DCA-11-FR-002
BNSF Coal Train – Work Train Collision
Red Oak, IA
April 17, 2011

ATTACHMENT 3

Maintenance of Way Operating Rules

BNSF Railway Safety Vision

We believe every accident or injury is preventable. Our vision is that BNSF Railway will operate free of accidents and injuries. BNSF Railway will achieve this vision through:

A culture that makes safety our highest priority and provides continuous self-examination as to the effectiveness of our safety process and performance...

A work environment, including the resources and tools, that is safe and accident-free where all known hazards will be eliminated or safe-guarded...

Work practices and training for all employees that make safety essential to the tasks we perform...

An empowered work force, including all employees, that takes responsibility for personal safety, the safety of fellow employees, and the communities in which we serve.

This version contains the following revised or added pages:

December 2, 2009: 6-9, 6-10.

December 18, 2009: 8-1, 8-2.

March 1, 2010: i-3, i-4, 2-3, 2-4, 6-5, 6-6, 6-7, 6-8.

July 22, 2010: 6-1, 6-2, 6-21, 6-22.

October 1, 2010: 12-3, 12-4, 12-5, 12-6.

January 14, 2011: 6-3, 6-4.

April 1, 2011: Title Page, i-2, 6-23, 6-24.

BNSF RAILWAY SM

Maintenance of Way Operating Rules

In Effect at 0001
Central, Mountain and Pacific
Continental Time

December 2, 2009
(Including revisions through
April 1, 2011)

Table of Contents

1.0 General Responsibilities

1.1 Safety

Safety is the most important element in performing duties. Obeying the rules is essential to job safety and continued employment.

Empowerment

All employees are empowered and required to refuse to violate any rule within these rules. They must inform the employee in charge if they believe that a rule will be violated. This must be done before the work begins.

Job Safety Briefing

Conduct a job safety briefing with individuals involved:

- Before beginning work
- Before performing new tasks
- When working conditions change

The job safety briefing must include the type of authority or protection in effect.

1.1.1 Maintaining a Safe Course

In case of doubt or uncertainty, take the safe course.

1.1.2 Alert and Attentive

Employees must be careful to prevent injuring themselves or others. They must be alert and attentive when performing their duties and plan their work to avoid injury.

1.1.3 Accidents, Injuries, and Defects

Report by the first means of communication any accidents, personal injuries, defects in tracks, bridges, or signals, or any unusual condition that may affect the safe and efficient operation of the railroad. Where required, furnish a written report promptly after reporting the incident.

The employee on whom the responsibility most naturally falls must assume authority until the proper manager arrives.

When an accident occurs at a road crossing, do not cut trees, weeds or make any changes to the scene until representatives from the General Claims Department have investigated.

1.1.4 Condition of Equipment and Tools

Employees must check the condition of equipment and tools they use to perform their duties. Employees must not use defective equipment or tools until they are safe to use. Employees must report any defects to the proper authority.

1.1.5 Inspection After Derailment

After derailed equipment has been rerailed, employees must check the condition of the track to ensure it is safe for the equipment to proceed.

1.2 Personal Injuries and Accidents

1.2.1 Care For Injured

When passengers or employees are injured, do everything reasonable to care for them.

1.2.2 Witnesses

If equipment is involved in personal injury, loss of life, or damage to property, the employee in charge must immediately secure the names, addresses, and occupations of all persons involved, including all persons at the scene when the accident occurred and those that arrived soon after. The employee in charge must secure the names regardless of whether these persons admit knowing anything about the accident.

The employee in charge must also obtain the license numbers of nearby automobiles. When necessary, other employees can assist in obtaining this information, which must be included in reports covering the incident.

Where signaling devices are provided or a flagman is on duty, the employee in charge and assisting employees must try to determine who, among the witnesses, can testify whether the signaling devices were functioning properly or if the flagman was performing his duties properly.

When possible, obtain the names of witnesses who can testify about the bell and whistle signals.

1.2.3 Equipment Inspection

If an accident results in personal injury or death, all tools, machinery, and other equipment involved, including the accident site, must be inspected promptly by the foreman, another person in charge of the work, or other competent inspectors. The inspector must promptly forward to his manager a report of the inspection. The report must include the condition of the equipment and the names of those making the inspection.

The equipment inspected must be marked for identification and placed in custody of the responsible manager or employee until the claims department is contacted and determines disposition.

1.2.4 Mechanical Inspection

When engines, cars, or other equipment are involved in an accident that results in personal injury or death, the equipment must be inspected before it leaves the accident site.

A mechanical department employee must further inspect the equipment at the first terminal. This employee must promptly report inspection results to the proper manager.

1.2.5 Reporting

All cases of personal injury, while on duty or on company property, must be immediately reported to the proper manager and the prescribed form completed.

A personal injury that occurs while off duty that will in any way affect employee performance of duties must be reported to the proper manager as soon as possible. The injured employee must also complete the prescribed written form before returning to service.

If an employee receives a medical diagnosis of occupational illness, the employee must report it immediately to the proper manager.

1.2.6 Statements

Except when authorized by the proper manager:

- Information concerning accidents or personal injuries that occur to persons other than employees may be given only to an authorized representative of the railroad or an officer of the law.
- Information about the facts concerning the injury or death of an employee may be given only to the injured employee, an immediate relative of the injured or deceased employee, an authorized representative of the railroad, or an officer of the law.
- Information in the files or in other privileged or confidential reports of the railroad concerning accidents or personal injuries may be given only to an authorized representative of the railroad.

1.2.7 Furnishing Information

Employees must not withhold information, or fail to give all the facts to those authorized to receive information regarding unusual events, accidents, personal injuries, or rule violations.

1.3 Rules

1.3.1 Rules, Regulations, and Instructions

Safety Rules. Employees must have a copy of, be familiar with, and comply with all safety rules issued in a separate book or in another form.

Maintenance of Way Operating Rules. Employees governed by these rules must have a current copy they can refer to while on duty. When amendments are made to the Maintenance of Way Operating Rules, employees must have a copy of the general order with their rule books, make notation of the change in their rule book or obtain a copy of the revised page.

Hazardous Materials. Employees who in any way handle hazardous materials must have a copy of the instructions or regulations for handling these materials. Employees must be familiar with and comply with these instructions or regulations.

Timetable/Special Instructions. Employees whose duties are affected by the timetable/special instructions must have a current copy they can refer to while on duty.

Classes. Employees must be familiar with and obey all rules, regulations, and instructions and must attend required classes. They must pass the required examinations.

Explanation. Employees must ask their supervisor for an explanation of any rule, regulation, or instruction they are unsure of.

Issued, Cancelled, or Modified. Rules may be issued, cancelled, or modified by track bulletin, general order, or special instructions.

Engineering Instructions. Employees governed by the Engineering Instructions must be familiar with and comply with all their provisions.

1.3.2 General Orders

General orders:

- Are numbered consecutively.
- Are issued and cancelled by the designated manager.
- Contain only information and instructions related to rules or operating practices.
- Replace any rule, special instruction, or regulation that conflicts with the general order.

Before beginning each day's work or trip, trainmen, enginemen, and any others whose duties require, must review general orders that apply to the territory they will work on.

1.3.3 Circulars, Instructions, and Notices

Circulars, instructions, notices, and other information are issued and cancelled by the designated manager. Before beginning each day's work or trip, trainmen, enginemen, and any others whose duties require, must review those that apply to the territory they will work on.

1.4 Carrying Out Rules and Reporting Violations

Employees must cooperate and assist in carrying out the rules and instructions. They must promptly report any violations to the proper supervisor. They must also report any condition or practice that may threaten the safety of trains, passengers, or employees, and any misconduct or negligence that may affect the interest of the railroad.

1.4.1 Good Faith Challenge

A. Right to Challenge

Federal Regulations have provisions that allow an employee the right to challenge a directive which, based upon the employee's good faith determination, would violate a railroad operating rule relating to:

- Shoving moves,
- Leaving equipment foul of an adjacent track,

  or

- Handling of hand-operated switches or fixed derails.

These Federal Regulations are not intended to abridge any rights or remedies available to the employee under collective bargaining agreements or Federal law.

B. Good Faith Challenge Procedure

1. The employee may inform their supervisor issuing a directive that they have made a good faith determination that the directive would violate a railroad operating rule relating to:
   - Shoving moves,
   - Leaving equipment foul of an adjacent track,

     or

   - Handling of hand-operated switches or fixed derails.
2. The supervisor will not require the employee to comply with the directive until the challenge is resolved. The supervisor may:

   Require the challenging employee to perform other tasks not related to the challenge until the challenge is resolved,

   or

   Direct an employee, other than the challenging employee, to perform the challenged task before the challenge is resolved. Employee so directed will be informed of the challenge, and determine that the challenged task does not violate the rules.

C. Resolving Good Faith Challenge

1. A challenge may be resolved by one of the following:
   - The supervisor's acceptance of the employee's request.
   - An employee's acceptance of the directive.
   - An employee's agreement to a compromise solution acceptable to the person issuing the directive.
2. If the challenge cannot be resolved because the supervisor issuing the directive has determined that the employee's challenge has not been made in good faith or there is no alternative to the direct order, the railroad will:
   - Provide immediate review by at least one manager, which must not be conducted by the supervisor issuing the challenged directive or that supervisor's subordinate.
   - Resolve the challenge using the same options available for resolving the challenge as the initial supervisor.
3. If the manager making the final decision concludes that the challenged directive would not cause the employee to violate any requirement of the involved rules, the reviewing manager's decision shall be final and not be subject to further immediate review.
   - The manager will inform the employee that federal law may protect the employee from retaliation, if the employee's refusal to do the work is a lawful, good faith act.
   - The employee making the challenge will be afforded an opportunity to document in writing, any protest to the manager making the final decision before the employee's tour of duty is complete. The employee will be afforded the opportunity to retain a copy of the protest.

D. Request for Review and Verification of Decision

Upon written request, at the time of the challenge, the employee has the right for further review by the "Designated Review Manager". Within 30 days after the expiration of the month during which the challenge occurred, the "Designated Review Manager" will verify the proper application of the rule in question. The verification decision shall be made in writing to the employee.

1.5 Drugs and Alcohol

The use or possession of alcoholic beverages while on duty or on company property is prohibited. Employees must not have any measurable alcohol in their breath or in their bodily fluids when reporting for duty, while on duty, or while on company property.

The use or possession of intoxicants, over-the-counter or prescription drugs, narcotics, controlled substances, or medication that may adversely affect safe performance is prohibited while on duty or on company property, except medication that is permitted by a medical practitioner and used as prescribed. Employees must not have any prohibited substances in their bodily fluids when reporting for duty, while on duty, or while on company property.

1.6 Conduct

Employees must not be:

1. Careless of the safety of themselves or others
2. Negligent
3. Insubordinate
4. Dishonest
5. Immoral
6. Quarrelsome

   or

7. Discourteous

Any act of hostility, misconduct, or willful disregard or negligence affecting the interest of the company or its employees is cause for dismissal and must be reported. Indifference to duty, or to the performance of duty, will not be tolerated.

1.6.2 Notification of Felony Conviction

The conduct of any employee leading to conviction of any felony is prohibited. Any employee convicted of a felony must notify the proper authority of that fact within 48 hours after the employee receives notice of the conviction.

1.7 Altercations

Employees must not enter into altercations with each other, play practical jokes, or wrestle while on duty or on railroad property.

1.8 Appearance

Employees reporting for duty must be clean and neat. They must wear the prescribed uniform when required.

1.9 Respect of Railroad Company

Employees must behave in such a way that the railroad will not be criticized for their actions.

1.10 Games, Reading, or Electronic Devices

Employees on duty must not:

- Play games.
- Read magazines, newspapers, or other literature not related to their duties.

  or

- Use electronic devices not related to their duties.

Engineering employee and/or supervisor's cellular phones must be turned off and ear pieces removed while occupying the controlling cab of a moving train or engine. Cellular phones may only be used under the following conditions:

- When train is stopped
- After a job safety briefing has been held with all assigned members of the train crew prior to using the device and all agree how communications can safely take place.

Other electronic devices (not capable of voice communication) may be used while occupying the cab of a train or engine only as duties require. Prior to using such device, a job safety briefing must be held with all assigned crew members of the train and all agree how the use of the device can safely take place.

1.11 Sleeping

Employees must not sleep while on duty, except as outlined under Rule 1.11.1 (Napping). Employees reclined with their eyes closed will be in violation of this rule.

1.11.1 Napping

Napping is permitted under the following conditions:

- During meal period.

  or

- When employee is working outside their normal working hours or when they have worked outside their normal working hours in the last 24 hours.

The employee in charge must approve all naps. Naps may be approved when work group is waiting for authority, waiting for other work groups, etc.

EXCEPTION: Lone workers must enter the word “Nap” and the time the nap was initiated on the line captioned “time form completed” of the Statement of On-Track Safety.

Before napping the employee must take the necessary precautions to protect themselves and railroad property. The nap period must not exceed 45 minutes. The period is not limited to the time sleeping but includes the advance time needed to fall asleep. The normal requirements of the MWOR, Timetable Special Instructions, MW Safety Rules, and other operating instructions are suspended for the employee taking the nap. All employees are encouraged to perform stretches prior to returning to work after taking a nap.

1.12 Weapons

While on duty or on railroad property, employees must not have firearms or other deadly weapons, including knives with a blade longer than 3 inches. However, railroad police are authorized to possess firearms in the course of their work.

1.13 Reporting and Complying with Instructions

Employees will report to and comply with instructions from supervisors who have the proper jurisdiction. Employees will comply with instructions issued by managers of various departments when the instructions apply to their duties.

1.14 Employee Jurisdiction

Employees are under the jurisdiction of the supervisors of the railroad they are operating on.

When operating on another railroad, unless otherwise instructed, employees will be governed by:

- Safety rules and hazardous materials instructions of the railroad they are employed by.
- The operating rules and timetable/special instructions of the railroad they are operating on.

1.15 Duty—Reporting or Absence

Employees must report for duty at the designated time and place with the necessary equipment to perform their duties. They must spend their time on duty working only for the railroad. Employees must not leave their assignment, exchange duties, or allow others to fill their assignment without proper authority. Continued failure by employees to protect their employment will be cause for dismissal.

1.16 Subject to Call

Employees subject to call must indicate where they can be reached and must not be absent from their calling place without notifying those required to call them.

1.17 Hours of Service Law

Employees must be familiar and comply with the requirements of the federal hours of service law. Employees are expected to use off-duty time so they are prepared for work.

If an employee is called to report for duty before legal off-duty time has expired, before accepting the call to work, the employee must notify the individual making the call that off-duty time has not expired.

A. Notification

When communication is available, employees must notify the train dispatcher or another authority of the time the law requires them to be off duty. Employees must provide notification early enough that they may be relieved, or transportation provided, before they exceed the hours of service.

B. Exceeding the Law

Employees must not exceed the hours of service law without proper authority.

1.18 Unauthorized Employment

Employees must not engage in another business or occupation that would create a conflict of interest with their employment on the railroad or would interfere with their availability for service or the proper performance of their duties.

1.19 Care of Property

Employees are responsible for properly using and caring for railroad property. Employees must return the property when the proper authority requests them to do so. Employees must not use railroad property for their personal use.

1.20 Alert to Train Movement

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

Employees must not stand on the track in front of an approaching engine, car, or other moving equipment.

Employees must be aware of location of structures or obstructions where clearances are close.

1.21 Occupying Roof

Employees whose duties require them to occupy the roof of a car or engine must do so only with proper authority and when the equipment is standing.

1.22 Not Permitted on Equipment

Unauthorized persons must not be permitted on equipment.

1.23 Altering Equipment

Without proper authority, employees must not alter, nullify, change the design of, or in any manner restrict or interfere with the normal function of any device or equipment on engines, cars, or other railroad property, except in the case of an emergency. Employees must report to the proper supervisor changes made in an emergency.

1.24 Clean Property

Railroad property must be kept in a clean, orderly, and safe condition. Railroad buildings, facilities, or equipment must not be damaged or defaced. Only information authorized by the proper manager or required by law may be posted on railroad property.

1.25 Credit or Property

Unless specifically authorized, employees must not use the railroad's credit and must not receive or pay out money on the railroad account. Employees must not sell or in any way get rid of railroad property without proper authority. Employees must care for all articles of value found on railroad property and promptly report the articles to the proper authority.

1.26 Gratuities

Employees must not discriminate among railroad customers. Employees must not accept gifts or rewards from customers, suppliers, or contractors of the railroad unless authorized by the proper manager.

1.27 Divulging Information

Employees who make up, handle, or care for any of the following must not allow an unauthorized person to access them or disclose any information contained in them:

- Correspondence
- Reports
- Books
- Bills of Lading
- Waybills
- Tickets
- Statistics

1.28 Fire

Employees must take every precaution to prevent loss and damage by fire.

Employees must report promptly to the train dispatcher any fires seen on or near the right of way, unless the fires are being controlled. If there is danger of the fire spreading to a bridge or other structure, crew members must stop their train and help extinguish the fire.

Cause of fire, if known, must be promptly reported.

1.33 Loading Freight Cars

Freight cars must be loaded safely.

If width or height approaches clearance restrictions, movement must be cleared with the proper authority.

1.34 Flat Spots

If a wheel on a piece of equipment has a flat spot more than 2 1/2 inches long, or if the wheel has adjoining flat spots that are each at least 2 inches long, the equipment must not be moved faster than 10 MPH. Such equipment must be set out at the first available point.

1.35 Dump Doors

Be sure dump doors on cars are closed after a load is dumped. If car must be moved short distances with the dump doors open, make sure the doors and chains will clear tracks and crossings.

1.44 Duties of Train Dispatchers

Train dispatchers supervise train movement and any employees connected with that movement.

1.45 Duties of Bridgetenders

Bridgetenders must have a copy of and comply with instructions for control operators and bridgetenders.

1.46 Duties of Yardmasters

At locations where a yardmaster is on duty, employees must comply with the yardmaster's instructions when the employees' duties affect yard movement. At locations where no yardmaster is on duty, employees must comply with the instructions of the designated employee.

1.48 Time

While on duty, all MW EIC's and all lone workers must have a watch. Other employees must have access to a watch or clock.

The watch or clock must:

- Be in good working condition and reliable.
- Display hours, minutes, and seconds.
- Not vary from the correct time by more than 30 seconds.
- Be compared with the time source designated in the special instructions.

1.49 Encroachment

Encroachment on railroad property, including building occupancy or the unauthorized dumping or storage of material having an adverse environmental impact, is prohibited.

When observing outside parties performing work that may encroach on the right-of-way, report the location and the nature of work to the proper authority.

Livestock found on railroad property must be driven away or handled as directed.

2.0 Railroad Radio Rules

2.1 Transmitting

Any employee operating a radio must do the following:

- Before transmitting, listen long enough to make sure the channel is not being used.
- Give the required identification.
- Not proceed with further transmission until acknowledgment is received.

2.2 Required Identification

Employees transmitting or acknowledging a radio communication must begin with the required identification. The identification must include the following in this order:

- For base or wayside stations:
  - Name or initials of the railroad.
  - Name and location or other unique designation.
- For mobile units:
  - Name or initials of the railroad.
  - Train name (number), engine number, or words that identify the precise mobile unit.

If communication continues without interruption, repeat the identification every 15 minutes.

Short Identification

After making a positive identification for switching, classification, and similar operations within a yard, fixed and mobile units may use a short identification after the initial transmission and acknowledgment.

2.3 Repetition

An employee who receives a transmission must repeat it to the person transmitting the message, except when the communication:

- Concerns yard switching operations.
- Is a recorded message from an automatic alarm device.

  or

- Is general and does not contain any information, instruction, or advice that could affect the safety of a railroad operation.

2.4 Ending Transmission

Employees using a radio for transmissions must state to the employee receiving the transmission the following as it applies to indicate that the communication has ended or is completed:

“OVER”—when a response is expected.

or

“OUT”—preceded by required identification—when no response is expected.

However, these requirements do not apply to yard switching operation.

2.6 Communication Not Understood or Incomplete

An employee who does not understand a radio communication or who receives a communication that is incomplete must not act upon the communication and must treat it as if it was not sent.

EXCEPTION: An employee who receives information that may affect the safety of employees or the public or cause damage to property must take the safe course. When necessary, stop movement until the communication is understood.

2.7 Monitoring Radio Transmissions

Radios in attended base stations or mobile units must be turned on to the appropriate channel with the volume loud enough to receive communications. Employees attending base stations or mobile units must acknowledge all transmissions directed to the station or unit.

2.8 Acknowledgment

An employee receiving a radio call must acknowledge the call immediately unless doing so would interfere with safety.

2.9 Misuse of Radio Communications

Employees must not use radio communication to avoid complying with any rule.

2.10 Emergency Calls

Emergency calls will begin with the words “Emergency, Emergency, Emergency.” These calls will be used to cover initial reports of hazardous conditions which could result in death or injury, damage to property or serious disruption of railroad operations such as:

- Derailments
- Collisions
- Storms
- Washouts
- Fires
- Track obstructions

  or

- Emergency brake applications

In addition, emergency calls must be made for the following:

- Overrunning limits of authority

  or

- Overrunning Stop indications.

