever is restored to motor position.

775. If a change of direction of movement is made while any portion of a train is occupying the section of track between opposing absolute signals at a power operated switch, the dispatcher's permission must be obtained. This does not apply while dual control switch is operated by hand.

776. When an absolute signal indicates "stop", except when it is known to be caused by the approach of a train at a meeting or passing point, the dispatcher must be consulted as quickly as possible after stopping, by the nearest available member of the crew. If authorized by him to proceed against the stop indication of the signal, first examine the power operated switch, if any, to see that the switch points are in proper position and the selector lever, if any, in motor position and locked, then:

- (a) If authorized to enter or continue on the main track and the next absolute, or automatic, signal governing the movement is in view and the intervening track is seen to be clear of opposing trains, proceed with caution not exceeding twelve miles per hour until next signal is reached. If the next signal is not in view send a flagman ahead immediately, wait at least five

minutes after he has started, and then proceed, keeping at least one-fourth mile behind him until he reaches such viewpoint. Speed must not exceed twelve miles per hour until rear of train passes next signal.

- (b) If authorized to enter siding, proceed with caution not exceeding twelve miles per hour.

777. When, for any reason, proceed indication of an absolute signal cannot be acted upon at once, dispatcher must immediately be notified.

778. When an automatic signal indicates "stop", Rule 509, 509 (F) or 509 (J), as the case may be, as applied to single track, will govern; but if the signal governs entrance to the main track, permission from the dispatcher must first be obtained.

780. Trains carrying passengers or United States mail must not pass or leave a place where passengers or mail are received or discharged in advance of their time as shown in time-table.

781. Conductor of a train, or engineer of a light engine, entering centralized traffic control system at an intermediate point, must ascertain from dispatcher what instructions are outstanding as to track conditions on that portion of the system over which movement is to be made.

GENERAL REGULATIONS

801. Indifference in the performance of duties will not be condoned. Employees who are careless of the safety of themselves or others, insubordinate, dishonest, immoral, quarrelsome, or otherwise vicious, will not be retained in the service.

802. Civil, gentlemanly deportment is required of all employees in their dealings with patrons, the public, their subordinates, and each other. Boisterous, profane, or vulgar language is forbidden. Employees must not enter into an altercation, but will report the facts to their immediate superior.

803. Continued failure by an employe to meet his just obligations shall be sufficient cause for dismissal.

Employees must not contract for deductions from wages without the consent of the Company.

The institution of any suit or legal proceeding against the Company, or any act of hostility or wilful disregard of its interests by an employe, will immediately terminate the employment without further notice.

804. Misconduct or negligence affecting the interests of the Company must be reported. Withholding such information will be considered proof of negligence or indifference, and treated accordingly.

805. Employees are forbidden to offer presents to their superiors, either directly or indirectly, and those in authority will not accept such presents. The acceptance of gratuities or rewards from passengers or other patrons of the Company is forbidden.

806. Unless specially authorized, employes must not use the Company's credit and must neither receive nor pay out money on the Company's account. Property of the Company must not be sold nor in any way disposed of except by proper authority.

807. The affairs of the Company must not be divulged nor access to the Company's records permitted, without proper authorization.

808. Information concerning accidents or personal injuries to other than employes must be communicated or given only to authorized representatives of the Company, and then only when known to be authentic. Information as to accidents or personal injuries to employes shall be given only to a person in interest. Information concerning accidents or personal injuries of any character contained in the files of the Company is confidential and must not be divulged without proper authority from the Company.

809. The Company's telegraph or telephone lines must not be used unnecessarily; messages relating to personal affairs of employes must not be transmitted over them, except in case of illness or accident.

Mail not pertaining to the affairs of the Company must not be sent by train mail; to do so is forbidden by United States postal laws.

810. Employees must not engage in other business without permission of the proper officer. They must report for duty at the prescribed time and place and devote themselves exclusively to their duties during prescribed hours.

An employe subject to call for his tour of duty must not absent himself from his usual calling place without notice to those required to call him.

811. Employes whose duties connect them with the movement of trains must not absent themselves from their places, substitute others, or exchange duties without proper authority. Trains must not be delayed for trainmen and enginemen to eat, without permission of the chief train dispatcher.

812. Employes required to perform service on more than one division, also employes of other railroads while operating trains on this Company's tracks, are under the jurisdiction of the division on which the service is being performed. Employes of this Company, while performing service or operating trains on the tracks of another railroad, are under the jurisdiction of the railroad on whose tracks the service is being performed.

