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THE WESTERN PACIFIC
RAILROAD COMPANY

SACRAMENTO NORTHERN
RAILWAY COMPANY

TIDEWATER SOUTHERN
RAILWAY COMPANY

OPERATING RULES

The rules herein set forth govern the railroads operated by Western Pacific and must be observed by all employees whose duties are in any way affected thereby. They supersede all previous rules and instructions inconsistent herewith.

Special instructions may be issued by proper authority.

Approved

R.C. MARQUIS
Senior Vice President — Operation

Effective July 1, 1972

Following Pages Revised May 1, 1979

3-48a-48b-48c-48d-48e-48f-48g-48h-49-50-70-70a-70b-71-121-146a-147-171a-172-186

Following Pages Revised June 15, 1978

13-30-51-52-53-54-55-56-57-58-59-59a-59b-59c-59d-65-66-67-68-69-70-75-76-77-134-135-136-144-145-146-147-148-152-195-196-198-199-200-201-228-233.

Following Pages Revised Jan. 1, 1973

3-4-18-23-30-37-38-44-46-52-54-58-67-68-69-70-71-72-73-74-75-76-77-78-79-80-88-94-115-128-140-140A-153-186-187-188-206-212

Revised Jan. 1, 1973
Revised June 15, 1978
Revised May 1, 1979

APPLICATION OF RULES

Rules will apply as follows:

Without Prefix—To both signaled and non-signaled territory.

Prefix **T**—To territory outside T.C.S. limits only.

Suffix (A)—To all employees.

Suffix (T)—To all transportation department employees.

Suffix (R)—To all maintenance-of-way department employees.

Suffix (D)—To train dispatchers only.

Suffix (M)—To all mechanical department employees.

All rules are single track rules unless otherwise indicated.

Prefix integral part of rule number identification. Suffix in parentheses specifies employees governed by rule and is *not* part of rule number identification. Example:

T-83-B. (T) is

RULE T-83-B.

governing all transportation department employees.

GENERAL NOTICE (A)

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.

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

Cooperation is essential to success. Cooperation between employees is required for proper functioning under the rules and instructions.

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

The rules contained herein are issued for the purpose of insuring greater protection to lives of employees, the public, the property of the company, and the traffic it transports.

The public judges a railroad by the appearance and conduct of its employees, 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 service.

DEFINITIONS (A)

Absolute Block—A block in which a train or engine is not permitted to enter while it is occupied except as prescribed by the rules.

Absolute Signal—A block or interlocking home signal designated by letter "A", or by absence of number plate.

Accepting Signal—Proceed Indication: When leading unit of an approaching movement passes a governing fixed signal.

Indication per Rules 291, 292 and 292-A: When leading unit of an approaching movement stops within 500 feet of a governing signal.

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

Automatic Block Signal System (A.B.S.S.)—A block signal system where in the use of each block is governed by an automatic block signal, cab signal, or both.

Automatic Cab Signal System (A.C.S.)—A system which provides for the automatic operation of the cab signal and cab warning devices.

Auxiliary Track—Any track other than a main track.

Block—A length of track of defined limits, the use of which by trains and engines is governed by block signals, block limit signals, cab signals, or cab signals and block signals.

Block Limit Signal—A fixed signal indicating the limit of a block, the use of which by trains or engines is prescribed by block signal system rules.

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

Cab Signal—A signal located in the engine control compartment or cab indicating a condition affecting the movement of a train and used in conjunction with interlocking signals and in conjunction with or in lieu of block signals.

Class—Rank of trains designated by timetable. Refer to Rule T-72 and definition of *Schedule.*

Classification Signals—Lights displayed on an engine indicating extra trains or prescribed sections of schedules. Refer to Rules 20 and 21.

Clear Point—Refer to definition of *Fouling Point.*

Conductor—Road conductor or yard conductor.

Controlled Siding—A siding, the use of which is governed by signals under the control of a train dispatcher and which is included in signal circuits in its entirety.

Current of Traffic—The movement of trains on a main track, in a designated direction, specified by the rules. Movement against current of traffic is *opposite* to designated direction.

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

Double Track—Refer to definition of *Two Or More Tracks.*

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

Dwarf Signal—A low home signal.

Electric Lock Switch—A hand-thrown switch or derail with an electrically-operated mechanism applied to prevent its operation except under prescribed conditions.

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

Engineman—Engineers, firemen (helpers), and hostlers.

Extra Train—A train not authorized by a timetable schedule. It may be designated as:

Extra—For any extra train except work extra;

Work Extra—For work train extra.

Fixed Signal—A signal of fixed location indicating a condition affecting the movement of a train or engine, including but not limited to such signals as switch, train-order, block, interlocking, semaphore, stop signs, yard limit signs, slow signs, or any other means for displaying indications that govern the movement of a train or engine.

Flagman—Any employee of whatever designation to whom the term flagman is applicable under the rules governing flag protection.

Flag Protection—Refer to Rule 99.

Form B—Form used to authorize movement from an absolute signal according to rules governing.

Form U—Form used to authorize granting of work limits according to rules governing.

Form W—A train order used in strict conjunction with provisions of rules 10-I and 228-W.

Fouling Point—The location in the vicinity of a switch marking safe passing clearance with another track. In signaled territory also indicating point where signals on adjacent track are activated by occupation of signal detector circuit.

Grade Signal—Automatic block signal equipped with yellow marker displaying a black letter "G".

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

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

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

Interlocking Signals—The fixed signals of an interlocking.

Joint Track—Designated trackage on which more than one carrier may operate.

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

Manual Block—A block established by train order or by special instructions where conditions require.

Manual Block Signal System (M.B.S.)—A block signal system wherein the use of each block is governed by block signals controlled manually or by hand signals in the absence of a fixed signal, or by block limit signals, or any combination thereof, upon information by telephone or other means of communication.

Non-signaled Territory—Those portions of the railroad in which movement on main track and siding is governed by timetable, train orders, and other rules.

Notices—Written instructions issued by proper authority.

Operating Department—Includes all the Operating Departments:

1. Transportation (train service, engine service, yard service, station, transportation center, and division office employees, dispatchers, marines)

2. Maintenance-of-Way = M.W.S. (roadway, bridge and building, signal/communications, maintenance of roadway equipment)

3. Mechanical (car, locomotive, shop)

Outfit Cars—House cars, including TOFC type, used by Maintenance-of-Way personnel for living or eating quarters; *not* including MWS cars transporting roadway equipment.

Outside of A.B.S.S. Limits—Also applies to movement on any track which is provided with block signals, but movement is being made in the direction for which block signals are not provided.

Paired Track—Western Pacific-Southern Pacific trackage between Weso and Alazon, Nevada.

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

Proceed Indication—Any signal aspect displayed by Rules 281 through 288. Movement on any signal must be in accordance with specific rule indicated.

Railroad Grade Watch— Standard lever-set pocket watch and those wristwatches authorized by notice or special instruction.

Register Station—A station at which train register is located.

Regular Train—A train authorized by a timetable schedule.

Schedule—That part of a timetable which prescribes class, direction, number and movement for a regular train. Schedules not designated as first, second, or third class have no timetable superiority and are for information only.

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

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

Signal Aspect—The appearance of a fixed signal conveying an indication as viewed from the direction of an approaching train; the appearance of a cab signal conveying an indication as viewed by an observer in the cab.

Signal Indication—The information conveyed by the aspect of a signal.

Signaled Territory—That portion of the main track and sidings having either A.B.S.S. or T.C.S. signals.

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

Speed—

Track Speed: The highest speed authorized, observing all rules and restrictions, not exceeding the maximum allowed by timetable or timetable bulletin.

Limited Speed: A speed not exceeding 50 miles per hour.

Medium Speed: A speed not exceeding 35 miles per hour.

Restricted Speed: A speed that will permit stopping short of another train, obstruction, stop signal, or switch not properly lined, and looking

out for broken rail, not exceeding 20 miles per hour.

Turnout Speed: Speed specified in timetable special instructions under "other maximum speeds."

Yard Speed: A speed, according to conditions, prepared to stop within one-half the range of vision and short of a train, enging, cars, switch not properly lined, derail, other obstruction, or before reaching a stop signal, NOT EXCEEDING 20 MPH.

Where circumstances require, train must be preceded by a flagman.

Spring Switch—A switch designated by the letter "S" on the switch target and equipped with a spring mechanism arranged to restore the switch points to original position after having been trailed through.

Station—A place designated in the timetable by name.

Subdivision—A portion of a division(s) designated by timetable.

Superior Train—A train having precedence over another train.

Switch—A device to connect one track diverging from another.

Switching Limits—Areas designated in timetable for clarification purposes. They are not to be confused with yard limits.

Timetable—The authority for the movement of regular trains subject to the rules. It contains classified schedules with special instructions relating to the movement of trains and includes supplements issued thereto.

Timetable Bulletins—General or special instructions superseding timetable or operating rules.

Track Car—A self-propelled vehicle, operating on the rails, with or without trailers or push cars, used for transporting men and/or material to or from a job site or for inspection.

Traffic Control System (T.C.S.)—A block signal system under which train movements are authorized by block signals, cab signals, or both, whose indications supersede the superiority of trains for both opposing and following movements on the same track.

Train—One or more engines, with or without cars, displaying markers.

Trainmen—Conductors, brakemen, yard conductors, and yard brakemen.

Train of Superior Class—A train given precedence by timetable.

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

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

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

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

Yard—A system of tracks within defined limits provided for the making up of trains, storing of cars and other purposes, over which movements

not authorized by timetable or by train order may be made, subject to prescribed signals and rules or special instructions.

Yard Limits—Limits specified in timetable special instruction within which the main track may be used, subject to all other applicable rules, without providing flag protection except against first-class trains and within which all trains except first-class trains must proceed at yard speed.

TOPICAL TABLE OF CONTENTS

Application of Rules, General Notice and Definitions on preceding pages. Other rules on following pages.

A. Employees whose duties are prescribed by these rules must provide themselves with a copy and have such copy with them while on duty.

Employees whose duties are in any way affected by the timetable must have a copy of the current timetable with them while on duty.

B. Employees must be conversant with and obey the Rules and Instructions. If in doubt as to their meaning, they must apply to proper authority for explanation; if immediate action is necessary, the safe course must always be taken.

C. Employees designated by proper authority must pass the required examinations before entering service, and as prescribed for promotion. Designated employees must attend rules classes annually, or as required by law, or by proper authority. When reporting for rules classes, they must present their copy of the operating rules, timetable, and other instructions, as required, for inspection.

E. Employees must render every assistance in their power in carrying out the rules and special instructions. They must report promptly to the proper official any violation thereof or any misconduct or negligence affecting the interests of the railroad.

F. Accidents, defects in track, bridges, tunnels, or signals, or any unusual conditions which may affect the movement of trains must be protected at the location and train dispatcher informed of the condition promptly using first available means of communication.

G. The use of alcoholic beverages or other intoxicants, narcotics or other similar substances by employees subject to duty or their possession or use while on duty or on company property is prohibited.

Employees shall not report for duty under the influence of any drug, medication, or other substances, including those prescribed by a doctor or dentist, that will in any way affect their alertness, coordination, response, safety, or ability to perform their work properly; nor shall such drug, medication, or other substance be used by or be in the possession of employees either while on duty or on company property.

H. Smoking is prohibited on company property where danger of fire therefrom exists and where designated by proper authority.

J. Employees on duty must be neat and clean in appearance. Their hair must be worn so that eyes are not covered and no longer than will allow for the safe conduct of their duties. Hair longer than shoulder length must be secured. Beards and/or mustaches may be worn provided they are consistent with safety.

They must wear protective clothing or appliances, as prescribed, when on duty.

They must be suitably clothed for the performance of their duties consistent with safety. Suitable footwear around shops, tracks, and moving equipment does *not* include sandals, high-heeled boots or shoes, and tennis shoes.

Any locker or cabinet furnished will be maintained in a sanitary manner and free of any fire hazard. Such lockers and cabinets are subject to inspection by any officer of the company.

L. Fire or other danger to the company's property must be reported promptly and employees must unite to protect it, taking every precaution to guard against injury and loss or damage from any cause.

M. Employees are responsible for their own safety. Constant presence of mind to insure safety to themselves and others is the primary duty of all employees and they must exercise care to avoid injury to themselves or others. They must observe the condition of equipment and tools which they use in performing their duties and, when found defective, will put them in safe condition, reporting defects to proper authority.

Employees are prohibited from getting on roof of cars except when necessary to make repairs.

Employees are prohibited from riding or walking on top of any moving car except in work train service.

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

Employees must not stand on track in front of an approaching engine or car. They must not ride footboard of engine in direction of movement or trailing footboard when engine is pulling cars.

Employees must not attempt to board or get off equipment moving at a speed which would endanger their safety.

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

Engine room doors and cab windows and doors must be closed on all units except when in immediate use. Safety chain or guard must be used if provided.

N. Employees reporting for duty are expected to be amply rested in order to be physically and mentally fit for the proper and safe performance of their duties.

STANDARD TIME

1. (TR) Standard time, obtained from an authorized observatory, will be transmitted daily.

1-A. (TR) The locations of clocks bearing the prescribed sign "Standard Clock" will be shown in the timetable. Employees charged with the duty of receiving time signal must set standard clock to agree with time signal.

2. (TR) Railroad grade watches must be carried while on duty by trainmen, enginemen, yardmasters, train-order operators, signal maintainers, linemen, track car operators, roadway and signal foremen, roadmasters, track and signal supervisors, and such other employees as may be designated. Watch time must be within 30 seconds of standard time.

2-A. (TR) Employees designated in Rule 2 must show their watches and time indication to proper authority upon request.

3. (TR) Unless otherwise provided, employees designated in Rule 2 who have access to a standard clock must compare time before commencing each day's work. The time a conductor and/or engineer's watch is compared must be recorded in "remarks" column of time return and delay report. Conductor must compare time with crew members before commencing day's work or starting on trip, if practicable, otherwise at first opportunity.

When entire tour of duty is within T.C.S. limits it will not be necessary for such employees to compare time with each other nor record when watches are compared, but all other requirements apply.

Employees who do not have access to a standard clock must compare time with each other before commencing each day's work and, when practicable, with employees who have compared with a standard clock or with the train dispatcher.

Watches must be set to correct time if they reflect a variation of more than 30 seconds from correct time when comparison is made as prescribed in this rule.

TIMETABLES

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

Schedules on each division or subdivision date from their initial stations on such division or subdivision.

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

The words "daily" and "except Sunday", etc., printed at head and foot of schedule for a train, indicate the "day of leaving" its initial station on each division or subdivision.

Schedules not designated as first, second, or third class have no timetable superiority, and are for information only.

4-A. (TR) Notice of new timetable must be bulletined at least seventy-two hours prior to its taking effect.

Train order form "Q" must be issued twenty-four hours prior to and six days after the new timetable takes effect.

4-B. (TR) Special instructions in a timetable or timetable bulletin supersede any rule of the operating rules with which they conflict.

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

Instructions affecting the superiority of trains must not be issued by timetable bulletin.

The time and date posted will be endorsed on the face of each timetable bulletin and the stations where timetable bulletins are provided will be designated by timetable.

4-C. (TR) Employees whose duties are in any way affected by the timetable must have a copy of the current timetable with them while on duty.

Before commencing a trip in road service or to perform work in yard service on any division or subdivision upon which they have not been working, or after an absence of six days or more, such employees must know that they have the current timetable.

Trainmen and enginemen must be familiar with all timetable bulletins and notices and must read latest issues before commencing each day's work.

Conductors and engineers must record the number of the last timetable bulletin in "remarks" column of Time Return and Delay Report to indicate they have read and understand the latest and all previous timetable bulletins.

5. (TR) Not more than two times are given for a train at any station; where one is given, except at terminating stations, it is the leaving time; where two are given, they are the arriving and the leaving times.

The time applies at the clearance point of the switch where an opposing 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 station.

Schedule meeting or passing stations are indicated by figures in full-faced type, with the numbers of the trains to be met or passed in small figures adjoining.

6. (TR) The following symbols, if placed before the time figures of the schedule, indicate:

L—leave.

A—arrive.

s—regular stop.

f—flag stop.

6-A. (TR) The following symbols, when placed adjacent to station name column, indicate:

TO—train-order office.

R—train register station.

YARD—yard.

YD. LMTS.—yard limits.

B—timetable bulletin station.

F—fuel station.

I—interlocking.

K—standard clock.

O—track scales.

P—telephone.

T—turntable.

W—water station.

Y—wye.

Siding capacities, spur connections, and other designated abbreviations may also be used in this column.

The following abbreviations may be used and the territory to which they apply will be designated by timetable:

D.T.—double track.

T.C.S.—traffic control system.

A.B.S.S.—automatic block signal system.

M.B.S.—manual block signal system.

A.C.S.—automatic cab signal system.

SIGNALS

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

7-A. (TRM) 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 hand, flag or lamp signals must locate themselves so as to be plainly seen. Signals must be given in such a manner that they can be definitely understood.

The utmost care 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. Unless trainmen and enginemen are positive that signals given are intended for them, they must not move until proper understanding is assured.

When backing or shoving a train, engine or cars, the disappearance from view of employee or light by which signals are given must be construed as a stop signal, unless the way is seen or known to be clear, the movement is directed by radio, or controlled by tail-hose.

7B. (TRM) When radio communication is used to direct movement, distances will be called out in car lengths, such as, "ten, nine, eight," etc. Should continuous contact with employee directing movement be lost, the movement must be stopped immediately. Refer to Rule 48.

8. (TRM) When flags (cloth or metal) are used by day, they must be of the prescribed color; lights of the prescribed color must be used by night.

8-A. (TRM) Electric lanterns may display white lights only except as specifically authorized for signaling purposes.

9. (TRM) Day signals must be displayed from sunrise to sunset; but when day signals cannot

be plainly seen, night signals must be used in addition.

Night signals must be displayed from sunset to sunrise.

10. (TRM) **Color Signals**

COLOR	INDICATION
1. Red	Stop.
2. Yellow	Proceed as prescribed by the rules. See Rules 221 and 628.
3. Green	Proceed as prescribed by the rules.
4. White	Flag and lamp signals and for other uses prescribed by the rules. See Rule 12.
5. Blue	Stop. See Rule 26.

10-G. (TR) When an unattended red flag or red lamp is displayed on or near the track, train or engine, after stopping, must be preceded for a distance of 4000 feet from point where signal is displayed, by a flagman who must carefully examine track and structures.

Stop must be made before any part of train or engine has passed the red signal if preceded by torpedo explosion. Refer to Rule 15.

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

10-H. (TR) A metal banner at right of track in direction of approach displaying yellow indicates that trains must reduce speed over restricted track

to restricted speed, unless different speed is specified. Such signal must be placed by foreman two (2) miles before the location is reached where speed of trains must be reduced whenever it is necessary that trains reduce speed over any structure or portion of track. Whenever possible instructions will be issued specifying the limits and speed restriction to be observed; in the absence of specific instructions speed of trains must not exceed restricted speed over track protected by yellow banner.

A metal banner at right of track displaying green indicates the leaving end of the reduced speed area. Such signal must be placed within 150 feet beyond the point where the restricted track ends. If green banner is not encountered and limits *are* specified, train may resume speed when rear of train has passed through the limits specified. If the limits of restriction are *not* specified, and green banner is not encountered, train must proceed at restricted speed for one (1) mile beyond the point of restriction, that point beginning two (2) miles from point where yellow banner was displayed, and may resume speed when rear of train has passed through that one-mile limit.

When instructions specify different speeds, either decreasing or increasing, adjoining each other in the same area, a banner with black background with diagonal yellow strip will be displayed to the right of track in direction of approach one-fourth mile before reaching the location where speed must be decreased, or at the point of change where speed may be increased. Only one green signal will be used at the leaving end of such reduced speed area. The same provisions concerning absence of green flag specified in preceeding paragraph apply.

By night, yellow and green lights must be used unless banners are reflectorized.

10-I. (TR) 1. When Form W train order is in effect, an unattended red sign reading "CONDITIONAL STOP" will be displayed 1000 feet before reaching the point where main track is obstructed or impassable. Trains must stop short of this sign unless orally authorized to proceed by foreman in charge of work or a proceed signal with a green flag is received. When proceed signal with green flag is given, train must not exceed restricted speed until rear of train has passed the limit of restriction. A yellow sign reading "PROCEED PREPARED TO STOP" will be displayed two (2) miles before the red sign is reached.

2. Before authorizing a train to proceed by radio, foreman must inform engineer the maximum speed permitted over restricted track in the following manner:

Foreman's Initiation

"THIS IS W.P. FOREMAN IN CHARGE OF THE WORK BETWEEN MP ---------- AND MP ---------- . W.P. TRAIN ORDER NO. ---------- . WE ARE IN THE CLEAR AND YOU MAY PROCEED PAST THE RED CONDITIONAL STOP SIGN AND THROUGH THE LIMITS OF THE ORDER AT ----------M.P.H.*"

Engineer's Response

"THIS IS ENGINEER W.P./S.P. TRAIN. ---------- . I MAY PROCEED PAST THE RED CONDITIONAL STOP SIGN AND THROUGH THE LIMITS OF W.P. ORDER NO. ---------- BETWEEN M.P. ---------- AND M.P. ---------- AT (Speed)* REPEAT (Speed) MILES PER HOUR.*"

Foreman must acknowledge engineer's response as follows:

"W.P./S.P. TRAIN ---------- , BETWEEN M.P. ---------- and M.P. ----------(Speed)* MILES PER HOUR, OK ON ORDER NO. ----------".

*FOREMAN MAY AUTHORIZE TRAIN TO PROCEED "AT MAXIMUM AUTHORIZED SPEED" IF NO SPEED RESTRICTION IS REQUIRED ACCOUNT FORM W TRAIN ORDER.

3. A metal banner at right of track displaying green indicates the leaving end of restriction shown in Form W train order. If green banner is not encountered train may resume speed when rear of train has passed through the limits specified.

4. When time limits specified in order have expired, or before time limits are in effect, the foreman must protect in accordance with Rule 101 if conditions require.

5. If for some reason yellow and/or red signs are not displayed *during effective time of* Form W train order, trains approaching limits specified will be governed *the same as though signs were displayed*, per paragraph 1. above.

6. Trains approaching limits covered by Form W train order *before or after* time limits specified in order are in effect will be governed by the following:

a. YELLOW AND/OR RED SIGNS DISPLAYED—Train must respect signs displayed per paragraph 1. above. When it is evident foreman and gang are not working in the immediate vicinity of the red sign, train may proceed at restricted speed through the limits specified pro-

vided train can clear such limits outside of time limits of order.

b. NO SIGNS DISPLAYED—Train may proceed at maximum authorized speed provided train can clear limits specified outside of time limits of order.

c. SHOULD A TRAIN NOT HAVING FORM W TRAIN ORDER ENCOUNTER A RED CONDITIONAL STOP SIGN AND/OR A YELLOW PROCEED PREPARED TO STOP SIGN DISPLAYED—Train must respect signs displayed per paragraph 1. above. When it is evident foreman and gang are not working in immediate vicinity of the red sign, train will contact dispatcher for instructions; if unable to contact dispatcher at that point, train may proceed at restricted speed to first point of communication with dispatcher and thereafter be governed by his instructions.

7. Procedure to be followed by roadway foremen and train crews when using Form W train orders:

a. Form W Train Order to be administered only by the foreman of the gang.

b. The following information will be supplied the Chief Train Dispatcher the night before Form W Train Order is needed. (When a weekend is involved the information may be furnished Friday night for Monday AM):

STATION---------- DATE ----------
ISSUE FORM W TRAIN ORDER EFFECTIVE
----------(DATE)---------- TO PROTECT BETWEEN
MP ---------- POLE ---------- AND MP ----------
POLE ---------- BETWEEN ----------(STATION)----------
AND ----------(STATION)---------- FROM

----------(TIME-SPELLED & NUMBERED) ---------- TO ----------
----------(TIME-SPELLED & NUMBERED) ---------- .

CONDITIONAL STOP SIGNS AT MP ---------- POLE ---------- FOR EASTWARD TRAINS AND MP ---------- POLE ---------- FOR WESTWARD TRAINS WITH YELLOW PROCEED PREPARED TO STOP SIGN TWO MILES BEFORE RED CONDITIONAL STOP SIGN IS REACHED. BE GOVERNED BY RULE 10-I.

FOREMAN ----------

GANG NO. ----------

WRITTEN COPIES WILL BE FURNISHED BY FOREMAN TO:

ROADMASTER
DIVISION ENGINEER
DIVISION SUPERINTENDENT

c. Standard form W Train Order signs should be erected promptly after order goes into effect, and all signs must be removed before Form W Train Order expires. Foreman is responsible for and will personally supervise the placing of all signs. One foreman relieving another foreman when signs are already displayed will personally check to assure himself that proper flags are being used and that they are in proper location. Care must be exercised when placing and removing signs so as not to delay any trains unnecessarily.

d. Engineer on train holding Form W Train Order will commence attempting radio contact with the Foreman who is working under protection of the Form W Train order, at least ten (10) miles prior to reaching point of restriction. When contact is established, be governed by paragraph e.

e. After radio contact has been established, *foreman will initiate the radio communication with engineer for oral authorization and acknowledgments between foreman and engineer, and must not do so until track has been made safe for the passage of trains.*

f. To assure no misunderstanding, foreman must require that train correctly repeats ORDER NUMBER, MP LOCATIONS, AND SPEED and MUST NOT sign off until train has correct information.

g. If radio contact cannot be made with engineer, foreman must proceed to red conditional stop sign and give train signal with green flag or orally authorize train to proceed if other than restricted speed is desired.

h. Foremen are responsible for condition of signs, and all signs must be clean and placed where they are easily seen.

i. If there is any doubt in unusual cases, contact your supervisor.

8. Use of this rule may be authorized in signaled and/or non-signaled territory by Vice President Operation.

10-J. (TR) Speed-control boards that prescribe reduction in speed will be located to the right of track in the direction of approach 4000 feet in advance of point of restriction.

Speed-control boards that authorize an increase in speed will be located at the point where higher speed is permissible and speed may be increased accordingly as soon as rear of train has passed such speed-control board.

Speed prescribed by timetable or otherwise must not be exceeded.

11. (TR) Within T.C.S. and A.B.S.S. territory, a train finding an unattended fusee burning on or near its track must stop and extinguish the fusee and proceed at restricted speed for not less than one mile.

Outside of T.C.S. or A.B.S.S. limits, a train finding a fusee burning on or near its track must stop and not proceed until fusee has burned out and then proceed at restricted speed for not less than one mile.

Where there is sufficient sight distance, or where preceded by torpedo explosion, stop must be made before leading wheels pass the burning fusee. Burning fusee must be removed if under engine or train.

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

Burning fusee found on or near tracks must not be extinguished by Maintenance-of-Way employees.

Fusees must be handled in careful manner to avoid injury and must not be placed on bridges, or other places where damage from fire may result.

Fusees must not be thrown off in timber-lined tunnels. If necessary to use in such a tunnel, they must be held in the hand, or placed securely in the earth or ballast in such manner that it would be impossible for fire to be communicated to woodwork within the tunnel.

The use of fusees except as prescribed by the rules is forbidden.

Within yard limits, *unattended* fusee may be passed without stopping.

12. (TRM) FLAG AND LAMP SIGNALS

MANNER USING	INDICATION
1. Swung at right angle to track.	Stop.
2. Slight horizontal movement at arm's length.	Reduce speed.
3. Raised and lowered vertically.	Proceed.
4. Swung vertically in a circle at right angle to track.	Back.
5. Swung horizontally across the body when the train is standing.	Apply air brakes.
6. Swung in arc above the head when the train is standing.	Release air brakes.

12-A. (TRM) HAND SIGNALS

When daytime hand signals are given at variance with flag and lamp signals prescribed in Rule 12, indication of hand signals will govern. However, signals prescribed by Rule 12 may be used night or day. Refer to Rule 9.

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

14. (TRM) ENGINE WHISTLE SIGNALS

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

SOUND	INDICATION
1. o	Apply brakes. Stop. Answer to 12.1 or other stop signal; not to be given in answer to a fixed signal, yellow signal, torpedoes, or unattended fusees. Acknowledgment of signal to initiate air test.
2. — —	Proceed. Acknowledgment of signal to release air brakes.
3. —ooo	Flagman protect rear of train as prescribed by Rule 99.
4. ooo—	Flagman protect front of train as prescribed by Rule 99.
5. — — — — —	Flagman may return from west as prescribed by Rule 99.
6. — — — — — —	Flagman may return from east as prescribed by Rule 99.

SOUND	INDICATION
7. oo	Answer to 14.10. or any signal not otherwise provided for, except stop signal. Not to be given in answer to a fixed signal.
8. ooo	When standing, back. Answer to 12.4. or other back-up signal.
9. oooo	Call for signals.
10. —oo	To call attention of engine and train crews of trains of the same class, inferior trains and yard engines, and of trains at train order meeting or waiting point to signals displayed for a following section. If not answered by a train, the train displaying signals must stop unless the crew of that train, by radio or direct communication, has acknowledged complete identification of the train displaying signals.
11. — — o —	a. Approaching crossings at grade. The signal will commence no later than arrival at whistle sign or place where such sign is normally located. The signal is to be re-

SOUND	INDICATION
	peated or the last sound prolonged until engine has passed over the crossing. b. When running with the current of traffic: (1) Approaching stations, curves, tunnels, or other points where view may be obscured and to warn trackmen or other workmen. (2) Approaching trains and when passing trains. (3) As frequently as necessary when moving in fogs and storms.
12. ———	One mile before reaching stations, junctions, drawbridges, and railroad crossings at grade; when standing apply air from rear of train, such application to be answered by 14.7.
13. ——	Air brakes applied for test in response to signal to apply brakes.
14. — — o	Approaching meeting or waiting points. Refer to Rule T-90-A.

SOUND	INDICATION
15. o —	Inspect brake pipe for leaks or for brake sticking.
16. Succession of short sounds	Alarm for persons or livestock on the track.
17. — o	When running against the current of traffic: a. Approaching stations, curves, tunnels, or other points where view may be obscured and to warn trackmen or other workmen. b. Approaching trains and when passing trains. c. As frequently as necessary when moving in fogs and storms.
18. — — —	Train parted.

14-A. (T) Whistle must be sounded at all places where required by rule or law, and where necessary as warning signal. The unnecessary use of whistle is forbidden.