Emergency calls must contain as much complete information on the incident as possible.

All employees must give absolute priority to an emergency communication. Unless they are answering or aiding the emergency call, employees must not send any communication until they are certain no interference will result.

2.11 Prohibited Transmissions

Employees must not transmit a false emergency or an unnecessary or unidentified communication. Employees must not use indecent language over the radio. Employees must not reveal the existence, contents, or meaning of any communication (except emergency communications) to persons other than those for whom it is intended, or those whose duties may require knowing about it.

2.12 Fixed Signal Information

Employees must not use the radio to give information to a train or engine crew about the name, position, aspect, or indication displayed by a fixed signal, unless the information is given between members of the same crew or the information is needed to warn of an emergency.

2.13 In Place of Hand Signals

When the radio is used instead of hand signals, information must include the direction and distance to be traveled.

Movement must stop within half of the distance specified unless additional instructions are received.

2.14 Mandatory Directive

Mandatory directives are authorities to occupy a main track or speed restrictions that affect the movement of equipment.

Mandatory directives are:

- Track warrants
- Track bulletins
- Track and time
- Track permits
- Foul time
- OCS

When transmitted by radio, a mandatory directive must be transmitted according to applicable operating rules and the following:

- The train dispatcher must state that a mandatory directive will be transmitted.
- The employee must inform the train dispatcher when ready to copy, stating the employee's name, occupation and location. An employee operating the controls of moving equipment may not copy a mandatory directive. In addition, a mandatory directive must not be transmitted to moving equipment if the operator of the equipment feels that the transmission could adversely affect safe operation.
- The employee receiving a mandatory directive must copy it in writing using the format outlined in the operating rules.
- Mandatory directives that have been fulfilled or canceled shall be marked in accordance with applicable operating rules and retained for the duration of that tour of duty.
- A mandatory directive may not be released by an employee at the controls of moving equipment.

2.14.1 Verbally Transmitting and Repeating Mandatory Directives

When transmitting and repeating mandatory directives:

- State and spell single digit numbers by number and digit.
- State multiple digit numbers by number and digit.
- Identify decimal points as “point”, “dot”, or “decimal”.
- State and spell directions.

2.14.2 Before Reporting Clear of Authority Limits

Before a field employee reports clear or releases a portion of authority limits, and the Train Dispatcher/Control Operator accepts the information, the following must occur:

- The employee will provide their name or other identification and the authority number to the Train Dispatcher/Control Operator.
- The Train Dispatcher/Control Operator will have the required form or computer screen displayed for data entry and confirmation.
- The employee will inform the Train Dispatcher/Control Operator that all employees and multiple work groups using the authority are clear of track(s).
- The Train Dispatcher/Control Operator and field employee must carefully match the verbally transmitted information against the authority form to ensure the information matches and is correct.

2.15 Phonetic Alphabet

If necessary, a phonetic alphabet (Alpha, Bravo, Charlie, etc.) will be used to pronounce clearly any letter used as an initial, except initial letters of railroads.

2.16 Assigned Frequencies

The railroad must authorize any radio transmitters used in railroad service. Radio transmitters must operate on frequencies the Federal Communications Commission assigns the railroad. Employees are prohibited from using other transmitters or railroad frequencies not assigned to that particular territory.

2.17 Radio Testing

Test radios to be used as soon as possible before the beginning of a work assignment.

The radio test must include an exchange of voice transmissions with another radio. The test must confirm the quality of the radio’s transmission.

2.18 Malfunctioning Radio

Malfunctioning radios must not be used. As soon as possible, notify the train dispatcher or other affected employees that the radio is not working.

2.19 Blasting Operations

Employees must not operate radio transmitters located less than 250 feet from blasting operations.

2.20 Internal Adjustments

Employees are prohibited from making internal adjustments to a railroad radio unless they are specifically authorized by the FCC or hold a current Certified Technician's Certificate. Employees authorized to make adjustments must carry their FCC operator license, Certified Technician's Certificate, or verification card while on duty.

2.21 Requirement for Roadway Workers

Maintenance of way equipment operating without locomotive assistance between work locations shall have a working radio on at least one unit in each multiple piece of maintenance of way equipment traveling together under the same movement authority. The operators of each additional piece of maintenance of way equipment shall have communications capability with each other, which can include the ability to pass and receive hand and other signals.

Each maintenance of way work group shall have intra-group communications capability upon arriving at the work site, which can include the ability to pass and receive hand and other signals.

Each employee providing protection for a work group, and each lone worker, will maintain immediate access to a working radio, which can be a portable radio capable of monitoring transmissions from train movements in the vicinity.

This page left blank intentionally.

3.0 Not Used

This page left blank intentionally.

4.0 Timetables

4.1 New Timetable

The moment a new timetable goes into effect, it will replace the previous one.

4.1.1 Notice of New Timetable

At least 24 hours before a new timetable goes into effect, notification will be made by general order. A track bulletin will also be issued at least 24 hours before the new timetable goes into effect and continue for 6 days after the effective date.

4.2 Special Instructions

Special instructions will replace any rule or regulation with which they conflict.

4.3 Timetable Characters

Timetable characters are letters and symbols located in the timetable station column. These letters and symbols indicate the special conditions at specific locations (such as yard limits and manual interlockings). A timetable station column may also include information on the method of operation (such as TWC, ABS or CTC). The following timetable characters are in effect:

A	Automatic Interlocking
B	General orders, notices, and circulars
C	Radio communication
g	Gate, normal position against conflicting route
G	Gate, normal position against this subdivision
J	Junction
M	Manual interlocking
P	Telephone
R	Restricted Limits
S	Railroad crossing protected by permanent stop sign
T	Turning facility
U	Railroad crossing not protected by signals or gates
X	Crossover
X(2)	Multiple crossovers
Y	Yard Limits

This page left blank intentionally.

5.0 Signals and Their Use

5.1 Signal Equipment

Employees who give or display signals must have the proper appliances. Appliances must be in good condition and ready to use.

5.2 Receiving and Giving Signals

5.2.1 Looking for Signals

To recognize and follow signals correctly, employees must:

- Always be on the lookout for signals.
- Comply with the intent of the signal.
- Not act on any signal that they do not understand or that may be intended for other trains or engines.

5.2.2 Signals Used by Employees

To give clear signals during the day and at night, employees must:

A. During the Day

1. Use the correct color of flags or lights.
2. Use day signals from sunrise to sunset.

B. At Night

1. Use the correct color of reflectorized flags or lights.
2. Use night signals from sunset to sunrise or when day signals cannot be seen clearly.

Flags may be made from cloth, metal, or other suitable material.

5.2.3 Flagging Kits

All hy-rail vehicles, on-track equipment that works independently, and the lead and trailing pieces of on-track equipment in a gang consist must carry a full railroad flagging kit. Additionally, vehicle operators whose duties may require flagging must also carry a full flagging kit. The employee in charge and the machine operator are responsible for ensuring that the kit is complete at the beginning of each shift.

A full flagging kit will consist of the following:

12 - Red Fusees
2 - Red Flags
2 - White Lights

5.3 Hand and Radio Signals

5.3.1 Hand Signals

The following diagram illustrates the hand signals for a train or engine to stop, proceed, or back up.

Description of Signal	Indication	Movement
1. Swung at a right angle to the track	STOP	
2. Raised and lowered vertically	PROCEED	
3. Swung slowly in a circle at a right angle to the track	BACK UP	

[Diagram A.]

Employees may use other hand signals only if all crew members understand the signals. When employees are not giving hand signals, they must not make any gestures or movements that may resemble a hand signal.

5.3.2 Giving Signals

Employees who give signals must:

- Make sure signals can be plainly seen.
- Give signals clearly so they can be understood.
- Give signals on the engineer's or operator's side of the track when practical.

5.3.3 Signal Disappearance

If a person disappears who is giving the signal to back or shove, or the light being used disappears, the backing or shoving movement must stop.

5.3.4 Signal to Stop

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

5.3.5 Explain Stop Signal

When a flagman stops a train, the flagman must thoroughly explain to the engineer why the train was stopped before it can proceed.

5.3.6 Radio and Voice Communication

Employees may use radio and other means of voice communication to give information when using hand signals is not practical. Employees must make sure crew members:

- Know which moves will be made by radio communication.
- Understand that while using the radio, the operators of equipment will not accept any hand signals, unless they are Stop signals.

5.3.7 Radio Response

When radio communication is used to make movements, crew members must respond to specific instructions given for each movement. In addition:

- Radio communications for backing and shoving movements must specify the direction and distance and must be acknowledged when distance specified is more than four cars.

Movement must stop within half of the distance specified unless additional instructions are received.

5.4 Flags for Temporary Track Conditions

5.4.1 Temporary Restrictions

Track bulletins, track warrants, or general orders may restrict or stop train movements because of track conditions, structures, men, or equipment working. Yellow flags will be used for temporary speed restrictions. Yellow-red flags will be used when a train may be required to stop. If flags cannot be immediately displayed, that information will be included in the track bulletin, track warrant or general order.

When a track condition requires protection, this protection must be established through the use of Rule 6.19 Flag Protection until track bulletin or track warrant can be issued.

Only flags or lights that meet system standards will be used with temporary track conditions to restrict or stop the movement of trains or on-track equipment.

Track Bulletins and Track Warrants

When a condition exists that requires a train to be restricted, advise the train dispatcher of the location of the restriction by using mile posts and tenths of a mile from mile posts. The location must include the station names located immediately outside the location of the restriction. Unless approved electronic method is used, a request for a track bulletin Form B must be made by providing the required information to the train dispatcher on the form entitled, “Request/ Verification of Track Bulletin Form B.”

Track bulletins and track warrants that have been requested are not in effect until:

- A copy of the track bulletin or track warrant is received.

  or

- The train dispatcher advises that all trains will be protected by track bulletin or track warrant.

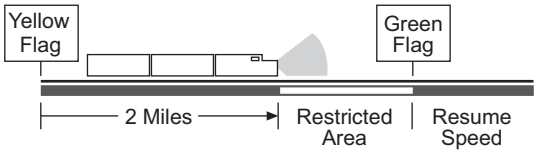
Speed Restrictions

Speed restrictions will only be given to trains by the train dispatcher, except as outlined in Rule 5.4.7 (Display of Red Flag or Light) or Rule 15.2 (Protection by Track Bulletin Form B).

5.4.2 Display of Yellow Flag

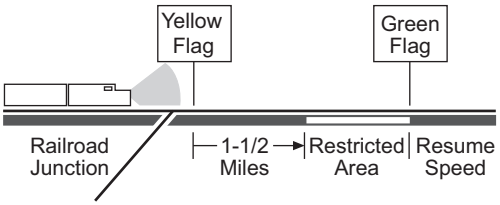
A. Restriction Specified in Writing

Two Miles Ahead of Restricted Area. Yellow flags warn trains to restrict movement because of track conditions or structures. To make sure train movement is restricted at the right location, employees must display a yellow flag 2 miles before the restricted area.



[Diagram A.]

Less than Two Miles Ahead of Restricted Area. When the restricted area is close to a terminal, junction, or another area or if restriction is on a siding, employees will display the yellow flag less than 2 miles before the restricted area. This information will also be included in the track bulletin, track warrant, or general order.



[Diagram B.]

Once the Train Reaches the Restricted Area. The speed specified by track warrant, track bulletin, general order or radio speed restriction must not be exceeded until the rear of the train clears the restricted area.

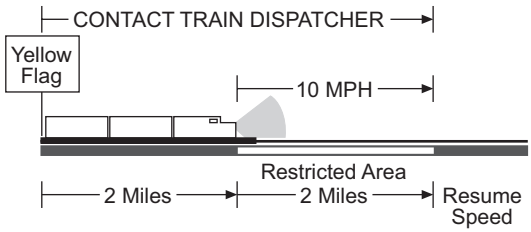
B. Restriction Is Not Specified in Writing

When a yellow flag is displayed and the restriction is not specified by a track bulletin, track warrant, or general order, once the train is 2 miles beyond the yellow flag, crew members must:

1. Continue moving the train but at a speed not exceeding 10 MPH.
2. Resume speed only after the rear of the train has:
   a. Passed a green flag.

      or

   b. Traveled 4 miles beyond the yellow flag and the train dispatcher has verified that no track bulletin or track warrant is in effect specifying a temporary speed restriction at that location.



[Diagram C.]

Observe the following guidelines when using yellow flags to restrict train movement into areas that require a speed restriction.

- Notify the train dispatcher of the speed restriction as soon as possible and advise the dispatcher of the actual location of the yellow flag if it is displayed less than 2 miles from the restriction.
- Display yellow flags 2 miles in advance of the restricted area.
- When the restriction requires the yellow flag to be placed at a siding, a yellow flag must also be placed adjacent to the siding.
- When a restricted area is too close to a terminal or other area to display a yellow flag 2 miles in advance of the restriction, display the yellow flag as far in advance of the restricted area as possible.

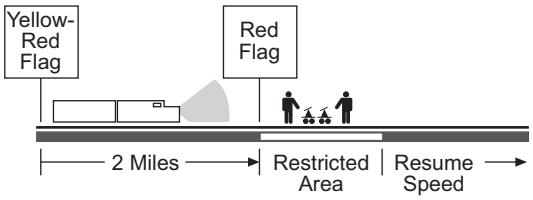
5.4.3 Display of Yellow-Red Flag

Maintenance of Way employees may display yellow-red flags from one hour before to one hour after a Form B track bulletin is in effect. During that time, trains may accept verbal permission from the employee in charge as outlined in Rule 15.2 (Protection by Track Bulletin Form B).

The display of yellow-red flags as described does not extend the authorized working time beyond the times listed on the track bulletin Form B .

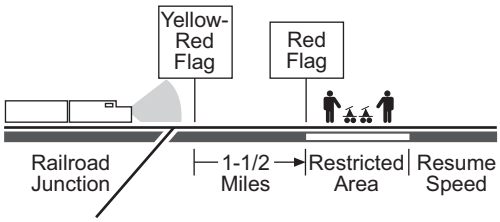
A. Restriction Specified in Writing

Two Miles Ahead of Restricted Area. Yellow-red flags warn a train to be prepared to stop because of men or equipment. To make sure the train is prepared to stop at the right location, employees must display a yellow-red flag 2 miles before the restricted area.



[Diagram A.]

Less Than Two Miles Ahead of Restricted Area. When the restricted area is close to a terminal, junction, or another area, employees will display the yellow-red flag less than 2 miles before the restricted area. This information will also be included in the track bulletin, track warrant, or general order.



[Diagram B.]

B. Restriction Is Not Specified in Writing

When a yellow-red flag is displayed and the restriction is not specified by a track bulletin, track warrant, or general order, crew members must be prepared to stop short of a red flag 2 miles beyond the yellow-red flag. If a red flag is displayed, proceed as outlined in Rule 5.4.7 (Display of Red Flag or Red Light). If no red flag is displayed:

1. Move at restricted speed.
2. Increase speed only after:
   a. A crew member has received permission from the employee in charge.

      or

   b. The leading wheels of movement are 4 miles beyond the yellow-red flag, and the train dispatcher has verified that no track bulletin or track warrant protecting men or equipment is in effect at that location.

      Green flags must not be placed to release a train from the requirements of a yellow-red flag.

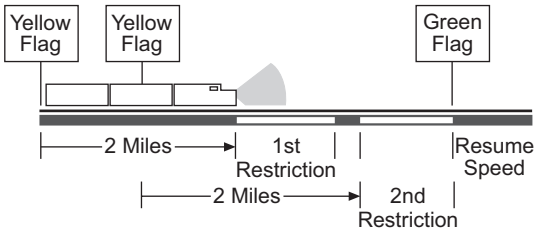
Observe the following guidelines:

- Notify the train dispatcher of the restriction as soon as possible and advise the dispatcher of the actual location of the yellow-red flag if it is displayed less than 2 miles from the restriction.
- Display yellow-red flags 2 miles in advance of the restricted area.
- When the restriction requires the yellow-red flag to be placed at a siding, a yellow-red flag must also be placed adjacent to the siding.
- When a restricted area is too close to a terminal or other area to display a yellow-red flag 2 miles in advance of the restriction, display the yellow-red flag as far in advance of the restricted area as possible.

5.4.5 Display of Green Flag

A green flag indicates the end of a speed restriction. If a series of locations requires reduced speeds, the green flags could overlap yellow flags. When this is the case, employees must:

- Place a yellow flag before each speed restriction.
- Place a green flag at the end of the last speed restriction.



[Diagram A.]

Before placing or removing green flags, an employee must communicate with the train dispatcher to determine the existence of overlapping flags.

5.4.7 Display of Red Flag or Red Light

A red flag or red light is displayed where on-track equipment or trains must stop. When approaching a red flag or red light, the train or on-track equipment must stop short of the red flag or red light and not proceed unless the employee in charge gives instructions. If instructions to proceed are received before the train or on-track equipment stops, the train or on-track equipment may pass the red flag or red light without stopping.

If track bulletin Form B is not in effect, instructions must include speed and distance. This speed must not be exceeded until the rear of the train has passed the specified distance from the red flag or red light, unless otherwise instructed by the employee in charge.

Displayed Between Rails. When a red flag or red light is displayed between the rails of a track, the train must stop and not proceed until the flag or light has been removed by an employee of the class that placed it.

Types of Red Flags and Red Lights. Use only the type of red flags or red lights specifically authorized by system standards for use in the protection of impassable track, speed restrictions, track bulletin Form B's, working limits and for use by designated flagmen.

5.4.8 Flag Location

Flags will be displayed on all main tracks and sidings leading to the track affected.

Flags or red lights must be displayed to the right of the track as viewed from an approaching train. In multiple main track territory or where sidings are adjacent to main track(s), they will be placed on the field side of outside tracks. Red flags or red lights may be displayed between the rails as outlined in Rule 5.4.7 (Display of Red Flag or Red Light). Flags or red lights will be placed in this manner unless otherwise specified by track bulletin, track warrant, special instructions, or general order. It is not permissible to display or affix red flags or red lights to on-track equipment for the purpose of delineating working limits.

When flags are displayed beyond the first rail of an adjacent track, the flags will not apply to the track on which the train is moving.

When placing track flags, the least restrictive flag should be placed first. (Example: Yellow-red flag then red flag, or green flag then yellow flag.)

When removing track flags, the most restrictive flag should be removed first. (Example: Red flag then yellow-red flag, or yellow flag then green flag.)

5.4.9 Approved Flags and Lights

For temporary track conditions, use only flags or lights approved for use in the current edition of the BNSF Standard Plan Book to restrict or stop the movement of trains or on-track equipment (BNSF Standard Plan 3010 and 3090).

When using flags to restrict speed, prevent movement onto impassable track, or control the movement of trains and on-track equipment in connection with a track bulletin Form B, use only portable train control sign No. 10 shown in drawing No. 3010 of the BNSF Standard Plan Book.

When using flags or lights to prevent the movement of trains and on-track equipment into working limits, except as required in connection with a track bulletin Form B, use either signs 92 and 93 in drawing No. 3090 of the BNSF Standard Plan Book or portable train control sign No. 10.

In addition to these items, on other than main tracks and controlled sidings, use sign 91 in drawing No. 3090 of the BNSF Standard Plan Book to establish working limits.

Flagmen will use the red signal flag (sign 92) in drawing No. 3090 of the BNSF Standard Plan Book to protect other employees or on-track equipment and to prevent the movement of trains and on-track equipment onto track where conditions necessitate restrictions.

5.5 Permanent Speed Signs

5.5.1 Permanent Speed Signs

Permanent speed restriction signs will be placed in advance of permanent speed restrictions. Speeds will be shown in the timetable or on general order.

Speed restrictions covered by a general order will be protected by permanent speed restriction signs.

Permanent speed signs are not required for trains moving against the current of traffic.

Resume Speed Signs

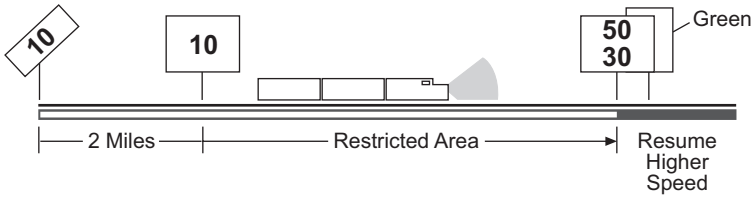
A permanent resume speed sign or a speed sign showing a higher speed will be placed at the end of each restriction.

Crew members must not exceed the speed shown on each permanent speed restriction sign until the rear of the train:

- Has passed a permanent resume speed sign or a sign showing a higher speed.

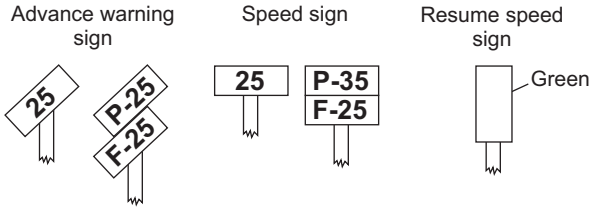
  or

- Has cleared the limits of the restriction.