813. Minors must not be employed in yard, train, or engine service. Minors must not be employed in any other service without the written consent of parent or guardian on prescribed form, to be filed with application for employment, nor without fully complying with all federal, state, and local regulations governing employment of minors.

814. When leaving the service, or on demand by proper authority, Company property entrusted to employes must be returned.

816. Protection of the Company's property and property in its custody from fire is a duty of employes under all circumstances. The employe having direct supervision over the buildings, premises, or cars will be held responsible for the observance of safe prac-

tices and fire prevention rules and regulations.

Buildings, docks, and wharves must be kept free from accumulation of dirt, rubbish, or inflammable material; special attention being given to closets, lockers, fuel bins, attics, stationery cabinets, etc. Gasoline and oil must be kept in prescribed places and only authorized containers used. Stoves in buildings, outfit cars, and cabooses must conform to prescribed standards, and must be kept free from accumulation of rubbish. Oils, fusees, torpedoes, and matches must be kept in containers provided for that purpose. Fire extinguishers must be kept properly charged and must be located in accessible places ready for immediate use. Fire hose and nozzles must be kept in places provided therefor and in serviceable condition. Water barrels must be kept filled, and the necessary supply of buckets ready for use.

817. Employes must keep a sufficient distance from passing trains to avoid possibility of being struck by anything projecting or that may fall or be thrown therefrom. On double track, they should keep outside of and clear of both tracks while train is passing. They must not depend on others to notify them of approaching trains, engines, or cars.

818. Billboards must not be so erected, nor material so placed, on Company property as to obstruct the view of approaching trains.

819. In emergencies, or in case of obstruction by accident or other cause, suggestions based on observation of the actual situation are useful and required, and frequent report of progress must be made. Prompt action is imperative, and in the absence of designation,

the employe on whom the responsibility most naturally falls will assume authority.

820. In case of damage to trains or structures involving the security of freight or other Company property, it is the duty of all employes to see that arrangements are promptly made for its protection against loss through pilferage or other causes.

821. In case of extraordinary rain storm or high water, trains must be stopped, and bridges, trestles, culverts, and other points subject to damage, examined by conductor and engineer, or engineer if there is no conductor, before passing.

Careful inquiry must be made at all stopping places, extra stops being made if thought advisable, to ascertain the extent and severity of storms, and no risk must be taken. In case of doubt as to the wisdom of proceeding, train must be moved to the safest available place and there held until it can proceed with safety.

Trains must run with caution over portions of the track which may have been damaged, and if a defect which may cause an accident is discovered, the telegraph or telephone must not be wholly relied on to notify trains, but a flagman must be left.

822. Employes are warned not to get on or off an engine or car in rapid motion.

Employes must face the equipment in descending ladders on engines and cars, whether standing or moving.

When a coupling or a movement is being made, employes must not stand or ride between engine and car, or between two engines, either on footboard or on pilot; they must not go between moving cars, or between engine and cars in motion.

If uncoupling lever on one side fails to work, that on the other side must be used. When necessary to change the alignment of couplers, cars must be stopped, and under no circumstances must attempt be made to adjust couplers with foot or hand, or raise lock pin by hand, while cars are moving.

If necessary to make change or repairs to couplers, the action must be understood by all employes who may, through misunderstanding, move or cause cars to be moved; the cars should be separated not less than one car-length to reduce possibility of injury, should they be moved by mistake. Employes should, when possible, avoid standing directly in line with couplers while making repairs.

Trainmen and enginemen must forbid employes whose duties do not connect them with the movement to get on or off trains, engines, or cars, while in motion.

Trainmen or yardmen standing on top of moving car must take position about middle of car to avoid falling off in case of sudden stop, jerk, or slack action. When standing on top of caboose they must stand back of cupola.

823. Electric light and power wires must be considered alive at all times. Employes must not depend for their safety on the insulation of wires. Employes noticing dangling wires or wires sagging over track, must avoid coming in contact with them. They must provide, if possible, such protection as will insure the safety of themselves and others, and promptly notify the proper authority.

824. On grades, before engine is cut off at stations to do work, or at any stop of unusual length, the air must be released and a

sufficient number of hand brakes set to hold the train. Both conductor and engineer will be held responsible for compliance with this rule.

825. Cars must not be left on sidings, or tracks principally used for meeting or passing of trains, without permission of chief train dispatcher, except in emergency. When so left, the conductor must promptly inform the chief train dispatcher. Crews are not relieved of compliance with Rule 105 requiring that trains using a siding must proceed with caution, even though they may not have been notified that there are cars on the siding.