14-B. (T) In case of whistle failure, speed of train must be reduced consistent with safety and bell rung continuously when approaching and passing through station, yard limits, over public crossings, and on curves. Refer to Rule 30.

14-C. (TR) Signs bearing letter "X", located one-fourth mile in advance of certain public cross-

ings at grade, tunnels, and obscure curves, require engine whistle signal as prescribed above. Absence of this sign in advance of public crossings at grade, tunnels, or obscure curves does not relieve engineers from sounding whistle signals prescribed.

14-D (TRM) Employees working on or about track on which movement is being made must acknowledge whistle signal 14.11., 14.16., or 14.17. with a hand or lamp signal.

15. (TRM) The explosion of two torpedoes is a signal to immediately reduce speed and proceed prepared to stop short of train, obstruction or stop signal, but not exceeding medium speed for a distance of two miles from point where torpedoes were exploded.

The explosion of one torpedo will indicate the same as two, but the use of two is required.

Torpedoes must be handled with care and must not be placed where they may cause injury.

Torpedoes must be placed on right-hand rail in the direction of approach 100 feet apart. Except in emergency, they must not be placed on public crossings or in yards.

The use of torpedoes except as prescribed by the rules is prohibited.

Torpedoes observed on rail by roadway forces will not be run over by track car but removed and replaced. If torpedoes are exploded or displaced by a track car they must be replaced.

17. (TR) The headlight will be displayed to the front of every train by day and by night. In non-signaled territory when a train turns out to meet another the headlight must be extinguished after the train has stopped clear of the main track, but until headlight is extinguished, it is an indication that main track is obstructed. The opposing train must approach at restricted speed, and if head end of train is clear of main track, it may proceed at restricted speed to the point where the main track may be obstructed. When on siding not clear of main track to meet an opposing train, in non-signaled territory, if headlight is obscured by cars or has failed, a flagman must immediately be sent ahead to insure protection.

17-A. (TR) By night, when standing or moving about yards, a detached road engine must display a dimmed headlight or a white light to the front and rear.

17-B. (TR) If headlight fails enroute or if engine not equipped with headlight is on the leading end, a white light must be used in its place.

17-C. (TR) Except when approaching and moving over public crossings at grade, the headlight must be dimmed at night under the following conditions:

1. Approaching and passing front and rear of train standing or moving on adjacent tracks.

2. While standing in or passing through yards where yard engines are working.

3. When standing to meet a train at a junction or at end of two or more tracks or while

standing on main track at meeting point after route has been lined for opposing train.

4. While standing in a siding in signaled territory. Headlight may also be extinguished.

5. At other points to permit passing of signals, delivery of train orders, or when safety of employees requires.

17-D. (TR) Oscillating while light on engines so equipped must be displayed at night when approaching public crossings at grade and at all times during night or day when weather conditions impair visibility.

Oscillating red light on engines so equipped will be displayed by day or night when train is stopped suddenly under circumstances in which adjacent track may be fouled or in an emergency until flag protection ahead has been provided, but does not relieve employees from compliance with Rule 99. A train or engine approaching an oscillating red light must stop at once and will not proceed until it is ascertained track is clear.

T-17-E. (TR) When taking siding to meet trains, unless it is definitely known that train is clear of the main track, headlight will be displayed and flag protection provided ahead. This does not in any way relieve the approaching train from complying with provisions of Rule T-90.

18. (TR) Yard engines when moving will display headlight in the direction of movement. When not provided with headlight to the rear a white light must be displayed. The headlight may be extinguished on the end coupled to cars. The headlight will be dimmed approaching and passing other engines, when other engines or trains are passing

on adjacent tracks or when circumstances or safety of employees requires.

19. (TR) The rear of a train will be identified by illuminated markers displaying red to rear. If markers cannot be illuminated, a red flag will be displayed to the rear. Until prescribed markers can be displayed, additional protection as may be necessary must also be provided.

19-A. (TR) When markers display red to the rear in non-signaled territory, it is an indication that the main track is occupied. Following trains must approach and proceed at restricted speed until the main track is seen to be clear. When train has stopped clear of main track to be passed by following train, markers will not display red to rear.

In signaled territory, a train may occupy siding displaying red markers to rear, and following trains will be governed by signal indication.

20. (TR) Outside of T.C.S. territory, all sections except the last must display two green lights as classification signals.

21. (TR) Outside of T.C.S. territory, extra and work extra trains must display two white lights as classification signals.

When helper engines are coupled at the head end of a train, both lead helper and road engine will display the signals as prescribed by Rules 20 and 21, but the leading engine only will give and answer signals.

22. (TR) One light, marker, or classification signal, displayed where Rules 19, 20, or 21 prescribe two, will indicate the same as two, but proper display of all train signals is required.

23. (TR) If whistle fails, or if both lights prescribed by Rule 20 fail, a train displaying signals must not leave the point of meeting or passing a train of the same or inferior class until the crew of that train, by radio or direct communication, has acknowledged complete identification of the train displaying signals. In such circumstances acknowledgment by whistle signal, Rule 14.7, must not be accepted.

24. (TR) Extra and work extra trains will be identified by engine number. Engine identifying regular, extra, and work extra trains will ordinarily be lead unit but may be any unit in locomotive consist. Engine unit identifying train will have engine number lights, and classification lights as applicable, illuminated day and night, in both signaled and non-signaled territory. Other number and classification lights in locomotive consist will *not* be illuminated.

26. (TRM) As used in rule 26, the following definitions apply:

"Workman" — Railroad employes assigned to inspect, test, repair or service railroad rolling equipment or their components including brake systems. Train and yard crews are excluded, except when assigned to perform such work on railroad rolling equipment that is not part of the train or yard movement they have been called to operate. Note: "Servicing" does not include supplying cabooses, engines, or passenger cars with items such as ice, drinking water, tools, sanitary supplies, stationery, or flagging equipment. "Testing" does not include visual observations made by an employe positioned inside or alongside a caboose, engine, or passenger car.

"Rolling Equipment" — Engines, railroad cars, and one or more engines coupled to one or more cars.

"Blue Signal" — A clearly distinguishable blue flag or blue light by day and a blue light at night.

"Effective Locking Device" — When used in relation to a manually operated switch or a derail, a lock which is capable of being locked and unlocked only by the class, craft or group of workmen applying the lock.

"Car Shop Repair Track Area" — One or more tracks within an area in which the testing, servicing, repair, inspection, or rebuilding of railroad rolling equipment is under the exclusive control of mechanical department personnel.

"Engine Servicing Track Area" — One or more tracks, within an area in which the testing, servicing, repair, inspection, or rebuilding of engines is

under the exclusive control of mechanical department personnel.

"Main Track" — A track, other than an auxiliary track, extending through yards or between stations, upon which trains are operated by timetable or train orders or both, or the use of which is governed by a signal system.

"Engine" — A self-propelled unit of equipment designed for moving other equipment or engines including a self-propelled unit designed to carry freight or passenger traffic, or both, and may consist of one or more units operated from a single control.

"Switch Providing Access" — A switch which if traversed by rolling equipment could permit that rolling equipment to couple to the equipment being protected.

"Group of Workmen" — Two or more workmen of the same or different crafts assigned to work together as a unit under a common authority and who are in communication with each other while the work is being done.

(a) Blue signals displayed in accordance with Rule 26-A, 26-B, or 26-C signify that workmen are on, under, or between rolling equipment. Under these conditions:

(1) The equipment may not be coupled to;
(2) The equipment may not be moved, except as provided for in Rule 26-C; and
(3) Other rolling equipment may not be placed on the same track so as to reduce or block the view of a blue signal, except as provided for in Rule 26-C (a), (b) and (c);
(4) Rolling equipment may not pass a displayed blue signal.

(b) Blue signals must be displayed in accordance with Rules 26-A, 26-B or 26-C by each craft or group of workmen prior to their going on, under, or between rolling equipment and may only be removed by the same craft or group that displayed them.

26-A. (TRM) When workmen are on, under or between rolling equipment on a main track;

(a) A blue signal must be displayed at each end of the rolling equipment; and
(b) If the rolling equipment to be protected includes one or more engines, a blue signal must be attached to the controlling engine at a location where it is readily visible to the engineman or operator at the controls of that engine.
(c) When an emergency repair work is to be done on, under, or between an engine or one or more cars coupled to an engine and blue signals are not available, the engineman or operator at the controls of the engine must be notified and protection must be given those engaged in making the repairs in the same manner as if blue signal were displayed. The same employe who notified engineer or operator that work was necessary must notify engineer or operator when work has been completed.

26-B. (TRM) When workmen are on, under, or between rolling equipment on track other than main track:

(a) A blue signal must be displayed at or near each manually operated switch providing access to that track;
(b) Each manually operated switch providing access to the track on which the equipment is located must be lined against movement to that track and locked with an effective locking device;
(c) The person in charge of the workmen must have

notified the operator of any remotely controlled switch that work is to be performed and have been informed by the operator that each remotely controlled switch providing access to the track on which the equipment is located has been lined against movement to that track and locked as prescribed in Rule 26-D.

(d) If rolling equipment requiring blue signal protection as provided for in this rule is on a track equipped with one or more crossovers, both switches of each crossover must be lined against movement through the crossover toward that rolling equipment, and the switch of each crossover that provides access to the rolling equipment must be protected in accordance with the provisions of paragraph a and b or c of this rule.

(e) If the rolling equipment to be protected includes one or more engines, a blue signal must be attached to the controlling engine at a location where it is readily visible to the engineman or operator at the controls of that engine.

26-C. (TRM) Instead of providing blue signal protection for workmen in accordance with Rule 26-B, the following methods for blue signal protection may be used:

(a) When workmen are on, under, or between rolling equipment in an engine servicing track area:

(1) A blue signal must be displayed at or near each switch providing entrance to or departure from the area;

(2) Each switch providing entrance to or departure from the area must be lined against the movement to the area, locked with an effective locking device; and

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

(4) If the speed within this area is restricted to not more than five miles per hour, a derail capable of restricting access to that portion of a track within the area on which the rolling equipment is located will fulfill the requirements of a manually operated switch in compliance with subparagraph 2 of this rule when positioned at least 50 feet from the end of the equipment to be protected by the blue signal, when locked in a derailing position with an effective locking device, and when a blue signal is displayed at the derail;

(5) An engine may be moved onto an engine servicing area track after the blue signal has been removed from the entrance switch to the area. However, the engine must be stopped short of coupling to another engine.

(6) An engine may be moved off of an engine servicing area track after the blue signal has been removed from the controlling engine to be moved and from the area departure switch;

(7) If operated by an authorized employe under the direction of the person in charge of the workmen, an engine protected by blue signals may be repositioned within this area after the blue signal has been removed from the engine to be repositioned and all workmen on the affected track have been notified of the movement; and

(8) Blue signal protection removed for the movement of an engine as provided in subpara

graphs (5) and (6) of this rule must be restored immediately after the engine has cleared the switch, if blue signal protection is still required on engine servicing area tracks.

(b) When workmen are on, under, or between rolling equipment in a car shop repair track area;

(1) A blue signal must be displayed at or near each switch providing entrance to or departure from the area; and

(2) Each switch providing entrance to or departure from the area must be lined away from movement to the area and locked with an effective locking device.

(3) If the speed within this area is restricted to not more than five miles per hour, a derail capable of restricting access to that portion of a track within the area on which the rolling equipment is located will fulfill the requirements of a manually operated switch in compliance with subparagraph (b-2) of this rule when positioned at least 50 feet from the end of the equipment to be protected by the blue signal, when locked in a derailing position with an effective locking device and when a blue signal is displayed at the derail.

(4) If operated by an authorized employe under the direction of the person in charge of all workmen, a car mover may be used to reposition rolling equipment within this area after workmen on the affected track have been notified of the movement.

(c) Except as provided in paragraph (a) and (b) of this rule, when workmen are on, under, or between rolling equipment on any track, other than a main track;

(1) A derail capable of restricting access to that portion of the track on which such equipment is located, will fulfill the requirements of a manually operated switch when positioned no less than 150 feet from the end of such equipment; and

(2) Each derail must be locked in a derailing position with an effective locking device and a blue signal must be displayed at each derail.

(d) When emergency repair work is to be done on, under, or between an engine or one or more cars coupled to an engine and blue signals are not available, the engineman or operator at the controls of the engine must be notified and protection must be given those engaged in making the repairs in the same manner as if blue signal were displayed. The same employe who notified engineer or operator that work was necessary must notify engineer or operator when work has been completed.

26-D. (TRM) When remotely controlled switches are involved on track other than main track;

(a) After the operator of the remotely controlled switches has received the notification required by Rule 26-B paragraph (c), he must line each remotely controlled switch against movement to that track and apply an effective locking device to the lever, button, or other device controlling the switch before he may inform the employe in charge of the workmen that protection has been provided.

(b) The operator may not remove the locking device unless he has been informed by the person in charge of the workmen that it is safe to do so.

(c) The operator must maintain for 30 days a written

record of each notification which contains the following information;

(1) The date and time the operator received notification of the work to be performed;

(2) The name and craft of the employe in charge who provided the notification;

(3) The number or other designation of the track involved;

(4) The date and time the operator notified the employe in charge that protection had been provided in accordance with paragraph (a) of this rule; and

(5) The date and time the operator was informed that the work had been completed, and the name and craft of the employe in charge who provided this information.

26-E. (TRM) A sign reading "Stop—Men At Work" must be respected in the same manner that a blue signal is observed.

26-F. (TRM) A yellow flag displayed on switch stand governing entrance to a yard track indicates roadway men working on or about such track. Track thus protected may be used but trainmen must protect any movement into track by first notifying roadway forces working on the track of their intention. Cars must not be kicked or dropped to such track. Cars shoved into such track must be protected by trainmen taking conspicuous position on leading car.

27. (TR) Except when Form X train order (Rule 228.X.) is in effect, the absence of a signal at a place where a signal is usually shown, the absence of a light, a white light displayed where a colored light should be, or a signal otherwise imperfectly displayed, must be regarded as displaying the most restrictive indication that can be given by that signal, except that when the day indication is plainly seen it will govern. Arms removed from semaphore signals or covering placed over light signals must be regarded as signals imperfectly displayed.

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

29. (TR) When a signal, except a fixed signal, is given to stop a train, it must be acknowledged as prescribed by Rule 14.1.

30. (TRM) The engine bell must be rung when an engine is about to move, except after momentary stops in continuous switch movements. It must also be rung while approaching and passing public crossings at grade, through tunnels, and elsewhere where necessary as a warning signal. The unnecessary use of bell is forbidden.

34. (TRM) All members of engine and train crews must, when practicable, communicate in a distinct and audible manner to each other the name of the next signal ahead affecting the movement of their train or engine as soon as it becomes clearly visible, and thereafter continue to observe the signal and call any change of indication until it is passed. If engineer fails to control speed in accordance with

signal indication or speed restriction, other crew members must take necessary action to insure safety.

When seats are available, all trainmen riding head end of train will ride in lead unit.

34-A. (T) On trains equipped with radio, signal name per Rule 285, must be communicated from engine to caboose and acknowledged from caboose to engine. Radio failure between head end and rear end of a train must be reported to train dispatcher per Rule 41-A.

35. (TR) The following signals will be used by flagmen:

1. DAY SIGNALS	2. NIGHT SIGNALS
a. A red flag.	a. A white light.
b. Torpedoes and fusees.	b. Torpedoes and fusees.
	c. A red light when called for by the rules.

35-A. (TR) When going out to flag, flagman should take with him not less than eight torpedoes and six fuses.

RADIO RULES

40. (TRM) Radio communication, if distinct, may be used the same as any other means of communication to effectuate any operation prescribed by the rules.

The use of other than company authorized radios is prohibited. Citizen band radios are prohibited on engines and cabooses and must not be used for railroad operating purposes.

Radios must be used only in connection with railroad business and in compliance with the operating rules.

41. (TRM) During each tour of duty, engineers and conductors are responsible for verifying that engine and caboose radios are working.

Radios used in train operation outside yards must be tested at the point where train is originally made up.

Portable or packset must be tested in accordance with these requirements.

Radio test must consist of an exchange of voice communication, determining quality and readability of transmission.

41-A. (TRM) A malfunctioning radio must not be used and each member of crew and the train dispatcher or other designated employee must be notified as soon as practicable.

Radio log books when provided must be maintained and entries must contain only pertinent information.

41-B. (TRM) The locations of radio base and wayside stations, times such stations are attended, and assigned channels will be designated by timetable or other instructions.

41-C. (TRM) When radios are manned, they must be turned on to the appropriate channel with volume adjusted to receive communications.

Radio calls must be promptly acknowledged; acknowledgement may be delayed if it would interfere with other duties relating to safety.

41-D. (TRM) An employee who receives a transmission must repeat it to the transmitting party except when the communication:

1. Relates to yard switching operations;

2. Is a recorded message from an automatic alarm device; or

3. Is general in nature and does not contain any information, instruction or advice which could affect the safety of the railroad operation.

41-E. (TRM) When radio is used to transmit any mandatory directive for movement it must be copied by the employee receiving the transmission and repeated to the employee transmitting it.

42. (TRM) Radio communications must be made in accordance with Federal Communication Commission and Federal Railroad Administration regulations:

1. No employee shall knowingly transmit false distress calls or communications.

2. Unnecessary, irrelevant, or unidentified communications are forbidden.

3. Obscene, indecent, or profane language is prohibited.

4. No employee shall knowingly transmit while distress traffic is being handled on the circuit.

a. A distress call will be preceded by the word "Emergency" repeated three times. Such calls shall be used only to cover initial reports of derailments, storms, washouts, fires, obstructions to tracks, or other matters which would cause serious delay to traffic, damage to property, injury to employees or the traveling public, and shall contain as complete information thereon as possible. All employees shall give absolute priority to communications from another station in distress, and except in answering or aiding a station in distress shall refrain from sending any communications until there is assurance that no interference will result to the station in distress.

b. Internationally, the word "Mayday" indicates a distress message, the word "Pan" an urgent message, and the word "Security" A SAFETY MESSAGE. Railroad employees may hear such messages sent by aircraft or in coastal areas by boats. Employees hearing such messages must report them immediately to train dispatcher, in addition to taking such appropriate action to relieve the distress as may be possible.

5. No employee shall divulge or publish the existence, contents, purpose, effect, or meaning of any communication (distress communications excluded) except to the person for whom the communication is intended or to another employee of the railroad whose duties may require knowledge of the communication. The above applies either to communications received direct or to any that may be intercepted.

6. Any employee receiving inquiry concerning any violation shall answer within 24 hours after receipt of notice to permit the Company to provide an answer to an official notice within three days.

7. Any employee shall permit inspection of the radio equipment in his charge and all F.C.C. documents pertaining thereto, by a duly accredited representative of the Federal Communications Commission at any reasonable time.

8. All employees except those specifically authorized to do so are PROHIBITED from making any adjustments to a railroad radio set. Employees so authorized must carry their F.C.C. operator license and verification card when on duty.

9. Upon request, railroads will provide reasonable assistance to federal inspectors when it is necessary for those inspectors to monitor radio communications to verify compliance with regulations.

43. (TRM) 1. An employee using radio must satisfy himself that he is in communication with the proper station and person and must not consider communication completed until he is certain that he has heard all of the conversation, repeating same when required to indicate that the total communication is understood.

2. Every radio transmitter (base, mobile, or hand unit) must be identified when initiating or acknowledging a radio transmission. If the transmission or exchange of communication exceeds three minutes in length, or consists of a series of transmissions without substantial interruption, identification must again be made at the end of each 15 minute period.

3. An employee transmitting or acknowledging radio communication must begin with positive identification which must include the following in the order listed:

a. Base or Wayside Station

1. Name or initials of the railroad
2. Name of office or other unique designation of the station
3. Location of station

b. Mobile Units

1. Name or initials of the railroad
2. Occupation
3. Train name (number) engine number, caboose number, motorcar, packset, any on or off track equipment and location that will identify the precise mobile unit. Examples:

END TO END OF TRAIN

Initiation— "WP Extra 3501 East Engine *(or* Caboose) calling Caboose (*or* Engine)." OVER

Response— "WP Extra 3501 East Caboose (*or* Engine)." OVER

Termination— (1) "Extra 3501 East Engine (*or* Caboose) out."

(2) "Extra 3501 East Caboose (*or* Engine) out."

DISPATCHER TO TRAIN

Initiation— "WP seventh sub Dispatcher calling WP Extra 3501 East Engineer (*or* Conductor)" OVER

Response— "WP Extra 3501 East Engineer (*or* Conductor)" OVER

Termination— (1) "Dispatcher seventh sub out."

(2) "Extra 3501 East Engineer (*or* Conductor) out."

TRAIN TO DISPATCHER

(Refer also to Paragraph 6 below)

Initiation— "WP Extra 3501 East Engineer (*or* Conductor) KEDDIE calling WP third sub Dispatcher." OVER

Response— "WP third sub Dispatcher." OVER

Termination— (1) "Extra 3501 East Engineer (*or* Conductor) out."

(2) "WP third sub Dispatcher out."

TRAIN TO TRAIN

Initiation— "WP Extra 3501 East Engine (*or* Caboose) calling head end (*or* rear end) WP Extra 3508 West." OVER

Response— "WP Extra 3508 West head end (*or* read end)." OVER

Termination— (1) "Extra 3501 East out."

(2) "Extra 3508 West out."

MWS TO TRAIN

Initiation— "WP Gang 211 Foreman at Virgilia, calling head end (*or* rear end) WP Extra 711 East." OVER

Response— "WP Extra 711 East head end *(or* rear end)." OVER

Termination— (1) "WP Gang 211 Foreman out."

(2) "Extra 711 East out."

TRAIN TO MWS

Initiation— "WP Extra 711 East Engine *(or* Caboose) calling MWS Foreman between Robbers Creek and Lodgepole." OVER

Response— "WP Gang 221 Foreman at MP 59 POLE 17." OVER

Termination— (1) "Extra 711 East out."

(2) "WP Gang 221 Foreman out."

MOBILE TO MOBILE (OR TRAIN)

Initiation— "WP Mobile 8 calling clerk Olsen *(or* head end WP Extra 3501 East)." OVER

Response— "WP Mobile 10 clerk Olsen (or head end WP Extra 3501 East)." OVER

Termination— (1) "WP Mobile 8 out."

(2) "WP Mobile 10 (or head end WP Extra 3501 East) out."

MOBILE TO STATION

Initiation— "WP Las Plumas, calling 25th Street Yardmaster." OVER

Response— "WP 25th Street Yardmaster." OVER

Termination— (1) "WP Las Plumas out."

(2) "WP Yardmaster out."

STATION TO MOBILE (OR TRAIN)

Initiation— "WP Elko Yard Office calling trainmaster Kelly or WP Mobile 8 (or WP Caboose 465)." OVER

Response— "WP Trainmaster Kelly (or WP Caboose 465)." OVER

Termination— (1) "WP Elko Yard out."

(2) "WP Mobile 8 (or Caboose 465) out."

4. To indicate that a transmission is ended and that a response is expected, the transmitting employee must say "over." To indicate that a transmission is ended and that no response is expected, the transmitting employee must state his identification and say "out."

a. In all yard operations, after initial positive identification is established, short identification may be used.

5. After radio contact has been established between roadway foreman and train concerning Form W train order, be governed by formula outlined in Rule 10-I.2.

6. The normal engine and caboose control knob setting is F-2. To initiate a call to the dispatcher, turn control knob to F-1. If the dispatcher initiates the communication, he will be heard on F-2 but it will be necessary to switch to F-1 to answer.

7. After radio contact has been established between HMP operator and train operator and train concerning track patrol escort, be governed by Rule 935.

44. (TRM) When a message or instruction is to be transmitted to a train by radio, the employee

operating the radio shall listen a sufficient interval to be sure that the circuit is not already in use, particularly for distress traffic or for train orders.

45. (TRM) Except for yard switching operations, instructions relating to the movement of trains or engines shall be repeated to the sending station by the person receiving them. All other instructions and messages received by radio shall be acknowledged to the sending station by the person receiving them.

46. (TRM) Any instruction or message which is not repeated or acknowledged as being fully understood in accordance with these procedures shall not be acted upon and shall be treated as though not sent.

47. (TRM) Radios must not be used to give information about the aspect of any fixed signal, except between members of the same crew.

1. Unless specifically authorized by the rules, radio must not be used to convey instructions which would override the indication of a fixed signal.

48. (TRM) When radio communication is used in connection with switching, backing or pushing a train, engine, or cars, complete instructions must be given or continuous radio contact must be maintained.

When backing or pushing a train, engine, or cars, the distance of the movement must be specified, and movement must stop in half the specified distance unless additional instructions are received. Refer to Rule 7-B.

If the instructions are not understood or continuous radio contact is not maintained, movement must stop immediately and not be resumed until the misunderstanding has been resolved, radio

contact has been restored, or communication by other means has been established.

49. (TRM) Radio communication must not be used to inform a train of the contents of a train order not yet transmitted to or received by that train.

50. (TRM) When radio is used to transmit train orders, rules for movement by train order and the following instructions apply:

1. When a train order is to be transmitted directly to a train by radio, the train dispatcher will call the train and state this fact. The crew members who are to copy the order must state their names, positive identification and exact location and that they understand a train order is to be transmitted and that they are prepared to receive it.

2. Train orders may be transmitted by radio directly to a moving train but must not be copied or repeated by an employee operating the controls of the engine of such train.

3. Train orders must not be transmitted to the crew of a moving train when, in the judgment of the conductor, the engineer or the train dispatcher, the order cannot be received and copied without impairing the safety of the train.

4. Train orders transmitted by radio directly to a train must be copied and repeated by a crew member or other qualified employee. When crew member on caboose has no means of receiving the order, train order must not be transmitted by radio directly to the train.

5. "Complete" must not be given to a radio-transmitted train order until it has been repeated and dispatcher has verified the accuracy of the repetition. Dispatcher will then state "Complete,"

the time, and the initials of the employee designated by the railroad. Crew members copying the order must then acknowledge by repeating "Complete" and the time.

6. "Complete" and time must not be given to a radio-transmitted train order for an inferior train until response "Complete" and time have been acknowledged by the superior train.

7. Train orders transmitted by radio directly to two or more trains must be transmitted simultaneously to as many of them as practicable.

When a train is to be restricted by a radio-transmitted train order at the point where the train will receive the order, train must be stopped and dispatcher notified of train's exact location before order is transmitted.

8. The "X" response must not be used for radio-transmitted train orders.

9. Information contained in radio-transmitted train orders must not be acted upon by other than those to whom the orders are addressed.

9. Information contained in radio-transmitted train orders must not be acted upon by other than those to whom the orders are addressed.

10. During radio transmission of a train order, should communication fail after order number is received and prior to receiving the word "Complete" and the time, those trains addressed must stop and not proceed until communication is reestablished.

11. A train order transmitted by radio must not be acted upon until the word "Complete" and the time are received and both the conductor and engineer have received a written copy of the order and have made certain that the order has been

read and understood by other members of the crew.

51. (TRM) If any communication from a station other than another Western Pacific radio transmitter interferes with radio service, the railroad employee will endeavor to ascertain the identity of such station and report the occurrence as soon as possible to the train dispatcher, giving the exact time, nature of the communication, and identity of the station, if possible.

53. (TRM) Radio transmission will not be attempted when signs indicate electric blasting caps are being used.

54. (TRM) If necessary for clarity, a phonetic alphabet must be used to pronounce any letter used as an initial, except initial letters of the railroad.

54-A. (TRM) A word which needs to be spelled for precision or clarity shall first be pronounced, and the word shall then be spelled. If necessary, the word shall be spelled again, using a phonetic alphabet.

54-B. (TRM) Numbers must be spoken by digit, except exact multiples of hundreds and thousands may be stated as such. A decimal point must be indicated by the word "decimal."

54-C. (TRM) The required phonetic alphabet:

A ALFA	J JULIET
B BRAVO	K KILO
C CHARLIE	L LIMA
D DELTA	M MIKE
E ECHO	N NOVEMBER
F FOXTROT	O OSCAR
G GOLF	P PAPA
H HOTEL	Q QUEBEC
I INDIA	R ROMEO

S SIERRA	W WHISKEY
T TANGO	X XRAY
U UNIFORM	Y YANKEE
V VICTOR	Z ZULU

54-D. (TRM) The required pronunciation of numerals:

Number:	*Spoken*		
0	ZERO	5	FI-YIV
1	WUN	6	SIX
2	TOO	7	SEVEN
3	THUH-REE	8	ATE
4	FO-WER	9	NINER

SUPERIORITY OF TRAINS

T-71. (T) SINGLE TRACK: A train is superior to another train by right, class or direction.

Right is conferred by train order; class and direction by timetable.

Right is superior to class or direction.

Direction is superior as between trains of the same class.

DOUBLE TRACK: A train is superior to another train by right or class.

Right is conferred by train order; class by timetable.

Right is superior to class.

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

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

T-73. (T) Extra trains and work extras are inferior to regular trains.

T-74. (T) There is no superiority between extra trains, including work extras, except as provided by train order.

80. (T) A train or engine, unless authorized by signal indication, timetable or train order authority, or as specifically provided for in the rules, will not occupy a main track without providing protection as prescribed by Rule 99. A train or engine crossing over to or fouling another main track, unless otherwise provided, must first be protected as prescribed by Rule 99. In double track territory trains and engines must keep to the right unless otherwise specified in the timetable.

T-82. (TR) Timetable schedules, unless fulfilled or annulled 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.

T-82-A. (T) Unless otherwise provided, regular trains 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 order must be used:

"*Eng* ----------*run as No* ----------*from* ----------"

When a train is detoured, it must not leave the station at which it returns without train order authority.

When its initial station is an open train-order office, unless otherwise provided, an extra train must not leave without a clearance, which must bear the OK, time, and initials of the Chief Train Dispatcher.

T-83. (T) A train must not leave its initial station on any subdivision, or a junction, or an intermediate station where schedules originate or terminate, or pass from double to single track, until it has been ascertained whether all trains due, which are superior, have arrived or left.

T-83-A. (T) Train register will be kept at stations designated in timetable and the conductor, or engineer if there is no conductor, unless otherwise provided, must enter therein all information required.

An extra train will register only at a register station where it originates or terminates, unless otherwise directed.

A train must not leave a station at which it is necessary for the conductor to check the register until he has checked the register and delivered to each engineer a check of the register on prescribed form. Arrival of extra trains cannot be checked by train register. Refer to Rule T-83-C.