[Diagram A.]

5.5.2 Speed Limit Signs



[Diagram A.]

Speeds preceded by the letter P apply to passenger trains.

Speeds preceded by the letter F apply to freight trains.

Speeds not preceded by a letter apply to all trains.

Numbers

Numbers on the face of these signs indicate the highest speed permitted over the limits of the restriction.

Two Sets of Numbers

When two sets of numbers are shown, the greater number governs trains consisting entirely of passenger equipment. The lesser number governs all other trains.

Advance Warning Signs

An advance warning sign must be placed 2 miles before the location where the lower speed is in effect.

Speed Signs

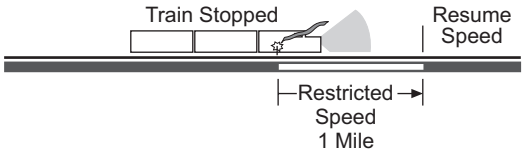
Speed signs must be placed at the location where the lower speed is in effect.

Resume Speed Signs

Resume speed signs must be placed at the location where the lower speed is no longer in effect. Normal speed signs may be used in lieu of resume speed signs.

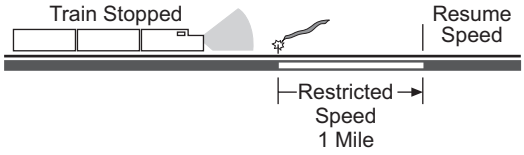
5.6 Unattended Fusee

If a train approaches an unattended fusee burning on or near its track, the train must stop consistent with good train handling.



[Diagram A.]

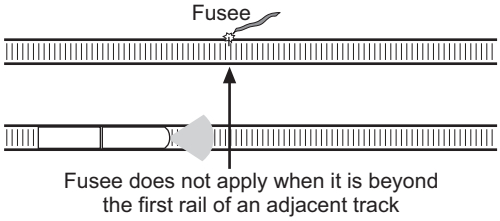
A train moving at restricted speed must stop before passing the fusee.



[Diagram B.]

After stopping, the train must proceed at restricted speed for 1 mile beyond the fusee.

If the unattended burning fusee is beyond the first rail of an adjacent track, the fusee does not apply to the track on which the train is moving.



[Diagram C.]

Do not place fusees where they may cause fires.

5.8 Bell and Whistle Signals

5.8.2 Sounding Whistle

When weather conditions impair visibility, sound the whistle frequently.

When other employees are working in the immediate area, sound the required whistle signal before moving.

The use of horns at grade crossings by all roadway machines and hy-rail equipment is optional at the discretion of the operator.

Sound whistle signal (8) and ring the bell when approaching roadway workers on or near the track, regardless of any whistle prohibition.

When on-track equipment is observed on adjacent track, sound whistle signal (8) approaching and passing this equipment.

The radio may be used in place of whistle signals, except signals (1), (7) and (8). See following chart.

The required whistle signals are illustrated by “o” for short sounds and “—” for longer sound:

Sound		Indication
[1]	Succession of Short Sounds	Use when persons or livestock are on the track at other than road crossings at grade. In addition, use to warn railroad employees when an emergency exists such as a derailment, When crews on other trains hear this signal, they must stop until it is safe to proceed.
[2]	—	When stopped: air brakes are applied, pressure equalized.
[3]	— —	Release brakes. Proceed.
[4]	o o	Acknowledgment of any signal not otherwise provided for.
[5]	o o o	When stopped: back up. Acknowledgment of hand signal to back up.
[6]	o o o o	Request for signal to be given or repeated if not understood.
[7]	— — o —	Approaching crossings at grade.
[8]	— o	Approaching men or equipment on or near the track, regardless of any whistle prohibitions. After this initial warning, sound whistle signal (4) intermittently until the head end of train or on-track equipment has passed the men or equipment.

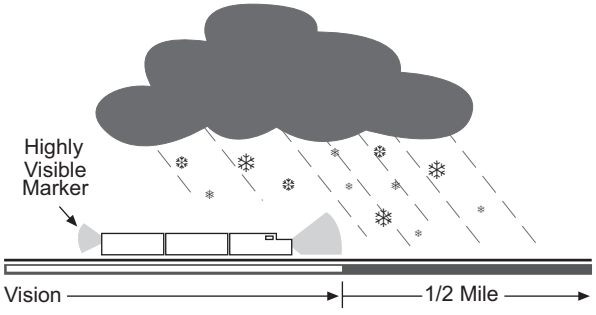
5.10 Markers

A marker of the prescribed type must be displayed on the trailing end of the rear car to indicate the rear of the train.

5.10.1 Highly Visible Markers

Display a highly visible marker at the rear of every train as follows:

- From 1 hour before sunset to 1 hour after sunrise.
- When weather conditions restrict visibility to less than 1/2 mile.



[Diagram A.]

A marker equipped with a functioning photoelectric cell will automatically illuminate at the appropriate time.

When an engine is operating without cars or is at the rear of the train, the trailing headlight illuminated on dim may be used as a marker.

5.10.2 Alternative Markers

Display a reflector, red flag, or light fixture at the rear of the train as the marker when any of the following conditions exists:

- A highly visible marker is not required.
- A defective car must be placed at the rear for movement to a repair point.
- The rear portion of the train is disabled and cannot be moved, and a highly visible marker cannot be displayed on the rear of the portion to be moved.

  or

- The highly visible marker becomes inoperative en route. If this occurs, notify the train dispatcher and move the train to the next forward location where the highly visible marker can be repaired or replaced.

5.11 Engine Identifying Number

Trains will be identified by initials and engine number, adding the direction when required. When an engine consists of more than one unit or when two or more engines are coupled, the number of one unit only will be illuminated as the identifying number. When practical, use the leading unit.

5.12 Protection of Occupied Outfit Cars

This rule outlines the requirements for protecting occupied outfit cars. As used in this rule, the following definitions apply:

Outfit Car. Any on-track vehicle, including outfit, camp, or bunk car or modular home mounted on a flat car to house railroad employees. Such equipment is not considered an outfit car when placed in a wreck train.

Effective Locking Device. When used in relation to a manually operated switch or a derail, a lock that can be locked or unlocked only by the craft or group of workmen applying the lock.

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

Switch Providing Direct Access. A switch that if used by rolling equipment could permit the rolling equipment to couple to the equipment being protected.

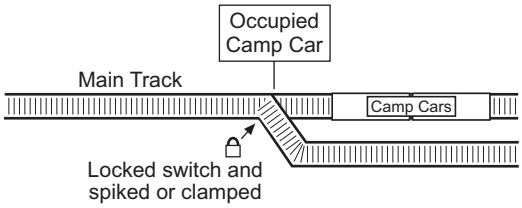
Warning Signal. A white sign that reads “OCCUPIED CAMP CAR” in black lettering. At night, an illuminated white light must also be used.

When occupied outfit cars are placed on a track, the employee in charge of the outfit car occupants (or a designated representative) must provide or request protection using one of the following methods:

A. On a Main Track

One of these two methods or a combination of these methods must be provided:

1. Each manually operated switch that provides direct access to that portion of the main track where occupied outfit cars are located must be lined against movement to that track, secured with an effective locking device, and spiked or clamped. Warning signals must be displayed at or near each switch.



[Diagram A.]

2. If remote control switches provide direct access to the main track where occupied outfit cars are located, the control operator will line the switch against movement to that track and apply blocking devices to the control machine to prevent movement onto that track. The control operator must complete the above tasks before informing the employee requesting protection that protection is provided.

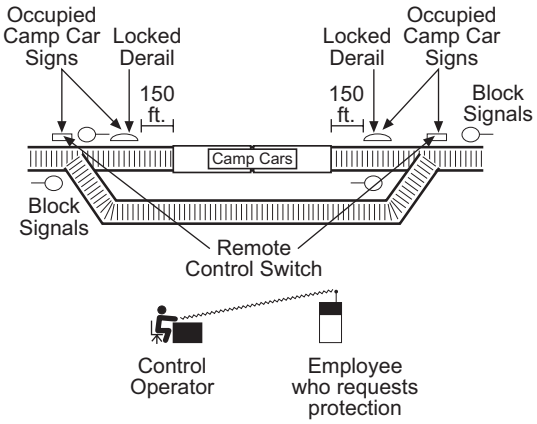
Blocking devices must not be removed until the employee in charge of the outfit car occupants (or a designated representative) informs the control operator that protection is no longer required.

a. Warning signals must be displayed at or near each remote control switch.

b. In addition, a derail capable of restricting access to the portion of main track where occupied outfit cars are located must be placed at least 150 feet from the end of the occupied outfit cars. The derail must be locked in derailing position with an effective locking device. Warning signals must be displayed at each derail.

c. The control operator must maintain for 15 days a written record of each notification. The record must contain the following information:

- Name and craft of employee requesting protection.
- Identification of track protected.
- Date and time employee in charge of outfit car occupants is notified that protection was provided.
- Date, time, name, and craft of employee authorizing removal of protection.

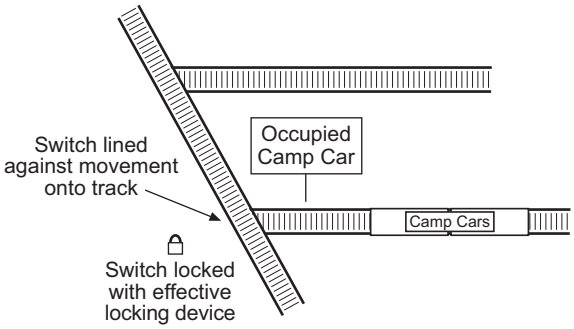


[Diagram B.]

B. On Other Than a Main Track

One of these three methods of protection or a combination of these methods must be provided:

1. Each manually operated switch that provides direct access to the track where occupied outfit cars are located must be lined against movement to that track and secured with an effective locking device. Warning signals must be displayed at or near the switch.

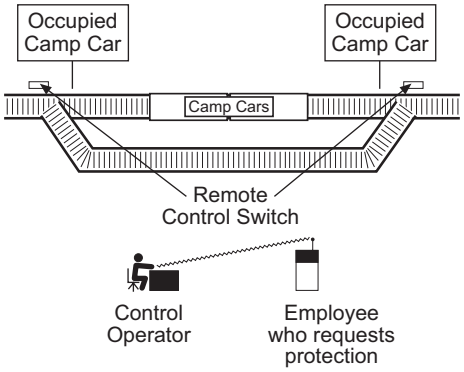


[Diagram C.]

2. If remote control switches provide direct access to the track where occupied outfit cars are located, the control operator will line the switch against movement to that track and apply blocking devices to the control machine to prevent movement onto that track. The control operator must complete the above tasks before informing the employee requesting protection that protection is provided.

Blocking devices must not be removed until the employee in charge of the outfit car occupants (or a designated representative) informs the control operator that protection is no longer required.

a. Warning signals must be displayed at or near each remote control switch.



[Diagram D.]

b. The control operator must maintain for 15 days a written record of each notification. The record must contain the following information:

- Name and craft of employee requesting protection
- Identification of track protected
- Date and time employee in charge of outfit car occupants is notified that protection was provided
- Date, time, name, and craft of employee authorizing removal of protection

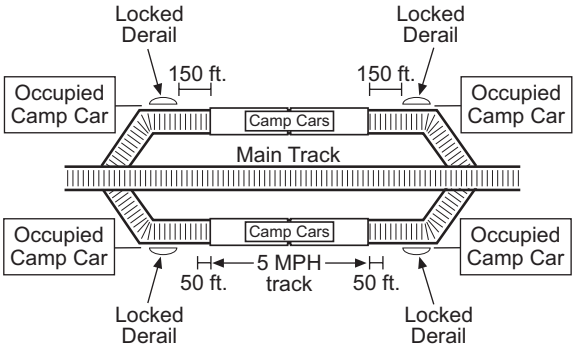
3. A derail capable of restricting access to that portion of the track where occupied outfit cars are located will fulfill the requirements of protection when the derail is:

   a. Positioned at least 150 feet from the end of the occupied outfit cars.

      or

   b. Positioned at least 50 feet from the end of the occupied outfit cars where the maximum speed on that track is 5 MPH.

   Warning signals must be displayed at each derail.



[Diagram E.]

C. Warning Signals

When a warning signal is displayed to protect occupied outfit cars:

1. Occupied outfit cars must not be coupled to or moved.
2. Rolling equipment must not pass the warning signal.
3. Rolling equipment must not be placed on the same track in a manner that would block or reduce the crew's view of the warning signal.

When outfit cars are occupied, hand brakes must be set on each outfit car and any car coupled to outfit cars. If necessary, wheels must be blocked.

5.13 Blue Signal Protection of Workmen

This rule outlines the requirements for protecting railroad workmen who are inspecting, testing, repairing, and servicing rolling equipment. In particular, because these tasks require the workmen to work on, under, or between rolling equipment, workmen are exposed to potential injury from moving equipment.

As used in this rule, the following definitions apply:

Workmen. Railroad employees assigned to inspect, test, repair, or service railroad rolling equipment or components, including brake systems. Train and yard crews are excluded, except when they perform the above work on rolling equipment not part of the train or yard movement they are handling or will handle.

- "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 an employee making visual observations while on or along side a caboose, engine, or passenger car. Also, testing does not include repositioning the activation switch or covering the photoelectric cell of the marker when the rear of the train is on the main track. The employee inspecting the marker must contact the employee controlling the engine to confirm that the train will remain secure against movement until the inspection is complete.

Group of Workmen. Two or more workmen of the same or different crafts who work as a unit under a common authority and communicate with each other while working.

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

Blue Signal. During the day, a clearly distinguishable blue flag or light, and at night, a blue light. The blue light may be steady or flashing.

The blue signal does not need to be lighted when it is attached to the operating controls of an engine and the inside of the engine cab area is lighted enough to make the blue signal clearly distinguishable.

Effective Locking Device. When used in relation to a manually operated switch or a derail, a lock that can be locked or unlocked only by the craft or group of workmen applying the lock.

Car Shop Repair Area. One or more tracks within an area where rolling equipment testing, servicing, repairing, inspecting, or rebuilding is controlled exclusively by mechanical department personnel.

Engine Servicing Area. One or more tracks within an area where engine testing, servicing, repairing, inspecting, or rebuilding is controlled exclusively by mechanical department personnel.

Switch Providing Direct Access. A switch that if used by rolling equipment could permit the rolling equipment to couple to the equipment being protected.

A. What a Blue Signal Signifies

A blue signal signifies that workmen are on, under, or between rolling equipment and requires that:

1. Rolling equipment must not be coupled to or moved, except as provided in **"Movement in Engine Servicing Area"** and **" Movement in Car Shop Repair Area of this Rule."**
2. Rolling equipment must not pass a blue signal on a track protected by the signal.
3. Other rolling equipment must not be placed on the same track so as to block or reduce the view of the blue signal.
    a. However, rolling equipment may be placed on the same track when it is placed on designated engine servicing area tracks or car shop repair area tracks, or when a derail divides a track into separate working areas.
4. Rolling equipment must not enter a track when a blue signal is displayed at the entrance to the track.

Blue signals or remote control blue signals must be displayed for each craft or group of workmen who will work on, under, or between rolling equipment.

Protection Removed. Blue signals may be removed only by the craft or group who placed them. Remote control display may be discontinued when directed by the craft or group that requested the protection. When blue signal protection has been removed from one entrance of a double-ended track or from either end of rolling equipment on a main track, that track is no longer under blue signal protection.

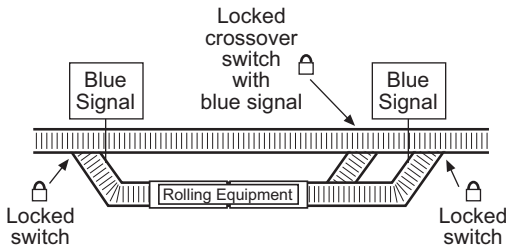
B. How to Provide Protection

When workmen are on, under, or between rolling equipment and exposed to potential injury, protection must be provided as follows:

On a Main Track. A blue signal must be displayed at each end of the rolling equipment.

On Other Than a Main Track. One of these three methods of protection or a combination of these methods must be provided:

1. Each manually operated switch, including any facing point crossover switch that provides direct access must be lined against movement onto the track and secured by an effective locking device. A blue signal must be placed a or near each such switch.



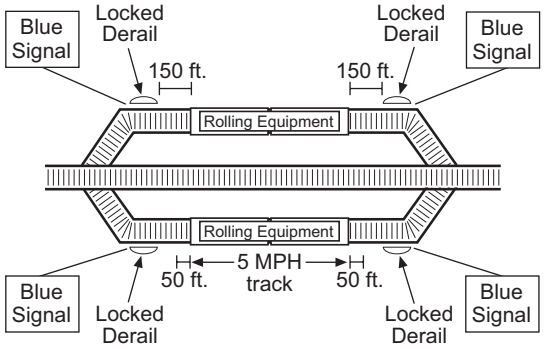
[Diagram A.]

2. A derail capable of restricting access to the track where work will occur must be locked in derailing position with an effective locking device and:

   a. Positioned at least 150 feet from the rolling equipment to be protected.

      or

   b. Positioned at least 50 feet from the end of rolling equipment on a designated engine servicing track or car shop repair track where speed is limited to not more than 5 MPH. A blue signal must be displayed at each derail.



[Diagram B.]

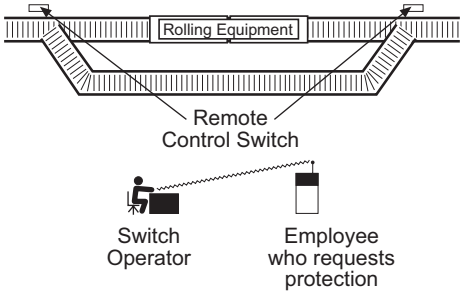
3. Where remote control switches provide direct access, the employee in charge of the workmen must tell the switch operator what work will be done. The switch operator must then:

   a. Inform the employee in charge of the workmen that the switches have been lined against movement onto the track and devices controlling the switches have been secured.

   b. Not remove the locking devices unless the employee in charge of the workmen says it is safe to do so.

c. Maintain for 15 days a written record of each notification that includes:

- Name and craft of the employee in charge of the workmen requesting protection.
- Identification of track involved.
- Date and time the employee in charge of workmen is notified that protection was provided.
- Date, time, name, and craft of the employee in charge of workmen who authorized removal of the protection.

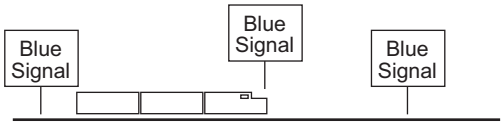


[Diagram C.]

C. Blue Signal Readily Visible to Engineer

In addition to providing protection as required in **"On a Main Track"** and **"On Other Than a Main Track,"** when workmen are on, under, or between an engine or rolling equipment coupled to an engine:

1. A blue signal must be attached to the controlling engine.
2. A blue signal must be visible to the engineer or employee controlling the engine.
3. The engine must not be moved.



[Diagram D.]

D. Protection for Workmen Inspecting Markers

Blue signal protection must be provided for workmen when they are:

1. Replacing, repositioning, or repairing a marker, and the rear of the train is on any track.

   or

2. Inspecting a marker by repositioning the activation switch or covering the photoelectric cell, and the rear of the train is on other than a main track.

E. Protection for Emergency Repair Work

If a blue signal is not available for employees performing emergency repairs on, under, or between an engine or rolling equipment coupled to an engine, the employee controlling the engine must be notified and appropriate measures taken to provide protection for the employees.

F. Movement in Engine Servicing Area

An engine must not enter a designated engine servicing area until the blue signal protection is removed from the entrance. The engine must stop short of coupling to another engine.

An engine must not leave a designated engine servicing area unless the blue signal is removed from the engine and the track in the direction of movement.

Blue signal protection removed to let engines enter or leave the engine servicing area must be restored immediately after the engine enters or clears the area.

An engine protected by blue signals may be moved on a designated engine servicing area track when:

1. An authorized employee operates the engine under the direction of the employee in charge of workmen.
2. The blue signal has been removed from the controlling engine to be repositioned.
3. Workmen have been warned of the movement.

G. Movement in Car Shop Repair Area

When rolling equipment on car shop repair tracks is protected by blue signals, a car mover may reposition the equipment if:

1. Workmen have been warned of the movement.
2. An authorized employee operates the car mover under the direction of the employee in charge of workmen.

5.14 Signs Protecting Equipment

When a sign reading

STOP—TANK CAR CONNECTED

STOP—MEN WORKING

EMPLOYEES WORKING

SERVICE CONNECTIONS

or a similar warning is displayed on a track or car, the car must not be coupled to or moved. Other equipment must not be placed on the same track in a manner that would block or reduce the view of the sign.

5.15 Improperly Displayed Signals

If a signal is improperly displayed, or a signal, flag, or sign is absent from the place it is usually shown, regard the signal as showing the most restrictive indication it can give. However, if a semaphore arm is visible, it will govern.