Cars must be left clear of any street or public crossing, and at least one hundred feet from the crossing when practicable, and must not be so left as to obstruct view of an approaching train by the public.

A sufficient number of hand brakes must be set to hold cars; if brakes are inoperative, cars must be secured otherwise. When cars are set out on a grade they must be coupled, if practicable, and in addition to brakes being set, wheels must be blocked.

Cars should not be stored on tracks not protected with derails, facing-point switches, or by ascending grade of one-half of one per cent or over toward main track. In emergency this may be done on instructions of chief train dispatcher or other proper authority. In such cases, hand brakes must be set securely and wheels blocked where necessary.

When wooden cars are stored on tracks without fire protection, an opening of at least forty feet must be made every five car-lengths.

Outfit cars must not be left adjacent to oil or gasoline loading or unloading locations, lumber yards, storehouses, warehouses or other buildings.

Engines must not be operated over the live rail of any track scale.

826. When necessary to disturb outfit cars, or cars that are being loaded or unloaded, notice must first be given to all persons in or about the cars to be moved. Such cars must be returned to the location at which found. Care must be taken to avoid injury to persons, or damage to trucks, automobiles or other property not clear.

827. Trainmen must be in position to observe their trains while running, particularly while rounding curves and approaching or leaving stations.

The running gear, brake and draft rigging of trains must be inspected by trainmen as often and as closely as practicable when on the road. If defects are discovered they should be corrected if possible; cars unsafe to run must be set out. Special attention must be given to hot bearings.

Forward brakemen must frequently look back for signals that may be given by other trainmen while train is running.

Places at which freight trains must stop for inspection, or the maximum distance a freight train may run without stopping for inspection, will be designated in the time-table.

828. Speed of a freight train must not exceed eight miles per hour for a distance sufficient to permit running inspection when starting. Trainmen must closely watch to see that brakes are released, and if necessary must signal enginemen to stop if wheels are found sliding. Each trainman will be held responsible for wheels slid under that part of the train in his charge. Conductor in report-

ing flat wheels must give the name of trainman in charge. They must promptly mail to the superintendent a report of flat wheels discovered under the cars in their train.

829. A standing train must not block traffic on street or public road crossings longer than five minutes.

Trains must not stand on railroad crossings at grade, on drawbridges, or within the limits of an interlocking, when practicable to avoid so doing.

830. When practicable, trainmen, stationmen, signal operators, signal maintainers, bridge and track foremen, track-walkers, pumpers, and watchmen must observe passing trains closely and if anything dangerous is noted, such as defective wheel or coupling, brake rod or beam dragging, hot bearing, or if trains are not complying with Rule 91, must notify trainmen and enginemen of such trains by signal. Trainmen and enginemen must be on the lookout for such signals.

831. Occupied wooden frame outfit cars must be placed next ahead of passenger cars if handled in mixed trains, or next ahead of cabooses if handled in freight trains.

Women and children must not be permitted to ride in outfit cars when moved by freight train.

832. Wooden underframe flat cars must be placed next ahead of cabooses, except that when handled in the same train with wooden frame outfit cars they must be placed next ahead of the outfit cars.

833. Power shovels, pile drivers, derricks, ditchers, cranes and the like must not be handled in trains without A frames, leads and booms having been lowered and secured. Un-

less booms are disconnected they must be placed in trains in trailing position when possible. Center plow and wings of spreaders must be securely fastened and chained prior to shipment.

When such roadway machines are operated on double track, or on track next to a main track, or on ground adjacent to a main track, boom or other parts of machine must not be operated to foul main track without proper flag protection. Such equipment must be at rest and clear of main track when a train is passing.

When ballast or other material is being loaded or unloaded on track adjacent to a main track, proper flag protection must be provided on such main track, and loading or unloading must be stopped while a train is passing.

834. Open top cars loaded with rail, pipe, lumber, structural steel, poles, or mounted wheels, when such lading projects above sides and end walls of the car, must not be placed in trains next to cabooses, occupied outfit cars, cars loaded with high explosives or inflammables, nor cabs or tenders of oil burning engines.

835. When handled in trains, yard engines not equipped with engine trucks must be placed, when practicable, with the tender ahead.

Conductor must inform engineer and chief train dispatcher when there is equipment in train requiring restricted speed.

836. Cars must not be shoved ahead of engine between stations when it can be avoided. When necessary to so handle, speed must not exceed twenty miles per hour.