Regular trains register on date due in or out per timetable schedule *regardless* of actual time and date train actually arrives or departs.

Extra trains register *departure* on date train called for; *arrival* on date train actually arrives.

T-83-B. (T) A train may leave a register ticket of prescribed form with the train-order operator at a train register station when authorized by special instructions in the timetable or by train order, or when a train-order check of trains is received. When so authorized, the operator must enter on the register information contained on the ticket, then report the train from the register.

When a train-order check of a schedule or section is received, or a schedule or section is identified, or check on a register at the initial or terminal station, or at the end of double track, when passing from double to single track, or after having been met on single track or passed on either double or single track by a regular train, it will not be necessary to check an intermediate register against the same train.

T-83-C. (T) When a train is restricted for an extra train, the restricted train must not leave until 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 is received in the following form:

"---------- *has arrived* (or *left*)
---------- *on Order No* ----------"

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

In switching or other moves where trainmen are handling switches they must know that the switch is set properly before signaling engineer to move.

84-A. (T) Backing a train, except locals, work trains, and road switchers, must be done only on an emergency basis with direct permission of chief dispatcher, dispatcher, or proper officer.

When necessary to back a train, including locals, work trains, and road switchers, working units must be reduced to three by isolating all units above three, with working units next to the train.

85. (T) 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, and extra trains may pass and/or run ahead of second and third-class and extra trains. Third-class trains may pass and/or run ahead of second-class 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.

Within T.C.S. territory, a section may pass and run ahead of another section without exchanging train orders or signals, but must not leave those limits until the change in sections has been authorized by train order.

T-86. (T) In A.B.S.S. territory, unless otherwise provided, an inferior train must clear a first-class train, or train of superior right in the same direction so as to avoid giving a restrictive signal indication to the following superior train.

Outside of A.B.S.S. territory, an inferior train must be in the clear at the time a first-class train or train of superior right in the same direction is due to leave the next station in the rear where time is shown; except that if the time between stations is less than ten minutes, the inferior train must clear not less than ten minutes.

An extra train must be in the clear at the time a superior extra train in the same direction is authorized to leave the next station in the rear where time is shown per Form D (Rule 228.D.3) or Form G (Rule 228.G.3) Train Order; except that if the time between stations is less than ten minutes, the inferior train must clear not less than ten minutes.

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

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

An extra must clear the time of an opposing extra which is given right over it not less than five minutes.

T-88. (T) At a meeting point between extras, or between work extras, the train in the inferior timetable direction must take the siding unless otherwise provided.

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

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

T-89. (T) At meeting points the inferior train must take the siding and clear the time of the superior train not less than five minutes.

The inferior train must pull into the siding when practible; if necessary to back in it must be protected as prescribed by Rule 99.

T-90. (T) At schedule meeting points between trains of the same class, the superior train must stop clear of the switch used by the train to be met in entering the siding unless switch is properly lined and the track clear.

At train order meeting points, the train holding the main track must stop clear of the switch used by the train to be met in entering the siding, unless the train to be met is clear of the main track and switch properly lined.

T-90-A. (T) When a train equipped with communicating signal system approaches a point where it is restricted to wait, meet, or be passed by another train, conductor must use communicating signal, giving one short sound, not less than one mile from point of restriction and engineer must answer by signal 14.14. On other trains the engineer must give signal 14.14. not more than two or less than one mile before reaching such point.

Should engineer fail to answer or give signals accordingly or fail to prepare to stop short of fouling point, the conductor must stop the train.

Radio communication may be used in lieu of communicating signal and engine whistle. When so used an understanding of the conditions must be reached.

91. (T) In non-signaled territory, trains in the same direction must keep not less than ten minutes apart. Lighted fusees must be thrown off for this purpose when necessary. Refer to Rule 99.2.

T-92. (T) A train must not leave a station in advance of its schedule leaving time.

93. (T) Yard limits will be designated in the timetable and the limits will be indicated by "Yard Limit" signs.

Within yard limits the main track may be used, clearing the time an approaching first-class train

is due to leave the nearest station where time is shown. Protection against other trains and engines is not required.

In case of failure to clear the time of first-class trains, protection must be provided as prescribed by Rule 99, except where movements are governed by automatic block signal system indication.

All trains and engines within yard limits, except first-class trains, must move at yard speed, not exceeding 20 MPH unless the main track is known to be clear by automatic block signal system indication.

A train or engine must not move against the current of traffic within yard limits until authorized to do so by train order, Yardmaster or other designated official, and must move at yard speed, not exceeding 20 MPH.

T-95. (T) Two or more sections may be run on the same schedule. Each section has equal timetable authority.

Unless otherwise provided, a train must not display signals for a following section without train order authority or upon receipt of clearance with the words "green signals" following the section number.

T-96. (T) 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 (Rule 228.K.) train order must be used.

When a following section is created at an intermediate point of a schedule, a copy of the

order must be given inferior trains and trains of the same class in the same direction at or before reaching such point, until the following section has left.

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

98. (T) Trains and engines must approach the end of double track, railroad crossings at grade, and drawbridges, prepared to stop, unless the switches are properly lined, signals indicate proceed, and track is clear.

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

99. (TR) Flag protection will be provided as follows:

1. GENERAL

a. Flag protection will be complied with only by provisions of this rule.

b. When movement is preceded by a flagman, as in Rules 10-G, 340-A, 509.1.b., 509.2, 548, 663, and others, flag protection will be complied with only when employee flagging is on ground a sufficient distance in advance of movement to allow flagman to inspect appurtenances, stop opposing movements as required by the rules, and for following movement to be stopped short of his position if required.

c. Roadway flag protection will be complied with only by provisions of the preceding subparagraph b. and Rule 101.

d. Flagman's signals: Refer to Rules 11., 15., 35. and 35-A.

2. NON-SIGNALED TERRITORY

A. When a train is moving on main track at less than half the maximum authorized timetable speed for any train at that location (including slow order limits), a crew member must drop single lighted fusees at intervals not exceeding nine minutes.

When a train is moving on main track at or more than half the maximum authorized timetable speed for any train at that location (including slow order limits) under circumstances in which it may be overtaken, crew members responsible for providing protection must consider grade, track curvature, weather conditions, sight distance, and speed of the train relative to following trains, when deciding if lighted fusees should be dropped.

b. When a train stops on main track, protection against following trains on the same track must be provided as follows:

(1) The flagman must go back immediately with flagman's signals.

(2) One mile from rear of train he will place two torpedoes on the right hand rail in the direction of approach 100 feet apart. Continuing back one additional mile from that point (2 miles from rear of train) flagman will place two torpedoes on the right hand rail in the direction of approach 100 feet apart and leave on lighted fusee. Flagman will then return to the location of the two torpedoes, one mile from point to be protected and remain there until he has stopped the approaching train or is recalled. When recalled and no following train is seen or heard, he must leave a lighted fusee, and while returning to train must leave lighted fusees at not less than nine minute intervals. Flagman must not stand within 200 feet of torpedoes.

(3) When the train departs, a crew member must leave a lighted fusee and drop single lighted

fusees at not less than nine minute intervals until train attains a speed not less than half the maximum authorized timetable speed for any train at that location.

c. If the flagman sees or hears a train approaching before he reaches the required distance, he must at once place two torpedoes on the rail on the engineer's side and go toward the approaching train giving stop signals.

d. If recalled before reaching the required distance, flagman will immediately place two torpedoes on the right hand rail in the direction of approach 100 feet apart, place a lighted fusee, and if no train or engine is seen or heard approaching, return to train, placing additional ufsees at not less than nine minute intervals. When train departs the provisions of subparagraph b. (3) will govern.

e. Refer to Form I train order. When Form I train order is received, protection against following trains is not required.

f. If a Form I train order has not been issued (Rule 228.I.), the flagman will contact train dispatcher by radio to determine the symbol and engine number of following trains. When train is moving under circumstances in which it may be overtaken, in addition to the other requirements of Rule 99.2.a., flagman will attempt to make radio contact with the following train, keeping it advised of his train's location. If train stops after contact is made and *if* the following train positively understands the location of the standing train, *and if* the following train repeats to the flagman that location and understands torpedoes are not placed at one and two mile intervals behind the train, the flagman is relieved from that portion of Rule 99.2.b. specifying distance. All other provisions of Rule 99 will continue to apply.

If radio is not available, or if communication is not distinct, the above will be null and void and *all* provisions of Rule 99 will govern.

99-A. (T) When a train carrying passengers stops under conditions which do not require the flagman to go back under Rule 99, he must take position on ground at rear of train prepared to provide protection if it becomes necessary.

T-99-B. (T) 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 flagging order to the engineer who must stop and leave flagman at the first switch at station to which he is sent.

Flagging instructions must be written in duplicate, one copy given to the flagman and the other retained by the conductor or engineer, and then mailed to the Superintendent. Flagging orders issued by the 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 wirtten on prescribed form. After reading the flagman's hold order, engineer must return it to the flagman.

3. SIGNALED TERRITORY

a. Within signaled territory, protection against following trains or engines on the same track is not required EXCEPT:

(1) When running against current of traffic, protection must be provided as prescribed by paragraph 2, above (non-signaled territory).

(2) During foggy weather, if a train stops at location(s) other than at station(s) between absolute signals at that station, flagman must go back immediately with flagman's signals a sufficient distance to insure full protection against trains moving at restricted speed, placing himself in the best possible position to give stop signals ready for immediate use until properly relieved or recalled.

(a) If the flagman sees or hears a train approaching, he must at once place two torpedoes 100 feet apart on the rail on the engineer's side and go toward the approaching train giving stop signals.

(b) When recalled, and safety to train will permit, flagman may return, leaving a lighted fusee and, when conditions require, torpedoes. Flagman must not stand within 200 feet of torpedoes, when used.

b. Flag protection is not required in T.C.S. territory when a train is standing at a station between absolute signals at that station.

4. BOTH SIGNALED AND NON-SIGNALED TERRITORY

a. When required by the rules, the front of the train must be protected in the same manner as the rear of the train by a member of the crew.

b. During foggy or stormy weather or when on descending grade or in vicinity of obscure curves, flagman must go back a greater distance as conditions warrant, placing additional torpedoes. During foggy or stormy weather flagmen will use lighted fusees if necessary to give stop signal.

c. When the cause for a flagman's stop signal is explained fully to the engineer(s) and train may proceed, care must be taken to follow flagging instructions.

d. (TR) Employees stationed at highway crossing must give stop signals when necessary to stop trains. When no special signal device is authorized, they must use a red signal to stop highway traffic, making certain such signal is displayed to highway traffic only. They must not give proceed signals to highway traffic.

T-100. (T) If a flagman has gone back to protect the rear of his train and is left behind, the conductor must insure the rear of his train is protected. It must not be assumed that the flagman riding on the following train will afford necessary protection for his train.

101. (TR) Trains and engines must be protected against any known condition which interferes with their safe passage at track speed.

1. When changing rails or in any way working on track, bridges, or tunnels rendering the track impassable or unsafe, flagman must be immediately sent in both directions, unless protection has otherwise been provided for by the rules. One mile from the point to be protected flagman will place two torpedoes on right-hand rail in the direction of approach 100 feet apart. Continuing back one additional mile from that point (two miles from the point to be protected), flagman will place two torpedoes on the right-hand rail in the direction of approach 100 feet apart. Flagman will then return to the vicinity of the two torpedoes *one* mile from point to be protected and place himself in the best possible position to give stop signals ready for immediate use until properly relieved or recalled. Flagman must not stand within 200 feet of torpedoes.

a. During foggy or stormy weather, or when on descending grade, or in vicinity of obscure curves, flagman must go back a greater distance as conditions warrant, placing additional torpedoes. During foggy or stormy weather flagman will use lighted fusee if necessary to give stop signals.

b. If the flagman sees or hears a train approaching before he reaches the required distance, he must at once place two torpedoes on the rail on the engineer's side and go toward the approaching train giving stop signals.

c. When the flagman is to be recalled, the foreman, or a man delegated by the foreman, must go to the flagman and notify him that the track has been made safe for the passage of trains. Flagman will then remove all torpedoes he has placed.

d. A clear understanding of what flagman is to do must be had between foreman and flagman before flagman is sent out. If there is enough time, foreman will give flagman written description of work being done or nature of obstruction, date, and exact location, instructing engineer to stop before reaching that location, unless signal is received from the foreman in charge. Unless otherwise provided, written instructions will be on prescribed form and will be shown to the engineer of each train flagged.

2. When alone, roadway or other employee finding track or bridge in unsafe condition must immediately place a red flag by day or a red light by night in both directions not less than 1000 feet from the point of obstruction. When authorized, employee will also place shunt cord by day or night. After the red signals are placed, flagman will immediately go in one direction one mile from the point to be protected and place two torpedoes on the right-hand rail in the direction of approach 100 feet apart. Continuing back one additonal mile from that point (two miles from the point to be protected), flagman will place an additional set of two torpedoes on the right-hand rail in the direction of approach 100 feet apart. Flagman will then return to point of obstruction and proceed immediately in the opposite direction, placing torpedoes

in the same manner as done in the first direction. Flagman will then return to point of obstruction, remaining there until relieved by another flagman, except if train approaches, he must at once go towards the approaching train giving stop signals with a red flag and, if at night or during foggy or stormy weather, a lighted fusee.

3. Only qualified men may be used as flagmen. When flagmen are sent out to protect track conditions they must flag all trains and remain on continuous duty including the meal period until relived by foreman in person, or by another flagman.

101-A. (TR) Instructions respecting movement of trains or condition of track or structures must be in writing, except within yard limits where movements are subject to yardmaster's instructions, within T.C.S. territory where movements are subject to train dispatcher's instructions, and within interlockings where movements are subject to operator's instructions.

101-B. (TR) In case of heavy rain storms or high water, if roadway supervisors are not available to make inspection, trains must be stopped and bridges, trestles, culverts, and other points subject to damage examined by a member of the crew before proceeding.

When tracks are covered by water and it is known they are safe for movement, engines may be operated over them only if the water is below the traction motor frames, not exceeding 5 MPH.

101-C. (TR) If any defect or condition which might cause an accident is discovered in track, bridge, culvert, or other structure, or if any crew member has reason to believe that his train has passed over any dangerous defect, the train must be stopped at once and proper protection provided, conferring promptly with train dispatcher, informing him of conditions and, when practicable, with the nearest roadway supervisor.

When in doubt as to the wisdom of proceeding, train must be moved if safety will permit, to the safest available place and there held until determined that it can proceed with safety. The train dispatcher must be kept informed of conditions from nearest available point of communication.

Detectors that check for defects do not relieve employees of making required visual inspections.

101-D. (T) During and immediately following stormy weather which may impair the roadway, engineers must take extraordinary precautions to insure safe movement of their train, reducing speed where in their judgment it may be required.

Where normal visibility is impaired, trainmen and enginemen must take extraordinary precautions to operate their trains safely.

102. (T) When a train is disabled or makes an emergency stop, radio communication must immediately be used to stop trains on any adjacent track. Also, such tracks must immediately be protected by flag until it is ascertained there is no obstruction and that they are safe for passage of trains. The train must be inspected before it is moved. When a train air brake system goes into emergency application and the cause is not known, no movement will be made until hand, lamp, or radio signal is given.

102-A. (T) When for any reason an engine leaves its train or part of its train on the main track, a sufficient number of hand brakes must be set to keep train from moving. When safety requires, torpedoes must be placed a sufficient distance ahead of the standing equipment to serve as a warning and a crew member must protect the returning movement.

103. (T) When shoving cars, precaution must be taken to prevent damage or fouling other tracks. When conditions require, a member of the crew must take a conspicuous position on the leading

car, with the proper signals. When shoving cars over crossings not protected by crossing gates in lowered position, a trainman must ride the leading end or be ahead to protect the crossing. When kicking or dropping cars over crossings not protected by crossing gates in lowered position, a member of the crew must protect the crossing.

103-A. (T) Switching must be done in a careful manner to avoid severe shocks by sudden starting or stopping or by impact in making couplings and to prevent personal injury, damage to equipment or lading.

Kicking or dropping of cars must be done in a careful manner to avoid injuries and damage. Such movements must not be made with cars placarded "Explosives" or "Dangerous" with cars occupied by persons or livestock, or to tracks occupied by such cars. Loaded T.O.F.C. or multi-level cars must not be kicked or dropped against other cars nor other cars against them.

Tank cars containing Flammable Compressed Gas (FCG) shall not be cut off when in motion. No car moving under its own momentum shall be allowed to couple to a car containing Flammable Compressed Gas (FCG).

Before making a drop it must be determined that there is adequate room and that hand brakes and switches to be used are in working order. Engine must be run on straight track when practicable.

When cars are cut off to an open track, precautions must be taken to prevent fouling other tracks. When necessary to control cars by hand brakes it must be known, before cars are cut off, that such brakes are in good order.

Cars must not be shoved or kicked or left to foul leads or adjacent tracks until it is known that it is safe to do so. Engines and cars must not be left to foul adjacent track if possible to avoid it.

Cars with plug type doors and refrigerator cars must not be moved unless doors are closed and properly secured.

103-B. (T) Trains moving under conditions that may require them to stop must, where possible, stop to clear public grade crossings. Such crossings must not be blocked longer than necessary and in no case longer than ten minutes unless no vehicles are waiting at or closely approaching the crossing.

Switches must not be left open nor equipment left standing longer than necessary on tracks within operating limits of automatic grade crossing warning devices. In leaving equipment on any track it must be left clear of highways and street crossings and insulated joints. When necessary to spot equipment in vicinity of public grade crossings it must, if possible, be left a sufficient distance from road, sidewalk, or street line to afford an unobstructed view for persons approaching from either direction. When it can be avoided, locomotives must not be stopped under bridges.

Switching movements over public grade crossings should be avoided whenever possible. If not possible such crossings must be cleared frequently to allow vehicles to pass and must not be occupied continuously for longer than ten minutes unless it can be seen that no vehicles are waiting at or closely approaching the crossing.

In general highway crossing signals are not designed to operate for trains and 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.

Employees flagging public grade crossings must not give proceed signals to highway traffic.

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

103-C. (T) A sufficient number of hand brakes must be set to hold cras standing on any track. If brakes be 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 and, if necessary, chained to rail.

Proper precautions must be taken to prevent damage or fouling other tracks before coupling to equipment that may roll away when coupling is attempted.

Immediately before coupling to or moving cars which may be in process of loading or unloading, dock boards, tank car couplings, and similar connections must be removed and in the clear. Also it must be known that trucks and other vehicles are clear. Persons in or about cars must be warned and requested to vacate cars while they are being switched.

Whenever coupling is attempted by engine or car with other equipment, the joint must be

stretched to know that knuckles are locked before further movement is made or before air, steam, and electrical connections are made.

Cars must be switched to proper tracks, platform, or other (un)loading places and, when necessary to move cars on spot, they must be returned to the same place or where designated by switching instructions or patron.

104. (T) Conductors are responsible for the position of switches and derails used by them and members of their crews. This however does not relieve other crew members where and when they are handling a switch or derail or are able to observe the positions of switches and derails.

Switches and derails must be properly lined after having been used. When practicable, enginemen must see that the switches and derails nearest the engine are properly lined. A switch must not be left for another train or engine unless in charge of a member of the crew of such train or engine.

A train or engine must not foul a track until switches connected with the movement are properly lined unless it can be seen there is no conflicting movement, or in case of spring switches, the normal route is seen to be clear. Neither switch of a crossover may be opened when there is a train, engine, or car closely approaching either switch. When a crossover movement is to be made by a train or engine both switches must first be opened before movement is commenced and switches must not be restored to normal position until the movement is completed or clear of the track involved.

104-A. (TR) The normal position for a main track switch is lined and locked for movement on the main track; for a switch connecting any track except main track to a siding, is lined and locked for movement on the siding; for a derail, is lined and locked in derailing position. They must be left

in normal position after having been used and locks must be tested to know that they are secured. Switches not equipped with locks must be left hooked. When a switch cannot be properly locked or hooked it must be secured and immediately reported to proper authority.

Main track switch locks found defective or missing must be replaced immediately or the switch must be spiked for main track movements. Report must be made to train dispatcher by first means of communication.

Main track switch must not be thrown for track cars when the cars can be lifted over.

104-B. (TR) Employees lining switches must see that points fit properly and that switches are lined for route intended before initiating movement over them. If a rigid switch is run through it is thereafter unsafe and must be protected. If an engine or car is run partially through a switch the entire movement must be continued. When a switch is damaged report must be made immediately to proper authority and switch spiked unless track supervisor takes charge.

104-C. (TR) Employees must not unlock derails or main track switches to enter main track until the trains which are to be met or passed have cleared the switch.

When a train is in a siding to meet an opposing train main track switch must be lined and locked for main track movement. No member of the crew will go nearer to the main track switch than fouling point until the opposing train has passed over the switch.

After lining a main track switch for an opposing train or engine to enter siding, the employee tending the switch must move to the fouling point until the train to be met has passed over the switch. Proceed signal must not be given to approaching train.

Employees riding on equipment while moving over a switch must pass switch stand before alighting to change position of switch; when on rear car of moving train they must not alight until rear steps pass the switch stand.

104-D. (TR) Spring switches will be designated by the letter "S" on the switch target.

Trailing movement may be made through a spring switch when points are in normal position.

A train or engine trailing through and stopping on a spring switch must not make reverse movement or take slack while any part of train or engine is on switch points until switch has been thrown by hand. Extreme care must be used operating a spring switch which is under compression.

Sand must not be used while passing over a spring switch.

If necessary to spike a spring switch it must be protected and the train dispatcher notified.

Cars must not be kicked or dropped over spring switches.

When signal governing movement against facing point spring switch displays "STOP" indication, test switch by throwing over and back by hand. Examine switch points to see that they fit properly and that switch is lined for route to be used. Train or engine may then proceed per Rule 509.

104-E. (R) Foremen are responsible for the position of switches used by them and their employees. Switches must be properly lined after having been used. When two or more gangs are using the same switch, the employee opening the switch must close it. Roadway employees shall not handle switches for trainmen except to prevent an accident. Be governed by Rule 341 where applicable.

104-F. (TR) During storms or drifting snow, special care must be used in handling switches. Remove snow from the points, using a broom when necessary. Never use force to put the switch in place against the obstruction of snow, as it may be possible to spring the lever into place while the points may be left open unsafely.

When necessary to clean power switch, switch must be placed in hand-throw per Rule 545 before any attempt is made to clean. When work is complete, restore switch to motor control and inform dispatcher per Rule 545.

In the event a switch equipped with a gas burning heater becomes inoperative, contact dispatcher to insure that switch heater has been turned off, then use shovel or broom to make a ditch or opening in the snow away from each rail to provide ready access for necessary air to support combustion in the heater. Only after taking these precautions, switch may be cleaned by hand. If dual-control switch it must be placed in hand-throw as prescribed by Rule 545. Dispatcher must be notified when switch has been made operative and must be assured that no employee will be within 50 feet of switch when heater is again turned on.

105. (T) Unless otherwise provided, trains and engines using siding or other inside track not protected by signals must proceed at yard speed.

Trains leaving the main track must pull clear of main track before stopping for employee to line switch for main track.

105-A. (T) When practicable, train taking siding to meet or be passed by other trains must stop in siding after receiving indication that rear of train is clear of main track and head end of train is within 500 feet of fouling point. Train will, when train length permits, stop back not less than 400 feet from fouling point.

105-B. (TR) Cars must not be left on sidings without authority except in emergency, in which case the train dispatcher must be notified. When safety requires, siding switches must be spiked for main track movements.

106. (T) Both conductor and engineer are responsible for safety of the train or engine and for observance of the rules. Under conditions not provided for by the rules, they must take every precaution for protection. This does not relieve other employees of their responsibility under the rules.

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

108. (A) *In case of doubt or uncertainty the safe course must be taken.*

109. (A) All employees must, as far as practicable, observe passing trains for defects. Trainmen of freight and passenger trains, yardmen, and operators must observe passing trains for defects.

Defects to be looked for include brakes sticking, wheels sliding, brake rigging down, swinging doors, hot journals, protruding objects, lading dangerously shifted, evidence of fire, or any other condition which will endanger movement of train.

Employees noting such defects will give stop signals and when communication with train dispatcher is possible notify him of such defects. If nothing irregular is noted employees observing trains for defects will give proceed signals to the rear of the passing train.

When passing other trains, interlocking, open train-order offices, and points where roadway men are working, train and engine crews must be on lookout for signals and, when practicable, exchange signals. When practicable a trainman must be on rear platform of caboose to receive such signals.

When crew members on head end of train observe personnel giving their train an inspection and radio communication is available, they will alert crew members on caboose as to which side inspection being made, and all crew members will be alert for either hand signals or radio communication from employees making such inspections.

When a train stops to be met or passed by another train, a trainman on head end of train must take position on opposite side of his train when practicable to observe passing train; trainman at rear of standing train must observe passing train on side adjacent to his train. Roadway and other employees observing passing trains for defects will spread themselves, when practicable, to both sides of track in order to inspect both sides of passing trains.

Employees must keep a sufficient distance from passing trains to avoid possibility of being struck by anything projecting or that may fall from passing train. Employees must not remain in bay window of caboose on side next to a track on which a train is passing or being passed. They must not depend on others to notify them of approaching trains, engines, or cars.

110. (T) When leaving stations and at every opportunity on the road, crew members must carefully inspect their train for defects.

If train is moving when defect is discovered, train must be stopped.

While train is moving frequent inspection of the track from rear end must be made for evidence of derailed or dragging equipment.

Enginemen and forward trainmen must frequently look back and rear trainmen must frequently look ahead, especially when moving around curves and approaching and passing stations, to observe signals and note condition of train.

When conditions restrict visibility, the conductor will designate any stops for inspection that in his judgment are necessary. If stops for train inspection are contemplated and if practicable to do so, train dispatcher should be notified in advance. Where stops are made for other reasons, inspection of train must be made as often as practicable.

111. (T) Unless known that rolling inspection is not being made speed of freight trains must not exceed eight miles per hour when starting for a sufficient distance to permit rolling inspection.

RULES FOR MOVEMENT BY TRAIN ORDERS

201. (T) For movements not provided for by timetable, unless otherwise provided, train orders will be issued by authority and over the signature of the Chief Train Dispatcher. They must contain only information and instructions essential to such movement. They must be brief and clear; in the prescribed forms; and without erasure, alteration or interlineation.

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

202. (T) Each train order must be given in the same words to all employees or trains addressed.

203. (T) 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. (T) 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 anyone who acts as its pilot. A copy for each employee addressed must be supplied by the operator.

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

Enginemen, conductors, and trainmen must read train orders, check with each other when practicable and have a definite and proper understanding of their requirements.

Train orders for yard crews should be addressed to: *Yardmaster; C & E Yard Engs*; or *C & E Yard Engs Care Yardmaster.*

Enginemen and trainmen must call attention of engineers and conductors to any errors or omissions in train orders, failure to observe train orders, or to clear the time of superior trains.

204-A. (T) Each engineer must receive copies of all train orders, but only the engine by which the train is designated need be referred to in train orders.

When helper engines are placed on the head end of a train over a helper district, the road engine may be used in train orders.

Copies of all train orders affecting movement of a train having helper engines must be given to engineer of each helper engine. When such orders affect the movement after helper engine is added, copies for the helper engineer must be delivered at that point; or, if not an open train-order office, must be sent to the helper engineer in care of road engineer or conductor of train to be helped.

205. (T) Each train order must be written in full in book provided for the purpose at the office of the train dispatcher and with it recorded the names of those who have signed for the order; the time and the signals which show when and from what offices the order was repeated and the responses transmitted; and the train dispatcher's initials. These records must be made at once, and never from memory or memoranda.

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

206. (T) In train orders, regular trains will be designated by numbers, thus: *No 62*; and sections, thus: *Second 62*. Extras will be designated by engine number and the direction, thus: *Extra 758 East*. Work extras will be designated by engine number, thus: *Work Extra 758*. For the movement of an engine of another railroad the initials will precede the engine number, thus: *Extra GN 7669 East*. When two extras are mentioned in train orders, the word "two" shall be used, thus: *Meet two extras 725 and 3015 West*.

Train dispatchers should not address orders to "freight trains", "passenger trains", "all concerned", or "all westward trains". Designate trains as shown in last paragraph or thus: *Westward First Class Trains; Eastward Second Class and Extra Trains; Westward Trains Originating;* etc.

When it is desired to issue a train order to a schedule number of the following day, the schedule number must be identified in the address and in the train order by adding the date intended such as: *No 2 of April 25*.

Except in connection with Uniform Time Act of 1966, even hours must not be used in stating time of day in train orders, such as: *10 00 a m*.

206-A. (T) In transmitting and repeating train orders the names of stations, sections and direction of extras must be pronounced plainly and then spelled letter by letter, thus: *Almanor, A-l-m-a-n-o-r; Second, S-e-c-o-n-d; East, E-a-s-t.* Order numbers, train, engine and other numbers must be pronounced first and then followed by pronouncing each figure, thus: *One hundred five, 1-naught-five; Twenty-seven fifty-six, 2-7-5-6,* except where the number is but one figure when

it must be pronounced first, thus: *One*, then spelled, thus: *O-n-e*. Time must be pronounced first, 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-naught*.

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: "Almanor", "second", "east"; "105", "2756", "1"; "nine fifty 9 50".

206-B. (T) 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.

206-C. (T) 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 repeat the order then to the train dispatcher, by whom "complete" will be given to the relaying operator who will transmit it to destination.

206-D. (T) Before transmitting an order to a conductor or engineer, the person who is about to receive the order must give his name, train identification and location. He must not break communication until informed that the transaction is finished. Employees who have been promoted to conductor or engineer are permitted to copy non-restricting train orders when authorized by conductor or engineer.

When it is apparent that his train will be delayed at a siding or when the train to be met is not in sight, conductor must communicate with the train dispatcher as quickly as possible.

207. (T) To transmit a train order, the word "Copy" followed by the direction must be given to each office addressed, the number of copies being stated, thus: "Copy West 5" or "Copy East 7".

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

The several addresses must be in the order of superiority of trains, each office taking its proper address, and when practicable must include the operator at the meeting or waiting point, when only one waiting point is specified, and the last-named station in a Form C train order (Rule 228.C.).

Orders issued to the superior train at the meeting or waiting point need not be addressed to the operator.