Promptly report improperly displayed signals or absent fixed signals, flags, or signs to the train dispatcher.

6.0 Movement of Trains, Engines and On-Track Equipment

6.1 Repeat Instructions

An employee who verbally receives instructions or information about train or engine movements must repeat them.

6.2 Initiating Movement

6.2.1 Train Location

MW employees must not receive authority behind a train(s) until the train(s) is passing, or has passed the location where the track will be occupied or fouled. After receiving authority behind a train(s) and before occupying or fouling the track, or using the authority as a method of protection, the employee must establish direct radio contact with a crew member of the train(s) and verbally:

- Confirm train(s) identity by engine initials and number
- Determine train(s) location by MP

The employee must use this information to verify the train(s) has passed the location prior to occupying or fouling the track, or using the authority as a method of protection.

When an authority is issued voiding a previous authority and identifying additional train(s) to be followed, movement must stop until direct radio contact is established to ascertain the MP location of the additional train(s). Direct radio contact is not required when employees are occupying the track with authority behind a train(s), and additional authority is received behind the same train(s).

An electronic device cannot be used to ascertain train(s) has passed the location where the track will be occupied or fouled.

6.2.2 Electronic Display of Authority

A. Authority Displayed on Electronic Device

Employees may receive authority via an approved electronic device such as a laptop computer, printer or other device. Written authority is not required when using this electronic device.

When received, the authority must be acknowledged using prescribed method associated with the device and remain accessible via the electronic device used to receive this authority.

B. Loss of Electronic Device Functionality

Should the electronic device become inoperable and the granted authority text is no longer available, the vehicle must be stopped.

Employees must not continue movement until:

- The electronic device returns to normal operation and the granted authority text becomes viewable,

  or

- Train dispatcher or control operator is contacted and written authority is obtained, recording information on the prescribed form.

6.3 Track Occupancy

6.3.1 Main Track Authorization

Use one of the following on main tracks, controlled sidings or any track where CTC is in effect:

- Rule 6.14 (Restricted Limits)
- Rule 9.15 (Track Permit)
- Rule 10.3 (Track and Time)
- Rule 14.0 (Track Warrant)
- Rule 15.2 (Track Bulletin Form B)
- Rule 17.0 (Foul Time)
- Rule 18.0 (Occupancy Control System)

Working Limits

- When receiving an authority that is not “joint”, working limits are considered to be established at the limits of authority. Red flags do not need to be displayed.

  Exception: When authority includes only a portion of a CTC Control Point or Manual Interlocking, display a red flag between the rails to indicate the authority limit(s) within the Control Point or Manual Interlocking unless those limits are identified by a field sign (e.g. Track and Time Point, Release Point, etc.)

- When receiving an authority that is “joint”, display red flags if working limits are established within overlapping authority limits. Prior to occupying any overlapping authority limits that are “joint,” all working limits (including your own working limits) within the overlapping authority limits must be documented on the “Working Limits” form.
- Where authority overlaps track bulletin Form B limits, make all movements under the direction of the employee in charge of the track bulletin Form B. Red flags will only be displayed at the limit of the track bulletin Form B and at main track junctions within the limits.

Occupying or Fouling Track

Before occupying a main track, controlled siding or any track where CTC is in effect, employees must have information concerning all track bulletin Form B’s in effect that may overlap their authority. Employees continuing to occupy a main track, controlled siding or any track where CTC is in effect after midnight must contact the train dispatcher to obtain any additional Form B’s that may have been issued.

When employees are unable to obtain authority and it is necessary to foul or occupy a main track or controlled siding, protection must be established in both directions using Rule 6.19 (Flag Protection).

When requesting authority or establishing protection, the employee in charge must ensure that equipment and employees do not occupy or foul the track until authority is received or protection is established. The employee requesting authority must be qualified on these rules and must tell the train dispatcher or control operator where the main track will be entered.

When the work group consists of two or more employees, at least one other employee (rules qualified, if available) in that work group must read and understand the authority prior to equipment or employees fouling the track.

Overlapping Authority

When an employee receives “joint” authority, the employees must not occupy the overlapping limits until employees and/or trains listed on that authority are contacted. A job briefing must determine the location of all working limits. The job briefing must designate only one employee as the EIC of overlapping working limits.

When an employee receives an authority that overlaps a track bulletin Form B, the employee must not occupy the overlapping limits until the EIC of the track bulletin Form B is contacted. Make all movements within the Form B limits under the direction of the employee in charge of the track bulletin Form B. Do not display red flags within the limits of the track bulletin Form B.

When authority is granted behind a train, working limits may not be established until the employee in charge contacts the train(s) listed on the authority. The EIC will inform crew that working limits will be established behind their train. The employee in charge will also inform the train crew that no reverse movements may be made without first contacting the employee in charge.

Multiple Work Group — Job Briefing

When two or more work groups are using the same authority, the EIC of the authority must have a job briefing with each work group.

Multiple Work Group — Documentation

The employee in charge of the authority must document the following on the "Multiple Work Groups Using the Same Authority" form:

- Authority number
- Name of each work group using the authority
- Time acknowledgment received
- Time authority limits are cleared

When working limits have been established, the employee in charge of the other work group must document the following on the "Working Limits" form:

- Working limits
- EIC of the working limits
- At time
- Clear time

Confirmation of Limits Prior to Granting Authority

Following a verbal request for authority, the following will apply:

1. If the authority can be granted as requested, the train dispatcher or control operator will restate the limits to the requesting employee for confirmation.
2. If confirmation is received from the employee, the train dispatcher or control operator will issue the authority with no change in the confirmed limits.
3. If unable to grant authority with limits as requested, the train dispatcher or control operator will state limits that can be given, asking employee if usable.
4. If changed limits are usable, the train dispatcher or control operator will require the employee to repeat the changed limits to confirm understanding before issuing limits. If the authority issued is different from that discussed with the train dispatcher or control operator, employee must not repeat the authority until a confirmation of the limits requested is identical to the authority being issued.

Releasing Authorities

Track and Time, Track Permits, Track Warrants, Foul Time and Occupancy Control System limits must be cleared and reported clear to the control operator or train dispatcher before time expires. Before any of these authorities are released, all equipment and employees must be clear of the limits and reported clear to the designated control operator or train dispatcher.

The employee must request any additional time before the authorized time has expired. If the employee can not clear the track before the expiration time of the authority, authority is extended until the control operator or train dispatcher is contacted.

6.3.2 Protection on Other Than Main Track

To establish protection on a track other than a main track, controlled siding or any track where CTC is in effect, use one or a combination of the following:

- All switches that provide direct access to the track must be:
  - Lined against movement.
  - Properly tagged.
  - Effectively spiked, clamped or locked with an effective locking device.
- A red flag or light must be placed as outlined in Rule 5.4.7 (Display of Red Flag or Light). A derail capable of restricting access to the track where work will occur must be locked in derailing position near the red flag or light with an effective locking device. The red flag or light must be placed at least 150 feet from the work location when the track speed is greater than 5 MPH or at least 50 feet from the work location when the track speed is 5 MPH or less.
- When remote control switches, including those in a hump yard, are operated by a control operator or other designated employee, employees must establish protection as outlined below:
  - The employee requesting protection must notify the employee controlling the switches that provide access from the hump to the track where the work will occur.
  - After being notified, the switch controller must line any remote control switch against movement to the affected bowl track and apply a locking or blocking device to the control for that switch.
  - The switch controller must then notify the employee that protection is provided. Protection will be maintained until the switch controller is advised that work is complete and protection is no longer required.
- Place a flagman to hold all trains and on-track equipment clear of the working limits.
- Establish discontinuity in the rail to prevent movement into the working limits. Place red flags 150 feet in advance of the working limits.
- Establish working limits on main track or controlled siding to prevent movement to other than main tracks.

When establishing protection, the employee in charge must ensure that equipment and employees do not occupy or foul the track until protection is established. The employee assigned the responsibility of yard movements must be notified of the work to be done.

Protection Within Car Shop, Repair or Engine Servicing Areas

Before establishing working limits, the roadway worker in charge must conduct a job briefing with the mechanical employee in charge of the Car Shop, Repair or Engine Servicing Area. When locomotives, cars or motorized on-track equipment are on the track where working limits will be established, the roadway worker in charge and the mechanical employee in charge must jointly establish safeguards to protect the working limits against other movements. The roadway worker in charge must notify the mechanical employee in charge when work is completed and working limits have been cleared.

Protection Within Intermodal Hub Facility

Before establishing working limits, the roadway worker in charge must conduct a job briefing with the intermodal ramp coordinator. When locomotives, cars or motorized on-track equipment are on the track where working limits will be established, the roadway worker in charge and the designated intermodal employee in charge must jointly establish safeguards to protect the working limits against other movements. The roadway worker in charge must notify the intermodal employee in charge when work is completed and working limits have been cleared.

Protection on Other Than Main Track

When work is performed that does not require the employee(s) to be in front or behind the train or engine, employee(s) may establish protection by flagging the train or engine to a stop. Employee(s) may then give the crew specific instructions to make all movements under the direction of the MW EIC as outlined in the System Work Train Policy in the System Special Instructions.

When work is performed in front of or behind a train or engine, employee(s) may establish protection in one direction by flagging the train to a stop. Employee(s) may then give the crew specific instructions to make all movements under the direction of the MW EIC. Protection must also be established in the other direction to prevent any unannounced movements onto the track segment being protected.

6.3.3 Visual Detection of Trains

Authority or protection is not required when using visual detection of trains as outlined below.

STATEMENT OF ON-TRACK SAFETY

A lone worker using individual train detection or a lookout using train approach warning to establish on-track safety must complete this form prior to fouling a track.

To complete this form:

1. Provide the following information:

   Name of Lone Worker/Lookout:

   Date: _____ Division: _____

   Subdivision:_____

   Location: From MP_____ to MP _____

   Designated Place of Safety: _____

   Method of Warning: _____

   Time form completed: _____

2. In the table below, place an X in the box adjacent to the maximum authorized speed of trains at the location specified above. Observe the minimum required distance between the approaching train and the employee(s) when the place of safety has been reached.

Maximum Authorized Speed in MPH	Minimum Separation Upon Reaching Place of Safety		Maximum Authorized Speed in MPH	Minimum Separation Upon Reaching Place of Safety	
	X	Feet		X	Feet
5		110	50		1,100
10		220	55		1,210
15		330	60		1,320
20		440	65		1,430
25		550	70		1,540
30		660	75		1,650
35		770	80		1,760
40		880	85		1,870
45		990	90		1,980

Note: When the maximum authorized speed is not shown on the form, use the next higher speed.

A. Lone Workers

Lone workers using individual train detection must complete the form entitled, "Statement of On-Track Safety" prior to fouling a track. The completed form must be in the employee's possession when used to establish on track safety.

Each employee providing protection for a work group, and each lone worker, will maintain immediate access to a working radio, which can be a portable radio capable of monitoring transmissions from train movements in the vicinity.

Lone Worker Responsibilities

Lone workers must:

- Identify a place of safety prior to fouling a track.
- Position themselves in a predetermined place of safety at least 15 seconds prior to the arrival of the train moving at maximum authorized speed as indicated in the Statement of On-Track Safety.

Conditions for Use

Lone workers may perform minor work or a routine inspection using individual train detection when they meet all of the following conditions:

- The work will not affect the movement of trains.
- The lone worker is able to visually detect the approach of a train moving at maximum authorized speed and position themselves in a predetermined place of safety at least 15 seconds prior to the arrival of the train as indicated on the Statement of On-Track Safety.
- Visibility is sufficient to observe the entire track segment at the minimum separation distance as specified by the "Statement of On-Track Safety".
- Power-operated tools or roadway maintenance machines are not in use within hearing distance.
- The ability to hear and see approaching trains and other on-track equipment is not impaired by background noise, lights, precipitation, fog, a passing train or other physical condition.
- Natural or artificial light and conditions are sufficient to observe approaching trains, engines or on-track equipment at the minimum separation distance as specified by the "Statement of On-Track Safety". Individual train detection is prohibited based solely upon the observation of headlights, ditch lights or markers, such as during conditions of insufficient visibility as affected by darkness or inclement weather.
- The work is performed outside the limits of a control point or a remotely controlled hump yard facility. Automatic interlockings are not control points.

B. Lookouts

Lookouts must complete the form entitled "Statement of On-Track Safety" prior to anyone fouling the track. The completed form must be in the employee's possession when used to establish on-track safety. Work groups may use a lookout to perform minor work or a routine inspection using train approach warning.

Lookout Responsibilities

Lookouts must adhere to the following:

- Be trained and rules qualified.
- Identify a place of safety where they and employees they are protecting can go when a train approaches.
- Communicate the place of safety to the other employees prior to the track being fouled.
- Devote their full attention to detecting the approach of trains and warning employees.

- Warn employees and have them positioned in a predetermined place of safety at least 15 seconds prior to the arrival of the train moving at maximum authorized speed as indicated in the Statement of On-Track Safety.
- Use a method to warn employees of the approach of a train or on-track equipment that:
  - Is distinctive, clear and unquestionable.
  - Does not require employees to be looking in any particular direction.
  - Can be detected by employees regardless of noise or work distractions.
  - Is identified in the job safety briefing.

Employees who depend upon a lookout for protection must always remain in a position that allows them to receive warnings communicated by the lookout.

Conditions for Use

Work groups may use a lookout to perform minor work or a routine inspection using train approach warning when they meet all of the following conditions:

- The work will not affect the movement of trains.
- Lookouts must be able to visually detect the approach of a train moving at maximum authorized speed. They must position themselves and the members of the work group in a predetermined place of safety at least 15 seconds prior to the arrival of the train as indicated on the Statement of On-Track Safety.
- Visibility is sufficient to observe the entire track segment at the minimum separation distance as specified by the “Statement of On-Track Safety”.
- The ability to communicate a warning to all members of the work group upon the approach of trains and other on-track equipment is not impaired by background noise, lights, precipitation, fog, a passing train or other physical condition.
- Natural or artificial light and conditions are sufficient to observe approaching trains, engines or on-track equipment at the minimum separation distance as specified by the “Statement of On-Track Safety”. Train approach warning is prohibited based solely upon the observation of headlights, ditch lights or markers, such as during conditions of insufficient visibility as affected by darkness or inclement weather.

6.3.4 Train Coordination

Train Coordination provides for men or equipment to use a train’s authority to establish working limits for track maintenance. The employee must contact the train’s engineer to request use of Train Coordination. To establish working limits:

- The train must be in view and stopped.
- The employee in charge of working limits will communicate with the engineer who will notify other crew members that working limits are to be established.
- The engineer will make movements only as permitted by the employee in charge until the working limits have been released to the engineer.
- The train will not release its authority within the limits until those working limits have been released by the employee in charge.

Establish Working Limits

Working limits may be established within a train’s authority limits as follows:

A. DTC or TWC Territory

1. With a train having authority to move in either direction that is not joint.

   or

2. With a train having authority to move in one direction only, working limits must not be established:
   - Behind the train.
   - More than one block in advance of the train or beyond any location that a train or engine could enter the track between the employee in charge of the working limits and the train.

B. Rule 9.15 (Track Permit)

With a train having the only track permit authority within the limits.

C. Rule 9.14 (Current of Traffic)

With a train having authority to move with the current of traffic, working limits must not be established:

- Behind the train.
- More than one block in advance of the train or beyond any location that a train or engine could enter the track between the employee in charge of the working limits and the train.

D. CTC Territory

1. With a train having track and time authority that is not joint.

   or

2. With a train having authority to move in one direction only, working limits must not be established:
   - Behind the train.
   - More than one block in advance of the train or beyond any location that a train or engine could enter the track between the employee in charge of the working limits and the train.

E. OCS territory

Employees may use a train's permission in OCS territory in the same manner as using a train's authority. Working limits may be established within a train's OCS limits as follows:

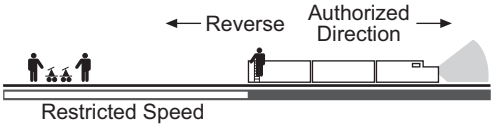
1. With a train having permission to move in either direction that is not joint.

   or

2. With a train having permission to move in one direction only, working limits must not be established:
   - Behind the train.
   - More than one block in advance of the train or beyond any location that a train or engine could enter the track between the employee in charge of the working limits and the train.

6.4 Reverse Movements

Make reverse movements on any main track, but only within the limits on-track equipment has authority to occupy the track. Trains and engines must make reverse movements at restricted speed.



[Diagram A.]

6.5 Handling Cars Ahead of Engine

When cars or engines are shoved and conditions require, a crew member must take an easily seen position on the leading car or engine, or be ahead of the movement, to provide protection. Cars or engines must not be shoved until the equipment operator knows who is protecting the point of the movement and how protection will be provided. The employee providing protection for the movement shall not engage in any task unrelated to the movement. Cars or engines must not be shoved to block other tracks until it is safe to do so.

When cars are shoved on a main track or controlled siding in the direction authorized, movement must not exceed:

- 20 MPH for freight trains and on-track equipment.
- Maximum timetable speed for snow service unless a higher speed is authorized by employee in charge.

6.5.1 Remote Control Movements

Remote control movements are considered “shoving” movements, except when the remote control operator controlling the movement is riding the leading engine in the direction of movement. Before initiating movement, the remote control operator or a crew member must be in position to visually observe the direction the equipment moves.

Relief of Providing Protection

The remote control operator is relieved from the requirement to stop within half the range of vision for movements with engine on leading end when:

1. The remote control zone has been activated.
2. Switches/derails are known to be properly lined.
3. Track(s) within the zone are known to be clear of other trains, engines, railroad cars, and men or equipment fouling track.

This process must be repeated each time the remote control zone is activated.

6.7 Remote Control Zone

A. Entering Remote Control Zone

Before entering a remote control zone, all employees that are not part of the remote control crew must determine whether the zone is activated. Employees may receive this information from the remote control operator, other authorized employee, or special instructions.

When the remote control zone is activated, track(s) within the zone must not be fouled with equipment, occupied, or switches operated until the remote control zone has been deactivated.

Note: Lone workers using individual train detection or work groups utilizing a lookout may perform minor work and routine inspections within an active remote control zone (RCZ).

B. Transfer of an Active Remote Control Zone

An active remote control zone may be transferred to other remote control operators. A job briefing must be conducted each time the zone is transferred between remote control operators and, if applicable, other authorized employee.

C. Deactivating Remote Control Zone

When the remote control operator ends the tour of duty, the remote control zone must be deactivated except the remote control zone may remain active if:

- Transferred.

  or

- Special instructions specify the hours the remote control zone is active.

6.8 Stopping Clear for Meeting or Passing

When stopping in the clear to be met by a train and the length of track permits, on-track equipment must stop 400 feet from the signal or the clearance point of the facing point switch.

6.11 Mandatory Directive

Mandatory directives are written, printed, or displayed authorities or speed restrictions issued by the train dispatcher or control operator.

Mandatory directives are:

- Track warrants
- Track bulletins
- Track and time
- Track permits
- Radio speed restrictions
- Foul time
- OCS

A mandatory directive restricting a train's movement will not be issued near a point where the restriction applies until the engineer or conductor confirms that the train can comply with the restriction.

MW employees must indicate "VOID" on mandatory directives which are made void. Where multiple mandatory directives are recorded on a single form, MW employees must indicate "VOID" on each portion of the mandatory directive form that is released.

6.13 Use of Yard Limits

6.13.1 Movements Through Yard Limits

Before entering or occupying a main track within yard limits, the operator of on-track equipment must do one of the following:

- Verify that movements in or movements about to enter yard limits will not conflict. The operator of on-track equipment must communicate directly with trains or engines when conflicting movements are known to be present.
- Secure track and time within CTC
- Secure a track permit within Rule 9.15 (Track Permit)
- Secure OCS within Rule 18.0 (Occupancy Control System)
- Place a track bulletin Form B per Rule 15.2 (Track Bulletin Form B)
- Establish flag protection in accordance with Rule 6.19 (Flag Protection)

6.13.2 Maintenance in Yard Limits

Maintenance work performed on a main track within yard limits must be protected by one of the following:

- Secure track and time within CTC
- Secure a track permit within Rule 9.15 (Track Permit)
- Secure OCS within Rule 18.0 (Occupancy Control System)
- Place a track bulletin Form B per Rule 15.2 (Track Bulletin Form B)
- Establish flag protection in accordance with Rule 6.19 (Flag Protection)

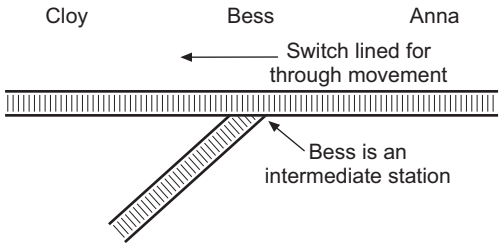
6.14 Restricted Limits

Between designated points specified by signs and in the special instructions, trains, engines and on-track equipment may use the main track not protecting against other trains, engines and on-track equipment. All movement of trains and engines must be at restricted speed.