837. Switching must be carefully done, and trains must be carefully handled, to avoid shocks from abrupt starting or stopping of cars, or from impact in making coupling, and to prevent damage to cars or contents.

Before fouling any track it must be known that engines or cars on adjacent tracks will clear.

Before shoving cars into spur tracks any cars standing on the spur must be properly secured by setting hand brakes, irrespective of grade conditions, before coupling or shove is attempted.

Cars must not be shoved or coupled without a definite knowledge that lead or adjacent tracks will not be fouled.

Cars standing on grade must not be coupled onto, in descending direction, without knowing sufficient hand brakes are set to prevent uncontrolled movement of any such cars, should coupling fail or cars not be securely coupled. (5th paragraph, Rule 837—4-16-45)

Before beginning to shove cars they must be stretched to insure that all cars are properly coupled.

Occupied passenger and outfit equipment must not be switched unless air brakes are in service on all cars, and must not be detached while in motion, nor other cars kicked or dropped against them. When making coupling to such cars, air brakes must be cut in and operative on all cars being handled.

838. At night, employes, so far as possible, must avoid making noise in or about sleeping cars. Employes should pass through them only when necessary, and in a quiet manner. Careless coupling or switching of cars, or the disturbance of occupants of sleeping cars in any manner, must be avoided.

Uniform caps must be removed while pass-

ing through dining cars when occupied by passengers, except when engaged in collecting transportation.

839. Careless throwing of articles from engines and cars is dangerous and is forbidden.

840. The display of advertisements or banners upon freight or passenger cars must not be permitted, except upon authority of the superintendent.

841. Employes must provide themselves with a copy of, and be conversant with, all rules and instructions applicable to or affecting their duties.

842. Yardmasters are responsible for conditions within yards. Trains and engines will be under the control of the yardmaster, and all employes in train, engine or yard service will be subject to his direction as to movements within yard limits. Road crews of trains entering yards will be responsible for their respective trains and engines until the yardmaster or his representative takes charge.

Yardmasters will keep informed of important trains, such as stock, fruit and manifest, and make every effort to get them through the yard with the least possible delay. They must see that cars loaded with explosives or inflammable material are placed in trains the prescribed distance from the engine and caboose. Freight assigned to particular trains must be forwarded in such trains.

843. The general direction and government of a train is vested in the conductor, and all other persons employed on the train will obey his instructions. Should there be any doubt as to authority or safety of proceeding

he will consult the engineer, who will be responsible with him for the safety and the proper handling of the train and such use of signals and other precautions as circumstances may require. He must obey the instructions of yardmasters within yard limits and be governed by the direction of agents in doing work at stations, and conform to the instructions issued by the Traffic and Accounting Departments.

844. Before leaving initial station, the conductor must be assured that all members of his crew are on hand, that the brakes are in proper working order and hand brakes released, and that his train is provided with the proper tools, supplies and flagging equipment.

845. Conductors must assure themselves that their subordinates are competent, instruct them if necessary in the proper performance of their work, and caution them as to its risks. Incompetence and disobedience must be reported.

846. The protection of trains is of the first importance, and conductors must not allow other duties to interfere therewith. They must require their flagmen to act with the utmost promptness and in strict accordance with the rules. A trainman must be stationed, when practicable, on the rear of every train while in motion.

847. When the rear car is a private or official car, or an occupied observation car, trainmen, except in emergency, must not get on or off the observation platform to the inconvenience of passengers.

Train employes must not use space in observation end of occupied observation cars, or occupy seats in drawing room or compart-

ments of sleeping cars. They must not occupy seats with passengers, or enter into conversation with them, or with other employes, further than is required in the discharge of their duty; but, so far as possible, they will contribute, without being officious, to the safety, convenience, and comfort of passengers, giving particular attention to women and children who are unattended, and to all persons who are ill, infirm, inexperienced, or otherwise unable to care for themselves.

Trainmen while on duty must not stroll or lounge about station platforms, read newspapers or any kind of literature, nor solicit for any other transportation company or for any hotel.

848. When private or official cars are to be handled on rear of train during night, occupants must courteously be requested to leave doors unlocked or provide rear brakeman with keys, which will be returned following morning. When crews change, or cars are set out, conductor must arrange with relieving conductor or with stationmaster, agent or yardmaster for prompt return of keys. Trainmen will use keys only when necessary to go through the car to flag when train has stopped with rear on bridge or trestle without side-walks. Doors must be locked when rear brakeman is out flagging.

Unoccupied private or official cars will not be handled on rear of train unless keys are available.