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

A train order must not be sent to a superior train at the meeting or waiting point if it can be avoided. When so sent, that fact will be stated in the order, (except at initial station), and special precautions must be taken to insure safety. When an order is so sent, the following will be added:

"*Order to* ---------- *at* ---------- ." Refer to Rule 228.A.7.

The train must be brought to a stop before the clearance is OK'd by the train dispatcher or the order delivered.

When time at that station in wait order expires before arrival of train restricted, train dispatcher may OK clearance and order may be delivered without stopping train.

208-A. (T) A train that is advanced to a meeting or waiting point where the opposing train receives the order must approach such station (where location of the train-order signal may permit opposing train to overrun the siding switch), prepared to stop back a sufficient distance and send flagman ahead as prescribed by Rule 99.

209. (T) Operators receiving train orders must write or typewrite them in manifold during transmission and retain a copy.

When necessary to make additional copies of a train order, copying machine will be used if available, and following provisions of this rule will not apply.

If copying machine is not available, operator must type or write additional copies, repeat from new copy to train dispatcher, and sign his own name on new copies. Operator must file the copy from which is made copies, together with one of the new copies, showing thereon date and time made. The time, complete, and signature of the operator must be in his handwriting. The train dispatcher will place notation in train-order book for the repetition.

210. (T) When a train order has been transmitted, operators must, unless otherwise directed,

repeat it at once from the manifold copy in the succession in which the several offices have been addressed. Each operator receiving the order must observe whether the others repeat correctly. When the order has been repeated correctly, the response "complete", and the time with the initials of the Chief Train Dispatcher will be given by the train dispatcher. The operator receiving this response will then write on each copy in his own handwriting: the abbreviation *Com* for the word "complete", the time, and his last name; he will deliver a copy to each person addressed, except copies may be delivered by a member of the crew, or as prescribed by Rule 217.

211. (T) Except in making test, dispatchers must not instruct a train-order operator to copy or repeat only part of a train order. A train order must be transmitted and repeated in its entirety by each office addressed. Dispatcher must not permit an employee to repeat a train order and tell him to "bust" it. A train order that has been repeated is in effect and if dispatcher does not desire to have the train order completed for delivery, it must be annulled.

211-A. (T) When an error is made in the transmission of a train order, or an alteration is necessary before it is entirely transmitted, the order must be marked "void"; employee copying the order should be instructed to destroy all copies and, when this is done, a new order will be retransmitted under the next higher number.

213. (T) "Complete" must not be given to a train order for delivery to an inferior train until the order has been repeated by the operator who receives the order for the superior train.

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

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

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

216. (T) When necessary to issue a train order to a work extra restricting its rights or annulling its authority as a work extra, the operator must, before repeating the order, secure the signature of the conductor and engineer of the work extra on the order. After the signatures are secured, the order will be repeated and signatures transmitted to the train dispatcher, who will give "complete".

217. (T) 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* (or *between*)—(*care of*—", and forwarded and delivered by the employee in whose care it is addressed. Train orders may be sent in care of any employee, but must be addressed in care of one person only. When sent on a train, they will be addressed, if practicable, in care of the engineer, and 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. The person in whose care the order is addressed must be supplied with sufficient copies as prescribed by Rule 204.

For orders which are sent in the manner herein provided, to a train, the superiority of which is thereby restricted, the operator will be directed to make an extra copy of the order, which he will deliver to the person who is to make delivery of the order. On this copy, the person delivering the order must secure the signature of the conductor and engineer addressed. This copy he must deliver to the first operator accessible, who must at once transmit the signatures of the conductor and engineer to the train dispatcher, and preserve the copy. Under such circumstances "complete" must not be given to the order for an inferior train until the train dispatcher has received the signatures of the conductor and engineer of the superior train.

When an order is sent in care of conductor or engineer, as prescribed herein, or when a conductor or engineer obtains an order from train dispatcher directly, a clearance will not accompany such order or be issued.

218. (T) When a train is named in a train order by its schedule number alone, for example: *No 62*, all sections of that schedule are included, and each must have copies delivered to it.

219. (T) An operator must not repeat response to a train order restricting the movement of a train which has been cleared or of which the engine has passed his train-order signal displaying proceed indication until he has obtained the signatures of the conductor and engineer to the order.

220. (T) 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 T-82, or is annulled. Any such orders held by an operator must be annulled by dispatcher before operator may file.

220-A. (T) 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, with necessary information regarding trains met or that have passed. Relieving conductor or engineer will confer with dispatcher before proceeding if necessary.

220-B. (T) 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 may be made applicable to an additional trip by adding to the order creating the train for additional trip from an intermediate point the words: *Respect Order No* ---------- .

221. (T) Unless otherwise provided, a fixed signal must be used at each train order office; when there are train orders to be delivered, it must indicate "Stop" for the direction of train addressed; when there are no train orders, it must indicate "Proceed", except it will indicate "Stop" when used for spacing trains, and at interlocking stations it will indicate "Stop" until after interlocking signal has been changed to permit a train to proceed.

At stations where train-order signal is used, when operator receives the signal "Copy" followed by direction, he must immediately place train-order

signal in stop position for direction indicated, and then reply "stop displayed and locked", adding the direction, record of which response must be entered in the train order book by the train dispatcher. Until the orders have been delivered or annulled, the signal must not be restored to "proceed" position.

Train dispatcher must not instruct an operator to display his train order signal to indicate "proceed" to allow a train to pass when operator holds an order for any other train in the same direction. Train order signal must remain in "stop" position until the orders for all trains in that direction have been delivered or annulled.

When it is apparent that orders are to be received without requiring train to stop, the office must be passed at a speed not exceeding thirty miles per hour by day, twenty miles per hour by night, and by night the headlight must be dimmed, to enable operator to make delivery without risk or injury.

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

A train must not pass the clear point of switch at which an opposing train may enter the siding when the train order signal is in stop position unless dispatcher instructs train order operator to display yellow flag by day or yellow light by night while delivering clearance or orders. When yellow flag or yellow light is displayed by train order operator while handing up train orders or

clearance it will indicate that absolute train order authority is being received to proceed to initial switch of next siding. If clearance or train orders are not received train must stop.

Operators outside of T.C.S. territory must have proper signal appliances for hand signaling ready for immediate use at all times and must use hand signals should the fixed signal fail to operate properly.

Dispatcher must instruct operator to use flagman's signals and must get his acknowledgment that he will use such signals as follows:

1. When train-order signal is obscured by fog or adverse weather conditions.

2. At stations where physical conditions obstruct view.

3. At stations where the train restricted passes, before reaching the train-order signal, the siding switch an inferior train would use to enter siding.

4. When clearance or train orders are to be delivered with yellow flag or yellow light displayed.

Except within A.B.S.S. territory, operators must space trains in the same direction ten minutes apart using the train order signal and when necessary clearance for that purpose.

At stations where no operators are on duty, conductors and engineers must space their trains per Rule 91.

221-A. (T) Before clearing a train for which there are train orders, operator must carefully read the address of each order held, fill out the clearance showing thereon without erasure or alteration, the number of each order addressed to the train or in care of an employee on the train, then transmit

the address and order numbers from clearance to the train dispatcher who must check the correctness thereof against his record in train order book, and if correct give the OK, time and initials of Chief Train Dispatcher and make proper record thereof and the operator after entering this information on clearance, may make delivery. When necessary to issue clearance to a train for which there are no orders, the word "no" must be written in the space provided for number of orders, and the time issued will be inserted following operator's name. Such clearance will not bear dispatcher's OK, except when used to authorize a train at its initial station as prescribed by Rule T-82-A.

If all orders held for a train have been completed, and communication fails before clearance has been OK'd by train dispatcher, operator may deliver such orders accompanied by clearance bearing notation "wire failure" in the space provided for dispatcher's OK. Time of issuance must follow operator's name. Such clearance must be accepted and acted upon as though OK had been given in the usual manner. When communication has been restored, operator will notify train dispatcher the time and order numbers for each train so cleared for dispatcher's record.

When a restricting train order is issued to a train after clearance has been delivered, operator must take up and destroy all clearances that have been delivered to that train at that station and a new one must be issued showing the numbers of all orders delivered that train at that station.

If further orders, other than restricting orders, are issued after train has been cleared and it is not practicable to take up the first clearance,

second clearance must show all orders delivered and endorsed "second" on top margin of clearance.

Clearance and train orders must be carefully checked by conductors and engineers and if errors or omissions found, train must not proceed until correction has been made.

222. (T) Operator must record and report promptly to the train dispatcher the arrival and departure of all trains, reporting "no signals" or "green signals" as the case may be.

Operators at register station must report to the train dispatcher "no signals" or "green signals", according to the registration of a regular train. If record of signals be given incorrectly, the train dispatcher must require correction of entry in register immediately.

Should "no signals" be registered or reported when "green signals" should have been displayed, the train dispatcher must notify all trains affected until he has ascertained that the signals are displayed properly.

222-A. (T) Operators in relieving each other must make a transfer on prescribed form, of undelivered 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 number of all overdue trains and whether trains in the yard or at stations 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. The relieving operator must place his initial on the transfer opposite each order turned over to him.

the address and order numbers from clearance to the train dispatcher who must check the correctness thereof against his record in train order book, and if correct give the OK, time and initials of Chief Train Dispatcher and make proper record thereof and the operator after entering this information on clearance, may make delivery. When necessary to issue clearance to a train for which there are no orders, the word "no" must be written in the space provided for number of orders, and the time issued will be inserted following operator's name. Such clearance will not bear dispatcher's OK, except when used to authorize a train at its initial station as prescribed by Rule T-82-A.

If all orders held for a train have been completed, and communication fails before clearance has been OK'd by train dispatcher, operator may deliver such orders accompanied by clearance bearing notation "wire failure" in the space provided for dispatcher's OK. Time of issuance must follow operator's name. Such clearance must be accepted and acted upon as though OK had been given in the usual manner. When communication has been restored, operator will notify train dispatcher the time and order numbers for each train so cleared for dispatcher's record.

When a restricting train order is issued to a train after clearance has been delivered, operator must take up and destroy all clearances that have been delivered to that train at that station and a new one must be issued showing the numbers of all orders delivered that train at that station.

If further orders, other than restricting orders, are issued after train has been cleared and it is not practicable to take up the first clearance,

second clearance must show all orders delivered and endorsed "second" on top margin of clearance.

Clearance and train orders must be carefully checked by conductors and engineers and if errors or omissions found, train must not proceed until correction has been made.

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Operators at register station must report to the train dispatcher "no signals" or "green signals", according to the registration of a regular train. If record of signals be given incorrectly, the train dispatcher must require correction of entry in register immediately.

Should "no signals" be registered or reported when "green signals" should have been displayed, the train dispatcher must notify all trains affected until he has ascertained that the signals are displayed properly.

222-A. (T) Operators in relieving each other must make a transfer on prescribed form, of undelivered 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 number of all overdue trains and whether trains in the yard or at stations 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. The relieving operator must place his initial on the transfer opposite each order turned over to him.

If an operator is permitted to close his office leaving track orders, annulments or 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. (T) The following signals and abbreviations may be used:

ABSS	—Automatic Block Signal System.
ACS	—Automatic Cab Signal System.
C&E	—for conductor and engineer.
Com	—Complete.
Condr	—Conductor.
Dispr	—Train Dispatcher.
Dist	—District.
Div	—Division.
Eng	—Engine.
Engr	—Engineer.
Frt	—Freight.
HMP	—Hi Rail Motor Patrol track car.
HRC	—Hi Rail Car.
Jct	—Junction.
MBS	—Manual Block System.
Mins	—Minutes.
MP	—Mile Post.
mph	—Miles Per Hour.
MWS	—Maintenance-of-Way.
No	—Number.
OK	—Correct.

Opr —Operator.

OS —Train Report.

Psgr —Passenger.

SD —Stop Displayed.

Subdiv —Subdivision.

TC —Track car.

TCS —Traffic Control System.

YM —Yardmaster.

The following for names of the month:

Jan Feb Mar Apr May June

July Aug Sept Oct Nov Dec

Initials for signature of the Chief Train Dispatcher.

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

FORMS OF TRAIN ORDERS

228. (T) The following forms of train orders are subparagraphs of this rule. Words and figures in italics following numbered subsections are train order form examples. Explanations preceding or following these examples in standard type are also integral parts of this rule.

A.

Fixing Meeting Points for Opposing Trains.

1. *No 1 meet No 2 at Lodgepole*

   No 3 meet Second 4 at Antelope

   No 5 meet Extra 752 east at Peavine

   Extra 3009 east meet Extra 755 west at Silverzone

2. *No 2 and Second 4 meet No 1 and No 3 at Ola and Extra 2010 west at Low*

No 1 meet No 2 at Barro Second 4 at Pilot and Extra 3522 east at Ruby

No 1 meet No 2 No 4 and No 6 at Sage

3. *First and Second 61 Engs 758 and 3016 meet Two extras 3020 and 3021 east at Hearst*

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

4. *No 1 take siding meet No 2 at Craig.*

When a superior train is ordered to take siding at a meeting point, such provision applies only to that order.

5. *No 1 take siding meet No 2 at Phillips No 4 at Wyche and No 6 at Kohler*

No 1 take siding at Phillips Wyche and Kohler

6. *No 1 meet No 2 at Phillips No 4 at Wyche and No 6 at Kohler*

No 1 take siding at Phillips and Wyche

No 6 take siding at Kohler

When there is more than one meeting point made in train order and it is desired that superior train take siding, or that inferior train hold main track at either or all of the meeting points, such instructions must be in a separate paragraph in the order.

If No. 1 is given an order to meet No. 2 at Altamont and afterwards it is necessary to advance No. 1 to Fremont and the order must be

placed at the meeting point (Fremont) for No. 2, the order must be worded as follows:

7. *No 1 take siding meet No 2 at Fremont instead of Altamont*

Order to No 2 at Fremont

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

1. *No 1 pass No 3 at Rennox*

No 3 take siding at Rennox

Both trains will run according to rule to the designated point and there arrange for the rear train to pass promptly. The order must specify which train will take siding.

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

If a train is delayed after receiving authority to run ahead of a superior train, it may allow the superior train to pass and the train dispatcher must be notified at first point of communication.

Outside of block signal territory, the superior train must look out for the inferior train ahead and, unless it can be seen that the track is clear, must not exceed the maximum authorized speed of the inferior train.

Form B train orders do not relieve the preceding train from protecting as prescribed by Rule 99.

C.
Giving Right Over an Opposing Train.

1. *No 2 has right over No 1 Wendover to Delle*

If the second-named train reaches the point last named before the other arrives, it may proceed, clearing the time of opposing train as required by Rule T-89.

2. *Extra 3526 east has right over No 55 Greenville to Bieber*

A train must not be given right over a first section only, or an intermediate section only of an opposing train unless train order protection has been provided against following section.

3. *Eng 3526 run extra Westwood to Bieber with right over No 55*

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

Should the regular train be advanced by Form E train order, it must clear the time of the extra train as required by Rules T-87 and T-89.

The above examples give right to the train first named over the regular 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.

4. *Extra 3520 east has right over Extra 3525 west Greenville to Bieber and wait at Little Valley until nine fifty nine 9 59 a m Dixie ten twenty five 10 25 a m for Extra 3525 west*

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

5. *Extra 2002 west has right over No 62 Keddie to Belden and at Belden*

Extra 2002 west, therefore, is also superior to No. 62 *at* Paxton, Twain, Virgilia, and Belden. The order must be delivered to No. 62 before its arrival at Belden.

6. *Extra 769 west has right over Extra 3012 East Sand Pass to Reno Jct and wait at*

Herlong	*Until two ten*	*2 10 p m*
Doyle	*two twenty five*	*2 25 p m*
Scotts	*two forty*	*2 40 p m*
	for Extra 3012 east	

This order gives right to the first-named extra over the other extra *between* Sand Pass and Reno Jct., but not *at* either of those points, and does not restrict the first-named train beyond the initial switch of siding at Reno Jct. The right conferred must extend to the end of the run of the first-named extra when practicable.

If the second-named extra originates at the intermediate station, add to the order:

Extra 3012 east originates at Reno Jct

If the second-named extra exists beyond Reno Jct. at the time the order is issued, the following must be added to the order:

and take siding not leave Reno Jct unless Extra 3012 east has arrived

If it is later decided to make a meeting point beyond Reno Jct., that part of the train order must be annulled before the train so restricted can leave that station.

D.

Giving Right Over Another Train in the Same Direction.

1. *No 55 has right over No 53 Bieber to Greenville*

2. *Extra 766 west has right over No 53 Bieber to Greenville and wait at*

Bieber	*until twelve fifty*	*12 50 p m*
Dixie	*one ten*	*1 10 p m*
Little Valley	*one twenty*	*1 20 p m*

3. *Extra 751 east has right over Extra 768 east Greenville to Bieber and wait at*

Greenville	*until twelve fifty*	*12 50 p m*
Almanor	*one ten*	*1 10 p m*
Westwood	*one twenty*	*1 20 p m*

These orders give right to the train first-named over the other train *between* the points named. The second-named train must keep clear of the first-named train as required by Rule T-86.

Under examples D.2. and D.3. the first-named train must not pass the designated points before the times given.

E.

Time Orders.

This form of train order has no effect on the schedule *at* the first and last points indicated except it prohibits the restricted train leaving the first named point before time specified by the order.

1. *No 1 run fifty 50 mins late Stockton Yard to Fremont*

2. *No 1 run fifty 50 mins late Stockton Yard to Fremont and twenty 20 mins late Fremont to Oakland Yard*

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

Time in Forms 228.E.1 and 228.E.2 (run Lates) must end in "naught" such as ten, twenty, thirty, etc., to be easily added to the schedule time.

3. (Order No 17) *No 1 and 3 wait at*

Marysville	*until nine fifty nine*	*9 59 a m*
Del Paso	*ten thirty*	*10 30 a m*
Hammer Lane	*ten fifty five*	*10 55 a m*

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

The stations, and the time at each, must be written in column formation when time is stated at three or more stations.

4. *No 1 run twenty 20 mins late on order No 17*

This makes the time mentioned at each station (including the last-named station) in an order

issued under example E.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 E.3.

5. *No 1 run twenty 20 mins late on Order No 17 from Del Paso*

If it be desired that an order issued under example E.4. shall not apply to the time given at all of the stations, example E.5. may be used, and will have the same meaning except that it applies only to the station named in example E.5. and succeeding stations.

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

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

6. *No 1 wait at James until nine fifty nine 9 59 am for No 62*

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.

Train dispatchers must not supersede nor annul Form E train orders. Additional time may be furnished by issuing another train order.

F.

For Sections.

Sections will be created at their initial stations by clearance bearing the words "green signals", or "no signals". Sections may be created, withdrawn, or reversed at an intermediate station by use of one of the following examples:

1. *No 53 display signals Bieber to Greenville for Eng 757*
2. *Second 55 display signals Westwood to Greenville for Eng 753*

The *engine* named in example F.1. will become Second 53, and the *engine* named in example F.2. will become Third 55, from the stations named.

To add any section other than the last, the following example will be used:

3. *Eng 3502 display signals and run as Second 1 Winnemucca to Portola*

   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, the following example will be used:

4. *Eng 3502 is withdrawn as Second 1 at Flanigan*

   Following sections change numbers accordingly

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

The last section authorized will not display signals.

Where there are only two sections and it becomes necessary to drop the first at an intermediate station, it may be done by annulling the second section (Second 53 Westwood to Greenville in paragraph 1 above) and then issuing the following train order:

4a. *Eng 915A is withdrawn as First 53 at Westwood*

Eng 757 display signals and run as First 53 Westwood to Greenville

In such cases the second section must be provided a copy of each train order that affects the first section between Westwood and Greenville.

When necessary to discontinue a last section at a station where there is no train register, the train dispatcher must authorize the preceding section to display signals to a station where all trains are required to register, and annul the following section from the station at which it is discontinued.

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

5. *Eng 2001 instead of Eng 3502 display signals and run as Second 1 Reno Jct to Portola*

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

Following sections need not be addressed.

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

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

6. *Engs 3009 and 729 reverse positions as Second and Third 1 Winnemucca to Portola*

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.

When necessary to reverse positions of sections at an intermediate station by use of paragraph 6, it is not permitted to reverse more than two sections in the same train order. When paragraph 6 is used the train order must be addressed to the section numbers, not engine numbers.

G.

Extra Trains.

1. *Eng 3502 run extra Roper to Wendover*
2. *Eng 3502 run extra Roper to Wendover and return to Burmester*

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

3. *Eng 752 run extra leaving Keddie Thursday Feb 17th as follows with right over all trains*

Leave Keddie	*six fifteen*	*6 15 a m*
Westwood	*seven fifty*	*7 50 a m*
Halls Flat	*nine one*	*9 01 a m*
Arrive Bieber	*ten fifteen*	*10 15 a m*

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. Opposing trains over which the extra is thus given right must clear the time of the extra not less than five minutes; trains in the same direction must clear the time as prescribed by Rule T-86. The words "*as follows*" distinguish this order from other examples and must be followed by a schedule as outlined above. Work extra whether required to protect or not protect against extras must clear the time of the designated extra in the same manner. Dispatcher must insure that all other trains affected have the order before complete is given to the extra train, or protection otherwise provided. Designated extra is *not* excused from complying fully with Rule 93.

Examples of Form E may be used in connection with an extra created by the following examples:

4. *After two ten 2 10 pm Eng 3011 run extra Portola to Keddie*

Engine 3011 must not leave Portola as an extra before 2:10 p.m.

5. *After Extra SP 2599 east arrives at Sand Pass Eng 3005 run extra Sand Pass to Portola*

Extra 3005 must not occupy the main track at Sand Pass until after Extra SP 2599 east has arrived.

6. *Engine 713 has until nine fifty 9 50 a m to run extra Oroville Yard to Keddie*

This order is fulfilled and Extra 713 loses authority at 9:50 a.m.

7. *After helping Extra 755 west Bieber to Halls Flat Eng 729 run extra Halls Flat to Bieber*

Extra 729 must not leave Halls Flat until Extra 755 west has arrived.

8. *After helping No 56 Greenville to Almanor Eng 2009 clear Extra 761 west then run extra Almanor to Little Valley with right over No 53*

Extra 2009 must not leave Almanor unless Extra 761 west has arrived.

To change engine number of an extra in a train order, dispatcher may either annul and reissue order or supersede by use of the words "*instead of*" according to conditions.

H.

Work Extra.

All trains running over working limits must be given a copy of all work orders sent to the work extra.

1. *Eng 760 works extra six forty five 6 45 a m until five forty five 5 45 p m between Greenville and Halls Flat*

The work extra must, whether standing or moving, protect itself against extra trains within the working limits in both directions as prescribed by Rule 99. The time of regular trains must be cleared as prescribed by Rules T-86 and T-87.

This may be modified by adding:

a. *Not protecting against eastward extra trains*

Protection against eastward *extra* trains is not required.

b. *Not protecting against extra trains*

Protection against extra trains is not required.

c. *Not protecting against extra trains until two forty 2 40 p m*

Protection against extra trains *is* required after time specified.

d. *Not protecting against extra trains except protect against Extra 3510 east after ten thirty 10 30 a m and Extra 767 west after one thirty 1 30 p m*

The work extra will not protect against *extra* trains until the time specified and only against the extra train specified; protection against *other extra* trains is not required. Extra trains excepted must not enter the work limits before the times specified.

When a work extra has been instructed by train order not to protect against extra trains but afterward it is desired to have it clear the track for or protect against a designated extra, an order may be given in the following form:

2. *Work Extra 755 clears* (or *protects against*) *Extra GN 7669 east between Greenville and Halls Flat after two ten 2 10 p m*

Extra GN 7669 east must not enter the working limits before 2:10 p.m. and will then run expecting to find the work extra clear of the main track, or protecting itself as specified by the order.

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

3. *Work Extra 755 protects against No 55 (or----------Class trains) between Greenville and Halls Flat*

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

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

4. *Work Extra 755 has right over all trains between Greenville and Halls Flat seven fifteen 7 15 p m until one fifteen 1 15 a m*

This gives the work extra the exclusive right *between* the points designated *between* the times named. Such order form must not be modified or amplified.

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

The limits or time of a work order must not be extended, but former order must be annulled and another issued. The working limits should be as short as practicable, to be changed as the progress of the work may require. Protection required in work order may be set back by use of the following form:

4a. *Work Extra 755 protects against Extra GN 7669 East after one ten 1 10 p m instead of two ten 2 10 p m*

When more than one work extra is authorized within the same limits at the same time, protection against each other must be provided by train order and all moves made at restricted speed.

Work extras will not be issued orders to meet

other trains except, in *extreme emergency* conditions, when specifically authorized by Superintendent.

All train orders held by or issued for work extras or any part of an order relating to work extras, *except* track orders and annulments, become void at expiration of the work time.

Train orders must not be issued to work extras instructing them "not protecting against regular trains" or to "clear" a regular train, or to "wait" at a station for an opposing train.

Form E may be used to provide "time" on trains for *use* by a work extra, but Form E must *not* be used to authorize a work extra.

I.

Relief from protecting against following trains.

1. *Extra 769 West will not protect against following trains between Bieber and Greenville until eleven one 11 01 a m*

The designated train will not protect against following trains between the points named while the order is in effect. Following trains must be given copies of the order and must not enter the limits of the order while it is in effect. Protection must be provided against a preceding train passed in the territory specified. Form I orders do not authorize train movements in the opposite direction and must not be issued to work extras.

J.

Holding Order.

1. *Hold No 2*
2. *Hold all* (or *eastward*) *trains*

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

----------*may go*

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

Form J will be used only when necessary to hold trains until orders can be given or in case of emergency and must not be used to advance inferior trains against superior trains.

K.

Annulling a Schedule or a Section.

1. *No 1 due to leave Salt Lake City Oct 29 is annulled Salt Lake City to Wendover*
2. *Third 61 due to leave Winnemucca Oct 29 is annulled Winnemucca to Portola*
3. *Third 61 due to leave Winnemucca Oct 29 has arrived at Winnemucca with no signals and is annulled Winnemucca to Portola*

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.

Form K orders, once issued to a conductor or engineer, continue in effect to them, although the schedule, section number, or running order of their train be changed, provided conductor and engineer have a copy in their possession on each trip.

Schedule number or last section of a schedule may be annulled, but first or intermediate section must not be annulled unless all following sections are also annulled.

When annulling a schedule or section, the annulment must be addressed to schedule number or section and also to extra train being created. Clearance will be addressed to extra train by its identity leaving that station.

L.

Annulling an Order.

1. *Order No 10 is annulled*

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

Annulled by Order No.----------

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 2 10 p m*

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.

Train dispatcher must not give an operator a number and allow operator to repeat the Form L order before it has been transmitted. Form L orders must be transmitted and repeated the same as other forms.

M.

Annulling Part of an Order.

1. *That part of Order No 10 reading No 1 meet No 2 at Wells is annulled*
2. *That part of Order No 12 reading No 57 wait at Barro until nine thirty 9 30 a m is annulled*

Form M must be used only when a particular movement or portion of movement in an order is to be annulled, and does not affect other movements in the order. Trains addressed must have copy of train order referred to in portion being annulled.

P.

Superseding an Order or a Part of an Order.

This order will be given by adding to prescribed form the words "*instead of* ----------."

1. *No 1 meet No 2 at Shafter instead of Ruby*

Superseding order must not be issued changing meeting point more than once. If necessary to change meeting point more than once, the last train order must be annulled and a new meeting point arranged. The original meeting point cannot be restored by annulling the superseding order because if this is done no meeting point would exist.

2. *No 62 pass No 6 at Redhouse instead of Kampos*

   No 6 take siding at Redhouse
3. *No 54 has right over No 53 Greenville to Little Valley instead of Bieber*

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

When a train is directed by train order to take siding for another train, such instructions apply only at the point designated in that order, and do not apply to the superseding order unless so specified.

When engines are changed on regular trains, the proper form to use is:

4. *No 1 has Eng 801A instead of Eng 803C*

Q.

Issuance of a New Timetable.

1. *Timetable No 73 is effective twelve one 12 01 a m Sunday July 10*

Before the effective time of a new timetable, dispatchers must check the new schedules to determine which trains authorized by the old timetable may be able to assume the new schedule and proceed on that schedule. Confer with Chief Train Dispatcher in this respect in order that such instructions or train orders may be issued to protect the change-over safely.

R.

Train-Order Check of Trains.

1. *Regular trains* (or *eastward* or *westward regular trains*) *due* ---------- (*Station*) ---------- *before* ---------- (*Time*) ---------- (*Date*) ---------- *have arrived and left except* ----------

2. *No* ---------- *of* ---------- (*Date*) ---------- *has arrived* (or *left*) ----------(*Station*)

Train dispatchers must check timetable schedules and train sheet before issuing train order check. Schedule numbers or sections of schedules that have been annulled are not to be included when issuing train order checks.

Where not required, the word "*arrived*" or "*left*" will be omitted. Use of the term "superior trains" is prohibited.

When this form is received, train may register by ticket, provided it is not necessary to check the register against other schedules.

Following form may be used to provide register check of arrival of an opposing extra train over which right has been given:

3. *Extra 3012 East has arrived Doyle on Order No 6*

V. (TR)

Storm Orders

1. *Storm order in effect MP 232 to West Mabie Speed where view obscured ---------- mph*

Speed restrictions specified in this order apply on curves where visibility is restricted and at other locations where view is obscured. Restriction will have been complied with when *engine* leaves such curves or reaches point where visibility clears. Where lower speeds are specified by timetable or other rules, the lower speed will govern.

2. *Do not exceed ---------- mph between MP 259 Pole 14 and MP 259 Pole 19 account slide detector fence out of service*

Restriction will have been complied with when *engine* leaves such limits.

W. (TR)

Conditional Stop Sign Order.

Between eight one 8 01 am and five one 5 01 pm July 10 men working on track between MP 58 and MP 60 located between Robbers Creek and Lodgepole Red Conditional Stop Signs displayed at MP 57 Pole 30 for Eastward Trains and MP 60 Pole 10 for Westward Trains.

Be governed by Rule 10-I

This order annulled five one 5 01 pm July 10

Request for Form W train orders shall be addressed to the Chief Train Dispatcher as specified in Rule 10-I.

Before Form W train order becomes effective, foreman will determine from train dispatcher the train order number, verify date and time effective, and the milepost and pole number locations to make sure they are correct. Form W orders will remain in effect for the time and date specified therein only. Unless annulled, Form W orders must be retained and observed during a continuous trip or tour of duty.