Men or equipment may perform maintenance in restricted limits only under the provisions of Rule 6.19 (Flag Protection) or Rule 15.2 (Track Bulletin Form B). On-track equipment may move within restricted limits without displaying a red flag or light.

6.17 Switches at Junctions

The normal position for a junction switch is for through movement on the main track where the junction is an intermediate station.



[Diagram A.]

6.19 Flag Protection

When flag protection is provided to protect on-track equipment, employees or track conditions, flagmen must immediately go at least the distance prescribed by the special instructions or other instructions for that territory and protect all possible access to the restriction. When reaching the correct distance, the flagman must remain there until he or she stops a train or is recalled. Where trains are required to move at restricted speed or under the provisions of Rule 6.28 (Movement on Other Than Main Track), flag protection may be provided by a single flagman located at the obstruction or point to be protected. Flagman must remain at the job site to watch for approaching trains. When a train approaches from either direction, flagman must go toward the approaching train and flag it with a red flag.

Flagmen must:

- Be rules qualified.
- Be sent in both directions to provide protection, unless there is a current of traffic and the train dispatcher has relieved the employee of flagging against the current of traffic. When relieved of flagging against the current of traffic, the flagman must notify the train dispatcher when he or she is clear of the track.
- Never rely on others for information about approaching trains.
- Never estimate the nature, speed or probable time of the next approaching train.
- Each individual flagman should carry a minimum of:
  - Six red fusees.
  - By day, a red flag.
  - By night, a white light.
- If only one flagman is available, the flagman must immediately provide protection in the direction from which the first train is expected. Then they should provide protection in the opposite direction.

6.19.1 Protection in Restricted Limits by Lining Switch

Flag protection may be established within Restricted Limits by lining and locking all facing point switches to prevent direct access to the protected track segment, including all crossover switches. When conditions permit, notify the train dispatcher and/or yardmaster of your intention to employ Rule 6.19.1 prior to lining the switches.

After determining there are no movements of trains, engines or on-track equipment on the portion of track to be protected, follow these steps for each switch to be lined and locked:

1. Reverse the switch.
2. Spike, clamp or lock the switch with an effective locking device or remain at the switch while protection is required.
3. Display a red flag between the rails of the main track at the switch.
4. When flag protection is no longer required, remove the flags and restore the switches to their normal position.

A main track authority and/or protection may be used to establish working limits to prevent movement into the protected track segment. This may be used in combination with a facing point switch that is lined to provide protection from the opposite direction.

6.19.2 Protection of On-Track Equipment

Do not depend on rail detectors and on-track equipment, other than engines or cars, to actuate block signals, interlocking signals, or highway crossing signals or to be under the protection of such signals. Provide flag protection when required.

6.19.3 Acknowledgment of Flagging

When flagged, the engineer must acknowledge stop signals promptly. The flagman must continue giving stop signals until the engineer acknowledges them and reacts to them. After stopping, the engineer must be told why the train was flagged and act accordingly.

6.19.4 Fouling Double Track

In double track or other areas where a current of traffic is in effect, flag protection must be provided against movements against the current of traffic, unless the train dispatcher advises that no movements have been or will be authorized. Employees who receive this advice must notify the train dispatcher when protection is no longer required.

6.19.5 Protection in ABS by Lining Switch

When employees or on-track equipment are within ABS limits and require flag protection, the protection may be provided by lining and locking main track switches (facing or trailing point switches) against movement at or beyond the point where the train or engine will stop movement or clear the main track. When conditions permit, notify the train dispatcher of your intention to employ Rule 6.19.5 prior to lining the switch.

If the switch is located within a block other than the one occupied, do not make movements under this protection until 5 minutes after the switch has been lined. Also, make sure no train or engine is between the switch and the train or engine being protected or is within or closely approaching the block where the switch is located.

Employees and on-track equipment in ABS limits may be protected by lining and locking main track switches. When providing this type of protection, follow these steps for each switch to be lined and locked:

1. Reverse the switch.
2. Remain at the switch for 5 minutes to ensure a train or engine is not approaching.

   Note: If a train or engine approaches:

   a. Immediately restore the switch to normal position.

   b. After the train or engine is no longer a factor, reverse the switch again.

   c. Remain at the switch for another 5 minutes to ensure a train or engine is not within the limits.
3. To prevent movement from another track, lock the switch with an effective locking device or remain at the switch while protection is required.
4. Place a red flag or light at the switch and at the other end of the working limits.

6.20 Protection of Equipment Left on Main Track

MW employees that receive permission from the train dispatcher to leave equipment on the main track or a controlled siding do not need to provide protection for the equipment if the train dispatcher gives verbal relief.

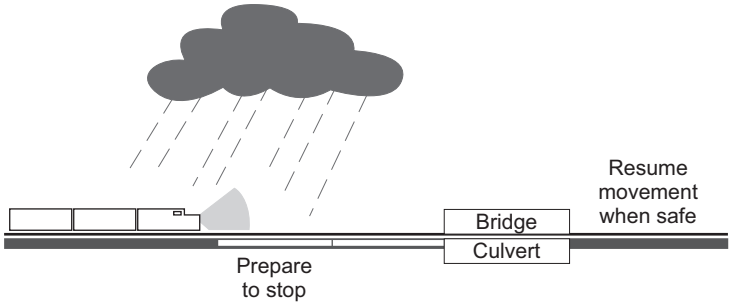
The train dispatcher may request the MW employees to report clear of their authority when the equipment is stored or tied down on the main track or controlled siding. The train dispatcher must provide protection for the equipment.

The train dispatcher must know that protection is provided. All crews that use the main track at that point must be notified of the equipment location and must move at restricted speed when approaching the location.

6.21 Precautions Against Unusual Conditions

Protect trains, engines and on-track equipment against any known condition that may interfere with their safety. Advise the train dispatcher of such conditions by the first available means of communication.

In unusually heavy rain, storm, or high water, on-track equipment must approach bridges, culverts, and other potentially hazardous points prepared to stop. If they cannot proceed safely, they must stop until it is safe to resume movement.



[Diagram A.]

6.21.2 Water Above Rail

Do not operate trains and engines over tracks submerged in water until the track has been inspected and verified as safe.

Operate engines at 5 MPH or less when water is above the top of the rail. If water is more than 3 inches above the top of the rail, a mechanical department supervisor must authorize the movement.

6.24 Movement on Double Track

On double track, trains must keep to the right unless otherwise instructed.

6.26 Use of Multiple Main Tracks

Unless otherwise indicated in individual subdivision special instructions, multiple main tracks will be designated as follows:

- When using main tracks in a northward or eastward timetable direction, they will be numbered from left to right, beginning with Main 1.
- When using main tracks in a southward or westward timetable direction, they will be numbered from right to left, beginning with Main 1.

6.27 Movement at Restricted Speed

When required to move at restricted speed, movement must be made at a speed that allows stopping within half the range of vision short of:

- Train.
- Engine.
- Railroad car.
- Men or equipment fouling the track.
- Stop signal.

  or

- Derail or switch lined improperly.

When a train or engine is required to move at restricted speed, the crew must keep a lookout for broken rail and not exceed 20 MPH.

Comply with these requirements until the leading wheels reach a point where movement at restricted speed is no longer required.

6.28 Movement on Other Than Main Track

Except when moving on a main track or on a track where a block system is in effect, trains, engines and on-track equipment must move at a speed that allows them to stop within half the range of vision short of:

- Train.
- Engine.
- Railroad car.
- Men or equipment fouling the track.
- Stop signal.

  or

- Derail or switch lined improperly.

6.28.3 Cars or Equipment Left on Siding

Avoid leaving cars or equipment on sidings unless authorized by the train dispatcher, except in an emergency. In this case, notify the train dispatcher immediately.

Do not perform maintenance on sidings, unless approved by the train dispatcher, except in an emergency. In case of an emergency, notify the train dispatcher immediately.

6.28.4 Storing Equipment on Other Than Main Track

When on-track equipment is stored on other than a main track or controlled siding, all switches that provide direct access to the track must be:

- Lined against movement.
- Spiked, clamped or locked with an effective locking device.
- Properly tagged.

When unable to line a switch away, place a red flag or light and derail to prevent movement onto the track protected and protect on-track equipment as outlined in Rule 15.4 (Protection When Tracks Removed from Service). Lock derails with an effective locking device and notify the train dispatcher or yardmaster.

When tying-up on-track equipment, observe the following requirements:

- Set brakes and secure booms or other extensions to prevent fouling adjacent tracks
- For machines with rotating cabs, engage the house lock (drop pin) to prevent movement
- Lower devices attached to booms, such as clam shells or magnets so they rest on the ground or the bottom of the car
- Ensure that the equipment is properly enclosed to prevent theft or vandalism. If necessary, notify railroad police to provide protection of company equipment.

6.29 Inspecting Trains

6.29.1 Inspecting Passing Trains

Except as provided in MWOR 12.1 and 12.2, employees must inspect passing trains. The inspection must be made from the ground if there is a safe location.

- Dismount equipment on the side opposite approaching train.
- Do not cross adjacent tracks solely for the purpose of inspecting a passing train.
- During inclement weather, employees may remain in equipment when inspecting passing trains.

If any of the following conditions are detected, notify crew members on the passing train by any available means:

- Overheated journals
- Sticking brakes
- Sliding wheels
- Wheels not properly positioned on the rail
- Dragging equipment
- Insecure contents
- Signs of smoke or fire
- Headlight or marker improperly displayed
- Any other dangerous condition

When trains or engines are passing, remain clear of tracks to prevent being struck by objects that may fall or protrude from the train. Note: Take articles that fall from cars to a secure area and report them to the supervisor and/or train dispatcher

6.30 Receiving or Discharging Passengers

Responsibilities of Approaching Movements

When notified that a passenger train will be at a station, do not pass between station platform and a passenger train until assured that all passengers and employees have cleared the track between the passenger train and the station platform. Movement may then pass when preceded by an employee walking ahead of the movement.

Other than Main Track Movements

A movement must not pass between a passenger train and the station platform being used unless safeguards are provided.

6.32 Road Crossings

6.32.1 Providing Warning Over Road Crossings

When cars are shoved over road crossings at grade, an employee must be on the ground at the crossing to warn traffic until the crossing is occupied. Make any movement over the crossing only on the employee's signal.

Such warning is not required when it is clearly seen that no traffic is approaching or stopped at the crossing. Shoving movements must not exceed 15 MPH over crossing until occupied.

MW employees must not kick or drop cars.

6.32.2 Automatic Crossing Devices

Employees must observe all automatic crossing warning devices and report any that are not operating properly to the train dispatcher or proper authority by first available means of communication. Notify all affected trains as soon as possible.

A. Automatic Warning Devices Malfunctioning

Under any of the following conditions, a movement must not foul a crossing equipped with automatic warning devices until the device has been operating long enough to provide warning and the crossing gates, if equipped, are fully lowered:

- Movement has stopped within 3,000 feet of the crossing.
- Movement is within 3,000 feet of the crossing and speed has increased by more than 5 MPH.
- Movement is closely following another movement.
- Movement is on other than the main track or siding.

  or

- Movement enters a main track or siding within 3,000 feet of the crossing.

Use the following table to properly complete movement over the crossing:

Movement When Notified that Automatic Warning Devices have an Activation Failure, are Disabled or Malfunctioning	
If ...	**Then ...**
The crew is notified that the crossing warning system has an activation failure or that the crossing warning system has been disabled and an equipped flagger is not at the crossing to provide warning.	Stop before occupying the crossing. After a crew member is on the ground at the crossing to warn highway traffic, proceed over the crossing on hand signals from that crew member. Then proceed at normal speed.
The crew is notified that the crossing warning system is malfunctioning, and an equipped flagger is not at the crossing to provide warning.	Stop before occupying the crossing. After a crew member is on the ground at the crossing to warn highway traffic, proceed over the crossing on hand signals from that crew member, or If devices are seen to be working or when instructed by the train dispatcher or proper authority, proceed over the crossing at 15 MPH without stopping until the head end of the train completely occupies the crossing. Then proceed at normal speed.
The crew is notified that the crossing has one equipped flagger who is unable to provide warning in all directions of approaching traffic.	Proceed over the crossing at 15 MPH without stopping until the head end of the train completely occupies the crossing. Then proceed at normal speed.
The crew is notified that the crossing has one or more equipped flaggers who are able to provide warning in all directions of approaching traffic.	Proceed over the crossing at normal speed without stopping.
NOTE: An equipped flagger is a person other than a crew member who is equipped with an orange vest, orange shirt or orange jacket. At night, the vest, shirt or jacket must be fluorescent. The flagger must have a red flag or stop paddle by day and a light at night.	

B. Whistle for Crossing

When notified that automatic warning devices are malfunctioning, sound whistle signal 5.8.2(7) regardless of any prohibition.

C. Train Dispatcher and Yardmaster Responsibilities

When notified that automatic warning devices are malfunctioning, the train dispatcher or yardmaster must:

- Notify all trains.
- Contact the Signal Maintenance Desk to ensure that local law enforcement agents are contacted.

D. Power Off Indicators

When the power off indicators on the side of signal housings at highway crossings are flashing or not illuminated, immediately notify the Train Dispatcher.

E. Flagger Responsibilities

If assigned the duties of a flagger when automatic crossing devices are malfunctioning, observe the following requirements:

- If protection can be provided for each direction of highway use, instruct the train to proceed at normal speed.
- When unable to provide protection for each direction of highway use, instruct the train to:
  - Proceed through the crossing at a speed not to exceed 15 MPH.
  - Resume normal speed after the lead engine is through the crossing.

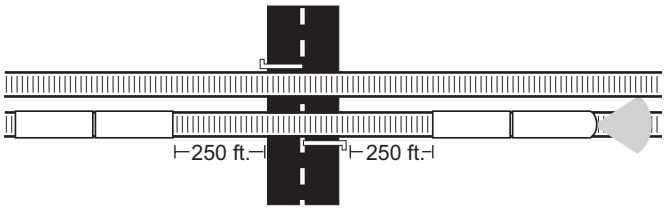
6.32.3 Standing Equipment Near Crossings

If on-track equipment or cut of cars is parted to clear a road crossing or is standing near the crossing, when possible, an employee must be on the ground to warn traffic against trains or engines approaching on adjacent tracks.

6.32.4 Clear of Crossings and Signal Circuits

Leave cars, engines, or equipment clear of road crossings and crossing signal circuits.

When practical, avoid leaving cars, engines, or equipment standing closer than 250 feet from the road crossing when there is an adjacent track.



[Diagram A.]

6.32.5 Actuating Automatic Warning Devices Unnecessarily

Avoid actuating automatic warning devices unnecessarily by leaving switches open or permitting equipment to stand within the controlling circuit. If this cannot be avoided and if the signals are equipped for manual operation, a crew member must manually operate the signal for movement of traffic. A crew member must restore signals to automatic operation before a train or engine occupies the crossing or before it leaves the crossing.

6.32.6 Blocking Public Crossings

When work is performed on or near a crossing protected by an automatic warning device, and if the work performed affects automatic warning device, provide protection.

6.33 Familiar with Territory

Employees must be familiar with the territory they are operating on or be accompanied by an employee who is.

6.50 Movement of On-Track Equipment

On-track equipment must move at a speed that will allow stopping within half the range of vision short of:

- Train.
- Engine.
- Railroad car.
- Men or equipment fouling the track.
- Stop signal,

  or

- Derail, moveable point frog or switch lined improperly.

6.50.1 Maximum Authorized Speed

On-track equipment must not exceed the manufacturer's recommended speed or any of the following speeds, whichever is less:

Type of Equipment	Speed
Hy-rail vehicles over 15,000 GVW	25 MPH
Bridge Inspection/Hy-rail vehicles 15,000 GVW or under	45 MPH
Locomotive Cranes (with or without cars)	30 MPH
Trackmobile without Cars	20 MPH
Trackmobile with Cars	10 MPH
Other on-track equipment	30 MPH
On-track equipment towed by other on-track equipment	20 MPH

Exception: Speed of on-track equipment designed for high speed travel will be governed by the System Special Instructions.

When determining the proper speed, take into consideration the following:

- Track conditions, such as grade, curvature and rail condition.
- Load.
- Sight distance.
- Visibility.
- Other conditions that might adversely affect the safe operation of on-track equipment.

On-track equipment must not exceed 20 MPH while within established working limits, except when a higher speed is specifically authorized by the EIC of the working limits on a main track.

6.50.2 Approaching Road Crossings

On-track equipment must approach all grade crossings prepared to stop and must yield the right of way to vehicular traffic. If necessary, flag the crossing to protect movement of on-track equipment. The use of horns at grade crossings by all roadway machines and hy-rail equipment is optional at the discretion of the operator.

6.50.3 Equipment Components Clear

Before passing over crossings, switches, derails and frogs, be sure all equipment components will clear.

6.50.4 Hy-Rail Vehicle Movement Over Spring Frogs, Self- Guarded Frogs, Lift Frogs, and Flange-Bearing Diamonds

Do not move hy-rails through the spring side of spring rail frogs or the low speed route(s) of lift frogs or flange-bearing diamonds, or make a facing point move through self-guarded frogs, except as outlined below:

- The hy-rail must stop before moving through the spring-rail frog, the self-guarded frog, or the low speed route(s) of the lift frog or flange-bearing diamond.
- When available, an employee must remain on the ground to guard against derailment and direct the hy-rail operator through the spring side of the frog.

Spring switches must be lined and locked for the route to be used before moving through the switches.

Hy-rail operators must look to ensure that switches are properly lined for movement before passing through the switches. When operating a hy-rail over a power operated switch, power operated derail, self-guarded frog, or low speed route(s) through a lift frog or flange-bearing diamond, do not exceed 5 MPH. Additionally, hy-rails must reduce to one half of their maximum authorized speed when operating over all other hand operated switches and frogs.

When operating a hand operated switch for hy-rail movement, return and lock it in the normal position after the hy-rail has passed the switch. When the train dispatcher or control operator is unable to line a dual-control switch for the desired route, hy-rail operators must first receive permission to operate the switch by hand as outlined in Rule 9.13.1 (Hand Operation of Dual Control Switches).

6.50.5 Hy-Rail Limits Compliance System (HLCS)

The Hy-Rail Limits Compliance System (HLCS) is a safety system designed to monitor the position of HLCS equipped on-track equipment within the limits of a Track and Time, Track Warrant or Track Permit issued to an Employee in Charge (EIC). On subdivisions where HLCS is in effect, all HLCS equipped on-track equipment that fouls or occupies the track when using Track and Time, Track Warrant or Track Permit authority must have the HLCS system activated and associated with the authority.

A briefing between the train dispatcher and the EIC must be conducted to determine if any equipment is HLCS equipped. All HLCS identification number(s) must be provided to the train dispatcher. If HLCS equipment is not operational, this fact must also be communicated. This briefing is required:

- Before initial authority is obtained each calendar day (during the Confirmation of Limits Briefing that occurs just prior to copying authority)
- Before first authority is obtained following dispatcher shift change
- When moving from one dispatching district to another
- When changing vehicles

HLCS on-track equipment identification number(s) of the EIC and that work group must be recorded on the authority form.

When additional work group(s) request to use an authority, the EIC must determine all HLCS on-track equipment identification numbers of the additional work group(s) and report the numbers to the train dispatcher prior to the additional work group(s) fouling or occupying the track. The number(s) must also be recorded next to the name on the “Multiple Work Group Using the Same Authority Form” by the EIC of the authority.

The train dispatcher must associate all reported HLCS equipment with the authority.

Action to be taken when the HLCS Vehicle Display Unit shows EXCEED

- When equipment is outside, but in immediate proximity of authority limits and no approaching movement is evident:
  - Move equipment into authority limits
  - Contact the Train Dispatcher / Control Operator and be governed by their instructions
  - Report circumstances to your supervisor
- When equipment is outside, and not within immediate proximity of authority limits:
  - Make emergency radio broadcast and provide flag protection
  - Contact the Train Dispatcher / Control Operator and be governed by their instructions
  - Report circumstances to your supervisor
- When equipment is within authority limits:
  - Check the thumb wheel for proper position
  - Contact the Train Dispatcher / Control Operator and be governed by their instructions

When problems are experienced with HLCS (e.g. tracking issues, radio problems, etc.) or the system is not operational, contact the TSOC at (800) 362-9624 to open a trouble ticket during the work shift the problem is identified.

Optional Test:
Employees may test HLCS to verify that they are setting on within the authorized limits. After receiving authority from the dispatcher, notify the dispatcher that you will be testing the HLCS for authority compliance before setting on the track. Place the Hy-Rail vehicle within 15 feet of the track to be occupied. Do not foul the track. Verify that the thumb wheel switch is in the proper position for the track the authority exists on. Activate the HLCS by engaging the steering wheel lock or placing the toggle switch in the on position indicating the vehicle is in the on-rail position. Note: This proximity test can only be conducted off the track and will be used to verify that you are within the authorized limits, not that you will be setting on the correct track.