849. Particular attention must be given to heating, lighting, and ventilation of cars occupied by passengers, or being made ready for use.

On a passenger train when approaching a station where engines are to be changed, or train is to be switched, trainman will open train-heat valve on rear of train, one mile or more before reaching station, and sound signal 16 (*m*), and engineman will shut off train heat at least one-half mile from station. Care must be taken to select a location for this operation where there is the least probability of injury to persons or damage to property.

850. End gates must be in position to protect all open vestibules of occupied equipment.

Torpedoes must not be affixed to end gates or railings, or left loose on platform of cars.

When making backward movement of trains or cars, passengers must not be permitted on rear platform.

851. Unless otherwise provided, side and trap doors of vestibules must be kept closed when not attended, and vestibule curtains fastened while train is in motion. Vestibule trap doors must not be left open while side doors are closed.

When a passenger train is standing to meet or be passed by another train, at a point where no passengers are to be received or discharged, the vestibule doors must be kept closed on the side on which the approaching train is to pass, unless a member of the crew is in position to prevent passengers from alighting.

852. Gunpowder, dynamite, nitro-glycerine, or other explosives, must not be transported in any car attached to a passenger train. Inflammable moving picture films, and firearms unless knocked down and in cases, must not be carried in cars occupied by passengers; except that firearms may be carried by police, military, or naval officers whose duties require it.

853. Passengers must not be allowed to carry bulky packages or other articles into coaches which may obstruct the aisles, seats, or the space between the seats, to the inconvenience of other passengers, nor to place heavy or bulky hand baggage or packages in overhead racks.

Passengers may be allowed to take canaries or other small birds in cages into passenger cars. Guide dogs for blind persons may be allowed in coaches; and dogs, cats, or other small animals, when carried in containers, may be admitted to rooms of Pullman sleepers, but will not be allowed in open sleeping parlor, club, or lounge cars.

854. Disorderly persons must not be allowed to board trains, nor may offensive language or other misconduct be permitted in or about cars.

855. If necessary to eject a passenger from the train, discretion must be used. Local rules, state laws, and the proprieties shall govern. Conductors will call upon duly constituted peace officers or upon railroad police for assistance when necessary.

If a passenger is ejected from a train, the name and address of such passenger, as well as names and addresses of all witnesses and their statements in writing if possible, should be obtained. Passengers must not be ejected from train except at a station where shelter and food may be obtained.

If there is doubt as to the right of a passenger to continue on transportation presented, or as to the proper course to be pursued, the facts in the case must be reported by wire to the superintendent.

856. So far as possible, conductors must see that passengers are provided with seats, and that no one is allowed to occupy more than a single seat to the exclusion of others. Employes traveling on passes should not occupy seats to the exclusion of revenue passengers. When there are not seats available in the coaches and there are vacant seats in any parlor or sleeping car (except chartered cars), passengers may be seated therein and train conductors will arrange with parlor or sleeping car conductors accordingly. Such seats must be surrendered as soon as there is room in the coaches or whenever required for regular use. Seats in the sleeping cars must not be so assigned or occupied at night after the passengers have retired.

858. Approaching a station at which the train is to stop, a member of crew must pass through each coach occupied by passengers, stop twice, and distinctly announce the name of the station; and approaching junctions, names of principal stations on connecting line, names of other stations when it is known there are passengers on the train for those stations, location of connecting trains, and any other helpful information, must be announced; except, at night when passengers are sleeping in coaches, each passenger must be individually notified when train is approaching his destination, to avoid disturbing other passengers.

Conductors must require employes of parlor, lounge, and sleeping cars to inform their occupants when train is approaching their destination.

Should a stop be made before the station announced is reached, trap doors must not be opened without leaving a member of crew in charge.

859. Trainmen must be on the alert for gamblers and swindlers, have them watched, personally warn passengers, and if any attempt is made to defraud, prevent it and report by wire to the superintendent. Beggars and other unauthorized persons must not be permitted to solicit from or otherwise annoy passengers. Unauthorized advertising matter must not be distributed on trains.

860. Telegrams entrusted to the care of conductors must be promptly delivered, if possible. Receipts may be taken for commercial telegrams. If telegram cannot be delivered, that information must be endorsed on the envelope and the telegram left at the next open office where train stops.

861. Articles found on trains must be delivered to the person authorized to receive them at terminal stations or division headquarters.

862. Except as otherwise provided, passenger trainmen must remain by their train at terminals to answer inquiries and assist passengers, until the train is vacated or until they are relieved.