At locations specified in this form of train order, Maintenance of Way and Structures employees are *not* required to provide flag protection for roadway equipment or track.

X. (TR)

Suspension of Signal System.

1. Signal system is suspended between----------
---------- *and* ----------
both inclusive

Trains and engines will operate by timetable train orders and related rules

Passenger trains must not exceed 59 mph and other trains 49 mph

To be used in A.B.S.S. territory.

2. *Signal at ---------- temporarily out of service and lights extinguished and covered* (in semaphore signals *and arms have been removed and lights extinguished*)

Proceed at restricted speed through block governed by this signal

When covering is removed (in semaphore signals *when arms are replaced*) *signal must be regarded as again in service*

To be used in A.B.S.S. or T.C.S. territories to authorize movement by single signals temporarily out of service and it is not desired to suspend signal rules. Rule 27 will not apply.

3. *Traffic control system is suspended between ---------- and ---------- both inclusive*

Trains and engines will operate by timetable train orders and related rules including rules with prefix T

Passenger trains must not exceed 59 mph and other trains 49 mph

To be used in T.C.S. territory and to restore prefix T rules to application.

4. *Order No ---------- is annulled Signal system restored to service*

Paragraph 4. example will be used when restoration is made under either paragraphs 1., 2., or 3.

Forms X.1. and X.3. will *not* be used without direct authority of General Manager with permission of FRA.

Z. (TR)
Speed Restricting or Other Restrictive Conditions.

1. *Do not exceed*

   10 mph over bridge 78.5 MP 78 Pole 20

   5 mph over east siding switch at Wyche

   15 mph between MP 166 Pole 10 and MP 167 Pole 30

May be modified by:

Seven one 7 01 a m until four one 4 01 p m

2. *18 cars on Burmester siding*

   10 occupied outfit cars on house track at Winnemucca

   East siding switch at Poe cannot be used

Paragraph 1. examples will be used for speed restrictions; paragraph 2. examples will be used for other conditions.

3. *Refer to notice* ---------- *Extra* ---------- *has* ---------- *car(s) of excessive dimensions*

   No member of train crew is required to ride on such car(s)

Message on paper of a fixed distinctive color other than the color used for other messages may be used in lieu of paragraph 3. train orders, if authorized.

Form Z orders must be consolidated as far as practicable and locations will be designated consecutively over each division.

Form Z orders, unless annulled, must be retained and observed during a continuous trip or tour of duty.

240. (D) Deviation from the train order forms that are provided by the rules can result in confusion and possible misunderstanding and is prohibited. Train orders must not be issued containing combinations of forms other than those provided by examples and explanations under Rule 228.

241. (D) Train dispatchers report to the Chief Train Dispatcher and are responsible to him and to other officers for the proper handling and protection of trains. Dispatchers must insure that schedules of trains are maintained in their proper preference.

242. (D) Train dispatchers must be courteous in conversations between themselves and others. Bear in mind that cooperation between departments is necessary for efficient operation. Courtesy will be beneficial in receiving information that otherwise may not be obtained.

243. (D) Train dispatchers must give instructions in a clear, concise, and factual manner. Being more familiar with existing conditions than other employees, it is the dispatcher's duty to take the initiative insofar as it lies within his power to see that trains are moved safely, to anticipate hazardous conditions, and to never issue instructions or unsafe combinations of train orders that might cause an accident due to confusion or misunderstanding.

It is not enough for train dispatchers alone to understand their instructions; they must be worded so clearly that others cannot misunderstand them. When a train order is misunderstood or there is any question as to the proper interpretation of an order, and the train dispatcher has knowledge of

such fact, the order must be satisfactorily explained.

244. (D) After being absent from office, the train dispatcher must identify himself as "dispatcher". He must not use the phrase "all right" or "OK" or any other phrase that might be taken as an affirmative reply to a question asked during his absence.

Dispatchers must use the proper term set forth in the operating rules. They must not refer or use the term "passing track" for "siding", or "main line" for "main track".

245. (D) Dispatchers must be conversant with and obey the various rules which must be complied with in restricting the former rights of a train such as "right over" orders, change of meeting point, "taking down" time, protection where superior train is stopped at meeting point, etc.

246. (D) Dispatcher will date each page in train order book with initials of dispatchers using page in the upper right hand corner.

When an order is fulfilled, superseded, or annulled, check it off by writing dispatcher's initial on it. Use an "X" drawn across the entire face of a leaf to indicate that all orders up to and including that page are fulfilled, superseded, or annulled. Refer to Rule 220.

247. (D) Dispatcher to be relieved will make a written transfer in ink in his train order book at the end of each tour of duty. It will contain all slow order numbers, train order numbers, form B's, Form U's, lineups that are in effect at that time, and all other necessary information. Relieving dispatcher will read carefully such transfer. It must indicate the time, date, and both dispatcher's names who are making the transfer.

248. (D) An extra train must be entered on the train sheet before being authorized by train order or otherwise. A careful check of train sheet must be made for protection against opposing extras or work extras.

Special attention must be directed to work extras by drawing a diagonal line on train sheet in the column of the work extra, between the station limits of a work order.

Before issuing Form H work order for a work extra, a careful check of the train sheet must be made and arrangements made for the protection of such work extra or work extras.

249. (D) Insure that when two extras are given round-trip orders, they are properly protected against each other on the return trip.

250. (D) Running orders should not be issued for an extra short of its destination on a subdivision. It is desirable when practicable to issue running orders separately from other forms of train orders but at times it may be advisable to combine them to insure other necessary restrictions are received by an extra before it acts upon the running order.

252. (D) Two methods are available in Form H orders for dispatchers to furnish protection to a work extra: By use of the term "*not protecting against*" or by the use of the "wait" order. The first method is advantageous where the limits of the work extra are short, the latter where the limits extend over a considerable distance and waits at one or more intermediate points are helpful. The method best suited to the occasion should be selected and adhered to.

253. (D) Train orders addressed and delivered to either conductor or engineer or both must not be taken away from them. If it is desired that train order held by them be annulled, annulling order must be addressed to train.

254. (D) Rules 216, 217, and 219 require signatures of the conductor and engineer of the restricted train; failure of train dispatcher to receive the signatures required before permitting an inferior train to act on such train orders is hazardous and is prohibited.

255. (D) It is not good practice to authorize a train to assume a schedule if the schedule is more than eight hours late. If no other schedule to use, the late schedule should be annulled and train otherwise operated.

256. (D) Train orders addressed to a schedule number must be delivered to and respected by all sections of that schedule. However, train dispatchers must use section numbers in addressing such trains when possible, unless all movements in the train order affect each section alike. Do not address a train order to the body of the train order, or do not address the train order to the sections of the schedule and then refer to the schedule number in the train order.

257. (D) Trains cleared on yellow signal per Rule 221 must be given absolute train order superiority to initial switch of next siding. Yellow signal will not be used when classification signals must be changed at that station or if any track orders which restricts speed are in effect between such station and initial switch of next siding.

261. (D) T.C.S. Machine Graph must show proper identification of each train movement, draw-

ing a connecting line near appropriate OS markings for the same train. Report to Signal Department any variation in the time column of graph as compared with Standard Time. Log book must be maintained to report any irregularities in operation of T.C.S.

262. (D) When a signal is reported improperly displayed, defective, or absent, prompt report must be made to Chief Train Dispatcher and proper maintenance employee. Trains must not be instructed to disregard signal indication. Movement beyond improperly displayed or defective signal, if desired, is provided for by the rules.

263. (D) When a section of T.C.S. becomes inoperative due to code line failure, train dispatchers must not issue a Form B unless authorized by Chief Train Dispatcher. When Form B is issued under these conditions, member of crew must be instructed to place switch in hand-throw position until engine is on switch points.

264. (D) A train to be admitted to a siding occupied by cars or by a prior train must be notified before entering siding that track is occupied. If possible, the train occupying siding should also be advised of the following movement.

Where two opposing trains are involved, both trains must be notified before being admitted to siding.

265. (D) Except in *extreme emergency* dispatcher will not authorize any employee to flag into a block held under the provisions of Rule 547 by another employee. All provisions of Rule 547-A. must be complied with to permit more than one operation within the same work limits.

266. (D) Dispatchers must be familiar with radio procedure and operation. All radio calls must be treated with equal importance as phone communications.

Dispatchers must not mute any radio transmission except in emergency. If mute is needed, the wire chief must be notified.

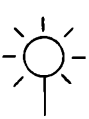
270. (TR) Signal aspects may be shown by the position of semaphore arms, color of lights, flashing of lights, or a combination thereof. They may be qualified, when provided in the rules, by marker plate, number plate, letter plate, marker light, shape of semaphore arm, or any combination thereof.

271. (TR) The signal aspects illustrated by the figures in Rules 281. to 292-A. inclusive are typical and must not be used with other than the names and indications prescribed by the rules. Aspects not in conformity must not be used unless shown in the timetable together with special instructions as to location and an explanation of their use.

272. (TR) The following may be used to indicate signal aspects in place of color:

R—Red	FR—Flashing Red
Y Yellow	FY—Flashing Yellow
G—Green	

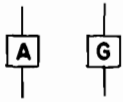
272-A. (TR) Flashing color lights will be indicated thus:

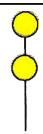


272-B. (TR) Number plates will be indicated thus:

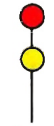
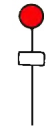
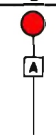
272-C. (TR) Position of semaphore arms may be indicated by line, thus:

272-D. (TR) Letter plates will be indicated thus:

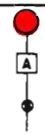


RULE	SIGNAL ASPECTS	
	BLOCK & INTERLOCKING	CAB
281. (TR)	 Fig. 1	
282. (TR)	 Fig. 1	
282-A. (TR)	 Fig. 1	
283. (TR)	 Fig. 1	
284. (TR)	 Fig. 1	
285. (TR)	 Fig. 1	

SIGNAL NAME	SIGNAL INDICATION
CLEAR	Proceed at track speed.
APPROACH MEDIUM	Proceed, reducing to medium speed before reaching next signal.
APPROACH LIMITED	Proceed, reducing to limited speed before reaching next signal.
DIVERGING CLEAR	Proceed on diverging route at track speed. Observe prescribed speed through turnout.
ADVANCE APPROACH	Proceed at medium speed approaching next signal at prescribed turnout speed. Trains exceeding medium speed upon accepting signal must take positive action to reduce to that speed.
APPROACH	Proceed at medium speed approaching next signal prepared to stop. Trains exceeding medium speed upon accepting signal must take positive action to reduce to that speed.

RULE	SIGNAL ASPECTS	
	BLOCK & INTERLOCKING	CAB
286. (TR)	 Fig. 1	
287. (TR)	 Fig. 1	
288. (TR)	 Fig. 1	
288.A. (TR)		
291. (TR)	 Fig. 1	
292. (TR)	 Fig. 1 2 3 4	

SIGNAL NAME	SIGNAL INDICATION
DIVERGING APPROACH	Proceed on diverging route approaching next signal prepared to stop. Observe prescribed speed through turnout.
DIVERGING RESTRICTING	Proceed on diverging route at restricted speed to next signal. Observe prescribed speed through turnout. Trains using inside track not protected by signals must proceed at yard speed.
RESTRICTING	Proceed at yard speed in accordance with specific timetable instructions.
RESTRICTING DIVERGING	Proceed on diverging route at yard speed not exceeding 20 mph, expecting tracks to be occupied. Observe prescribed speed through turnout. Speeds on sidings or auxiliary tracks will be governed by timetable instructions.
STOP AND PROCEED	Stop; then proceed at restricted speed until rear of train passes next signal in advance displaying less restrictive aspect.
STOP	Stop. Be governed by Rules 330, 509, or 663.

292-A. (TR)	 Fig. 1	
OPEN THE SWITCH	Stop; open the switch; then proceed in accordance with final indication displayed.	

300. (TR) Except as otherwise provided or affected by Signal Rules (General, A.B.S.S., T.C.S., or Interlocking) all operating rules remain in force in signaled territory.

301. (TR) Block and interlocking signals are located immediately to right of or immediately over the track they govern unless excepted in timetable instructions.

302. (TR) Location of Hot Box Detectors and associated signal indicators are noted in timetable instructions.

Hot Box indicators will normally display an "H" indication while approaching train is being checked. If no hot journal has been found, the indication will be a *steady* "H" when passing the signal.

If the indication is a *flashing* "H" when passing the signal, a hot journal has been detected and train must stop at location stated in timetable instructions. Call dispatcher for location of hot journal. Car detected, car ahead, and car behind car indicated must be checked. It will not be necessary to inspect entire train unless instructed by dispatcher.

When stopped by a Hot Box Detector and unable to contact dispatcher, entire train must be inspected. When this has been completed Hot Box indication will have been complied with and no further attempt to communicate with dispatcher concerning Hot Box indication need be made.

330. (T) When stopping at a signal displaying Stop aspect (per Rules 291, 292, or 292-A) no part of train or engine should pass signal. If a train or engine overruns an absolute signal dis-

playing "Stop" indication a member of crew must flag ahead immediately per Rule 99 and train dispatcher must be advised at once.

332. (T) After passing a signal displaying a green aspect per Rule 281, the indication of the next signal in advance may change to a "Stop" indication and enginemen and trainmen must be on the alert to observe it; under such conditions, stop must be made as soon as practicable, but unless an obvious emergency exists, emergency stop will *not* be made.

333. (T) When closely approaching a signal displaying indication permitting a train or engine to proceed which changes to a Stop indication before it is reached, stop must be made as soon as practicable but, unless obvious emergency condition exists, emergency stop will *not* be made. Train dispatcher must be notified at first available communication point.

334. (T) A train or engine stopped or delayed after having passed a signal displaying indication permitting train or engine to proceed, must approach the next governing signal in advance at restricted speed until indication of such signal can be determined.

338. (T) Within A.B.S.S. or T.C.S. limits, interlocking signals are part of A.B.S.S. or T.C.S., as the case may be, and will govern beyond the interlocking limits. Trains or engines stopped by interlocking home signals in A.B.S.S. or T.C.S. limits must observe interlocking rules within the interlocking limits and A.B.S.S. or T.C.S. rules, whichever is applicable, within the automatic portion of the block outside the interlocking limits.

339. (T) A train or engine or cars on sidings

or on other tracks must stand clear of insulated joints at clearance point. When a train or engine enters a siding or other track, the main track switch must be kept open until the entire train has passed insulated joints at the clearance point.

T-340. (T) Before opening a main track switch, train or engine crew must know by view of entire block to be entered that no train or engine is approaching within or adjacent to the block; when the view is obstructed or during inclement weather, flag protection must be provided.

Trains or engines proceeding from sidings or other inside tracks must remain clear of fouling point five minutes after main track switch has been opened, except at spring switches.

340-A. (T) Trains or engines proceeding from outside tracks to siding not part of yard or within yard limits must contact dispatcher before fouling such sidings; if unable to contact dispatcher within three minutes, such sidings may be entered under flag protection.

341. (TR) Both switches of a crossover must be open before train or engine starts to make a crossover movement. The movement must be completed before either switch is restored to normal position.

342. (T) Sand must not be used over movable parts of dual-control switches, spring switches, or between signals which govern the movement over these switches. Sand must not be used over movable parts of an interlocking.

If necessary to use sand when stopping an engine running light, after stopping, engine must be moved immediately a sufficient distance to clear sanded portion of rail.

T-343. (T) Refer to Rule 285. Trains or engines moving on main track on "Approach" aspect to stations in paired-track territory must proceed prepared to stop short of fouling point of sidings. Signals may not be at clear point on paired track.

344. (T) When a train is reported disabled to the train dispatcher by conductor or engineer, it must thereafter not be moved in either direction until relief train has arrived or unless otherwise instructed by the dispatcher.

CAB SIGNAL RULES

375. (T) Cab signals indicate conditions ahead within a block for a train or engine which has entered such block and should conform with the fixed signal governing entrance of that train or engine into that block within ten seconds after the engine enters the block.

377. (T) Should cab signal and fixed signal indications conflict, the more restrictive indication will govern.

MANUAL BLOCK SIGNAL RULES

408. (T) Manual block may be established by train order to govern movements between given points, requiring trains to receive clearance reading, 'Block Clear' or 'Block Occupied', before entering the block.

Trains or engines must not be permitted to enter the block until all opposing movements have cleared the block.

Trains and engines receiving clearance showing

'Block Occupied' must move through the entire block at restricted speed, unless information is received from train dispatcher that block has been cleared.

Passenger trains must not be operated unless the block is clear.

AUTOMATIC BLOCK SIGNALS RULES

505. (TR) Block signals govern the use of the blocks, but unless otherwise provided, do not supersede the superiority of trains, nor dispense with the use or the observance of other signals whenever and wherever they may be required.

509. (TR) When a train or engine is stopped by a "Stop" indication and such indication does not change promptly to a proceed indication:

1. Communicate with train dispatcher.

a. If train dispatcher knows there is no opposing train in the block, or at sidings that there is no train in the block between absolute signals, instructions may be issued under Form B (over Chief Train Dispatcher's initials) and train or engine must move at restricted speed until rear of train passes next governing signal displaying a proceed indication. If Form B is issued to a train or engine with a preceding movement in the block, a member of the crew must be advised of this condition. *Observe Rule 546 at dual-control switches.*

b. When dispatcher is not positive that there are no opposing movements involved, he may issue instructions to proceed under flag protection. Instructions to proceed under flag protection must be given in the following words: "*Proceed under flag protection from absolute signal at (station or other location)*".

c. A train or engine stopped by a signal bearing the letter "A", must stay until authorized to proceed under provisions of either paragraph a. or b. above. Engineer must have clear understanding of instructions issued by dispatcher.

d. The procedures under paragraph 1. must be repeated at each "Stop" indication, bearing letter "A", unless dispatcher has given authority under Form B or instructions to flag from more than one absolute signal location.

e. Record of Form B or instruction to flag must be maintained by dispatcher showing train or engine number, member of crew or other person to whom authority is given, location(s) from which authority is given to proceed, and time

authority is granted. Person receiving such authority must make written record as prescribed on Form B and repeat to dispatcher.

2. If there is a lack of communication and stop signal does *not* bear the letter "A", train or engine may proceed under flag protection without authority from the train dispatcher.

3. Observe Rules 101-C, 338, and 546; refer to Rule 544.

When proceeding under flag protection under any of the above conditions and signal in advance can be seen displaying a proceed indication, and view of track is clear to such signal, train or engine may pick up flagman. The movement must not exceed restricted speed until the rear of train passes next signal displaying a proceed indication.

Outside T.C.S. territory, written flagging instructions of work extra flagmen stationed at "Stop" indication will govern in proceeding from such signal but in no case will train or engine exceed restricted speed.

510. (TR) A train or engine may, under the following conditions only, pass a "Stop and Proceed" signal aspect at restricted speed without stopping:

1. When moving under flag protection per Rule 509, train or engine must continue under flag protection as prescribed.

2. When moving under Form B authority per Rule 509.

3. When moving within working limits per Rule 547.

4. When such signal is also a grade signal.

511. (T) Refer to Rule 84-A. A train or engine having passed beyond the limits of a block must not back into that block without flag protection except by permission of dispatcher and with a clear signal indication, unless move is in accordance with Rule 93 or Rule 547. In T.C.S. territory, also be governed by Rule 548.

516. (TR) When signal maintainer, maintenance-of-way employee or track car operator finds call light burning on front of relay house or a signal case at switch, or when trainman or engineman of train which is switching or standing within view of call light finds it burning, he must immediately communicate with the train dispatcher.

517. (TR) Where block indicators are used, the indications do not relieve engineman or trainmen from protecting their trains as required by the rules. Indication displayed by block indicator is not authority for a train movement.

Block indicators are *not* track car indicators and the indications of block indicators do not relieve track car operators from operating as required by the rules. Interpretation of indications displayed must be governed by special instructions.

TRAFFIC CONTROL SYSTEM (T.C.S.) RULES

540. (TR) On portions of the railroad and on designated tracks so specified in the timetable, Traffic Control System is in effect and trains will be governed by block signals without requiring the use of train orders and without regard to superiority of trains for both opposing and following movements on the same track.

541. (TR) The movement of trains will be under the direction of the train dispatcher who will issue instructions as may be required.

Instructions relating to track or other conditions within T.C.S. limits may be issued by train order, bulletin, other written notice, or may be issued orally to member of crew. Member of crew of a train entering T.C.S. at an intermediate point must ascertain from train dispatcher what instructions are in effect on that portion of T.C.S. over which movement is to be made.

542. (TR) The train dispatcher must be advised in advance of any known condition that will delay the train or prevent it from making track speed.

544. (T) Dispatcher may instruct trainman or engineman proceeding under provisions of Rule 509 to stop at any absolute signal in advance. When so instructed, movement through entire block(s) must be made at restricted speed and the particular absolute signal designated by dispatcher must not be passed, regardless of aspect displayed, until he so authorizes.

545. (TR) When necessary to hand-operate a dual-control switch, permission from train dispatcher must first be obtained then proceed as follows:

1. Unlock switch lock.

2. Move selector lever from position marked "Motor" to position marked "Hand".

3. Operate hand-throw lever back and forth until switch points are seen to move with movement of lever, then line switch for route to be used and check points to see that they fit properly.

NOTE: The selector and hand-throw levers must not be forced. They will move easily when

in mesh, although some manipulation of first one and then the other may be necessary to get them in proper mesh.

4. After movements over switch have been completed, switch must be restored to position in which originally found, then restore selector lever to position marked "Motor" and secure with lock.

5. When instructed by dispatcher to take switch in hand-throw under provisions of Rules 509., 546., or 547., and no switching is to be performed, after leading wheels have passed over switch points trainman or engineman will restore selector lever to motor position.

When dual-control switch is being operated by hand, signal indications governing movements over such switch are suspended and trains may make movements over the switch as authorized on hand signal from trainman or engineman stationed at switch.

The permission granted by the train dispatcher to operate a dual-control switch by hand does not authorize any part of train or engine to move beyond any working limits authorized per Rule 547; specific permission must be obtained to authorize such movement.

Selector lever must be locked if necessary for all members of the crew to leave immediate vicinity of switch.

When last movement is being made over the switch, selector lever may be restored to motor position as soon as any part of the train or engine occupies the track between absolute signals, but movement must be stopped before selector lever is placed in motor position.

Train dispatcher must be informed as to location

of train or engine, and dispatcher and engineer must be advised that switch has been restored to motor position.

Cars must not be dropped over dual-control switches except in emergency. Refer to Rule 103-A.

546. (T) When a train or engine is authorized to pass a "Stop" signal as prescribed by Rules 509, or 547, trainman or engineman must examine dual-control switch points and observe that they remain full normal or full reverse for route intended when the leading wheels of the engine or car pass over them.

When conditions require, dispatcher will instruct trainman or engineman to place dual-control switch in hand-throw position before movement over the switch is made. Observe Rule 545.

546-A. (T) Switching movements over dual-control switch may be made by signal indication not to exceed one initial and one reversal of direction. In order to receive signal indication, movement must stop beyond signal detector circuit governing signals involved; otherwise switching movements must be made in accordance with Rule 545 or a reverse movement as prescribed by Rule 548.

547. (TR) When work is to be done by any train, engine, M.W.S. gang, or other employee within a block or blocks requiring movements in both directions, authority must be obtained from dispatcher who will specify work limits and, when necessary, time limits (clocktime) over initials of Chief Train Dispatcher.

Employee requesting work limits will state his name, occupation, location, and train or other identification, and will repeat authorized limits to the dispatcher who will then give his "OK". Record of work limits and clocktime must be maintained by

dispatcher showing train or engine number, member of crew or other person to whom authority is given, time authority is granted, and location and time same employee reports clear of working limits. Person receiving work authority must make written record as prescribed on Form U.

When issuing clock time or work limits, the dispatcher must spell the words east (e-a-s-t) and west (w-e-s-t). Person receiving the time must repeat the direction in the same manner before "OK" is given.

Before granting work authority dispatcher must know there is no train approaching the work area in the block or blocks to be used, and know that no other employee has been given work authority in the block or blocks to be used. He must protect the ends of work limits by "Stop" indications and place a "Plug" in the appropriate "Jack" on the "block time board," observing that the corresponding "Flashing Blue Work Time Light" has been illuminated on the Train & Track Model Board. Thereafter a signal must not be cleared for train movement into the worktime limits, except trains or engines receiving the work time, and no dual-control switch within the work limits may be operated except by joint understanding between the dispatcher and the employee holding the work time. Plus inserted into block time board jacks for protection of work limits must not be removed until work authority has been released by the employee to whom it was issued. Bent or damaged plugs must not knowingly be used.

If employee does not know last train by his location, dispatcher will not issue work authority in a block occupied by a train per Rule 547-E.

When practicable train or engine granted work authority will be given signal to enter working limits.

Within work limits, unless main track is continuously occupied, a main track switch left open, or dual-control switch left in hand-throw position,

train or engine must secure renewed authority from dispatcher before returning to main track.

M.W.S. gangs required to use shunt cord in addition to securing work limits will so advise dispatcher when requesting work authority. Shunt cord will then be applied to track, advising dispatcher, who will then proceed to grant work authority when track occupancy indication shows on T.C.S. control panel, as prescribed. If shunt cord is removed, renewed authority must be secured from train dispatcher before re-shunting track. Removal of shunt cord does *not* release work limits.

When clocktime is authorized, train or engine or other employee must report clear of limits authorized by the time stated. When additional time is required it must be authorized by dispatcher before expiration of previous time limit. Before releasing clocktime, employee holding such authority must know that all his equipment and men are clear of limits, and M.W.S. foreman must know that track or structure is safe for passage of trains. Train dispatcher must be notified when work is completed.

While occupying work limits, movement may be made in either direction without flag protection.

547-A. (TR) Train or engine holding work authority per Rule 547 may permit another train or engine to work within its work limits after a definite understanding is had *between conductors* of each train and train dispatcher advised of this fact. Conductors must instruct their engineers of understanding reached and provide necessary protection. When more than one train is working within the same limits *all moves must be made*

at restricted speed. Conductor of train which has entered working limits of train holding work authority must clear out to the conductor of that train when leaving such limits. The conductor of the train holding the work authority is strictly responsible for knowing the other train is clear of the work limits before releasing work limits.

Under provisions of the preceding paragraph, a conductor may permit a M.W.S. employee to work within his work limits; *or* a M.W.S. employee may permit a train to work within his work limits. All provisions of this rule will apply to the engineer when there is no conductor.

M.W.S., track car operator, or other employee holding work authority may permit another track car to work within its work limits after a definite understanding is had *between the employees* involved and train dispatcher advised of this fact. When two or more track cars move in the same work limits under this provision, track car operators must have a *definite* understanding with each other to insure safe movement. Track car operator or other employee who has entered work limits of employee holding work authority must clear out to that person when leaving such limits. The employee holding the work authority is strictly responsible for knowing the other employee is clear of the work limits before releasing clocktime. Employees unable to contact each other by other means of communication will contact dispatcher at not more than 30-minute intervals for this purpose.

547-B. (T) Within work limits per Rule 547 all signal aspects must be respected *except* those shown below in paragraphs 1., 2., and 3., which may be passed at **restricted speed** without stopping:

1. Signals displaying aspect per Rule 291.

2. Signals displaying aspect per Rule 292 when signal is not a home signal at an interlocking and when signal does not govern movement over a dual-control switch.

3. Signals displaying aspect per Rule 292 governing movements over a dual-control switch when:

a. Switch has been placed in hand-throw per Rule 545.

b. Entering work limits by authority of dispatcher without signal indication. Observe Rule 546.

547-C. (T) Trains or engines operating under the provisions of Rule 547 will be operated at track speed *except:*

1. MORE THAN ONE TRAIN AUTHORIZED WITHIN THE SAME WORK LIMITS: All moves must be made at restricted speed *including movements on signals displaying a proceed indication.*

2. ONE TRAIN AUTHORIZED WITHIN THE WORK LIMITS: When moving past signals authorized per Rule 547-B, all moves must be made at restricted speed until the rear of train passes next signal displaying a proceed indication.

547-D. (TR) Work limits issued do *not* include any sidings within those work limits unless specified. Work limits do *not* authorize taking a dual-control switch in hand-throw unless specified by dispatcher.

547-E. (RD) When requested by foreman, dispatcher will issue work time in a block occupied by a train moving away from work limits provided employee assures dispatcher rear of such train has passed location where work is to be performed.

548. (T) Refer to Rule 84-A. If it becomes necessary to reverse the movement of a train or engine in T.C.S. territory such reverse movement must be made at restricted speed under flag protection to the next absolute signal displaying a proceed indication for a reverse movement unless a portion of the train or engine stops on detector circuit of a dual-control switch after having passed an absolute signal displaying a proceed indication and a portion of train or cars is between absolute signals at a station. When proceeding under flag protection under the above condition and signal to the rear can be seen displaying a proceed indication, and view of track is clear to such signal, train or engine may pick up flagman.

550. (TR) Hand-operated switches equipped with electric locks are under the control of the train dispatcher and shall be operated in accordance with the instructions posted in the adjacent phone housing.

Before any action is taken to use these switches the dispatcher's permission must be obtained at each location. After movements over switch have been completed, switch must be restored to normal position, electric lock secured, and dispatcher notified.

Trains and engines obtaining work limits per Rule 547 will at that time be authorized to use electric lock switches within their work limits except when such switches are between dual-control switches *at sidings*.

550-A. (T) When using an electric lock switch and portion of train is left on main track while engine enters outside track, the electric lock at the entering switch must be left unlocked until the engine has returned to the main track, as

electric lock cannot be released for re-entry to main track under these conditions.

551. (T) When a train or engine is to clear the main track at an electric lock switch, after it has entered the block in which the switch is located, the dispatcher must hold all signals governing movement into that block at stop and apply a plug in the appropriate "Jack" on the "block time board" controlling such signals. When movement is clear of main track and switch again normal, crew member will so advise dispatcher. Until employee so reports clear, dispatcher must not remove plugs from the block time board controlling the signals involved.

551-A. (T) When a train or engine is to re-enter the main track at an electric lock switch after it has cleared per Rule 551, Rule 550 applies and, after locks are released, if no signal governs the movement, train or engine may proceed approaching the next governing signal in advance at restricted speed until indication of such signal can be determined.