Required Test:
Once each calendar day the HLCS system of a vehicle is utilized, the vehicle operator must test the LED displays and audible tones of the Visual Display Unit (VDU) as soon as practical. The vehicle may be positioned either on or off the track; however the unit must be in communication with an HLCS capable base station to perform the test. When on track and associated with an authority the vehicle must not be positioned within 1.1 miles of either end of the authority limits while performing the test. When off track, the vehicle must be stopped while performing the test. After confirming the NET LED is illuminated, indicating the system is in communication, initiate the test by depressing the VDU test button. If the VDU fails the functional test of LED displays and audible tones, the TSOC must be contacted and the system reported as defective.

6.51 Maintaining a Safe Braking Distance

On-track equipment operators are responsible for maintaining a safe braking distance between their on-track equipment and other on-track equipment, trains and engines.

For purposes of this rule:

Working mode will apply to on-track equipment stopped or moving slowly in the performance of maintenance activities. Traveling mode will apply to on-track equipment moving to and from a work location or performing inspection activities.

On-track equipment operators must:

- Insure that on-track equipment remains at least 300 feet behind a train or engine while in working or traveling mode, except when it has been determined by a job briefing that the train or engine is stopped and will not move.
- Insure that on-track equipment remains at least 300 feet behind other on-track equipment while in traveling mode. *Exception:* On track equipment may be "bunched" to make movements over short segments of track such as crossings at grade, diamonds, moveable structures and control points. A job briefing must establish the procedure with all involved employees. Machines must be at least 50 feet apart during such movements. At grade crossings where, due to traffic volumes, it is determined that separation of 50 feet or more may allow aggressive highway vehicle operators to drive between machines, the interval may be reduced to not less than 25 feet, as long as environmental conditions are consistent with safe travel on the rail, and machines do not exceed walking speed.

If machines will be "bunched" when stopped, all employees must remain clear of the track until the entire movement has stopped, unless otherwise instructed by the employee in charge. After stopping, the lead machine operator must do the following:

- Dismount the machine.
- Assume a position that is visible to a following machine operator and anyone who could step into the path of the next approaching machine.
- Spot the following machine using hand signals.

Each successive operator must follow this procedure to spot the next machine.

- Use radio or hand signals to notify the operator of the following machine when slowing or stopping on-track equipment during traveling mode. If the following machine operator does not acknowledge the radio or hand signal, stop, dismount the on-track equipment and proceed, clear of the track, toward the following machine giving stop signals.
- Maintain at least 50 feet between on-track equipment while in working mode unless job briefing establishes a shorter distance due to existing working conditions. While in working mode, it is the responsibility of all machine operators to maintain a safe distance between their machine and other men and on-track equipment.
- Ascertain that a back-up alarm is activated and/or the appropriate whistle signal has been sounded and that the distance to be traveled is clear of workers and machines before making a back-up move.
- Follow these procedures when equipment is being tied up:
  - Secure all brakes, booms, locks and hooks.
  - Dismount the machine on the field side of the track away from traffic. If the track is between two live tracks, dismount on the side designated by the job briefing.
  - Stand beside the machine and direct the next roadway machine to a stop.
  - Do not go between machines until all machines have come to a stop or the employee in charge has given permission.

6.52 Spacing of On-Track Equipment

When on-track equipment is being used, workers and machine operators must follow the guidelines below for maintaining safe distances to prevent machines from contacting other machines and workers.

When machines must be spaced closer than guidelines require because of work or travel conditions, the machine operators and the employee in charge must have a thorough understanding of:

- The specific task
- The conditions under which the task will be done
- How the task will proceed

Work Zones Around Machines

Roadway workers must not enter a machine's work zone without first communicating with the operator to establish safe work procedures.

Note: Unless a different understanding is established through a job briefing, this work zone extends from a point 15 feet in front of the machine to a point 15 feet behind the machine. The work zone limits on each side of the machine will be designated in the job briefing.

If a machine is approaching workers who are foul of the track, the operator must communicate with the workers before getting closer than 15 feet to them.

Safe Working Distance Between Machines

The minimum distance between machines while working is 50 feet, unless a job briefing establishes a different distance.

Back-Up Movements by Machines

Before making a back-up move, the machine operator must:

- Verify that a back-up alarm is activated and/or the appropriate horn or whistle signal is sounded on machines so equipped.
- Observe that the track is clear of workers and machines.

6.53 Getting On and Off Equipment

Employees must not get on or off work equipment while it is moving.

Exception: In an emergency, or where designated by special instructions or general order, employees may get on or off work equipment while it is moving. In addition, employees may get on and off the following equipment while it is moving in work mode: Tie Laying Machines, High Speed Undercutters, 09-3X Production Tamper, Ballast Distribution Systems 100 & 200, Shoulder Ballast Cleaners and Rail Heaters. Work mode means when the equipment is engaged in its normal operation, moving less than 1 MPH, and not while traveling to a work site.

6.54 Display of Lights

If equipped with lights, on-track equipment will display a white light to the front and a red light to the rear.

6.55 Handling Emergency Situations

When there is an emergency, employees must not attempt to remove on-track equipment at the risk of their own safety.

6.56 Replacing Displaced Signals

Employees operating on-track or off-track equipment must replace signals such as flags, fixed signals and signs if they are displaced or disturbed.

6.58 Railroad Crossings, Moveable Bridges, Gates and Interlockings

Moveable Bridges

On-track equipment must stop at least 50 feet from the nearest end of a moveable drawbridge span and not proceed until it has been determined that there is no conflicting movement.

Railroad Crossings

At railroad crossings not protected by gates, on-track equipment must stop and not move over the crossing until it is known that there are no conflicting movements.

Railroad Crossings Equipped with Gates

When a railroad crossing is equipped with a gate, and when the gate is lined against the route to be used, on-track equipment must stop at least 50 feet before the gate and line the gate against the conflicting route. Where required, gates must be restored to normal position after the on-track equipment has passed the crossing.

Manual Interlockings

Employees may obtain track and time, foul time or be governed by the instructions of the control operator to proceed through or perform maintenance within the confines of a manual interlocking. Employees must contact the control operator before occupying the limits of a manual interlocking and they must advise the control operator when the manual interlocking limits have been cleared.

Automatic Interlockings

Automatic interlockings may be equipped with a maintenance of way release box. Comply with the instructions in the maintenance of way release box at these locations before entering the limits of the interlocking.

A signalman may authorize movement through an automatic interlocking by providing proper protection on all routes. If a signalman does not provide protection, comply with the following.

At locations not equipped with a maintenance of way release box, comply with the following:

If on-track equipment shunts the track and the automatic interlocking displays a proceed indication:

- Stop before passing the signal.
- If the signal continues to display a proceed indication, proceed if there is no conflicting movement.

If the on-track equipment shunts the track and the automatic interlocking displays a red or dark aspect:

- Stop before passing the signal.
- Remain at the signal while the employee in charge or an employee qualified on these rules operates the time release according to the instructions posted in the release box.

If, after operating the time release, the signal displays a proceed indication, on-track equipment may proceed through the interlocking if there is no conflicting movement. If the signal displaying a proceed indication changes to an indication requiring a stop, stop at once.

If, after operating the time release, the signal does not clear, on-track equipment must not proceed through the interlocking until an employee ensures that there are no conflicting movements.

When more than one piece of on-track equipment that shunts the track is involved in the movement, each piece of on-track equipment must apply this rule separately.

If the on-track equipment does not shunt the track at an automatic interlocking:

- Stop before passing the signal.
- Move through the automatic interlocking only after determining that there are no conflicting movements. If necessary, an employee must go to the crossing and protect the movement.

Working within Automatic Interlocking Limits

On-Track Safety must be provided while working within the limits of an automatic interlocking by:

- Obtaining authority or establishing protection on all routes into and out of the interlocking limits. A MW key release may be used, according to the instructions posted inside the release box, to provide protection against movements on the conflicting route(s) only.

  or

- Obtaining protection within the limits of the interlocking from a signalman who will ensure that signals on all routes into the interlocking limits display a STOP indication.

7.0 Switching

7.1 Switching Safely and Efficiently

While switching, employees must work safely and efficiently and avoid damage to contents of cars, equipment, structures, or other property.

Do not leave cars or on-track equipment standing where it will foul equipment on adjacent tracks or cause injury to employees riding on the side of a car, engine or on-track equipment.

On tracks where clearance point is indicated, leave cars and on-track equipment beyond the clearance point.

If the clearance point is not indicated or visible, determine the clearance point by standing outside the rail of adjacent track and extend arm towards the equipment (cars, engines or on-track equipment). When unable to touch the equipment, leave equipment at least an additional 50 feet into the track to ensure equipment is beyond the clearance point.

7.4 Precautions for Coupling or Moving Cars or On-Track Equipment

Before coupling to or moving cars or on-track equipment, verify that the cars or on-track equipment are properly secured and can be coupled and moved safely.

Make couplings at a speed of not more than 4 MPH. Stretch the slack to ensure that all couplings are made.

7.5 Testing Hand Brakes

Employees must know how to operate the type of brakes they are using. When hand brakes must control or prevent car or on-track equipment movement, test the brakes to ensure that they are operating properly before using them.

7.6 Securing Cars or On-Track Equipment

Do not depend on air brakes to hold cars or on-track equipment in place when left unattended. Insure that equipment left unattended is properly secured and that sufficient hand brakes are applied to prevent movement. If hand brakes are not adequate, block the wheels.

Do not release the hand brakes until the air brake system is fully charged.

When cars or on-track equipment are moved from any track, apply enough hand brakes to prevent any remaining cars from moving.

7.7 Kicking or Dropping Cars

MW employees must not kick or drop cars.

7.8 Coupling or Moving Cars on Tracks Where Cars are Being Loaded or Unloaded

Before coupling to or moving cars on tracks where cars are being loaded or unloaded, employees must be sure that all of the following have been removed or cleared:

- Persons in, on, or about cars.
- Platforms.
- Boards.
- Tank car couplings and connections.
- Conveyors.
- Loading or unloading spouts and similar appliances or connections.

- Vehicles.
- Other obstructions.

In addition:

- Be careful to avoid damage to freight of partly loaded cars.
- Do not handle cars that are improperly or unevenly loaded if load could shift or fall from the car, or if the car could derail or overturn.
- Return any car placed for loading or unloading to the location it was found if it has not been released for movement.
- Do not pull empty cars from an unloading facility until any major accumulation of debris is removed.
- Ensure plug-type and swinging doors on cars are properly closed or secured.

7.10 Movement Through Gates or Doorways

Before moving cars or on-track equipment through gates, doorways, or similar openings, stop to ensure that the gates, doorways, or openings are completely open and secure. When overhead or side clearances are close, make sure movement is safe.

7.11 Charging Necessary Air Brakes

Do not handle cars without charging the air brake system, unless the cars can be handled safely and stopped within the required distance. If necessary, couple the air hoses and charge the brake systems on a sufficient number of cars to control movement.

7.12 Movements Into Spur Tracks

When shoving cars into a spur track, control movement to prevent damage at the end of the track, and do the following:

- Stop movement 150 feet from the end of the track.
- Apply hand brakes, when necessary, to control slack.
- Have an employee precede any further movement when it can be done safely.
- Move only on the employee's signal.

7.13 Protection of Employees in Bowl Tracks

During humping operations, before a train or yard crew member goes between engines or cars on a bowl track to couple air hoses or adjust coupling devices, or before an employee performs maintenance on a bowl track, protection must be provided against cars released from the hump into the track as follows:

- The employee requesting protection must notify the employee controlling the switches that provide access from the hump to the track where the work will occur.
- After being notified, the switch controller must line any remote control switch against movement to the affected bowl track and apply a locking or blocking device to the control for that switch.
- The switch controller must then notify the employee that protection is provided. Protection will be maintained until the switch controller is advised that work is complete and protection is no longer required.

8.0 Switches

8.1 Hand Operation of Switches

Spring or dual control switches operated by hand are considered hand-operated switches, and all rules governing hand-operated switches apply to them, except that cars must not be dropped over the switches.

8.2 Position of Switches

The employee handling the switch or derail is responsible for the position of the switch or derail in use.

Do not operate a switch that is tagged. If a switch is spiked, do not remove the spike unless authorized by the craft or group that placed it.

Employees handling switches and derails must make sure that:

- Switches and derails are properly lined for the intended route.
- The switch or derail is not operated while on-track equipment is fouling, standing on or moving over the switch points or derail.
- On-track equipment does not foul the adjacent track until the hand- operated switch or derail is properly lined for the intended route.
- When moving over a switch, the switch remains lined for the movement until the on-track equipment has moved beyond the fouling point of the adjacent track.
- When the operating lever is equipped with a latch, they do not step on the latch to release the lever except when throwing the switch.
- The points fit properly and the target, if so equipped, corresponds with the switch's position.
- After locking a switch or derail, they test the lock to ensure that it is secured.

When practical, employees must see that the switches and derails near on-track equipment are lined properly.

When operating a main track switch, switch point lock or derail, the employee in charge must record the following information on the form entitled Position of Switches/Derails:

- Name and location of the main track switch, switch point lock or derail used.
- Time the employee initially operates the main track switch, switch point lock or derail.
- Time the main track switch, switch point lock or derail is finally restored to the proper position.

This record must be retained for 5 days after tour of duty is completed.

In non-signaled TWC or Double Track ABS Territory, when a main track switch is operated for any reason, on track equipment shall:

- Stop short of switch until activity is completed when possible.
- When activity is completed, if authority allows, make a facing point movement over the switch to ensure switch is lined properly for the main track.
- If authority does not allow for a facing point movement over the switch, make a walking inspection of the switch points to ensure proper fit and route.

When a main track switch is operated for any reason and on-track equipment is not being used in non-signaled TWC or Double Track ABS Territory, a walking inspection of the switch points must be made to ensure proper fit and route.

8.3 Main Track Switches

The normal position of a main track switch is for main track movement, and it must be lined and locked in that position.

However, the main track switch may be left open:

- Within Restricted Limits, as outlined in Rule 6.19.1 (Protection in Restricted Limits by Lining Switch).
- Within ABS limits, as outlined in Rule 6.19.5 (Protection in ABS by Lining Switch).
- When temporarily lined for immediate movement.

  or

- Within TWC territory, when authorized by track warrant. Track warrant protection must be provided for this condition. The switch must not be considered restored to normal position until the train dispatcher is notified by an employee at that location.

On main track switches (if equipped), the target will be red and perpendicular to the track if the switch is lined in other than its normal position.

In addition to the provisions of this rule, at points where double track begins, the normal position of a spring switch is for movement with the current of traffic.

Before reporting clear of a track warrant, track and time, track permit or OCS in a siding or other track, main track switches must be lined and secured in the normal position.

Do not open main track hand-operated switches, except as instructed by the employee in charge. The employee in charge should avoid transferring authority or responsibility to handle main track hand-operated switches whenever possible. When it is necessary to transfer such authority or responsibility, the employee in charge must ensure that the switch is lined and secured in normal position before releasing main track authority.

The position of the switch must be determined by the employee in charge by making a visual inspection or by communicating with the employee operating the switch. When communicating the position of the switch, the information must be acknowledged and repeated by the employee in charge.

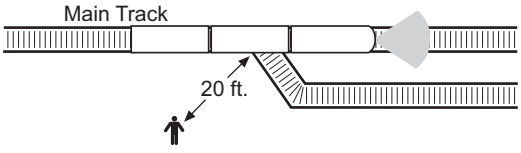
Lone workers who operate main track switches must observe the position of the switch and ensure that the switch is lined and secured in the normal position before leaving the area.

8.5 Clearing Main Track Before Restoring Switch

Do not return a main track switch to the normal position until movement is clear of the main track.

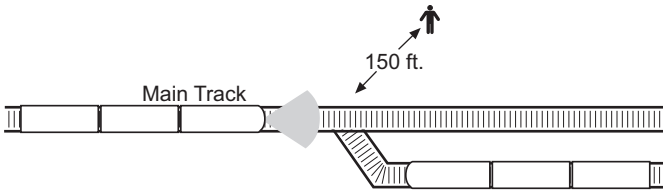
8.7 Clear of Main Track Switches

Except in switching movements, when a train, engine, or on-track equipment is approaching or passing on a main track, employees must not go nearer than 20 feet to any main track switch.



[Diagram A.]

When a train, engine or on-track equipment that will be met or passed is on a siding or other track, the employee attending the switch must not be nearer than 150 feet to the switch when the train is closely approaching.



[Diagram B.]

Inspecting Hand-Operated Switches in Non-Signaled Territory

In non-signaled territory, if the expected train is not closely approaching, a crew member will inspect facing point, hand-operated switches the train will pass over to determine that the:

- Switches are lined for the intended route.
- Switch points fit properly.
- Switch lever is secured.

8.8 Switches Equipped with Locks, Hooks, or Latches

When not in use, switches must be locked, hooked, or latched if so equipped. Before making movements in either direction over these switches, make sure that the switch is latched or secured by placing the lock or hook in the hasp. However, when making train movements in facing point direction, lock the switches equipped with a lock.

Replace any missing or defective switch locks. If they cannot be replaced, report the condition at once to the train dispatcher, yardmaster, or supervisor in charge, and spike the switch if possible.

8.9 Movement Over Spring Switches

Spring switches are identified by the letters S or SS, special targets, signs, and/or lights.

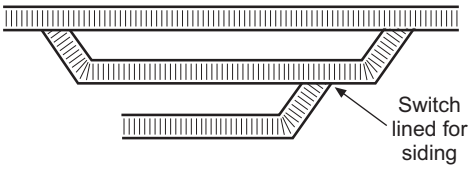
A spring switch that is spiked must be protected.

8.10 Switch Point Indicator

Aspect	Indication
Green.....	Switch points fit properly in normal position.
Yellow.....	Switch points fit properly in reverse position.
Red or Dark.....	Stop and inspect switch.

8.11 Switches in Sidings

The normal position of switches connecting any track, except the main track, to a siding is lined and locked or secured for movement on the siding.



[Diagram A.]

8.12 Hand-Operated Crossover Switches

The normal position of crossover switches is for other than crossover movement. The crossover switches must be left lined in normal position, except when they are in use for crossover movements. Both switches of a crossover shall be properly lined before equipment begins a crossover movement. A crossover movement shall be completed before either switch is restored to normal position, except when one crew is using both tracks connected by the crossover during continuous switching operations.

In Rule 6.14 (Restricted Limits) or Rule 6.28 (Movement on Other than Main Track), crossover switches may be left out of correspondence while providing blue signal or inaccessible track protection. When protection is no longer required the crossover switches connected to a main track or siding must be left lined for other than crossover movement. Crossover switches not connected to a main track or siding must be left in a corresponding position.

In signaled territory, crossover switches may be out of correspondence while performing maintenance, testing or inspection.

8.13 Scale Track Switches

When scales are not in use, line switches for dead rails where provided.

8.14 Conflicting Movements Approaching Switch

When conflicting movement is closely approaching a switch, the track must not be fouled or the switch operated.

Crossover switches must not be unlocked or lined for crossover movement when another movement is approaching or passing over either switch.

Exception: On a dual control crossover switch that has been upgraded per Signal Instruction Manual, part TP-103C, FRA signal switch tests can be independently performed by Signal Department employees on the dual control switch of the crossover not affected by approaching movements.

8.16 Damaged or Defective Switches

Report a switch that is damaged or defective to the train dispatcher, yardmaster, or supervisor in charge. Tag the switch, spike the switch if it is necessary unless the trackman or other competent employee takes charge. If the switch cannot be made safe, provide protection at once.

8.17 Switch Point Monitoring System (SPMS)

Switch Point Monitoring System (SPMS) is a program that will alert the dispatcher that a main track switch may not be properly lined for an approaching train in non-signaled TWC territory.

Maintenance of Way (MW) employees must have permission prior to operating an equipped main track switch. When Form B authority is in effect, the foreman or employee(s) working under the Form B must notify the dispatcher when opening any equipped main track switch(es).

When a MW employee receives a track authority with “Be prepared to stop at (location) until known to be in the normal position, the dispatcher must not indicate the switch to be “normal” unless the reporting employee has traversed the switch in main track to main track movement with on-track equipment and is physically at the switch.

8.18 Variable Switches

On-track equipment must not trail through a variable switch unless the switch is lined for such movement.

8.19 Automatic Switches

The location of automatic switches will be designated in the timetable. Unless the switch is in normal position when operating on a main track, employee must stop and hand operate the automatic switches before moving over them.

To operate an automatic switch by hand, do the following:

- Unlock the switch lock.
- Operate the hand throw lever until the switch points move when the lever is moved.
- Line the switch for the intended route.
- Do not return the selector lever to the POWER position until the entire movement has passed over the switch.

When the switch is in the POWER position, the switch will automatically return to its normal position.

When on-track equipment is operating on a siding, the equipment must be stopped before it fouls an adjacent track or passes an overlap sign, if equipped, and automatic switch must be hand operated. The switch must not be returned to POWER position until all on-track equipment has passed over the switch.

When automatic switches are operated by hand, all rules governing hand operated switches apply.