863. In case of personal injury, loss of life or damage to property, conductors must furnish wire reports of facts, with the name and address, and written statement when possible to obtain it, of each person who witnessed or has information concerning the accident. In case of death from accident or other cause on their train, or of fatal injury to a person by their train, they must see that the proprieties are observed and that the body receives appropriate care and is removed as soon as possible to a proper place and left in charge of a public officer or an agent of the Company; and in

case of serious injury they must see that suitable arrangements are made to care for the injured person before proceeding with train.

864. Persons, other than employes in the discharge of their duties and holders of properly endorsed transportation, must not be permitted to ride on an engine, or in a baggage, mail, or express car without a written order from the proper officer, except that conductors may permit passengers to enter baggage car to gain access to their checked baggage, to inspect corpse, or to care for pets. Unless entrance and exit are made during station stop, passenger must be accompanied by a member of the crew.

865. Unless authorized, passengers must not be carried on freight trains. Upon presentation of proper transportation employes traveling on Company business may be carried between points at which trains stop. Trainmen must caution persons carried on freight trains to remain seated while trains are moving and guard against possibility of injury while on or around such trains.

866. Freight conductors are responsible for the security of freight while in their charge. Seals and fastenings of cars must be examined and record made of imperfect or missing seals, also of seals that may be applied by them. Doors of empty cars in trains must be closed and fastened. Doors of loaded cars must be closed and sealed properly unless left open for ventilation.

867. All freight handled in trains must be covered by waybill. A car must not be taken from a station if it is unsafely loaded.

868. When necessary to set out cars which are in bad order, wire report must be made to the chief train dispatcher, stating nature of defect and giving initials and number of car, and if loaded, contents, destination, and waybill reference.

Prompt notice must be sent to the chief train dispatcher of the completion of repairs to disabled cars.

869. Trainmen must be so distributed over train as to control it most effectually. Unless otherwise provided, freight brakemen must be on top of their train when descending steep grades and under other conditions when the safety of trains so requires.

870. Conductors must see that their cabooses are kept in a clean and tidy condition. The use of stoves burning liquid fuel in cabooses is forbidden.

871. Firemen are subordinate to engineers. Engineers must assure themselves that their firemen are competent, instruct them if necessary, in the performance of their work, and caution them as to its risks. Incompetence and disobedience must be reported.

872. Enginemen must know before starting each trip or day's work that their engine is equipped with prescribed signals, tools, supplies, and flagging equipment in serviceable condition. They must know that they have an ample supply of water, fuel and sand. They must also know that a proper level of water is maintained in the boiler at all times to prevent damage.

While running by night, a red light must be kept in the engine cab where it cannot be seen by a passing train.

873. Care must be exercised to prevent water being thrown from smokestack when starting. At places where personal injury or damage may result, blow-off cocks and cylinder cocks must not be opened, injectors permitted to overflow, nor steam blown from train-heat line.

Firing must be done in such manner as to avoid dense smoke.

Blow-off cocks, sanders, or injectors must not be operated and boosters must not be started, while engine is standing on or passing over spring switches or power operated switches, nor at location of rail lubricators.

874. Enginemen must be alert in all matters pertaining to safety and while running must keep a constant and vigilant lookout, carefully note all signals, observe position of switches and derrails affecting their movement, and watch for obstructions and defects in track. They must frequently look back for signals and indications of defects in train, especially while rounding curves and approaching or leaving stations.

In backing into a track to take or leave cars, engine must approach with caution to avoid injury to persons or damage to property when coupling is made.

875. So far as practicable enginemen must observe all wigwag and other crossing warning devices, and must report from the first available point of communication any that are out of order, stopping for that purpose if necessary.

876. When visibility is impaired by fog, storm, or otherwise, the engineer must sound the whistle frequently as a warning to trackmen and others.

877. When stock is found inside of right-of-way fence, sectionmen must be notified, when practicable, and report made by wire to the chief train dispatcher. Should stock be killed or injured, report on prescribed form must be made.

878. Enginemen must use every precaution to avoid setting fires along the line.

879. If a train makes an improper stop at a station or elsewhere, and it becomes necessary to move the train, it must not be done without the proper signal being given, nor while passengers are leaving or entering the train.

880. Unless otherwise instructed, engineers shall permit no one to handle the engine, except the fireman when competent, and then only by consent of the proper authority and in the presence of and under the direction of the engineer; the responsibility remaining with the engineer. Only a fireman who has had the prescribed experience as an engineer may be permitted thus to handle the engine of a passenger train.