552. (T) Switches of certain tracks are not electrically locked or signaled. Except in emergency a train must not clear main track on such tracks. Trains and engines *must not* clear the main track at hand-operated switches not equipped with electric locks in territory where maximum speed is greater than 20 MPH.

If necessary to clear main track at such switches in territory where maximum speed is less than 20 MPH, permission must be obtained from the dispatcher before again entering main track and train or engine must remain clear of insulated joints at clearance point five minutes after main track switch has been opened. Thereafter move-

ment must not exceed restricted speed to the next governing signal in advance.

Switching may be done at these switches without work authority providing part of train is left at all times on main track within the block being used. Dispatcher should be advised when such switching is to be done between stations.

555. (T) Employee attending switch under provisions of Rules T-340, 340-A, or 552, must remain *at* switch during waiting time specified.

INTERLOCKING AND OTHER SIGNAL RULES

605. (TR) 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. Location of interlockings will be shown in timetable.

Flag protection is not required within interlocking limits.

611. (TR) When a towerman is on duty signals must be kept at their most restrictive indication except when cleared for an immediate movement. Towerman must familiarize himself with general instructions governing operation and manipulation of interlocking plant and must observe, as far as practicable, whether the indications of the signals and the position of derails and switches correspond with the position of levers.

612. (TR) Levers and other operating appliances must be used only by those charged with that duty and then with care, as directed by the rules, giving close attention to all controlling devices. During cold weather levers having mechanical connections must be moved as often as may be necessary to keep connections from freezing. If any unusual conditions or if any defects are detected, or if there is a derailment, or if any damage occurs to track or plant, signals must be kept at their most restrictive indication and no movement permitted until the condition has been corrected or examined and known to be in a safe condition. If any device fails it must be disconnected and secured, according to general instructions, in safe condition for traffic. Defects must be reported promptly to train dispatcher and signal supervisor.

613. (T) Interlocking routes will be lined up sufficiently in advance of movements to avoid delay. After signal has been cleared for an approaching movement it must not be changed before the approaching train or engine has passed it, except to avoid accident, unless the train or engine has first come to a stop before reaching the signal. A switch, derail, or locking device must not be moved when any portion of a train or engine is standing on or closely approaching it.

622. (TR) Towerman will be held responsible for the care and cleanliness of the interlocking station, plant, supplies, and must not permit unauthorized persons to enter the interlocking station. Towerman must not make or permit any unauthorized alterations, repairs, or additions to the appliances.

625. (TR) Signal maintenance personnel are responsible for the proper maintenance of all signal facilities assigned to their care and they must be notified in advance when track repairs affecting such facilities are undertaken.

When the condition of switches or track does not permit proper operation or maintenance of an interlocking plant or other signal facility the fact must be reported to the signal supervisor.

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

When any part of a manually operated interlocking plant is to be repaired, the towerman must have an understanding of the scope of the work and what route or routes may be affected by such repairs. The towerman must be notified when the repairs are completed.

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

628. (TR) Hand signals must not be used when the proper indication can be displayed by interlocking signals. When hand signals are necessary the towerman must assure himself that route is properly lined and known to be safe for passage of trains. Signals must be given from such a place *on the ground* and in such a way that there can be no misunderstanding on the part of the engine-

men or trainmen as to the signals, intended movement, or as to the train or engine for which they are given.

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

If a train or engine disobeys a hand signal, the fact must be reported at once to the train dispatcher.

635. (T) Towermen must not go off duty until properly relieved. When relieving each other they must make a transfer of all unexecuted orders and instructions and information as to train movements, overdue trains, and condition of plant.

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

637. (T) Ordinarily, passenger trains will be given precedence over freight trains.

663. (TR) When stopped by a "Stop" indication at an interlocking and such indication does not change promptly to a proceed indication:

1. INTERLOCKING WHERE TOWERMAN IS ON DUTY:

Contact towerman and be governed by his instructions. If instructed to pass over interlocking, proceed as follows:

a. By telephone authority from towerman after member of crew has carefully examined all facing point switches and derails.

b. Upon receipt of signals given with yellow flag or yellow light per Rule 628.

2. ALL OTHER INTERLOCKINGS:

a. If automatic, be governed by paragraph c.

b. If remote-controlled, contact train dispatcher and be governed by his instructions. If instructed to flag over interlocking, be governed by paragraph c.

c. If automatic, or if remote-controlled and instructed by dispatcher to proceed under flag protection (or if unable to contact dispatcher, or if means of communication fail) operate emergency release, following instructions posted in emergency release housing, and be governed by paragraph d. If there is no emergency release mechanism, be governed by paragraph e.

d. If yellow indicator light in emergency release housing **is** illuminated, and signal does **not** change its indication to permit movement at expiration of time stated in instructions, and no train is seen or heard approaching on conflicting route, and a crew member has ascertained that all interlocking switches and derails are in proper position, train or engine may proceed on hand signal from crew member stationed at crossing. If yellow indicator light in emergency release housing is **not** illuminated at the expiration of the time stated in instructions, be governed by paragraph e.

e. If authorized to be governed by this paragraph, and if no train is seen or heard approaching on conflicting route, and a crew member has ascertained that all interlocking switches and derails are in proper position, train or engine may pass the signal displaying "Stop" indication one unit or one car length, stopping clear of

conflicting tracks. After waiting ten minutes (unless a different waiting time is specified in Timetable Instructions), if no train or engine is seen or heard approaching on conflicting route, train or engine may proceed on hand signal from crew member stationed at crossing.

3. A train or engine passing an interlocking signal displaying "Stop" as provided under provisions this rule must not exceed restricted speed until rear of train has passed through interlocking limits. In T.C.S. or A.B.S.S. limits movement must be made at restricted speed until rear of train passes next signal in advance displaying proceed indication.

4. When necessary to pass an interlocking signal displaying "Stop" indication, the fact must be reported to the train dispatcher.

669. (TR) Trains or engines stopped by the towerman in making a movement through an interlocking plant must not move in either direction until they have received the proper signal from him.

670. (TR) A reverse movement within the limits of an interlocking plant, or a forward movement after making a reverse movement, must not be made without the proper interlocking signal unless otherwise provided.

671. (T) Cars must not be kicked or dropped over interlocking switches.

ADDITIONAL GENERAL RULES

700. (A) Employees whose duties are prescribed by these rules will report to and comply with instructions issued by officers of the various bran-

ches of service and such others as may have proper jurisdiction when applicable to their duties.

701. (TRM) Employees required to perform service on more than one division or employees 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.

Employees of this Company 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.

702. (TRM) Employees whose vision requires the use of glasses in order to meet requirements prescribed by the Chief Surgeon must wear them while on duty and must carry an extra pair with them if Chief Surgeon so designates.

704. (TRM) Employees designated by special instructions must wear while on duty either a pair of prescription-ground glasses or prescribed safety glasses. The wearing of sunglasses is prohibited during the hours between sunset and sunrise unless authorized by proper authority.

705. (A) Civil, gentlemanly deportment is required of all employees in their dealings with the public and each other. Courtesy and attention to patrons is demanded.

Employees are prohibited from entering into altercations with any person, regardless of provocation. They will make a note of the facts, if necessary, and report to their immediate superior.

Employees, except those authorized by proper authority, are prohibited from having loaded or unloaded firearms in their possession while on duty or on company property.

Horseplay, sparring, or any form of practical joking is forbidden on duty or on company property.

706. (A) Carelessness, negligence and/or indifference in the performance of duties will not be condoned.

707. (A) Employees who are either disloyal, dishonest, intemperate, immoral, insubordinate, incompetent, make false reports or statements, or conceal facts concerning matters under investigation, will be subject to dismissal.

708. (A) Unnecessary conversations on the company telephone or radio are prohibited.

709. (A) Employees must not give information respecting the affairs of the railroad, including accidents and personal injuries, nor permit access to any records, except to authorized officers and other employees directly concerned unless authorized by proper authority to do so.

710. (A) Gambling while on duty or on company property is prohibited. Gaming while on duty or on company property is prohibited unless authorized by proper authority. The unauthorized use of radios and televisions while on duty is prohibited.

711. (A) Employees must report for duty at the designated time and place, attend to their duties during prescribed hours, and obey promptly instructions from the proper authority in matters pertaining to their respective branches of the service.

They must not absent themselves from duty, exchange duties with others, substitute others in their places, nor engage in other business which may interfere with the full discharge of their duty to the Company without proper authority.

712. (A) Employees subject to call for their tour of duty must not absent themselves from their usual calling place without notice to those required to call them.

All employees must promptly give written and telephone notice of change in residence and/or telephone number to proper authority.

713. (A) Employees found asleep or reading literature not pertaining to their work while on duty will be subject to discipline.

Lying down or being in a reclining position with eyes closed or with eyes covered or concealed will be considered as sleeping.

723. (TR) Before coupling to or moving occupied outfit cars, notice must first be given all occupants, and all ladders and other equipment cleared before moving.

Sign reading "Occupied Outfit Cars" must be placed on switch stand leading to tracks occupied by such outfits. These signs are not required on dual-control switches.

Occupied outfit cars should be handled immediately ahead of caboose when practicable. Unauthorized persons will not be permitted to ride in such cars.

Sidings blocked by occupied outfit cars must not be used for meeting or passing trains except in emergency.

All provisions of Rule 819 pertaining to cabooses also apply to outfit cars.

728. (TRM) Employees must familiarize themselves with the Code of Federal Regulations and applicable Bureau of Explosive Instructions governing the handling and transportation of explosives,

flammables, and dangerous materials, and be governed accordingly.

729. (A) Fire protection of the Company's property and property in its custody is a duty of employees under all circumstances. The employee having direct supervision over the buildings, premises or cars will be held responsible for the observance of safe practices and fire prevention rules and regulations. Buildings and structures should be kept free of refuse, and oily clothing or waste must not be stored in lockers. Gasoline and oil must be kept in authorized containers at prescribed places and not left unstored within 50 feet of any track when practicable. Stoves in buildings, outfit cars and cabooses must conform to prescribed standards. Fire extinguishers must be kept charged properly and must be located in accessible places ready for immediate use. Fire hoses and nozzles must be kept in places provided therefor and in serviceable condition.

It is important that the cause of any fire be ascertained, if possible, in each case and promptly reported to proper authority.

730. (TRM) Throwing of articles (littering) from locomotives, cars, roadway equipment, or company motor vehicles is dangerous and forbidden.

731. (TRM) When pile drivers, cranes, derricks, or similar equipment of the swinging or pivoting type are being moved on their own wheels or on cars, conductor must know that cars are in proper place with booms properly secured—trailing when practicable—and engineer notified. Center plow and wings of spreaders must be securely fastened and chained prior to shipment. Before such equipment is moved it must be inspected and must receive frequent inspection enroute.

When cranes are moved with booms not trailing, or spreaders in reverse movement, speed must not exceed 25 mph.

When such equipment is loaded on cars, it must be loaded and secured in strict accordance with A.A.R. loading rules and must be properly inspected before being moved and must be inspected by trainmen as often as practicable enroute.

Except on work trains such equipment must be handled on rear of trains, unless otherwise directed. If picked up at a point where it cannot be placed on rear it may be placed on head end and switched to rear at first station where possible to do so.

732. (TRM) When pile drivers, cranes, derricks or other machines equipped with booms or of the revolving type are being used on track, they must not be operated to foul adjoining tracks while trains or other movements are passing, and before fouling any adjoining track, flag protection must be provided.

Similar equipment working off track must use the same precautions.

Care must be used to avoid contact with overhead wires.

When trains are seen or known to be approaching, trains loading or unloading ballast or other material or operating dozers, snow machinery or similar equipment must stop and be sure adjacent track is clear and booms or other projecting parts of pile drivers, cranes, derricks or other similar on-track or off-track equipment must be secured to clear adjacent track and operation stopped.

Derricks or similar machines must not be turned or swung while traveling, either under own power or being handled by an engine, except where necessary in short moves of less than 100 feet or in closely continuous travel and work operation. Before moving a work train, engine whistle signal 14.2 or 14.8. must be sounded for protection of men working about the train, and the operators of ditchers or similar machines must be notified.

734. (A) Employees shall not make an unauthorized assignment of their wages or subject the Company to service of garnishment.

Garnishments, unauthorized assignments of wages or continued failure to meet just obligations shall be considered sufficient cause for dismissal.

735. (A) Unless authorized, employees 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.

736. (A) Property of the railroad, including freight and articles of value found in or on cars or on the right-of-way must be cared for, posting watchman if necessary, and properly reported without delay to the immediate superior or designated authority and in no way disposed of or removed from Company premises without first securing proper authority.

737. (A) Defacing, destroying or removing Company property, except as properly authorized, is prohibited.

738. (A) Care and economy must be exercised in the use of Company property. The unauthorized

use of any company property, including stationery and mail, is prohibited.

Employees whose duties require them to have in their possession property of the Company, such as switch keys, rule books, etc., will be required to receipt for same at the time of issue. They must return it on leaving the service or upon demand of the proper authority. The value of articles not returned may be withheld from wages.

739. (A) Time must not be entered on the payrolls, except for work actually performed by the person whose name appears thereon.

740. (A) Employees must not depend for their safety on the insulation of wires but must consider them alive at all times unless otherwise advised; and when they notice 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 notify the proper authority promptly.

741. (A) No person will be permitted to ride on an engine, freight train, in a baggage, mail, express car, or on track cars, without a written order from the proper officer, except employees in the discharge of their duties and those holding transportation endorsed to that effect. In the case of other persons riding engines, the written order must be signed by the Superintendent.

745. (A) The telegraph or telephone must not be used when mail will answer the purpose. Messages must be briefly worded and confined to railroad business. Letters not pertaining to the affairs of the Company must not be sent by railroad mail.

746. (A) Whenever service of summons or other legal papers is made on an officer, agent or employee with reference to the business of the Company, he must at once notify his department head and the General Counsel, giving names of parties to action and, when possible, a brief statement of the case. The papers served should be sent by first mail to the General Counsel, San Francisco, California. Whenever service of garnishment or attachment is made, the Treasurer must be advised in addition to the department head and the General Counsel.

747. (A) Billboards must not be erected nor material placed so as to obstruct the view of approaching trains.

Any structure or growth which may obscure visibility at grade crossings must be promptly reported to proper authority.

748. (A) Signs, posters and advertising matter must not be permitted on or about railroad property or equipment unless properly authorized. When authorized, such matter must be promptly removed after serving its purpose.

749. (TR) Employees must endeavor to avoid striking livestock with trains or engines. They must make report to proper authority of livestock seen on right-of-way, fences down, fence gates open; and when practicable see that livestock is driven off of right-of-way and gates closed.

When livestock is struck, unless animal is known to have been thrown clear, train must be stopped promptly, inspected for damage, and any remains removed. Report must be made by engineer on prescribed form.

750. (TRM) Any person operating a track car will be governed by all applicable roadway rules. Where two or more employees are riding on track car, rule 34 must be observed where applicable.

751. (A) All employees should acquaint themselves with the business interest of the people among whom they are situated and use all proper means to secure traffic and act with a view of accommodating the public and promoting the best interest of the company. They must advise proper authority of anything either detrimental or conducive to the good of the company.

752. (TRM) Telephone receivers and switches must be kept in proper position to avoid interference with circuits.

Each company telephone booth must be kept locked when not in use. Booths must be kept supplied with necessary forms as specified by proper authority.

760. (A) A personal injury sustained by an employee on or off duty must be promptly reported to proper authority in accordance with current instructions. Normally employees will report injuries sustained by them to their immediate supervisor, who will be responsible for making such report to Superintendent and other designated department heads. This does not relieve the employee from making and filing the report over his own signature if the supervisor is not available.

Employees having knowledge of any personal injuries occurring on railroad property, must make report to proper authority in accordance with current instructions.

All accidents resulting in damage to any property must be promptly reported to proper author-

ity in accordance with current instructions. Foremen, conductors, engineers, yardmasters, agents, or other employees having knowledge of accidents will be held responsible for making report or for seeing that report is made.

Additional written report on prescribed form must be completed promptly by all employees witnessing or having first hand knowledge of personal injuries or accidents involving damage to outsider's property. Conductors and foremen will submit such written report when damage to company property only is involved. These reports must be submitted promptly to proper authority in accordance with current instructions.

In an emergency, or in case of obstruction by accident or other cause, employee upon whom the responsibility most naturally falls must assume authority until arrival of an officer and must at once report conditions.

762. (A) In cases of injuries to trespassers or others, injured person or persons must be taken to nearest station when possible and placed in the care of local authorities. Necessary medical attention should be arranged with the distinct understanding that no expense therefor will be assumed by the Company without specific authority from the Superintendent, Claim Agent, or a General Officer of the Company.

763. (A) Whenever passengers or employees are injured, and can be moved, they should be taken for treatment to the nearest place where medical attention is available. If the case is urgent and the company physician cannot be immediately procured, the nearest physician available will be called to administer first aid and care for the patient

until the company physician can take charge of the case.

764. (A) In case of personal injury, loss of life, or damage to property in which a train is involved, the conductor must endeavor to secure the names, addresses and occupations of all persons involved, including all persons at the scene when the accident occurred. License numbers of automobiles nearby should be obtained. This information, obtained with the assistance of other employees when necessary, must be included in reports made covering such occurrences.

When signaling devices are provided, or crossing watchman or flagman are on duty, a special effort should be made to determine who among the witnesses can testify whether the signaling devices were functioning properly. No test of signaling devices will be allowed unless authorized by Superintendent and conducted under direction of signal personnel.

Names of witnesses who can testify relative to bell or whistle signals must be obtained when possible to do so.

765. (TRM) All equipment such as cars, engines, machinery or tools, etc., also premises involved in accidents resulting in personal injuries, should be promptly inspected by the foreman or other person in charge of the work or by other competent inspectors to ascertain the condition of same. A report of such inspection stating the condition found and name or names of the persons making the inspection should be promptly forwarded to the superior officer of the person making the inspections.

766. (A) When tools, machinery or other types of equipment or appliances are involved in an accident resulting in personal injury, they should if at all possible be marked for identification and placed in custody of some responsible officer or employee and held subject to the order of the general claim department or the Superintendent, regardless of whether or not inspection reveals any defect therein.

767. (TRM) When engines, cars or other rolling stock are involved in an accident resulting in personal injury, such inspection as can be made should be made before such equipment leaves the place of accident, and this should be followed by a further inspection at the first terminal. Such inspection should be made by at least two qualified employees, preferably by car inspector, car foreman or master mechanic. Report of the result of such inspection should be promptly forwarded through the proper channels to the Superintendent and by him transmitted to the general claim department.

770. (A) Company-owned or leased highway motor vehicles and roadway equipment travelling public roads shall not be used under any circumstances for any purpose except authorized company business and shall not be operated at any time off company property without the required license tags, inspection certificates, signal indicators, and other accessories required by law.

Only employees whose duties require such transportation will be permitted to ride in these vehicles.

When necessary for the protection of company property, one vehicle may tow another motor vehicle to a safe place for storage until repairs can be effected.

771. (A) An employee authorized to operate a company motor vehicle must be qualified to drive such vehicle; must be in good physical condition, including eyesight and hearing, and have no physical impairments that would prevent safe driving.

The operator must have in his possession the required license or permit, know and obey the regulations and laws of the state and company rules and regulations.

Any citations involving company vehicles must be reported to proper authority.

772. (A) Vehicles must have required license plates correctly displayed with markings and equipment as required by law of the state in which the unit is registered.

Registration card and other credentials required by city, state, or federal law for vehicle operation must be kept in the glove compartment of vehicle or in plain sight as required by law.

773. (A) *Motor vehicles must be operated in a safe manner regardless of the urgency or importance of the trip.*

774. (A) Motor vehicles must be driven at a safe and reasonable speed, observing all speed regulations, giving due regard to traffic, local conditions, and safety to the public.

All traffic laws must be observed.

The right of way must be surrendered if necessary to avoid an accident.

775. (A) If a company vehicle is involved in an accident, immediate report must be made to operator's supervisor. Prescribed report forms and any reports required by law must be completed

in full, giving name of driver, vehicle number, and all details of the accident.

776. (A) Operator of company vehicle is responsible for the safety of the occupants and must see that seat belts are used at all times on vehicles so equipped.

777. (A) Employees must obtain the safety rule book applicable to their craft and are required to comply with the safety rules therein.

778. (A) Employees must familiarize themselves with the Federal Hours of Service Law, and each employee governed by this law must notify the proper officer of the time the law requires him to be off duty early enough that he may be relieved, if necessary, before exceeding the hours of service permitted by the law.

Any employee who may be ordered to report for duty at a time prior to the expiration of his full legal rest period must call this to the attention of the crew clerk or other proper authority before accepting the call for service.

800. (T) The general direction and government of a train is in charge of the conductor, and all persons employed on the train are subject to his instructions.

Should there be any doubt as to authority or safety or proceeding, he must 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.

Conductors must submit promptly all the reports required of them by the several departments.

Conductors must report detention at interlockings and delays on line in accordance with current instructions.

800-A. (T) Subject to specific orders of the superintendent, conductor or (in the absence of conductor) engineer, must require trainmen to position themselves as in his judgment may be necessary.

801. (T) Conductors must not permit anything to interfere with the proper protection of their train and must see that flag protection is afforded promptly and in accordance with the rules.

802. (T) When on duty, trainmen and firemen are subordinate to their conductors and engineers. Conductors and engineers must see that their subordinates are familiar with their duties, ascertain the extent of their experience and knowledge of the rules, and instruct them in the proper and safe performance of their work.

When the conductor is not present, trainmen must promptly obey the instructions of the engineer.

803. (T) Before being employed in any branch of service involving the use of signals or movement of trains, applicants must pass a medical examination to determine whether such employee has a physical or mental condition that, incident to the full performance of his occupation, may adversely affect the safety of train operations.

Re-examination will be required as follows:

1. After acute infection of the eyes, eyelids or of the ears.

2. After any protracted or serious illness.

3. When deemed necessary by the Superintendent or Chief Surgeon.

819. (T) Cabooses and/or towed locomotives must not be kicked or dropped against other cars nor other cars kicked or dropped against them. When a caboose is kicked or dropped, a member of the crew must ride it. Hand brake must be tested before movement is started. Occupied cabooses and/or towed locomotives must not be included in movement when other cars are being kicked or dropped.

When coupling to a caboose and/or towed locomotive or coupling such equipment to other

cars, movement must be made with special care. Occupants of such equipment must be warned in advance of impending couplings. Persons occupying such equipment must brace themselves and remain seated while coupling is being made.

824. (T) Passenger cars handled in freight trains, unless otherwise instructed, and wooden underframe cars must be placed on trains next ahead of the caboose. Wooden underframe cars handled in the same train with wooden underframe outfit cars must be placed next ahead of the outfit cars.

825. (T) Helper engines must not be detached from a train while it is in motion. The use of helper engines behind occupied cabooses must be restricted to not more than two units or 3600 HP. Helper engines must not be used behind wooden cabooses.

Helper engines must be cut in ahead of any wooden underframe cars in a train.

826. (T) Cars must not be handled ahead of engine between stations except when necessary in work train service or to take cars to or from a spur and the movement then must be no greater distance than necessary. Unless air brakes are cut in and operative, such cars must be chained to engine.

830. (T) Trainmen and enginemen must report to dispatcher at first opportunity the presence of fires on or near right-of-way, unless fire is being controlled by other employees. In case of danger of fire spreading to a bridge, tunnel or other structure, train must be stopped and crew assist in extinguishing fire.

When a car is set out account of hot box, any

packing must be removed from the box. Trainmen must make careful inspection of the underside of the car to insure that fire has not ignited the wooden flooring and lading. All fire must be extinguished before train proceeds. Refer to Rule 861.

833. (T) Open-top cars loaded with rail, pipe, structural steel, lumber, poles or mounted wheels, or with open-top trailers similarly loaded, where such lading projects above sides and ends and which may shift, must not be placed in trains next to engines, cabooses, occupied outfit cars or cars placarded "Explosives", "Dangerous" or "Poison Gas".

842. (T) Unless freight trains are regularly designated to carry passengers, no person will be permitted to ride thereon, except by proper authority. Trainmen must warn passengers carried on freight trains of the liability of personal injury incident to slack action and require them to remain seated before starting and while moving.

Employees on trains entering or leaving yards or when stops or starts are anticipated, must be seated and take every precaution to avoid injury by properly bracing themselves.

844. (T) Employees are expected to familiarize themselves with Federal laws relating to hours of service, transportation of livestock, and any special instructions of the transportation department.

850. (T) It is the especial duty of the flagman to protect the rear of his train in accordance with Rule 99 and he must not allow anything to interfere with the prompt and efficient discharge of that duty.

851. (T) Conductors must see that company mail, telegrams and messages entrusted to their care are properly handled.

852. (T) End gates must be in position to protect all open end vestibules of occupied equipment.

When cuts are to be made between occupied passenger cars while switching, trainmen must know that vestibule curtains are unhooked and end gates closed at the end of each car where cut is to be made, and electrical connector, if any, must be taken down.

853. (T) Conductors are responsible for the security of all freight carried by train in their charge and its delivery with the necessary waybills or mainfests at its destination or terminals.

The doors of empty cars in trains must be kept closed when practicable. The doors of loaded cars must be kept closed and properly secured unless left open for ventilation. Instructions relative to the sealing of cars and ventilation of perishable commodities must be carefully observed.

854. (T) Conductors must comply with instructions in placing cars and doing other station work.

855. (T) Conductors unless otherwise provided must see that trains are equipped with proper tools and sufficient supplies of all kinds before leaving initial terminals.

856. (T) Conductors must see that cabooses in their charge are kept in a clean and tidy condition.

The use in cabooses of stoves other than those furnished by the Company is forbidden.

No special installations may be made in cabooses without authority.

857. (T) Unless otherwise instructed, all freight handled in trains must be covered by waybills.

Conductors must familiarize themselves with instructions pertaining to the loading, unloading, and handling of freight.

858. (T) A car must not be taken from a station if it is unsafely loaded, in which case a report must be promptly made to the train dispatcher. Waybills must be examined and all instructions thereon complied with. Card bills must be handled with as much care as regular waybills.

859. (T) Trainmen must give proper attention to the handling of livestock and perishable freight and be governed by instructions relative thereto.

Particular attention must be given to livestock unaccompanied by attendants. Conductors must report any unusual condition to the train dispatcher.

860 (T) When cars in trains have been broken into conductors must advise the Chief Dispatcher from the first point of communication, giving car number, seal numbers, and as much information as practicable.

Any employee noting such cars at any point must be governed by the above.

861. (T) Crews setting out Bad Order cars enroute must, in addition to making prescribed report, notify train dispatcher from first point of communication, giving location, car initials and number, contents, condition, and whether car can be coupled into and/or moved.

Dispatcher must inform all subsequent trains which will pass such location of the condition until car forces report car(s) safe to be coupled into and/or moved. *In T.C.S. territory* advice to trains

will be complied with by dispatcher tagging switches involved until car(s) released by car forces; dispatcher may, if conditions permit, remove tag(s) *temporarily* for switching or other purpose after advising crew of condition. *Outside T.C.S. territory* advice to trains will be accomplished by train order, message, or verbally.

863. (T) Agents must give prompt attention to correspondence, keep the books and accounts promptly and neatly written up in the manner prescribed by the accounting and other departments to which they relate, and file them in such manner as to be accessible to the traveling auditor or other authorized officer for examination.

They must see that tariffs are filed in the manner prescribed and that all notices to the public are posted as required.

Records must not be destroyed except as may be authorized by proper authority.

864. (T) Agents have supervision over Company property and station employees, are responsible for Company property and all property entrusted to the Company in the transaction of its business.

They must preserve order in and about the station, keep the buildings and grounds connected therewith neat, clean, safe, and in proper condition.

865. (T) Station employees must see that stations are supplied with the prescribed number of lamps, flags, torpedoes and fusees ready for use at all times.

866. (T) Station employees must make every effort to obtain cars for shippers at the time desired, but not promise to furnish them within any specified time unless so advised.

867. (T) Station employees must see that before cars are forwarded, the required cards are applied as indicated by the special instructions relating thereto and old cards removed, except home route and A.A.R. defect or repair cards.

868. (T) Station employees must see that the loading of lumber, timber and other freight on open cars is in conformity with "Loading Rules" of the Association of American Railroads, 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.

869. (T) Unless otherwise provided, station employees must see that cars are in fit condition to receive the class of freight to be loaded; that the doors and other openings are closed, securely fastened and sealed as soon as freight is loaded.

They must see that cars containing explosives, flammables, or other dangerous articles are in prescribed condition and loaded according to the Federal regulations governing such freight.

They must see that all freight loaded is stowed safely and properly and, when necessary, is fastened securely by braces, blocks, 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.

Freight requiring shelter must be placed in freight house or cars promptly. Doors of cars containing freight must be sealed or locked.

870. (T) Agents must see that consignees remove dunnage and debris for which they are responsible from cars and station grounds.

871. (T) Every effort must be made to avoid delay in the movement of cars, both loaded and empty, insuring that they are forwarded promptly in the proper trains.

873. (T) Station employees must examine the fastenings of cars and keep such record of their condition as may be necessary to answer all inquiries.

874. (T) Station employees must report to the proper officer and obtain disposition therefor when unloading of cars is delayed by refusal of consignees to accept freight, or from any other cause. Immediately upon arrival of cars containing Company material, they must notify the employee to whom consigned and if on hand over twenty-four hours, notify the Superintendent.

875. (T) When cars are left short of destination conductors must advise train dispatcher at first point of communication and make prescribed report, giving car initials and number, contents, destination, and why left. Refer to Rule 861.

876. (T) Station employees must see that freight houses and closed cars containing freight are locked, except when agent or other authorized person is in immediate charge thereof.

877. (T) Station employees must see that all cases of attempted robbery, theft of property belonging to the Company or in its charge, damage to property by fire or storm, personal injury and other extraordinary occurrences at or in the vicinity of stations, are reported promptly to the Superintendent in manner prescribed.

878. (T) Agents must familiarize themselves with the boundaries of the Company's property at stations, and not permit any unauthorized use of it.

They must familiarize themselves with standard track clearances and enforce their compliance as to the erection of structures or placing of obstructions.

Unless provided for by lease, they must not allow any commodities to be placed on grounds or right-of-way for the purpose of storage without written permission from the Superintendent, and then only after release on prescribed form has been executed by the owner.