8.20 Derail Location and Position

Employees must know the location of all fixed derails.

Do not make a movement over a derail in derailing position.

Sidings having hand-thrown derails will have derail locked in the non-derailing position, except when engines or cars are left unattended on siding. On auxiliary tracks other than siding, except when derails are placed in non-derailing position to permit movement, make sure they are always in derailing position regardless of whether cars are on the track they are protecting. Lock all derails equipped with a lock.

Derails dedicated for use in conjunction with Rule 5.12 (Protection of Occupied Outfit Cars), Rule 5.13 (Blue Signal Protection of Workman), and roadway worker protection must be in the derailing position only when their use is required for such protection. When their use is not required for their protection:

- Remove portable derails

  or

- Lock fixed derails in non-derailing position with an effective locking device.

This page left blank intentionally.

9.0 Block System Rules

9.5 Track or Signal Appliances Damaged or Under Repair

9.5.2 Protection If Signal Appliance or Track is Damaged

If a signal or signal appliance functions improperly or the track is damaged, signals that govern movements on affected routes must display a Stop indication. No movements on such routes may be permitted until track and signal appliances are examined and movement can occur safely.

9.5.3 Protection During Repairs

Within CTC limits or within manual interlocking limits (unless track bulletin Form B is in effect), when a switch, movable point frog, derail, or signal is under repair or is disconnected, or when the track is obstructed or removed from service, display Stop indications for all affected routes. In addition, block or mark any controls to prevent their operation.

Maintenance forces must contact the control operator before beginning repairs, disconnecting equipment, obstructing the track, or removing the track from service. Switches, movable point frogs, and derails must be spiked or secured in the required position if any movement over them occurs before repairs are complete.

9.13 When Instructed to Operate Dual Control Switches by Hand

If the control operator cannot line the dual control switch to the desired position, or the control machine does not indicate that the switch is lined and locked, the control operator must instruct the employee to operate the switch by hand.

Before passing over the switch, the movement must stop and the employee must operate the switch by hand as outlined in Rule 9.13.1 (Hand Operation of Dual Control Switches). After the entire movement has passed over the switch points, the employee must return the switch to power unless otherwise instructed by the control operator.

9.13.1 Hand Operation of Dual Control Switches

An employee must get permission from the control operator to operate a dual control switch by hand. Operate the switch as follows:

- Unlock the switch lock.
- Place the selector lever in the HAND position or remove the hand crank from the holder.
- Operate the hand throw lever until the switch points are seen to move when the lever is operated, even if the switch is lined for the intended route.
- Line the switch for the intended route, or insert the crank on the shaft and turn the crank as far as it will turn until the switch is in the desired position. Remove the crank from the shaft, but do not return it to the crank holder.
- Return the switch to power by restoring the selector lever to the POWER or MOTOR position and lock. Or, return the crank to the holder and secure it with the switch lock. Notify the control operator after power to the switch is restored.

9.14 Movement with the Current of Traffic

On tracks designated in the timetable, trains will run with the current of traffic, if the train dispatcher gives verbal authorization or a controlled signal indicates proceed.

9.14.1 Reporting Clear of a Track Having a Current of Traffic

A train without a crew member on the rear and operating on a track having a current of traffic may report clear of the limits or report having passed a specific location only when it is known the train is complete. This must be determined by one of the following ways:

- The rear of the train has a rear-end telemetry device, and air pressure on the head-end device indicates brake pipe continuity.
- An employee verifies the marker is on the rear of the train.
- A crew member can observe the rear car of the train on which the marker is placed.
- The train is stopped and an inspection verifies that the marker is on the rear car of the train.
- A trackside warning detector transmits an axle count for the train, and axle count duplicates the axle count transmitted by the previous trackside warning detector.

In addition, a train clearing in a siding or other track must comply with requirements outlined in Rule 8.3 (Main Track Switches) before reporting clear of the limits.

9.15 Track Permits

On tracks designated in the timetable, a track permit will authorize a train, on-track equipment, or employee to occupy the main track or tracks between specific points. The track permit must be issued by a designated control operator under the direction of the train dispatcher. Within these limits, movements may be made in either direction without flag protection.

Limits designated by a switch extend only to the signal governing movement over the switch unless otherwise designated.

9.15.1 Issuing Track Permits

The track permit may only be issued when:

- Limits are clear.
- Limits are occupied by the train, on-track equipment or employee that will receive the track permit.
- Limits are occupied by a train, on-track equipment or employee holding a track permit.

  or

- All trains moving on signal indication without a track permit have passed the location where the track will be fouled.

The track permit limits must be protected by controlled signals. The designated control operator must know the following before issuing a track permit:

- Each controlled signal protecting the limits displays a Stop indication.
- Marking or blocking devices prevent displaying signals for movement into the limits.
- The designated control operator and each control operator who controls signals to protect the limits understand the limits, have provided protection, and have recorded the track permit on the prescribed form.

Track Permit Wording

The employee requesting a track permit will state his or her name, occupation and location.

Track permits will be granted in the words, “Track permit authority (number), granted on (track), between (point) and (point), (time) until (time).”

The employee requesting a track permit must repeat the permit and receive acknowledgment before acting upon it.

Track permit authority must be recorded on and repeated from form provided for that purpose.

More than One Track Permit

If more than one track permit is in effect at any time within the same limits, all affected trains or employees must be notified.

Trains must move at restricted speed within these limits.

9.15.2 Clearing Track Permits

Marking or blocking devices must not be removed until the track permit has been released to the control operator. Other movements must not be authorized into the limits unless also granted a track permit.

Employees reporting clear of track permit authority must state:

- Their name or other identification.
- Track permit number being released.
- Limits being released.
- Position of hand operated main track switches.

9.18 Electrically Locked Switches and Derails

Special instructions or instructions posted near the switch will govern the operation of switches and derails equipped with electric locks.

To enter a track within manual interlocking or CTC limits, employees must not open the case door or unlock an electrically locked switch or derail without authority from the control operator.

Emergency Release

If the electric lock includes an emergency release, do not break the seal on the release or operate the release without permission from the control operator or train dispatcher. However, when communication has failed, the seal may be broken and/or the release operated:

- To permit a train or on-track equipment to leave the main track.

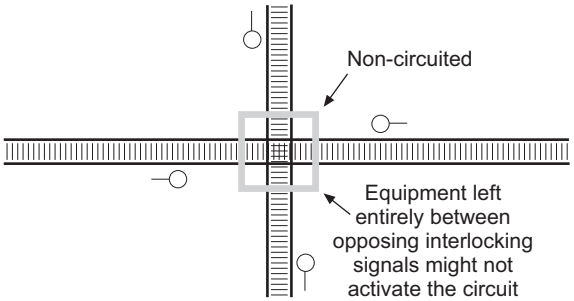
  or

- To permit a train or on-track equipment that has authority to enter the main track. Train or on-track equipment must not enter the main track until 5 minutes after the seal is broken and/or the release operated.

Notify the control operator or train dispatcher when the seal has been broken and/or the emergency release operated.

9.19 Leaving Equipment in Interlockings

Engines, cars, or on-track equipment must not be detached and left standing entirely between the opposing interlocking signals that govern movements at a railroad crossing at grade.



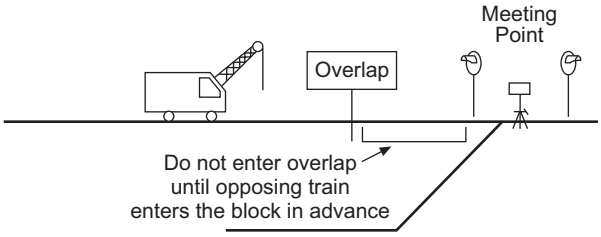
[Diagram A.]

9.20 Clear Track Circuits

A train, engine, car, or on-track equipment left standing on sidings or other tracks must be clear of insulated joints at clearance points.

9.21 Overlap Circuits

Overlaps may be identified by overlap signs. On-track equipment on the main track at a meeting point must not pass an overlap sign location or open a switch within the overlap until the opposing train has entered the block.



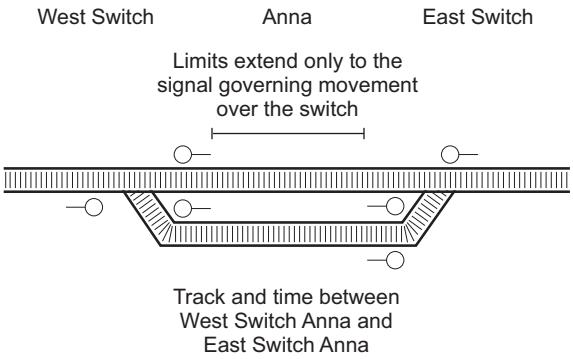
[Diagram A.]

10.0 Rules Applicable Only in Centralized Traffic Control (CTC)

10.3 Track and Time

The control operator may authorize men or equipment to occupy a track or tracks within specified limits for a certain time period. Authority must include track designation, track limits, and time limit. The people or equipment may use the track in either direction within the specified limits, until the limits are released, without providing flag protection.

Limits designated by a switch extend only to the signal governing movement over the switch unless otherwise designated.



[Diagram A.]

Track and time does not authorize maintenance of way employees and on-track equipment to occupy the main track within automatic interlocking limits.

Reporting Clear of Track and Time

An employee reporting clear of track and time must state:

- Their name and the name of the employee the authority was issued to if different.
- The track and time limit number being reported clear.
- The track limits being reported clear.

Releasing Portion of Limits

When an employee informs the control operator that the authority is released between two specific points, the authority is considered void between those points. This track release must begin at the outer limit of the authority.

10.3.2 Protection of People or Equipment Following a Train

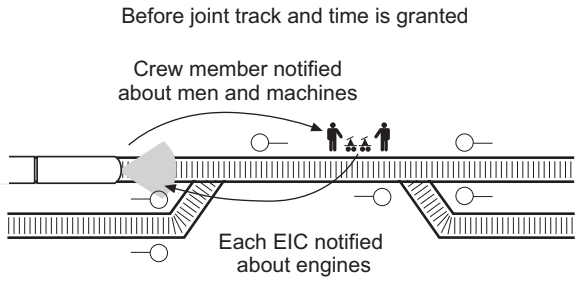
Employees may be issued track and time limits to follow a train or trains that have not been granted track and time as follows:

"Behind (train)."

10.3.3 Joint Track and Time

Before track and time is granted for on-track equipment or employees in the same limits with a train, each employee in charge and a crew member of each train must be notified of each other.

Trains must move at restricted speed within joint track and time limits.



[Diagram A.]

When track and time is granted to protect maintenance or repair work, trains must not be allowed into the working limits unless the trains and EIC of the work understand the conditions and movements that will be made.

If a track is not safe for trains to move at a speed of at least 20 MPH, employees must protect the track with red flags or lights as outlined in Rule 5.4.7 (Display of Red Flag or Light).

10.3.4 Record Track and Time

The employee requesting track and time will state his or her name, occupation, exact location and train or other identification. The employee will copy the authority granted on the form provided for the purpose, and repeat from the form the authority granted. If the authority is repeated correctly, the control operator will acknowledge with, “That is correct.” The train can make no movement until the engineer understands the track and time granted. The control operator must maintain a record of authority granted, including the time the track and time was released.

When requesting track and time, if communication is lost or an incomplete message is received while the control operator is issuing track and time, or if after repeating the authority to the control operator, the employee does not hear the response from the control operator “That is correct,” the employee must not occupy the track. The employee requesting track and time must contact the control operator as soon as possible and confirm with the control operator that the track and time was not received.

10.3.5 Using Track and Time Authority

Except as provided in Rule 10.3.3 (Joint Track and Time) track and time authority may be granted to an employee only after all trains moving within the limits have passed the location where the track is to be first occupied.

When using track and time authority, know the following:

- When the limits are designated by a control point and the authority includes “SWITCH NO,” the limits extend only to the signal governing movement through the control point. However, when the track and time authority includes “SWITCH YES,” the limits will include that switch (or switches) and the track in the direction lined between absolute signals governing movement through the control point.
- When the limits are designated by a switch, the limits extend only to the signal governing movement over the switch. However, when track and time is granted ON A SWITCH, the limits will include that switch (or switches) and the track in the direction lined between absolute signals governing movement over that switch.

11.0 On-Track Safety Policies

11.1 MWOR Training and Qualification

The purpose of this section is to prevent accidents and injuries that result from engines, locomotives, and on-track equipment striking roadway workers and machines.

The BNSF training and qualification programs for employees subject to the Maintenance of Way Operating Rules (MWOR) meet the requirements of Federal Railroad Administration (FRA) regulations under 49 CFR Parts 213, 214, and 217. Specifically, 49 CFR Part 214.343 prohibits railroads, or contractors to railroads, from assigning an employee to certain positions, and prohibits an employee from accepting those positions, unless the employee has been properly trained and has demonstrated the ability to fulfill the responsibilities for on-track safety that are required of an individual roadway worker performing that assignment. This instruction reflects the belief that the most comprehensive, consistent, and fair method for an employee to demonstrate his or her knowledge of rules and practices is through standardized training and testing for the various positions.

Assignments Requiring MWOR Qualification

Employees must be qualified on the Maintenance of Way Operating Rules (MWOR) before requesting or accepting assignments as:

- Employees in charge
- Lone workers
- Lookouts
- Flagmen
- Escorts
- Independent machine operators
- Subgroup coordinators working with large-scale maintenance and construction crews

In addition, these employees are trained and qualified on the on-track safety procedures specific to their positions. Assignments subject to these rules may be modified periodically pursuant to changes in governmental regulations or BNSF policy.

Initial Training to Attain MWOR Qualification

Training required to attain MWOR qualification reviews the content and application of those rules and addresses the on-track safety training and qualification required of employees whom a MWOR-qualified employee may be required to supervise or protect. To accomplish this, participants complete the MWOR Promotion Study Guide and the MWOR Promotion Examination.

The Promotion Study Guide is furnished to applicants upon request. Classes that complete the MWOR Promotion Examination are scheduled quarterly. An employee designated by the General Director Rules and Field Support facilitate these classes.

Re-Qualification Training to Retain MWOR Qualification

Training and re-qualification is required each calendar year for all employees currently qualified on the MWOR. Included in this program is a classroom review of:

- MWOR
- System Special Instructions
- Timetables
- General Orders
- BNSF Standard Plans

This review is followed by a written examination.

Training for Employees in Assignments Not Requiring MWOR Qualification

Training is required each calendar year for employees who are not currently qualified on the MWOR. This review is followed by an informal quiz (non-disqualifying).

Training and Qualification Records

Electronic records are maintained of each employee's qualification in effect. Each record includes the name of the employee, the type of qualification made, and the most recent date of qualification. Records are available for inspection and copying by the FRA during regular business hours.

Written Examinations

Employees whose assignments require MWOR qualification must pass initial qualification and requalification examinations. Employees whose assignments do not require MWOR qualification complete an informal quiz (non-disqualifying) on those rules to assist the employees in understanding the material.

Failure to Achieve a Minimum Score on Recorded Examination

Employees who fail to pass the initial qualification examination may re-take it up to two additional times. After three unsuccessful attempts at passing this examination, employees must wait at least 1 year from the first attempt before re-taking it. Employees who fail to pass the initial qualification examination before requesting assignments that require MWOR qualification are not eligible for such assignments.

Employees whose assignments require MWOR qualification and who fail to pass the re-qualification examination may re-take the examination; however:

- No further associated classroom training is provided.
- The examination may be re-taken up to two additional times.
- The second attempt may immediately follow the first, covering only those questions answered incorrectly on the first attempt.
- Re-examinations must be completed within 90 days of the first attempt.

After a second failure, employees must work under the oversight of another qualified employee until successfully completing the examination. Employees whose assignments require MWOR qualification and who do not pass the examination on the third attempt within the 90-day period are disqualified from holding positions that require this qualification. Such employees must wait at least 30 days before attempting to re-gain MWOR qualification through the process described in "Initial Training to Attain MWOR Qualification" above. Disqualification and exercise of seniority by those disqualified under the provisions of this Instruction are conducted according to the applicable collective bargaining agreement.

Expenses Associated with Taking Recorded Examination

Employees completing the initial qualification or re-qualification examinations may claim travel expenses/ allowances incurred for the classroom training and examinations (including the two re-examinations described in item 7 above), if provided for under their current applicable labor agreement.

Currently classroom training is available once annually, and then only for employees taking the re-qualification examination. Employees re-taking examinations use their rule books and other available materials for study guides.

Employees completing the initial qualification examination may take it up to three times in a twelve-month period.

An employee completing the classroom training and examination will be paid at the straight-time rate for time spent in the training and examination if his or her Supervisor schedules the training and examination after normal working hours.

Notification Associated with Failing to Pass Recorded Examination

Employees who fail to pass the re-qualification examination on the first attempt, including those who fail the second attempt on the same day, receive a notice from the rules instructor indicating the examination must be successfully completed within 90 days to retain MWOR qualification. Employees who fail to pass the initial qualification examination in three attempts and employees who fail to pass the re-qualification examination during the 90-day period receive a notice confirming that fact. For employees whose assignments require MWOR qualification, this notice advises the employee to contact his or her Supervisor before resuming normal duties. The Supervisor, in turn, provides a notice of disqualification to the employee.

11.2 Requirements for Operating Roadway Machines

General Requirements

Before operating a roadway machine, first:

- Receive training according to MWOR 11.1
- Be informed of the safety procedures that apply to persons working near your machine
- Inform the employee in charge that you fully understand the safety procedures

Machine-Specific Requirements

Follow these machine-specific requirements:

- Keep the operator’s manual with the machine if the machine is large enough to carry the manual.
- Be familiar with the information in the operator’s manual before you operate the machine.
- Follow the manual’s instructions for safe operation.

Qualification Requirements

To be qualified to operate a roadway machine, you must be trained and certified as competent to operate that machine. This training may be accomplished through:

- Peer instruction on the job

  or

- A combination of classroom training and peer training

A new machine operator or a relief machine operator who has not operated the type of equipment to which he or she will be assigned within the past year must be certified competent by a Work Equipment Supervisor or Roadmaster before operating the machine, except during supervised training.

After a new or relief operator receives approval to begin operating the machine, the certifying individual will observe the operator to ensure that he or she is competent to operate the machine.

11.3 Fouling the Track

Each roadway worker is responsible for determining that on-track safety is provided before fouling any track.

A roadway worker or roadway machine is fouling a track when the nearest rail of the track is within 4 feet. When this situation occurs incidental to the performance of his or her duties, such as when walking across or adjacent to a track on which authority or protection has not been provided, each worker must:

1. Assume individual responsibility to make the move safely.
2. Foul the track only after determining that it is safe to do so.
3. Move directly and promptly to a position clear of the track.
4. Not carry tools or material that restricts motion, impairs sight or hearing, or prevents the rapid movement away from an approaching train or other on-track equipment on the track being fouled.

11.4 Job Briefings

Conduct a job briefing before any roadway worker fouls a track. A job briefing is not complete until each roadway worker acknowledges understanding of the method of on-track safety that will be applied and the procedures that will be followed.

Roadway Work Groups

In the job briefing, discuss information related to on-track safety with each roadway worker who will foul the track.

In addition to other safety issues, minimum on-track safety information must include:

- Designation of the employee in charge
- Method of on-track safety being applied
- Track limits and time limits of authority
- Track(s) that may be fouled
- Operational controls of movements on adjacent tracks, if any
- Procedure to arrange for on-track safety on adjacent tracks, if necessary
- Means of providing a warning when a lookout is used
- Designated place of safety where workers will clear for trains
- Designated work zones around machines
- Safe working and traveling distances between machines

Conduct follow-up job briefings when:

1. The working conditions or procedures change.

   or

2. The method of on-track safety is changed, extended, or about to be released.

Lone Workers

At the beginning of each shift, each lone worker must participate in a job briefing with his or her supervisor or other designated employee. The job briefing includes the lone worker's planned itinerary and the procedures that will be applied to establish on-track safety.

Lone workers who cannot contact their supervisor or designated employee must verify the method of on-track safety with:

The Train Dispatcher, if communication with the Dispatcher is necessary to establish on-track safety (track and time, track warrant, track permit, track bulletin Form B)

or

One of the following, if communication with the Train Dispatcher is not necessary to establish on-track safety (inaccessible track, individual train detection):

- For signal employees, the Signal Call Center Desk
- For telecommunications employees, the Telecommunications Network Operations Center
- For all other employees, the Network Operations Center (NOC) Maintenance Desk

When all communication channels are disabled, conduct the job briefing as soon as possible after communications are restored.

11.5 On-Track Safety Procedures in Effect

Management and individual roadway workers share the responsibility for ensuring that proper on-track safety procedures are followed when workers are fouling track.

Responsibilities of Management

BNSF management must:

- Provide initial and recurring on-track safety training to all roadway workers once each calendar year.
- Guarantee each employee the right to challenge in good faith whether the on-track safety procedures to be applied at that work location comply with the MWOR.
- Follow the procedure outlined in MWOR 11.6 to promptly and fairly resolve challenges to on-track safety procedures.