The leading engine of a passenger train must be handled by an engineer and fireman who have had the prescribed experience.

881. Enginemen must never interfere with the safety valves or allow the boiler pressure to be above the limit at which valves are set. Steam pressure must be regulated to avoid the escape of steam from safety valves.

882. While switching, the enginemen must remain on the engine, exercising great care in handling engine while yardmen or others are making couplings, and must give close attention to signals.

883. Engines under steam must not be stored, nor left unattended on tracks that are not protected by derails against entry to main track. When engines are left without a man in charge, enginemen must take necessary precaution to prevent their moving. When blocking or chains are available, wheels must be secured.

Trains and engines must not be left on main track without flag or other protection, nor left on any track blocking movements on adjoining tracks.

Engines on passenger trains must not be left without a man in charge.

884. When possible to avoid it, engines must not be left standing within one hundred feet of a street or highway crossing; nor under any bridge; nor in the vicinity of waiting rooms, telegraph or telephone offices; nor near cars occupied by passengers, when the noise or smoke may disturb the occupants.

Except in emergency, or in compliance with Rule 14 (1), the whistle must not be sounded while opposite a passenger train.

885. Agents and subordinates must acquaint themselves with the business interests of the people with whom they come in contact, use proper means to secure traffic and act with the view of accommodating the public and promoting the best interests of the Company. Agents must notify the superintendent and heads of departments, of anything affecting their departments prejudicial thereto, or conducive to their good, present or prospective.

886. Notices to the public must be neatly posted in the station. Other advertising matter

must not be posted on the premises, except when properly authorized, and then only at places designated for the purpose. When train bulletin boards are provided, proper entries must be made thereon.

887. Agents must not be absent from their station, grant leave of absence to their subordinates, or make any change in their forces without permission.

888. Frequent inspection of yards, platforms, offices and buildings is required, and agents must keep stations clean and orderly. Agents must see that stockyards are kept in good condition, and that gates of the pens and chutes are closed and securely fastened when not in use.

Before loading stock, agents must examine cars to see that they are in good order. After loading, doors must be closed and all fastenings well secured.

889. Agents must promptly report by wire to the superintendent all cases of attempted robbery, theft of property belonging to or in charge of the Company, damage to property by fire or storm, personal injury and other extraordinary occurrences, at or in the vicinity of stations.

890. Waiting rooms and other apartments for the accommodation of passengers must be properly heated, ventilated and lighted when stations are open for the transaction of business; during the hours of darkness, platforms must be adequately lighted, when practicable. Waiting rooms, ticket offices and baggage rooms must be open such period of time as may be required before and after the departure of trains that are scheduled to stop.

891. Order must be preserved in and about stations; disorderly persons, or loungers, and persons engaged in unauthorized occupations must be excluded from stations and station platforms.

892. Places where automobiles and other vehicles may stand at stations, and where persons in charge thereof, hotel and other solicitors may remain while engaged in their duties on the Company's premises, will be designated by agents; any person who does not comply with the directions in this respect must be requested to remain in the place to which assigned by the agent. Bicycle riding and the driving of automobiles or other vehicles on station platform must not be permitted.

893. Current time-tables must be studied to avoid the sale of tickets to stations at which trains do not stop, or for trains which do not carry passengers.

894. Prompt attention must be given to correspondence; books and accounts must be promptly and neatly written, in the manner prescribed by the departments to which they relate, and must be submitted to authorized officials for examination as may be required.

895. Every effort must be made to obtain cars for shippers at the time desired, but promise must not be given to furnish cars within a specified time, unless authorized. Cars must be ordered from the chief train dispatcher as required, and the commodity, destination, and route when for points off the line, shall be given. When possible, cars of proper capacity must be furnished. Cars must be loaded to capacity when practicable. Cars furnished for loading must be in proper condition for the class of freight to be loaded.

Report should be made to the chief train dispatcher when cars received are unfit for the purpose required. When the demand for cars exceeds the supply, the available cars must be distributed in proportion to the actual requirements of shippers, their ability to promptly load, and with due regard to the sequence of orders. Agents must see that cars are promptly loaded and unloaded, and that demurrage and storage rules are enforced.

896. Freight must be loaded safely and stowed properly, and, when necessary, fastened securely by brackets, cleats, stakes, chains, or other means, as the nature of the freight may require, to prevent loss or damage by falling, shifting, chafing, breaking or by contact with any contaminating substance. In loading way cars, freight must be stowed in station order.