880. (T) Operators must give preferred attention to train order service. They must assist in clerical or other station service when called upon and must assist in wire tests when necessary.

881. (T) Operators must not permit unauthorized persons to frequent their offices. Messages of a personal nature must be held strictly confidential and in no manner be made known to any person except the one addressed, or be made the subject of remark.

882. (T) Operators must advise the train dispatcher promptly of fogs and as to severity of all storms and extent of damage. When there are indications of heavy winds, cloudbursts, or abnormal weather conditions, they must see at once that cars at their stations are so secured that they will not move.

883. (T) Operators must never inform the dispatcher that the train inquired for has not passed unless positive that it has not, or accept an order for a train of which there may be the least doubt

as to whether it has passed, unless instructed to do so by dispatcher who has knowledge that the train has not passed.

884. (T) All messages filed must show filing time and all proper sending notations. Messages telephoned must show date, time, to whom and by whom telephoned.

885. (T) Yardmasters have supervision over the yards, and all persons employed therein must obey their instructions.

886. (T) It is the responsibility of the yardmaster to take immediate and decisive action if he has knowledge of any employee under his jurisdiction being in a condition that such employee cannot render safe or satisfactory service, or is a hazard to other employees working in the yard. He must immediately notify proper authority and not allow any movements to be made that could cause injury to employees or damage to property.

887. (T) Yardmasters are responsible for conditions within yards. Trains and engines will be under the control of the yardmasters, and all employees in train, engine or yard service will be subject to their direction as to movements within yards.

Road crews of trains entering yards will be responsible for their respective trains and engines until yarded or until the yardmasters or their representatives take charge.

888. (T) Yardmasters are responsible for the proper distribution and placing of cars in the yards and for prompt movement of cars in and from the yards, in accordance with existing instructions.

889. (T) Yardmasters must report all violations of rules known to them and all accidents, damaged cars, engines, lading or property.

890. (T) Unless otherwise provided, enginemen must know before starting each trip or day's work that their engine is furnished with sufficient fuel, water, sand and other supplies and equipment.

891. (T) Engineers must anticipate as far as possible the necessity of sending out a flagman to protect rear of train (radio communication and whistle signal rule 14.3.) when conditions make it necessary that the rear of the train be protected.

892. (T) When a train has more than one engine, or the engine is in charge of a pilot, the requirements of the rules apply to each engineman or the engineman and pilot each, as the case may be. Except in emergencies, the use of the engine bell or whistle and air brake will be limited to the leading engine.

893. (T) Engineers must be diligent in all matters pertaining to safety and while moving must keep a close lookout, carefully note all signals and watch for obstructions on and defects in track and roadway.

All other employees on engine must assist in keeping a close lookout and must instantly give notice to the engineer of any signals and any indications of obstruction or danger.

894. (T) At station and other stops of sufficient duration, when practicable, engineer of locomotives must make an inspection thereof from the ground, giving particular attention to the trucks and brake rigging.

895. (TM) Where locomotives are being serviced, they must not be moved until hose connections are removed and it is ascertained that employees servicing are in a safe location.

896. (T) Enginemen must make all reports required of them by the transportation and mechanical departments, respectively, in due time and in the form and manner prescribed.

897. (T) In case of death on a train, the body should be taken to nearest station and proper public officers and Superintendent notified immediately.

In case of death on Company property from accident or other cause, after exact position of body and surrounding conditions have been carefully noted, body should be moved to give clear passage for trains and left in charge of an employee or other responsible person, and proper public officer and Superintendent notified immediately.

898. (T) In cases where persons or vehicles are struck and injured or damaged by trains or engines, it is permissible for crew members on request of law enforcement officer, to furnish their names, occupations and addresses; train identification; approximate speed of train; confirmation that the whistle, bell and headlight or headlights were operating; and direction of the vehicle. Signed statements are not to be given. Should police officer desire any additional information or tests of signals, he should be courteously referred to Claims Department representative.

USE AND OPERATION OF TRACK CARS AND OTHER ROADWAY EQUIPMENT

930. (R) Before action is taken to operate track cars or other roadway equipment foul of any track all applicable rules will be observed.

931. (R) No one except an employee who has qualified by passing prescribed examinations, has a standard watch, and has familiarized himself with the rules and instructions contained herein shall be permitted to operate a track car or any roadway equipment, not readily removable from main track or siding, on such trackage except, when necessary, other employees may operate such equipment under direct supervision of a properly qualified employee.

932.(R) Within T.C.S. limits permission to occupy main track or siding at any location with roadway equipment must be obtained from train dispatcher under provisions of Rules 10-I, 547., 547-A., 547-D., 547-E., or 935.

933. (R) Unless operating under Rule 932, employees in charge of roadway equipment must, before occupying main track or siding, obtain line-up of trains. Such information does not relieve employees from observing the rules for protection of roadway equipment.

934. (R) Unless operating under Rule 932, roadway equipment must not be left on main track or siding unprotected. Any such equipment that cannot be readily removed from track must be protected by flag in both directions and must not be used in storm, fog, or at night, unless authorized.

935. (TR) 1. Radio equipped Hi Rail Motor Patrol (HMP) track cars are authorized to run ahead of

and in same block as a train for purpose of track patrol escort in strict accordance with provisions of this rule.

2. All rules pertaining to track cars apply to HMP's and all rules pertaining to trains are in effect except when train is being escorted under provisions of this rule, the following rules are suspended: 547, 547-A, and 938.

3. HMP's are identified by initials A, B and C. Radio code identifications are: "Bronco *Alpha* East (*or* West)", "Bronco *Bravo* West (*or* East)", and "Bronco *Charlie* East (*or* West)", "Bronco David East (or West)", "Bronco Echo East (or West)", and "Bronco Zebra East (or West)"

When more than six vehicles are used in this service, additional initials and their appropriate radio code identification will be used.

4. When train is to be escorted through a territory, HMP operator will secure authorization of dispatcher to operate under Rule 935 and dispatcher will insure train and HMP operator have complete understanding of escort limits. When understanding is reached, HMP operator may occupy main track only after radio contact has been established with train to be escorted, thus:

HMP —"Bronco Bravo West at East Paxton to Extra 3012 West."

Train —"Extra 3012 West at Keddie."

HMP —"Bronco Bravo West will escort 3012 West Milepost two-seven-seven to Milepost two-three-five. Extra 3012 West will not pass MP two-seven-seven until I report at two-seven-five.

Train —"3012 West will not pass MP two-seven-seven until Bronco Bravo West reports at two-seven-five."

If such contact is not made before train is at least two miles away from position of HMP, train

must not enter escort limits until communication is established; thereafter, be governed by paragraph 5 of this rule.

5. After communication has been established according to this rule, HMP may occupy main track and precede train through the limits specified HMP and train will proceed at maximum safe safe speed, according to conditions, not exceeding track speed, running on two-mile headways. Train will not enter the two-miles occupied by HMP until HMP has reported at second milepost in advance. If necessary to stop and radio contact has not been reestablished within 2 minutes, train will proceed at yard speed not exceeding 10 MPH and HMP must provide flag protection until communication is again established. Milepost passings will be reported as follows:

HMP— "Bronco Bravo West two-seven-five."

Train— "Roger Bronco Bravo West. 3012 West at two-seven-seven pole ten."

HMP— "Bronco Bravo West two-seven-four."

Train— "Roger Bronco Bravo West. 3012 West at two-seven-six."

6. If radio contact cannot be reestablished, HMP and train will stop at first point of communication and notify dispatcher. After instructing train and HMP operator that they are *not longer operating under Rule 935.* dispatcher may furnish clocktime per Rule 547. Rule 547-A must *not* be used.

7. In T.C.S. territory, HMP's will approach absolute signals at stations prepared to stop or take siding and will respect such signals. HMP's taking siding will report to dispatcher when in the clear. Dispatchers will place absolute signals and

dual-control switches in governing position at stations sufficiently in advance to avoid unnecessary delay to HMP and/or escorted train.

8. When two escorted trains meet, HMP escorting train taking siding will take siding ahead of such train and remain there until HMP and escorted train in opposite direction have passed and route and signal have been lined for movement of train in siding back to main track. Neither train will leave the station until HMP escorting it has proceeded ahead to and reported at second Milepost in advance. Train will then proceed as prescribed by this rule.

9. When HMP reaches end of territory through which train is to be escorted, HMP Operator will clear out with train *and dispatcher*, thus:

HMP— "Bronco Bravo West has cleared main track at Poe and Extra 3012 West is released."

Train— "Roger Bronco Bravo West. You have cleared the main track at Poe and Extra 3012 West is released."

Dispatcher— "Roger Bronco Bravo West. You have cleared the main track at Poe and Extra 3012 West is released."

HMP operator may then obtain authority from dispatcher for any further movement.

936. (R) In signaled territory, roadway equipment when designated by proper authority (non-insulated equipment and any machine or power tool not readily removable from foul of track), will require use of shunt cord in addition to any other protection provided by the rules. Refer to Rule 547.

937. (R) Each track car should have the following supply of flagging equipment: two red flags, twelve fusees, and not less than twenty-four torpedoes, carried in separate compartments provided for that purpose and kept in readiness for immediate use. Track car operated by an employee alone will also be supplied with shunt cord and two red lights.

938. (R) The speed of track cars must not exceed that at which they can be stopped within the limit of safety and must not at any time exceed track speed or the following:

1. Hi-Rail Cars
   a. Executive type ..... Track Speed
   b. Passenger type
      Forward ..... 50 MPH
      Backward ..... 25 MPH
   c. Truck type
      Forward ..... 40 MPH
      Backward ..... 20 MPH
2. Light inspection cars (2-Man type)
      Forward ..... 30 MPH
      Backward ..... 15 MPH
3. Gang cars (4-Man type) without trailers or Push cars
      Forward ..... 20 MPH
      On curves ..... 10 MPH
      Backward ..... 10 MPH

4. Gang cars (4-Man type) with trailers or Push cars

Forward ..... 15 MPH

On curves ..... 10 MPH

Backward ..... Refer to Rule 954

5. All track cars (except executive type)

Through tunnels ..... 10 MPH

Through crossovers and turnouts, over highway and railroad crossings, and when passing trains on adjacent tracks ..... 5 MPH

When being met or passed by a train or engine on adjacent track ..... STOP

Through self-guarding frogs ... 3 MPH

When diverging over spring frogs .... STOP, then proceed at 1 MPH

When passing over a dual-control switch ..... STOP, then proceed.

When passing over other switches (except Gang Cars with Trailers) . 20 MPH

Speed of cars must be such that at all times the car can be stopped in less than one-half the distance track is seen to be clear.

939. (R) Care and safety must be exercised in the operation of track cars to avoid collisions with trains or other cars. Unless operating under Rules 547 or 935 track car operators must expect trains at any time without notice and protect when necessary using prescribed signals.

940. (R) Unless operating under Rules 547 or 935 track cars must be operated with *extreme* care, walking if necessary, around curves, through tunnels where view is obstructed, during storms

or fogs, where side clearance is not sufficient to take the car off, at night, or under any other conditions making it unusually difficult to handle the car; if conditions require, proceed only under flag protection.

942. (R) Track cars must not be run or pushed through spring switches. If cars cannot be lifted over switch, switch must be lined for movement.

946. (R) When gang cars are running on main track or siding, at least one employee must face the rear and keep sharp lookout for following trains.

947. (R) Unless otherwise provided, track cars must stop before passing over railroad crossings at grade and approach all highway grade crossings prepared to stop, giving highway traffic preference. If necessary, stop must be made, traffic flagged, and car pushed over crossing.

949. (R) When approaching workmen or others on or near the track, speed must be reduced and if necessary movement stopped.

950. (R) Unless the movement is protected track cars must not pass a passenger train on the side from which passengers are being received or discharged.

951. (R) Except in emergency, roadway equipment must not be attached to any engine or train. When practicable, such equipment, other than rubber-tired hi-rail track cars with automatic shift, must not be stopped within 500 feet of a standing train, and must not be run closer than 1000 feet behind a moving engine or train, nor closer than 500 feet behind other roadway equipment. Operator on trailing equipment must keep a sharp lookout for signals from equipment ahead.

952. (R) Each employee in a regular gang should be assigned a place on the car where he will ride. Horseplay or changing positions while moving must not be permitted. Employees must not ride on push cars. When there is insufficient seating space on track cars one or more trailers shall be provided with suitable seats and hand holds. All employees shall be so placed that they can leave the car or cars to the sides quickly in case of emergency.

953. (R) Immediately after starting, brakes must be tested to insure that they are in proper working condition. When employees are transported on trailers, each trailer must be equipped with brakes, and one employee must be assigned to operate them.

954. (R) Track cars must not be run backward or with trailer or push car ahead except in an emergency or in very short moves, such as in picking up and unloading tools and materials, or to reach a point where car may be turned, or when car is used with trailer or push car to haul concrete or other materials onto bridges, trestles, or in tunnels. When necessary to run track car backward special precaution must be taken to afford protection for tools or equipment on car to prevent same from falling off and to avoid injury to persons or derailment of cars. Empty car may be pushed on return trip to mixing plant or storage pile at a speed not to exceed 5 MPH provided approved coupler is used and no person rides on car being pushed.

955. (R) Trailers and other cars being towed must be coupled with an approved coupler. Under no circumstances must rope, wire, chain, or other makeshift coupler be used.

956. (R) When necessary to operate at night, during fog, storm, snow, or through tunnels, head and tail lights must be turned on and remain lighted until track car is removed from track.

957. (R) A track car should be used only for transporting employees and tools and must not be overloaded. Material such as ties, rail, frogs, and other heavy or bulky materials should be carried on push cars. Push cars and other roadway equipment towed must be handled behind any trailers on which employees are being transported.

958. (R) There must be a thorough understanding as to the part each employee in the gang shall take in removing car from track. When required to remove car quickly employee in charge must immediately indicate to which side of track it will be taken off.

At least once weekly the gang shall be drilled in the removal of the car so that each employee will always know what he is expected to do.

959. (R) Track cars must be used only for railroad business. Only employees in the discharge of their duties shall be permitted to use or ride upon cars except with proper authority.

960. (R) Privately owned track cars will not be allowed on the track except with proper authority. The operators of privately owned track cars must have the qualifications prescribed in Rule 931, and must comply with all rules and instructions.

961. (R) When removed from track, roadway equipment must be placed so that it will not foul the track. It must not be left standing at public and private crossings in such position that it will in any manner obstruct or interfere with the traveled way.

At night and other times when not in use track cars must be housed or have wheels chained and locked. When left adjacent to track, roadway equipment should be chained and locked together or to some stationary object.

962. (R) Unless otherwise provided, only insulated track cars may be used within signaled territory.

963. (R) Track cars must be thoroughly inspected as frequently as necessary by those responsible to insure that all mechanical and safety devices function as intended. They must be kept clean and in good order. Rail sweeps will be in sweep position when car is in motion. Cars considered unsafe to operate must be withdrawn from service immediately and report made to proper authority. Cars requiring repairs, although not unsafe to operate, must be similarly reported.

964. (R) Materials, tools, and supplies must be placed on track cars and push cars so that they will not fall off and the load should be distributed uniformly over the car. Lining bars or other bars must be placed in tool tray. Tools must be laid flat and pointed tools or poles placed with points to rear. Any tool, pole, or other appliance carried on car that cannot be safely placed within the confines of raised ends of tool tray must be securely fastened or tied on car to prevent shifting or falling off while car is in motion.

965. (R) Spark must be fully retarded before starting free-running motors. When cranking a free-running motor, it must be done by giving crank a quarter turn, lifting on crank with fingers and thumb on same side of handle and keeping body as far away as possible. Spinning or moving

crank by downward pressure when starting motor is not permitted.

966. (R) If track car is pushed to start the engine it must be pushed from the rear. Operator and all riders should be mounted on the car except when assigned to push it. When engine starts, operator will stop the car to permit pushers to mount the car in safety. Men operating cars alone must exercise particular caution in starting motor by hand cranking and when mounting car from the rear after engine starts. Employees must not get on or off a moving track car except in an emergency.

967. (R) Matches, torches, or other open lights must not be used in the inspection of roadway equipment. The engine of a track car must not be allowed to run while gasoline tank is being filled. Smoking is prohibited when the gasoline tank is being filled or when gang cars are moving.

Do not strain gasoline through a chamois skin as there is danger of ignition of the gasoline by a spark caused by static electricity.

When authorized to ship roadway equipment on a train, all gasoline tanks and carburetors must be drained; radiators, if not supplied with anti-freeze, must be drained.

Starting or allowing engines to run while within tool or car house is prohibited.

ADDITIONAL MECHANICAL RULES

1000. (M) Foremen shall report to and receive instructions from proper authority. They must know that all employees under their charge perform their duties properly and in a safe and economical

manner, instructing their men in safe working conditions. Unless otherwise directed they will remain with their men while on duty and personally direct the work. Foremen are responsible for seeing all rules, special instructions, and standards related to their work are observed.

1030. (M) Prompt notice must be sent to the train dispatcher by car forces of the completion of repairs to cars disabled enroute.

AIR BRAKE RULES

1101. (TM) Supervisors are jointly responsible with car inspectors, enginemen and trainmen for condition of air brake and air signal equipment on locomotives and cars to the extent that it is possible to detect defective equipment by required air test.

1102. (TM) *Standard Air Pressure for Main Reservoirs:* Locomotives should have the low pressure governor adjusted to 130 pounds and the high pressure governor adjusted to 140 pounds; reducing valve for independent air brake 35-40 pounds except when other pressures are stencilled on control stands; pressures shown on control stand will govern; safety valves on control and distributing valves will be set at 68 pounds.

Standard Air Pressure for Brake Pipe: Freight and mixed trains 90 pounds; passenger trains 110 pounds; minimum differential brake pipe and main reservoir with brake valve in running position 15 pounds.

Service Reduction: A decrease in brake pipe pressure of from 5 to 25 pounds.

Full Service Reduction: A service reduction sufficient in amount to cause equalization of

pressure in brake cylinder with pressure in the reservoir from which compressed air is supplied to brake cylinder (with 90 pound brake pipe pressure, Full Service is a 26 pound brake pipe reduction).

Emergency Reduction: A depletion of brake pipe pressure at a rate sufficiently rapid to move the operating valve to emergency position.

1103. (TM) Locomotive brake cylinder pressure must be so controlled as to prevent overheating of wheels, and to avoid sliding wheels and harsh slack action.

1104. (TM) Condensation must be blown from the pipe from which air is taken before connecting yard line or motive power to train. After starting trip, drain condensation from all main reservoirs and air filters frequently to insure proper operation of the air brake equipment and air operated auxiliary devices. During the winter season precautions must be taken to prevent brake pipe and hose connections from freezing.

At points east of Oroville enginemen must know that brake pipe on locomotive is free of moisture and ice before leaving departure track during freezing weather.

1104-A. (TM) After a block of cars with charged train line is coupled to the rear end of a train, a 20 pound brake pipe reduction must be made on such cars and angle cocks closed on engine handling and rear car before air is coupled between such cars and train.

1105. (T) Enginemen when taking charge of locomotive must know that air brakes are operative with all brake cylinders cut in, air signal apparatus in good working condition when appli-

cable, and air controlling devices are set at standard pressure.

1106. (T) Independent brake valve handle must not be fastened in release position or depressed in quick release position by any method other than the hand.

1107. (TM) When locomotive is standing either detached or coupled to a train, the independent brake must be applied in full application position.

Locomotive must not be left unattended while on duty except in case of necessity or when left in the care of a responsible employee.

When a locomotive must be left unattended it must be conditioned as follows:

1. Handbrake applied on lead unit.
2. Wheels blocked or chained.
3. Air brake controls positioned to "Lead" (If a multiple unit consist, on one unit.)
4. Independent Brake: Full application.
5. Automatic brake: 26L: Release.
   6BL, 14 EL, 24 RL: Running.
6. Reverse lever: Centered and removed.
7. Throttle: "Idle"
8. Selector or transition lever: "Off"
9. Generator field switch: Off (Down)—On both control stands if dual controls.
10. Isolation switch: "Start"

If conditions or instructions require diesel engine to be shut down, also:

11. If freezing conditions exist or are imminent, drain engine cooling water.
12. Place all switches at the control stand(s) in the off (down) position.
13. Place all switches and circuit breakers at the engine control panel and circuit breaker panel in the off (down) position.

NOTE: On turbo-charged EMD units the turbo lube oil pump circuit breaker and main bat-

tery switch must remain closed or on for approximately 30 minutes after load operation.

14. Open main battery switch.

1108. (T) The use of the Feed Valve as a means of braking of trains is prohibited.

1109. (TM) Dead-man pedal and alertors must be cut in on locomotives so equipped while train or engine is in motion.

Diaphragm foot pedal must not be depressed by any method other than the foot.

1110. (TM) *Train Make-up.* The conductor and enginemen should be informed of the train make-up before departing from the terminal. It is important that the enginemen know the length of the train, the approximate location of the loads and empties, or dead locomotivess in the train.

Cars having passenger brake equipment may be operated in freight trains of 30 CARS OR LESS without changing from graduated to direct release and without consideration for their position in train.

This means that if train length does not exceed 30 cars, the engineer must so handle brake valve that UC equipped cars will not graduate when brake pipe is being recharged, but will release in unison with freight equipment in the train.

Car inspectors will advise engineer the number of graduated release cars in train and their location.

When passenger cars are handled in freight trains of MORE THAN 30 CARS, braking equipment must be changed to direct release.

1111. (T) Enginemen and trainmen must observe air gauges frequently. When conditions such as low brake pipe pressure, speed, grade, or conditions

incidental to freezing weather indicate hazards to safe operation, precautions must be taken by use of conductor's valve or setting hand brakes without awaiting signals from the enginemen.

1112. (TM) When movements are being made in yards and elsewhere with derricks or occupied outfit cars, all air brakes must be cut in and automatic air brakes used in reducing speed or stopping and when making spots.

1113. (TM) Extra care is necessary when opening angle cocks at rear of engines or on car or cars attached to engines to avoid reducing the brake pipe pressure too quickly and causing emergency action of air braking equipment. The same care must be used when detaching locomotive or cars from train. When emergency air application is made, protective devices such as PC switch operate and locomotive is inoperative until air can be recovered; some locomotives shut down quickly in this circumstance and cause considerable delay in restarting and recovering air in order to proceed. A reduction of 10 pounds per second in brake pipe pressure will cause an undesired emergency action.

1114. (TP) Whenever the locomotive is to be detached or a stop is made on a grade under circumstances in which the efficiency of the air brake system may be impaired by allowing the train to stand with the brakes applied, a sufficient number of hand brakes must be set to hold the train before the air brakes are released or the locomotive cut off. When ready to start, hand brakes must not be released until it is known that the air brake system is fully recharged.

1115. (TM) It must be known that all hand brakes on locomotives are released before starting.

When cars are picked up the hand brakes must be released before moving cars to prevent wheels being slid flat.

1116. (TM) Each train must have the air brakes on all cars in effective operating condition except in emergencies created by air brakes becoming inoperative between terminals or at terminals where facilities for making repairs are not available, but at no time shall the number of operative air brakes be less than permitted by federal requirements. When piston travel is in excess of 10 inches the air brakes cannot be considered in effective operating condition.

When air brakes on a car or cars become defective and have to be cut out between terminals, it is permissible to haul such car or cars in train to the next terminal, provided that 85% of the cars in the train are subject to air brake control from the locomotive.

When necessary to transport a car or cars with defective air brakes from a terminal having no facilities for repair to a terminal with such facilities, all cars so defective shall be associated together at the rear of the train; provided, however, that under those circumstances 85% of the remaining cars in the train must be subject to air brake control from the locomotive.

Between terminals there must not be more than two consecutive brakes cut out at any place in the train.

AIR BRAKE TESTS

1116-A. (TM) When necessary, engineer should be advised which test applicable, according to conditions, under Rules 1117 and 1118, is to be made.

1117. (TM) *Initial Terminal Road Train Air Brake Tests.* All trains must be given inspection and test as specified by this rule at points: (1)

Where a train is originally made up (initial terminal); (2) Where train consist is changed other than by adding or removing a solid block of cars and train brake system remains charged; (3) Where train is received in interchange; (4) At designated intermediate points within a limit of not to exceed 500 miles.

1. Train air brake system must be charged to required air pressure, angle cocks and cutout cocks must be properly positioned, air hose must be properly coupled and must be in condition for service. An examination must be made for leaks and necessary repairs made to reduce leakage to a minimum. Retaining valves and retaining valve pipes must be inspected and known to be in condition for service.

2. After the air brake system on a freight train is charged to within 15 pounds of the setting of the feed valve on the locomotive, as indicated by an accurate gauge at rear end of train, and upon receiving the signal to apply brakes for test, a 15 pound brake pipe service reduction must be made in automatic brake operation, the brake valve lapped, and the number of pounds of brake pipe leakage per minute noted as indicated by brake pipe gauge, after which brake pipe reduction must be increased to full service. Inspection of the train brakes must be made to determine that angle cocks are properly positioned, that the brakes are applied on each car, that piston travel is correct, that brake rigging does not bind or foul, and that all parts of the brake equipment are properly secured. When this inspection has been completed the release signal must be given and brakes released and each brake inspected to see that all have released.

3. When the locomotive used to haul the train is provided with means for maintaining brake pipe pressure at a constant level during service application of the train brakes, this feature must be cut out during train air brake tests.

4. Brake pipe leakage must not exceed 5 pounds per minute.

5. *Initial terminal piston travel:*

a. Travel of body mounted brake cylinders which is less than 7 inches or more than 9 inches must be adjusted to nominally 7 inches.

b. Minimum brake cylinder piston travel of truck mounted brake cylinders must be sufficient to provide proper brake shoe clearance when brakes are released. Maximum piston travel must not exceed 6 inches.

c. Piston travel of brake cylinders on freight cars equipped with other than standard single capacity brake must be adjusted as indicated on badge plate or stenciling on car located in a conspicuous place near brake cylinder.

6. During standing test, brakes must not be applied or released until proper signal is given.

a. Radio will be used whenever possible for carmen to advise engineers and/or engineers to advise carmen when ready to initiate air test.

b. In addition to radio communication, engineer will use the following whistle signals:

(1) One short to indicate acknowledgment of carman's signal to initiate air test.

(2) One long to indicate application of brakes for test in response to carman's signal.

(3) Two longs to indicate release of brakes

for completion of test in response to carman's signal.

7. When test of air brakes has been completed the engineman and conductor must be advised that train is in proper condition to proceed.

1118. (TM) *Road Train and Intermediate Terminal Train Air Brake Tests.* At designated points and under conditions specified in this rule, additional inspection will be made to determine that : (1) Brake pipe leakage does not exceed 5 pounds per minute; (2) Brakes apply on each car from a 20 pound service brake pipe reduction; (3) Brake rigging is properly secured and does not bind or foul.

1. Before motive power is detached or angle cocks are closed on a freight train, brakes must be applied with not less than a 20 pound brake pipe reduction. Angle cocks must not be closed until engineman has sounded one blast of locomotive whistle to indicate brake valve exhaust has ceased and reduction is completed. After recoupling and angle cocks are opened, it must be known that brake pipe air pressure is being properly restored as indicated by the caboose gauge and that brakes on rear car are released. In the absence of a caboose gauge, inspector or trainman must determine if brakes on rear car of train properly apply and release.

2. At a point other than initial terminal where locomotive or caboose is changed, or where one or more consecutive cars are cut off from rear end or head end of train with consist otherwise remaining intact, after train brake system is charged to within 15 pounds of feed valve setting on locomotive as indicated at rear of freight train,

a 20 pound brake pipe reduction must be made and it must be determined that brakes on rear car apply and release properly.

3. At a point other than a terminal where one or more cars are added to a train, and after the train brake system is charged to not less than 60 pounds as indicated by a gauge at rear of freight train, tests of air brakes must be made to determine that brake pipe leakage does not exceed 5 pounds per minute as indicated by the brake pipe gauge after a 15 pound brake pipe reduction. After the leakage test is completed, brake pipe reduction must be increased to full service, and it must be known that the brakes on each of these cars and on the rear car of train apply and release. Cars added to train which have not been inspected in accordance with Rule 1117 must be so inspected and tested at next terminal where facilities are available for such attention.

4. At a terminal where a solid block of cars which has been previously charged and tested as prescribed by Rule 1117 is added to a train, test must be made to determine that brakes on the rear car of train apply and release.

5. Trains making air tests at locations or under conditions where it is impracticable to pass signals by hand or radio to complete air test as prescribed by this rule will make air test as follows: When the brake system is charged to within 15 pounds of feed valve setting, engineer will make a reduction of 10 pounds and as soon as the brake valve exhaust closes, signal the trainmen by one long whistle signal (Rule 14.12). The angle cock at the rear of the train must then be opened gradually and with care to avoid emergency action, allowing only enough air to

escape to cause the brake pipe gauge hand on the locomotive to respond. When the engineer notes the brake pipe pressure falling, as indicated by the gauge, he must signal the trainmen by two long whistle signals (Rule 14.2). The angle cock must then be closed. When the brake pipe pressure stops falling the engineer will then release the brakes. Cars tested under provisions this paragraph or which have not been inspected in accordance with Rule 1117, must be so inspected and tested at next terminal where facilities are available for such attention.

6. *Transfer train and yard train movements.*

a. Movements not exceeding 20 miles must have the air brake hose coupled between all cars and, after the brake system is charged to not less than 60 pounds, a 15 pound service brake pipe reduction must be made to determine that the brakes are applied on each car before releasing and proceeding.

b. Movements exceeding 20 miles must have brake inspection in accordance with Rule 1117.

7. *Before proceeding under any subparagraph this rule it must be known that the brake pipe pressure at the rear of train is being restored.*

1119. (TM) *Inbound Brake Equipment Inspection.* At points where inspectors are employed to make a general inspection of trains upon arrival at terminals, visual inspection must be made of retaining valves and retaining valve pipes, release valves and rods, brake rigging, safety supports, hand brakes, hose and position of angle cocks, and necessary repairs must be made or cars must be marked for repair tracks if yard repairs cannot be promptly made.

1. Freight trains arriving at terminals where facilities are available and at which special instructions provide for immediate brake inspection and repairs, shall be left with air brakes applied by a service brake pipe reduction of 20 pounds so that inspectors can obtain a proper check of the piston travel. Inspection of the brakes and needed repairs should be made as soon thereafter as practicable.

2. When train has stopped and after 20 pound service brake pipe reduction has been made, trainman will close angle cock on both the engine and the car coupled to the engine before uncoupling engine from train. Trainmen will not close any angle cock or cut the engine off until the 20 pound service reduction has been made and engineman has sounded one blast of locomotive whistle to indicate brake valve exhaust has ceased and reduction is completed.

DOUBLE HEADING AND HELPER SERVICE

1120. (T) When more than one locomotive is attached to a train, the engineman of the leading locomotive shall operate the brakes. On all other motive power units in the train the brake pipe cutout cock to the brake valve must be closed, the maximum main reservoir pressure maintained, and brake valve handles kept in the prescribed position. In case it becomes necessary for the leading locomotive to give up control of the train short of the destination of the train, a test of

the brakes must be made to see that the brakes are operative from the automatic brake valve of the locomotive taking control of the train.

1121. (T) Before an additional locomotive is coupled to the head end of a train, the incoming engineer will make a service brake application of not less than 15 pounds on passenger trains, or 20 pounds on freight trains, close double heading cock, and move automatic brake valve to running position. After the additional locomotive is coupled to the train, the lead engineer must release the brakes. This procedure must be followed in reverse order when the lead locomotive is detached. In each instance trainmen must note that the rear brakes have applied and released.

1122. (T) Engineers on helpers must, after pulling rear portion of train up and coupling to forward portion, and after making coupler test, make a full service brake pipe reduction before angle cocks are opened. Then close double heading cock and move brake valve to running position. The train brakes will be released and recharged from the lead locomotive and air test made.

When helpers are being cut in and the rear portion of train is not to be pulled ahead, after coupling helper locomotive and coupling test is made, before angle cock is opened, engineer will make a full service brake pipe reduction. Then close double heading cock, and move brake valve to running position.

1123. (T) While release is being made trainmen and helper engineers will observe caboose and locomotive brake pipe gauges, noting whether pressure is being restored and rear brakes are released before signal is given to proceed.

1124. (T) The engineer on the second engine should always allow train to be started by engineer of leading engine, if possible, before he begins to apply power. If the train cannot be started, the lead engineer will take the slack.

When stop is made on ascending grade with helper engine cut in train, helper engineer will apply engine brakes as train is stopping and then immediately close throttle. Engine brakes will be held applied while train is stopped.

While standing, helper engineer must keep a close watch of brake pipe air gauge. When ready to start on ascending grade lead engineer will make 25 pound service reduction with automatic brake valve (with selector cock in main reservoir charging position on 24-RL equipment); engineer will then place automatic brake valve in "Release position" for 25 seconds (on 24-RL equipment), then return brake valve handle to "Running position." Lead engineer and helper engineer will carefully note time automatic brake valve is placed in "Release position" (on 24-RL equipment) *or* "Running Position" (on 26-L equipment) and 3 minutes from time brake pipe pressure starts rising, helper engineer will move throttle to No. 3 position. After power has built up sufficiently to prevent slack run-out, engine brakes must then be released. Lead engineer will wait 3 minutes and 15 seconds after starting release of brakes, then carefully start to move train ahead.

When stopped on grades and work is necessary on road engine or train that might disturb brake pipe pressure, lead engineer must apply brakes in emergency. Thereafter helper engineer will not attempt to start until brake pipe pressure has been restored and brakes reapplied in service.

Under no circumstances will helper engineer take slack on rear portion of train until conductor has first had a verbal understanding with other engineers. When double heading on descending grades or with helper locomotive coupled in rear of train, enginemen must control locomotive brake cylinder pressure and must permit locomotive brakes to apply in stopping.

1124-A. (T) Before a helper engine is uncoupled from a train, angle cocks must be closed and the helper engine automatic brake valve must be cut in.

1125. (T) *Stop With Helpers at Rear of Train.* When a stop is made on level or ascending grade, lead engineer must gradually move throttle to idle position in ample time to permit the slack to close in gently before starting a service brake application to stop. The engineer of each helper locomotive at the rear of train must continue working power, keeping locomotive brakes released, and gradually closing throttle until stalled.

When a stop is made on descending grade or just over a summit of a grade, helper engineer must work only enough power to insure slack staying in until train stops.

FREIGHT TRAIN HANDLING

1130. (T) When time and conditions permit on heavy or long sustained grades where necessary to use braking effort to reduce or control train speed, the dynamic brake must be considered the

primary braking method for grades, curves, slow track, or other restrictions, and must be the first to be applied, while air brakes are secondary.

When preparing to use the dynamic brake, the throttle will be placed in IDLE position and selector lever in OFF position. Leave in OFF for at least ten seconds before moving selector to "B" position and leave in "B" position for five seconds before moving into braking zone or advancing the locomotive throttle to increase brake effort.

1131. (T) When speed cannot be controlled by dynamic brake alone, train air brakes must be used in conjunction with dynamic brake to provide the additional braking force required. The air brake application must be made with a minimum reduction and followed by additional reductions necessary to control train speed, placing or leaving the automatic brake valve in maintaining position after each reduction is made. Total reduction must be at least 10 pounds to insure proper release. Under no circumstances must locomotive air brake be allowed to apply when dynamic brake is in use, except when making stop, and brake cylinder gauge on locomotive must frequently be observed to insure that locomotive air brake is kept released. If the air brakes are to be released while train is moving, leave dynamic brake applied until sufficient time has been allowed for train brakes to release. After train brakes release, continue dynamic brake use as required.

1132. (T) When releasing dynamic brake, either move selector lever slowly to "B" *or* gradually close throttle to IDLE, stopping in each position

at least five seconds; then move selector lever to either No. 1, POWER, or OFF position, according to type of controller.

1133. (T) Load indicating meter and brake warning light must be closely observed during time dynamic brake is in use to avoid excessive brake force, which would result in damage to traction motors and grids. Under no circumstances may the brake warning light be covered with paper cups, cloth, or any other material.

1134. (T) Train handling involves many factors that command attention, obedience to the rules, and the exercise of good judgment. To handle trains smoothly requires know-how of controlling slack action.

This can be accomplished by proper use of power, dynamic brakes, train and locomotive brakes, and sand.

The majority of break-in twos occur at slow speed, caused by a harsh run-in or run-out, or by having the slack stretched too tightly, subjecting the draft rigging to too great a stress.

In the event of rough coupling or harsh slack action incidental to stopping trains or cars, inspection of the locomotive, cars, and track must be made. It must be determined whether any equipment has been damaged or rails displaced as a result of jack-knifing action between the locomotive units or the cars in the portion of the train liable to damage. Inspection must be made on each side of the locomotive and cars and it must be known that the equipment and track are in safe condition before proceeding.

1135. (T) In making a service stop, make an

initial reduction of 6 pounds. After brake pipe exhaust closes and slack is adjusted, follow with further reductions as needed. Total single reduction should not exceed 15 pounds before reaching point where final reduction is started and locomotive brakes will also be applied, using sanders except where their use is restricted. If working power at time of initial reduction, the locomotive brake must be kept released and throttle reduced as speed reduces and will be in IDLE position not less than 100 feet from stop. If stop is to be made with slack bunched, the locomotive brake must be applied with initial or following reduction.

When using dynamic brake to control speed of train when stop is to be made, locomotive brake must be kept from applying while train brakes are first being applied; after initial brake pipe reduction has become effective dynamic brake must be placed in OFF position and locomotive brakes allowed to apply on following reductions. With final reduction have locomotive brakes set heavily as train comes to a stop, using sanders except when their use is restricted.

It is important that the engineer exercise good judgment in making the final service reduction at the right time, whether the slack is *bunched* or *stretched*, having brake pipe air exhausting and locomotive brake set heavily as the train comes to a stop. The objective is to apply the brakes heavier on the head end of train, and at a time when the reduction will not have a chance to reach the rear before the train has stopped.

Where grade conditions permit, power stops will *not* be made at sidings while meeting trains.

1136. (T) *Making Stop in Back-Up Movement.* When making a back-up movement allow locomotive to drift and ease slack out gradually with independent brake before applying automatic brake. Make stop with light reductions. Where conditions permit stop may be made with locomotive brakes only.

1137. (T) Timetable instructions will govern the use of retaining valves.

1138. (T) *Heavy Grade Braking Using Retaining Valves.* When speed cannot be controlled by dynamic brake and/or retaining valves alone, the one-application method must be employed while descending grades when using retaining valves. The brake system must be charged to standard pressure before starting down the grade. After starting down grade air brakes must be applied in sufficient time to insure that speed of train can be controlled before maximum speed is attained. After this has been accomplished, brake pipe pressure on the gauge must be observed and the brakes released. The brake valve handle must be left in release position until the brake pipe pressure is restored.

Just before the train begins to gain speed, one reduction must be made, bringing brake pipe pressure to where it was immediately before releasing. After brake valve exhaust closes and train is about to slow down again, release must be made as before.

This operation must be continued while descending the grade, the speed being kept sufficiently low to permit restoring the amount of air used on the previous application. Engineer will observe equalizing reservoir pressure when making brake pipe reduction to determine amount of

brake pipe reduction to be made and amount of brake pipe pressure at rear of train.

Locomotive air brakes must be kept released except when necessary to control speed of train; engineer will avoid overheating of locomotive wheels.

1139. (T) *Release Time.* When stop is made with a light brake application, make an additional reduction of brake pipe pressure totaling 20 pounds before releasing. After placing automatic brake valve handle in release position, wait according to the following table of minimum times before attempting to start:

2 minutes with train of 60 to 80 cars.

3 minutes with train of 80 to 100 cars.

4 minutes with train of 100 to 120 cars.

5 minutes with train of 120 to 140 cars.

1140. (T) *Releasing Brakes with 24-RL Equipment.* On freight trains, move handle of automatic valve to release position until such time as brake system is initially recharged, returning it to running position, then wait until brake pipe pressure has settled as indicated by brake pipe gauge; and unless selector lever is in feed valve position, kick-off with two short releases of 6 and 3 seconds. On passenger trains follow the same procedure except after brake pipe pressure has settled, make the kick-off with one short release.

1141. (T) When necessary to take slack in starting a freight train, take only enough slack to enable locomotive to start the train. Where grade conditions might cause the rear end to run out, care must be exercised to prevent slack running out and consequent damage to equipment and personal injuries.

1142. (T) When releasing the brakes or charging the system with 24-RL equipment, the brake valve handle must be in release position and left in that position until brake pipe pressure will remain within 5 pounds of pressure carried.

1143. (T) *Running Release.* Air brakes may be released at speeds or under conditions which the engineer can properly control the slack. In the control of slack action the following conditions and rules must be respected:

1. Main reservoir pressure must be at maximum.

2. Slack in train must be in favorable position.

3. Sufficient time must have elapsed since last brake pipe reduction to permit slack adjustment.

4. Proper allowance must be made for grade conditions, sags, humps, and curves.

SURPRISE STOPS

1145. (T) In making a stop with a train where circumstances will not permit handling otherwise, apply the automatic brakes in emergency. If using power and desirable to continue its use, keep the locomotive brake bled off and reduce the throttle as the speed reduces, having throttle in idle position and locomotive brakes set heavily as the train comes to a stop. Sand must be used.

1146. (T) In case of emergency, move the brake valve handle quickly to emergency position and leave it there until the train stops. Sand must

be used, and ordinarily will be provided automatically. With 24-RL equipment, after stopping, place automatic brake valve on lap position (with 26-L equipment use suppression position) until vent valves close, then move brake valve handle to running or release position in order to restore brake pipe pressure to reset PCS, stop emergency sanding, and release the brakes.

An emergency application is available at all times from a helper locomotive having 24-RL or 26-L equipment without opening the double-heading cock, whenever the automatic brake handle is moved to emergency position.

1147. (T) *Conductor's Emergency Valve.* There are two kinds of emergencies that warrant use of the conductor's valve: (1) Immediate danger to life or property when noticed first by a trainman at rear of train, and (2) when necessary due to operating necessity, safety, or emergency, and a signal to stop cannot be conveyed to the engineman.

In emergency, the conductor's valve must be opened quickly to full extent and kept in that position until train stops. If train is on a grade, hand brakes must be set to protect train from moving before closing conductor's valve.

When imperative that the train be stopped within reasonable distance, but not as quickly as possible, the conductor's valve should be used with great care, opening it very gradually and steadily so as to avoid causing all the brakes to apply in quick action.

When it is felt that the brakes are slowing the train at a sufficiently rapid rate, the amount the valve is open should be maintained until the train is stopped; then open valve to full extent,

leaving open until condition corrected; then close valve. Under no circumstances will engineer move train until he receives a proceed signal or is informed as to cause of stop.

1148. (T) *Air Brake Failures.* If a train cannot be satisfactorily controlled with dynamic and/or air brakes, it must be stopped. If on a grade, it must be secured by hand brakes before beginning inspection to determine the cause. In case the trouble cannot be corrected the train must not be moved unless it can be done with safety and with 85% of cars in train subject to air brake control and then only to the first available point of communication with train dispatcher, where conductor will report the facts and await instructions.

Should the engineer of a train signal for brakes, a conductor's valve must be opened quickly and kept open until the train is stopped. If a strong blow of air is not indicated when the valve is opened, hand brakes must be applied as quickly as possible.

If automatic brake equipment on lead locomotive fails on a train being handled by more than one locomotive, train must be stopped and verbal understanding reached between the two engineers. Before proceeding a test must be made of air brakes from the locomotive that is to control the train. When possible, reverse position of locomotives to place the locomotive from which the brakes are to be operated ahead, unless brake pipe on defective locomotive cannot be used when placed behind.

1149. (TM) *Brakes Sticking.* Any brake that continues to "stick" will be cut out and conductor advised. He will fill out defect card and apply to car.

When brakes are sticking with train in motion and cannot be released manually the train must be stopped. After stopping, if brake fails to release, brake pipe branch cut-out cock will be closed, reservoir or reservoirs drained and drain-cocks or bleeders left opened.

Brakes must not be cut out except after they have been determined defective, such as foundation brake rigging failure, recurring brake sticking, after test has been made for undesired emergency, etc.

The locomotive brakes shall not be cut out except when necessary due to defective brake rigging, air brake devices, or when doing work on locomotive brake rigging. To protect against a possible application of the locomotive brakes, under the above conditions, close brake cylinder cut-out cock to brake cylinder involved.

1150. (TM) *Cutting Out Brakes On Cars.* The following method will be used when necessary to cut out brakes:

1. Cars with "AB" Brake Equipment—Close the branch pipe cut-out cock and drain both auxiliary and emergency reservoirs by fully opening release valve.

2. Cars with UC Brake Equipment—Close branch pipe cut-out cock and bleed all reservoirs.

3. With double equipment having independent brake rigging for each truck, cut out individually by opening brake cylinder side vented cut-out cock on each end of car.

4. Cars With D-22 Control Valve—Close the branch pipe cut-out cock (which is combined with the dirt collector) and drain both the auxiliary

and the emergency reservoirs by pulling the duplex valve handle its full travel and holding until the pressure is depleted, and open drain cock on supply reservoir. This equipment has side vented cut-out for each brake cylinder, which can be used individually if necessary.

5. When brake is to be cut out on account of foundation brake-rigging failures on cars equipped with UC or D-22 control valves, use brake-cylinder cut-out cocks, thereby keeping water-raising system in service.

1151. (TM) Before adjusting piston travel or working on brake rigging, cut-out cock in branch pipe must be closed, and reservoirs drained. Where cut-out cock is in cylinder pipe, the latter only needs to be closed (HSC and UC with one or more brake cylinders operated by one control valve).

1152. (TM) When uncoupling hose connections manually, both angle cocks must be closed. When opening angle cock at rear of car or engine, take firm grip on lower end of hose to avoid being struck by hose; and turn head to one side to avoid getting particles in eyes.

1153. (TM) When air, steam or communication hoses on either end of road and switcher locomotives and passenger cars are uncoupled, they must be fastened up with safety chain or dummy couplings if provided, or placed in pilot hose rack.

USE OF SAND

1160. (T) Engineer must know that the sanders are operating properly when he takes charge of a

locomotive and should inspect the sanders frequently while the locomotive is in his charge.

1161. (T) In stopping, unless otherwise provided, sand must be used for the last two car lengths, regardless of the condition of the rail. In emergency, sand should be started as soon as possible. Sand once started should be continued until the train stops or brakes are finally released.

1162. (T) During acceleration, sand should be used until sufficient speed is attained so slipping will not occur. When slipping occurs, do not apply sand unless automatic sanding fails to operate and then not until power is reduced and spinning has stopped. The slipping of driving wheels seriously damages rails and causes severe stresses in draft rigging and mechanical parts of locomotives.

1163. (T) Where slipping is likely to occur when passing over track oilers, spring switches, or power operated switches, reduce power when practicable to do so to prevent slipping, avoiding the use of sand until locomotive has passed such appurtenances.

RUNNING TEST

1165. (T) All trains approaching descending grade at points listed below must make a running test of train air brakes as soon as speed of train or control of slack permits. Power must not be shut off unless required, and running test must be made by applying train air brakes with sufficient force to ascertain whether or not brakes are operating properly.

When radio communication is available a crew member on locomotive of train approaching descending grade at points listed below will inquire

of crew member on caboose the amount of air pressure as shown on caboose gauge before running test is made. Should response indicate pressure is not satisfactory, train will be stopped and cause determined. If no response is received, apparently due to radio failure, running test will be made at points listed below. When radio or visual communication is available a rear trainman will give engineer a verbal "proceed" or a proceed signal when air brakes have applied and released on caboose. When communication is not available with rear trainman, engineer will make the judgment as to whether train brakes have responded normally, based on his observations of reduction of speed, action of air gauges, and other available factors.

Engineer will sound whistle signal 14.2. upon successful completion of running air test. When response of train brakes does not appear normal train will proceed, if safe to do so, to the nearest point of communication for instructions, moving at a speed at which train can be controlled under the circumstances.

Points where the instructions in this rule will be effective are as follows:

1st Subdivision	Westbound at Altamont
	Eastbound at Altamont
2nd Subdivision	None
3rd Subdivision	Westbound at Mabie, Keddie and James
	Eastbound—None
4th Subdivision	Westbound at Dixie, MP 53, Almanor, and Moccasin
	Eastbound at Halls Flat and Dixie

5th Subdivision	Westbound at Antelope and Sand Pass
	Eastbound at Chilcoot, Sand Pass, and Antelope
6th Subdivision	None
7th Subdivision	Westbound at Silverzone and MP 755
	Eastbound at MP 753 and Silverzone
8th Subdivision	Westbound at Low
	Eastbound at Low

When it is known that retainers are to be set at any of the above points, running test will not be required.

PASSENGER AIR BRAKE RULES

1170. (TM) *Initial Terminal Air Brake Tests.* Be governed by provisions of Rules 1116 and 1117 except air brake system on a passenger train must be charged to not less than 95 pounds as indicated by an accurate gauge at rear end of train before initiating air test.

1171. (TM) Each car of a passenger train must be connected with the engine by a communicating signal appliance when engine is so equipped. When engine is not equipped or signal appliance becomes inoperative, hand signal or radio communication may be used. Engineers must be on lookout for hand signals where circumstances may require.

Communicating signal must be used at least once while making air test, in which case 4 short sounds must be given to either set or release brakes, using cord of rear car.

1172. (TM) Communicating signal must be tested and known to be in suitable condition for service before leaving terminal.

To use the communicating signal, pull cord one second for each intended sound of the whistle and allow at least 5 seconds between each operation.

When one or more cars have been added to or detached from rear of train, trainmen must know before starting that car discharge valve on the rear car is cut in.

1173. (TM) *Road Train and Intermediate Terminal Air Brake Tests.* Be governed by provisions of Rules 1116 and 1118 except that the air brake system on a passenger train must be charged to not less than 70 pounds as indicated by an accurate gauge at rear of train before initiating air test.

1174. (T) *Passenger Train Handling.* Be governed by provisions of Rules 1134 and 1135 with the object of giving passengers the safest, smoothest, and most comfortable ride possible.

1. *Service Stop.* In making service stop with 16 cars or less with 75% or more graduated release equipment, the brakes should be applied by making an initial reduction of 6 to 8 pounds. After slack has become adjusted, an additional brake pipe reduction of sufficient amount should be made to stop short of objective if held fully applied. If using power, the throttle must be reduced as speed reduces. When speed has been

reduced sufficiently start a graduated release of the brake cylinder pressure by moving the brake valve handle momentarily to release or running position and back, completing the stop with little or no pressure in the brake cylinders depending on the grade conditions.

When making a graduated release stop, care should be exercised to not over-graduate the brakes and thereby make a re-application necessary at slow speed, as to do so may cause severe shock. If necessary to re-apply following a graduation, do so carefully with light reductions.

2. *Two Application Stop*. When making station or other ordinary stop with a passenger train of any length up to 30 cars (except as otherwise provided) reduce throttle to Run 4 if working power, make an initial brake pipe reduction of 6 to 8 pounds, keeping locomotive brakes released. Make additional brake pipe reductions and as speed reduces, place throttle in Run 3. When speed has been reduced sufficiently, place automatic brake valve handle in release position and recharge the brake system. Place throttle in Run 2 and complete the stop with moderate brake pipe reductions, placing throttle in Run 1 100 feet before coming to a stop. Apply locomotive brakes at stop and move throttle to IDLE.

3. *Spot Stops*. Use two application method on passenger trains of 17 to 30 cars inclusive. Reduce speed by use of the automatic brakes, allowing the locomotive brakes to apply with the second brake pipe reduction. When speed has been reduced sufficiently to permit control with the locomotive brakes, place the automatic brake valve handle in release position, retaining not to exceed 10 pounds of brake cylinder pressure on

the locomotive. When the brake system is fully charged, control the train speed with the locomotive brakes, avoiding slack action due to rapid increase or decrease of brake cylinder pressure. If necessary, complete the stop with moderate brake pipe reductions, holding locomotive brakes applied, regulating brake cylinder pressure by use of the independent brake valve.

The throttle must be in IDLE position before the locomotive brakes apply with the second reduction as outlined above.

4. Passenger trains of more than 30 cars must be handled under freight train rules.

5. *Reducing Speed at Restricted Curves.* To obtain the safest, smoothest and most comfortable operation on curves, speed should be reduced to that permitted by restrictions and brakes released just before entering curve.

1175. (TM) Passenger equipment being switched in the making up or breaking up of trains must have all air brakes cut in before starting movement and automatic air brakes must be used in reducing speed or stopping.

Except unoccupied baggage and express cars, passenger equipment must not be kicked or dropped and any cars left standing must have hand brakes set or be coupled to car or cars with sufficient hand brakes set to prevent them from moving.

1176. (T) The rear car in a passenger train must have an operative brake. When necessary to cut out the rear brake on a passenger train, trainman must station himself on rear car and know that hand brake is operative. The car must be switched ahead of other cars with operative air brakes at the first available point.

1177. (T) *Running Test* (PSGR). When motive power, engine crew or train crew has been changed and angle cocks have been closed, except for cutting off one or more cars from the rear end of train or helper engine added or detached, running test of train air brakes on passenger train must be made as soon as speed of train permits. Power must not be shut off unless required and running test must be made by applying train air brakes with sufficient force to ascertain whether or not brakes are operating properly.

Trainmen stationed at the rear of train must see that the brake on the rear car applies and releases properly before giving a proceed signal.

When practicable, communicating signal will be used, in which case one long sound must be given. If the engineer does not receive the required signal the train must be stopped unless proceed hand or lamp signal is given by flagman. If the brake on the rear car fails to apply and release, cause must be ascertained and prescribed protective action taken before proceeding.

1178. (T) When tail hose (back-up valve) is used for back-up movement, the engineer must charge brake system to not less than 10 pounds below standard pressure, make a reduction of 10 pounds, place automatic brake valve handle in lap position, and give whistle signal 14.12. An additional service reduction must then be made with tail hose cock. When the brake pipe pressure stops falling, the engineer will signal the trainmen with two longs (Rule 14.2.), and release brakes. Brake valve handle must be kept in running position, except when brakes are being applied or in accordance with rules governing emergency application.

1200. (TM) Trains handling engines dead in train must not exceed the maximum speed for such class engine. Unless otherwise authorized, engines dead in train must be handled next behind engine handling train.

1201. (TM) During freezing weather, engine water cooling system must be drained on any type engine being towed dead.

1202. (TM) When making long reverse moves with light engines equipped with two cabs, in yards or elsewhere, engineer or hostler will operate from cab on the end in direction of movement.

1203. (TM) Locomotive units must not be placed on live rails of any track scale to be weighed at any point without authority from Chief Transportation Officer.

1204. (TM) Locomotives dead in train must have automatic brake valves cut out in cab and brake valve handle locked in "removed" position on 24-RL equipment or handles removed in "handle off" position on 26-L equipment; independent brake valve handles removed in "running" position; dead-engine feature cut in; distributing valve pops on all but 26-L equipment set to 15 PSI pressure; rotair valve set to "passenger" position on units equipped with 24-RL brake equipment; MU valve in "lead or dead" position with 26-L brake equipment. The isolation switch must be placed in "start" position; main battery switch pulled; the selector lever in "off" and the reverser handle removed from control stand or locked in the "neutral" position; and all switches at engineer's control stand in "off" position.

Also, on locomotives equipped with an alertor, break the seal and close the alertor cutout cock.

1205. (TM) When changing operating ends on locomotives equipped with 24-RL brake equipment proceed as follows:

Make a 20 pound brake pipe reduction with the automatic brake valve, after which move the brake valve handle to lap position, move the independent brake valve handle to release position and observe that the brakes are still applied. Close the doubleheading cock and place the rotair valve in FRT Lap or PASS Lap position, depending on service in which it is used. Move the automatic brake valve handle to running position and remove both handles.

To assume control at the other end, first insert the brake valve handles, place the rotair in PASS or FRT position, depending on the service in which it is used. Move the independent brake valve handles to application psotion. Open the doubleheading cock and depress foot pedal, check gauges to insure brake pipe and main reservoirs are fully charged and, if ready to move, release independent brake.

When opening doubleheading cock, move handle toward open position until latch engages the lug, then pull handle up to clear lug and complete handle movement. This procedure will prevent undesired brake application and operation of the P.C.S.

1206. (TM) When changing operating ends on locomotives equipped with 26-L brake equipment, proceed as follows:

On End Being Cut Out:

1. Move the automatic brake valve handle

to the SERVICE position and make a 20 pound brake pipe reduction.

2. Wait until the brake pipe exhaust stops *completely*, then place the cutout valve in the CUTOUT postion by pushing in the dial indicator handle and turning.

It is very important that the brake pipe exhaust has stopped completely before cutting out the brake valve to avoid an undesired emergency brake application and/or emergency sand application.

3. Place the independent brake valve handle in the FULL RELEASE position and remove the handle.

4. On GP20, GP35 and U30B Units equipped with three position MU-2A valve, place handle in "TRAIL 24 or 26" position.

On GP40, U23B, and U30B Units equipped with two position MU Valve, place handle in "CLOSED in trail" position.

5. Move the automatic brake valve handle to the HANDLE OFF position and remove the handle.

6. Place the selector handle (on units so equipped) in the OFF position.

7. Place the reverse handle in the CENTER position and remove the handle to lock the controller.

8. On GP20, GP35, U23B, and GP40 Units, at the controller, place the Control, Generator Field and Engine Run switches in the OFF (down) position.

On U30B Units, at the controller, place the Generator Field circuit breaker in the OFF (down) position; on the engine control panel, place the

Control and Engine Run circuit breakers in the OFF (down) position.

NOTE: The controller handles and switches and engine control panel switches on all intermediate and trailing units must be positioned as stated in Steps 6, 7 and 8, so as not to interfere with the ability of the lead unit to control the locomotive consist.

9. Place the various headlight, signal light, number light and class light switches in the OFF (down) position.

10. Place the multiple unit Headlight Control switch in the correct trailing unit position.

11. Proceed immediately to end being cut in.

On End Being Cut In:

a. The following step should always be done first to insure that the fuel pumps in all units start running to supply fuel to the engines to avoid an undesired shut down of all units in the consist:

(1) On GP20, GP35, U23B, and GP40 Units, at the controller, place the Control and Engine Run switches in the ON (up) position.

(2) On U30B Units, on the engine control panel, place the Control and Engine Run circuit breakers in the ON (up) position.

b. Insert the reverser handle and leave in the center position.

c. Insert the automatic brake valve handle and move it to the SUPPRESSION position.

d. Insert the independent brake valve handle and move it to the full application position.

e. Position the cutout valve handle in the FRGT position (PASS if being used in passenger service) by pushing in the dial indicator handle and turning.

f. On GP20, GP35 and U30B Units equipped with three position MU-2A valve, place handle in "LEAD or DEAD" position.

On GP40, U23B, and U30B Units equipped with two position MU valve, place handle in "OPEN in LEAD or DEAD" position.

g. At the engine control panel, place the multiple unit Headlight Control switch in the correct lead unit position. Place the Number Light switch in the ON (up) position. When required place the Class Light switch in the ON (up) position and set color indication as required.

h. The multiple unit Headlight Control switch on all intermediate units must be in the "SINGLE UNIT or INTERMEDIATE UNIT" position to permit operation of the trailing unit headlight from the "Rear Headlight" controls in the lead unit.

12. After controls are properly cut in and when seated at control station:

a. Place Generator Field switch or circuit breaker in the ON (up) position.

b. Move Selector Handle to Transition 1 or Power (on units so equipped) and move reverser handle to position of desired movement.

c. Move automatic brake valve handle to the RELEASE (Running) position.

d. Move independent brake valve handle to the FULL RELEASE position.

e. Turn on Headlight in direction of movement.

1209. (TM) Air compressors are connected directly to the diesel engine and compressor speed will correspond with engine speed. Oil level in compressor crank case can be checked with bayonet gauge when compressor is stopped. When necessary to provide more air than is available with engine at idle, open generator field switch, place reverse lever in "off" position and open throttle not to exceed No. 5 position.

If difficulty develops in compressor that will permit the compressor to run without pumping air, open the unloader valve; if the compressor cannot be operated without damage, it will be necessary to stop the engine.

1210. (TM) Upon taking charge of locomotive if slid flat wheels are discovered by inspection, engineer will report such to roundhouse foreman, unless it is known that a previous report has been made, and will be governed by his instructions. After leaving terminal, if flat spots are detected or wheels slid flat, engineer must advise chief dispatcher from first available communication point, and make proper report on arrival at terminal.