The loading of lumber, timber, scrap metal, and other freight on open top cars must be in conformity with Rules Governing the Loading of Commodities on Open Top Cars as published by the Association of American Railroads, printed copies of which will be furnished for use of shippers upon application to the superintendent.

Loading must conform to the prescribed weight and clearance restrictions applicable to the entire route via which shipment is to move.

897. Before cars are forwarded, the required cards must be applied as indicated by the special instructions relating thereto, and old cards removed, except the A. A. R. defect or repair cards.

898. Effort must be made to have consignees remove from cars and station grounds all accumulation of dunnage, decayed fruit, or vegetables for which they are responsible.

899. When the unloading of cars is unreasonably delayed, the circumstances must be reported to the proper official.

Immediately upon arrival of cars containing Company material, the person in whose care the shipment is consigned must be notified; and if satisfactory disposition is not given within twenty-four hours, the attention of the superintendent must be called to the fact.

900. Unless otherwise directed, separate cars must not be used or ordered for partial loads of freight that can be loaded into cars of local freight trains.

901. Conductors must be furnished switch lists promptly, copies of which must be retained for office record. Every effort must be made to avoid delay in movement of cars.

902. Local freight to be loaded or unloaded at way stations must be checked by the conductor and agent or their representatives, and any irregularities found must be noted on the waybills.

903. Less than carload shipments of freight must be marked plainly, showing consignee and destination, and all old marks must be erased.

904. Freight which requires shelter must be promptly placed in freight house or in cars.

905. Freight houses and closed cars containing freight must be locked, except when agent or other authorized person is in immediate charge thereof.

906. Freight, baggage, mail or express matter, trucks or carts must not be left between tracks, nor within six feet of any track, and must be secured with appliances provided. Handles on four-wheel trucks must be turned under, or secured in raised position.

907. Skids, trucks, carts and scales, when not in use, should be placed in baggage room or warehouse. If necessary to leave on platform, they must be arranged at end or rear of station building if possible, and secured so they cannot roll out of position. Tongues of trucks not in use must be fastened in position to prevent accident.

908. Station employes must not handle switches for trainmen, except where, by special instructions, it is made their duty.

909. When there are indications of windstorms, cloudbursts, or abnormal weather conditions, agents must take precaution to prevent cars from moving and obstructing the main track.

Agents must inform the superintendent promptly by wire regarding the severity of storms and extent of damage that may result.

910. Agents must know the boundaries of the Company's property at their stations and be familiar with leases thereon.

Unless provided for by lease, the use of Company property for storage purposes must not be permitted without authority from the superintendent.

911. When agents are authorized to act as agents of Express or other Companies, preference must be given to the business of the Railroad Company.

912. Agents and operators must not permit unauthorized persons inside their offices. Business with the public or trainmen must be transacted over the counter or through window provided for that purpose.

913. Agents and operators must see that their stations are supplied with the necessary signal appliances.

Should anything endanger the safety of trains, proper signals must immediately be displayed.

914. The chief train dispatcher represents the superintendent of telegraph, unless otherwise arranged, and has supervision over operators and linemen. He must be kept informed of the movements and whereabouts of telegraph and telephone linemen.

915. Unless otherwise provided, operators are subordinate to agents and will devote themselves first to the telegraph and telephone service, giving train orders preferred attention. Those who have additional duties must be within hearing of their instruments when possible, and arrange their work so it will not conflict with the proper handling of telegraph and telephone business. They must not absent themselves nor close office without permission from the train dispatcher, except when means of communication fail.

916. When trains are passing, unless other duties prevent, operator must be on platform prepared to receive communications from trainmen.

917. Contents of messages must be held strictly confidential and in no manner made known to any person, except the one addressed. Violations are punishable under state laws.

Messages addressed to officers of the Company must be enclosed in envelopes and sealed.

918. A copy of all train orders issued must be filed in station records; each month's business must be labeled and tied in a package showing month and year. When a year's business accumulates, it must be enclosed in one package and properly labeled.

919. Operators will be held responsible for the prompt delivery of telegrams. When answers are required, they must make every reasonable effort to obtain them. In case the person to whom a telegram is addressed cannot be found, originating office must be notified without delay.

920. Office hours at train-order offices are fixed by the superintendent. Operators at stations where offices are not open continuously, must post notice showing location of their place of residence, so they may be called in an emergency.

117
The contents of messages must be sent
by the sender to the receiver in a
form which is not understood by the
intermediate stations. This is done
by the use of a code which is known
only to the sender and the receiver.
The code is a set of symbols which
represent the letters of the alphabet.
The symbols are arranged in a certain
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