Responsibilities of Individual Roadway Workers

Individual roadway workers must:

- Follow BNSF's on-track safety rules and procedures.
- Avoid fouling a track except when necessary to perform their duties.
- Wear high-visibility orange workwear when on or near the track. At night, the workwear must be retro-reflective. (See MWSR Rule S-21.1, "Personal Protective Equipment Requirements.")
- Determine that on-track safety is being provided before fouling a track.
- Refuse any directive to violate an on-track safety rule.
- Notify the employee in charge when making a good faith determination that on-track safety procedures to be applied at the work location do not comply with the MWOR.

11.6 Resolving Challenges to On-Track Safety Procedures

All roadway workers are guaranteed the right to challenge in good faith whether the on-track safety procedures applied at their work location comply with the MWOR and to remain clear of the track until resolved.

When making a good faith challenge, inform the employee in charge before the on-track safety rules are misapplied, if possible. Otherwise, inform the employee in charge before fouling the track.

A challenge is resolved as follows:

1. The challenging individual informs the employee in charge that he or she does not believe the method of on-track safety at the work location complies with the MWOR.

   Note: Individuals will not be subject to retribution or punishment for making a good faith challenge.

2. The employee in charge reviews the on-track safety procedures with the challenging individual to determine if proper procedures have been or will be applied.

3. If the challenging individual is still not convinced that the on-track safety procedures comply with the MWOR, the employee in charge contacts the next level Supervisor. The Supervisor reviews the on-track safety procedures and determines if the procedures are being properly applied.

4. After that review, if the challenging individual still is not convinced that the on-track safety procedures comply with the MWOR, the employee in charge and the next level Supervisor contact the General Director Rules and Field Support in Fort Worth, Texas or a designee. The person contacted reviews the on-track safety procedures and determines if the procedures are being applied properly.

   - If the determination is that the on-track safety procedures are not being applied properly, the employee in charge modifies the procedures as required.

     or

   - If the determination is that the on-track safety procedures are being applied properly, the challenge is considered resolved, and the employee in charge will instruct the challenging individual to perform his or her assigned duties.

     Note: Challenges that progress to the next level Supervisor are documented by that Supervisor. The section head of the work group reviews this documentation within 1 month of the challenge. A union representative is invited to participate in this review.

12.0 Adjacent Track Operations

12.1 Occupying Track Adjacent to Live Tracks

Before fouling a track adjacent to a live track (one subject to train operation), review this instruction as part of the daily job briefing. Two or more tracks are considered to be adjacent when their centers are spaced less than 25 feet apart.

When working on a track adjacent to a live track, establish on-track safety as necessary to protect against trains passing on the adjacent track. The requirements for on-track equipment operators and workers on the ground follow in this instruction.

To determine if authority or protection is required on adjacent tracks, the employee in charge must consider factors such as the following:

- Right-of-way conditions involved in reaching the identified place of safety
- Curvature of the track
- Sight distance
- Speed of passing trains
- Spacing of workers and equipment in the work group
- Background noise
- Risk of distraction

On-Track Equipment

Operators of on-track equipment working adjacent to a live track will place standard signs reading "Danger – Live Track" across the entrance/exit on the live track side of their machines if so equipped. Otherwise, another physical restraint must be placed to restrict access to that point. When the equipment is designed to enter/exit from either side, the employee in charge must instruct all personnel to utilize the field side when:

- Getting on or off the equipment
- Transferring tools or material
- Conversing with the occupant(s) of the equipment

Note: Where there are live tracks on both sides of the equipment, the employee in charge must designate in the job briefing which side to use.

When equipment being operated or material being handled will foul the adjacent live track, establish working limits on that adjacent track to prevent unannounced movement past the work area. Establish the working limits on a main track or controlled siding in conjunction with a track bulletin Form B when details of the project are known enough in advance to meet the established timelines for requesting the Form B.

Do not operate on-track equipment while a train is passing on an adjacent track if the equipment, while operating, will foul the adjacent track. Do not perform maintenance with on-track equipment while a train is passing on an adjacent main track or controlled siding, except as outlined under MWOR 12.2 Special Operating Guidelines. When the conditions of these guidelines cannot be met:

- Stop the equipment.
- Secure the equipment against movement.
- Inspect the passing train.

12.2 Special Operating Guidelines

You may perform maintenance with production rail grinders or rail detectors while a train is passing on an adjacent main track or controlled siding. You may perform maintenance with other on-track equipment, referenced in MWOR 12.3, while a train is passing on an adjacent main track or controlled siding if:

- A Track Bulletin Form B is in effect on the adjacent main track(s) or controlled siding.
- The employee in charge has instructed the passing train to pass people and equipment at:
  - 40 MPH or less on tangent track

    or
  - 25 MPH or less where curves or gradients obscure vision

EXCEPTION: When three or more main tracks are in service, and if the on-track equipment occupies the middle track, stop the on-track equipment if trains are passing on both adjacent main tracks at the same time.

Workers on the Ground. Workers required to foul an adjacent track while performing a task associated with the track on which they are working must be protected by a lookout if working limits are not established on the adjacent track. The provisions for lookout protection must be strictly complied with, and under no circumstances may equipment or material foul the adjacent track under lookout protection. Workers on the ground must not work between the tracks while a train is passing.

12.3 Work May Continue While Train is Passing

If equipment will not foul the adjacent track, the equipment may continue to work if the employee in charge has instructed the passing train to pass people and equipment at:

- 40 MPH or less on tangent track

  or
- 25 MPH or less when curves or gradients obscure vision

Use the following tables to determine which pieces of equipment will continue to work.

Rail Relay Gangs Working on the Rail *Nearest* the Live Track		
Equipment	**Continue Working**	**Stop Working**
Spike puller	X	
Spike reclaimer	X	
Tie plate retriever	X (Note 1)	
Tie plugger	X	
Speed swing		X
Cribber		X
Riding adzer		X
Riding cribber/adzer	X (Note 2)	
Rail positioner		X
Fully automatic pre-gager	X (Note 3)	
Hydraulic mobile crane		X
Tamper	X	
Spiker	X	
Rail heater	X	
Anchor remover	X	
Anchor applicator w/o cab		X
Anchor applicator w/cab	X	
Magnet scrap crane	X (Note 4)	
Welder		X

Note 1: Do not discharge plates while a train is passing.

Note 2: Equipment can continue working until train is passing equipment.

Note 3: Continue working only when working in fully automatic mode.

Note 4: Magnet scrap cranes equipped with a positive swing stop modification which limits the swing of the crane to prohibit the boom head or load, e.g. rail, from passing beyond the rail nearest to the live track with track centers of 14 feet or greater may continue to work.

Rail Relay Gangs Working on the Rail *Opposite* the Live Track		
Equipment	**Continue Working**	**Stop Working**
Spike puller	X	
Spike reclaimer	X	
Tie plate retriever	X	
Tie plugger	X	
Speed swing		X
Cribber	X (Note)	**Note: Equipment can continue working until train is passing equipment.**
Riding adzer	X (Note)	
Riding cribber/adzer	X (Note)	
Rail positioner	X	
Fully-automatic pre-gager	X	
Hydraulic mobile crane		X
Tamper	X	
Spiker	X	
Rail heater	X	
Anchor remover	X	
Anchor applicator w/o cab	X	
Anchor applicator w/cab	X	
Magnet scrap crane	X	
Welder	X	
Vosloh screw machine	X	

P811 Gangs Working When Main Frame Operator Side is *Nearest* the Live Track		
Equipment	**Continue Working**	**Stop Working**
Gantries	X	
Spike puller	X	
Main frame		X
Accumulator		X
Old tie pickup		X

P811 Gangs Working When Main Frame Operator Side is *Opposite* the Live Track		
Equipment	**Continue Working**	**Stop Working**
Gantries	X	
Spike puller	X	
Main frame	X	
Accumulator	X (Note)	**Note: The Accumulator and Old Tie Pickup Positions must work off of the opposite side of live track.**
Old tie pickup	X (Note)	
Magnet scrap crane	X (Notes 1 & 2)	
Note 1: You may work only when handling material, e.g. rail, from the side of the track opposite the live track. **Note 2: Magnet scrap cranes equipped with a positive swing stop modification which limits the swing of the crane to prohibit the boom or grapple head from passing beyond the rail nearest to the live track with track centers of 14 feet or greater may continue to work.**		

Tie Gangs Working (Except THS 2000)		
Equipment	**Continue Working**	**Stop Working**
Tie crane	X (Notes 2 & 4)	X (Note 1)
Spike puller	X	
Spike reclaimer	X	
Anchor spreader	X	
Tie inserter/remover	X (Note 2)	
Scarifier	X	
Final nipper tamper	X	
Plate broom		X
Tamper	X	
Rail lifter	X (Note 5)	
Tie plate inserter	X	
Magnet scrap crane	X (Notes 2 & 4)	
Spiker	X	
Anchor adjuster	X	
Ballast regulator	X (Note 3)	

Note 1: Cranes not equipped with a positive swing stop modification must stop operation and secure boom.

Note 2: You may work only when handling material, e.g. rail, or inserting or removing ties from the side of the track opposite the live track.

Note 3: Do not operate the broom. Retract the wing on the adjacent live track side and secure it in the stowed position.

Note 4: Tie cranes and magnet scrap cranes equipped with a positive swing stop modification which limits the swing of the crane to prohibit the boom or grapple head from passing beyond the rail nearest to the live track with track centers of 14' or greater may continue to work. Tie cranes must not be used to load or unload ties from push cars.

Note 5: You may work only when inserting plate from the side of the track opposite the live track.

This page left blank intentionally.

Bridge Construction and Repair Crews Working		
Equipment	**Continue Working**	**Stop Working**
Pile driver (on- and off-track)	X (Note 3)	
Bridge timber handler	X (Notes 2 & 4)	X (Note 1)
Note 1: Equipment not equipped with a positive swing stop modification must stop operation and secure boom.		
Note 2: You may work only when handling, inserting, or removing ties from the side of the track opposite the live track.		
Note 3: Pile driver on tangent track, with hammer running, may continue driving piling provided the boom, lead column, counterweight, or other attachment is not foul of the live track; otherwise, stop working.		
Note 4: Bridge timber handlers equipped with a positive swing stop modification, which limits the swing of the crane to prohibit the boom or grapple head from passing beyond the rail nearest to the live track with track centers of 14' or greater, may continue to work, except they must not be used to load or unload ties from push cars.		

Work Is at Many Locations Over an Extended Distance. When a crew is working at many locations over an extended distance, the employee in charge divides the workers into subgroups, each with a designated person who acts as a coordinator for that subgroup. The employee in charge notifies the subgroup coordinators when a train is approaching on an adjacent track. Each coordinator then:

- Warns subgroup employees of the approaching train, ensuring that all members of the subgroup have acknowledged an understanding that a train is approaching. If the subgroup coordinator is not in a position to physically or verbally warn employees as described below in "Coordinators Warn of Approaching Train," then the subgroup coordinator must also use the subgroup coordinator form
- Notifies employee in charge when all subgroup employees are alerted
- Serves as the lookout for any subgroup employees continuing to work on the ground between the tracks
- Makes immediate corrections when subgroup employees are operating equipment that could contact the passing train or are on the ground between the tracks with no provision for a lookout

  Note: Only MWOR-qualified employees may act as coordinators

Coordinators Warn of Approaching Train

Coordinators warn subgroup employees of a train approaching on an adjacent track as follows:

1. Identify the warning method in the job safety briefing
2. Give a distinctive, clear, and unquestionable warning
3. Make sure that workers can detect the warning regardless of noise or work distractions
4. Do not require workers to look in a particular direction to receive warning

Coordinator Notifies Employee in Charge

The coordinator notifies the employee in charge when all subgroup members have:

- Acknowledged an understanding that a train is approaching
- Stopped work between the tracks not protected by a lookout

  Note: The subgroup coordinator must be the designated lookout

- Stopped operating equipment that could foul the adjacent track

Employee in Charge Clears Train

The employee in charge clears a train on an adjacent track to pass the red flag or light as follows:

1. Use the Subgroup Coordinator Notification form to positively confirm that all coordinators have reported that their subgroup members have stopped work between the tracks that are not protected by a lookout and stopped operating equipment that could foul the adjacent track

   Note: Coordinators are the only crew members authorized to cross the live track to inspect the opposite side of passing train

2. Instruct the train to pass the red flag or light according to the speed restrictions in MWOR 12.2
3. When the train clears the work limits, notify each coordinator. Make sure that each coordinator specifically acknowledges that the information was received and understood

12.4 Work Will Not Continue While Train is Passing

Workers must stop working under these conditions:

- They are working on the middle track of three or more main tracks and trains are passing on both adjacent tracks at the same time

  or

- A train is allowed to pass at a higher speed than those previously specified in MWOR 12.2

The employee in charge has the following responsibilities:

- Before permitting the movement to pass the red flag or light, ensure that all work that is not protected by a lookout has stopped. Before allowing work to resume, ensure that the passing train has cleared and issue instructions to resume work
- Use appointed coordinators as necessary to communicate with workers

Workers have the following responsibilities when stopping work:

- Stop the equipment.
- Secure the equipment against movement.
- Inspect the passing train.

13.0 Not Used

This page left blank intentionally.

14.0 Rules Applicable Only Within Track Warrant Control (TWC) Limits

14.1 Authority to Enter TWC Limits

Where designated by the timetable, a track warrant will authorize main track use under the direction of the train dispatcher or as prescribed by Rule 6.14 (Restricted Limits). Track warrant instructions must be followed where restricted limits are in effect.

Track warrants do not authorize main track occupancy for MW employees within Rule 6.13 (Use of Yard Limits) or Rule 6.14 (Restricted Limits).

Within yard limits, MW employees and equipment may only perform maintenance under the protection of Rule 6.13.2 (Maintenance in Yard Limits). When moving through yard limits, proceed as prescribed by Rule 6.13.1 (Movements through Yard Limits).

14.2 Designated Limits

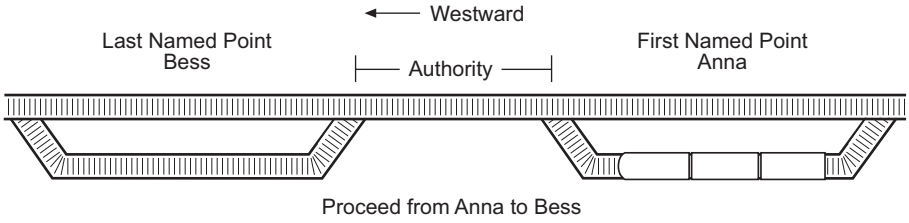
Track warrant limits must be designated by specifying track, where required, and exact points such as switches, mile posts, or identifiable points. However, station names may be used as follows.

A. First Named Point

When a station name designates the first named point, authority extends from and includes the last siding switch. Authority extends from the station sign if no siding exists.

B. Last Named Point

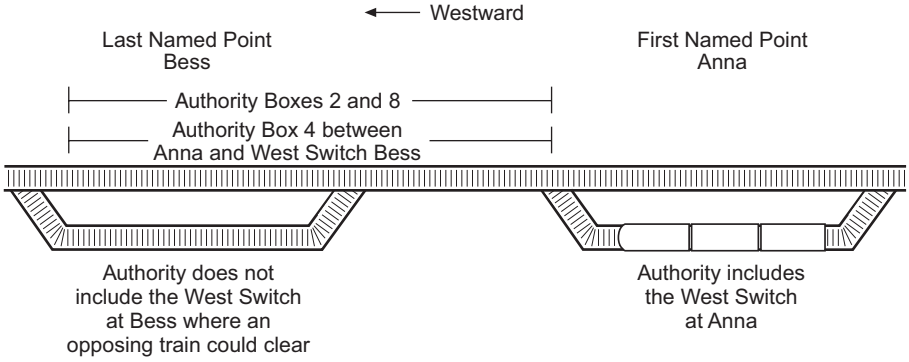
When a station name designates the last named point, authority extends to and includes the first siding switch. Authority extends to the station sign if no siding exists.



[Diagram A.]

14.3 Operating With Track Warrants

A track warrant authorizes a train, employee or equipment to occupy the main track within designated limits. However, a train, employee or equipment must not foul a switch at either end of the limits where an opposing train may use the same switch to clear the main track.



[Diagram A.]

The train, employee or equipment must move as follows:

1. Proceed from one point to another in the direction the track warrant specifies. When an employee informs the train dispatcher that the on-track equipment has passed a specific point, track warrant authority is considered void up to that point. When the train dispatcher instructs an employee to report passing a designated station or mile post, if the station has a siding, the report must be made after the on-track equipment passes over the last siding switch or mile post. If the designated station does not have a siding, the report must be made when the on-track equipment passes the station sign. Record the location of the specific point on the track warrant form.

   or

2. If authorized to "WORK BETWEEN" two specific points, a train, employee or equipment may move in either direction between those points without flag protection. When employee informs the train dispatcher that the authority is released between two specific points the authority is considered void between those points. This track release must begin at the outer limit of the authority. Record the location of the specific points on the track warrant form.

14.5 Protecting Men or Equipment

Men or equipment may receive a track warrant in the same manner as trains to occupy or perform maintenance on the main track without other protection.

A track warrant must not be issued to protect men or equipment within the same or overlapping limits with a train unless:

1. All trains are authorized to proceed in one direction only, and the track warrant specifies that people or equipment do not foul limits ahead of these trains.

   or

2. All trains authorized are notified of the men or equipment and have been instructed to move at restricted speed. Also, a track warrant must inform the employee in charge of people or equipment about trains. If the track is not safe for trains to move at a speed of at least 20 MPH, employees must protect the track with red flags or lights according to Rule 5.4.7 (Display of Red Flag or Red Light).

When authority is granted in the same limits with the train, all train movements must be made at restricted speed.

14.7 Reporting Main Track Switches Restored to Normal

Within TWC limits, when notified by track warrant that main track switch(es) may be in the reverse position, if the main track switch is found to be in reverse position, restore the main track switch to the normal position and advise the train dispatcher.

14.8 Track Warrant Requests

An employee requesting a track warrant must state their name and occupation to the train dispatcher. The employee must inform the train dispatcher of the following:

- The subdivision.
- The location where the track will be entered.
- The limits to be occupied.
- Tracks to be used.

  and

- How much time is required.

14.9 Copying Track Warrants

The employee in charge must have a copy of the track warrant issued and must read and understand it. The copy must show the date. The following must occur when a track warrant is transmitted verbally:

A. Transmitting Track Warrants

1. The train dispatcher will transmit the track warrant, followed by a summary of the total number of boxes and individual box numbers included by stating: “This warrant has (total number) boxes marked (Individual box numbers).”
2. An employee will enter all of the information transmitted by the train dispatcher, except the summary. As the summary is transmitted, the employee will check the total number of boxes and individual box numbers copied to ensure all items are included.
3. The employee will repeat the information to the train dispatcher, followed by a summary of the total number of boxes and individual box numbers included by stating: “This warrant has (total number) boxes marked: (Individual box numbers).”
4. The train dispatcher will check the repeat and, if all information including the summary is correct, will state the following: “Warrant (number) OK (time) (dispatcher initials)”. The employee will enter the OK time and the train dispatcher’s initials on the track warrant and repeat them to the train dispatcher.

Note: The summary information in Items 1, 2 and 3 above will be exempt from pronouncing and spelling numbers as indicated in MWOR Rule 2.14.1.

B. In Effect

1. The track warrant is not in effect until the “OK” time is shown on it.
2. If the track warrant restricts movement or previously granted authority, it cannot be considered in effect by the train dispatcher until acknowledgment of the “OK” has been received.

Employees may relay track warrants.

14.10 Track Warrant in Effect

A track warrant is in effect until the employee who copied it reports that people and equipment have cleared the limits or that the track warrant is made void.

14.11 Changing Track Warrants

Employees must not add to or alter a track warrant in any manner.

When a track warrant must be changed, a new track warrant must be issued showing, “Track Warrant No. _____ is void” and the number of the track warrant being changed. When a track warrant of a previous date is voided, the date must be included. The previous track warrant will no longer be in effect.

14.12 Voiding Track Warrants

An employee must inform the train dispatcher when people and equipment have cleared the limits. An employee releasing a track warrant must state the following:

- The employee’s name.
- The track warrant number being released.
- The track limits being released.
- The time that track warrant limits were cleared.

In addition, before reporting clear of a track warrant, the track warrant is made void or a portion of track warrant limits is released, the employee must restore hand operated main track switches to normal and will job brief with the train dispatcher about the position of main track switches and those switches operated are locked within the limits being released, referencing completion of the “Position of Switch/ Derail” form or stating no entries required.

Employees must write “VOID” across each copy of the track warrant when reported clear of the limits or when the track warrant has been made void.

14.13 Mechanical Transmission of Track Warrants

Repetition is not required when track warrants are transmitted mechanically. The “OK” time will be given when the track warrant is issued. The space for the name of the copying employee may be left blank.

Track warrants that restrict the authority or movement of people or equipment must not be transmitted mechanically, unless the people or equipment being restricted will not leave the point without receiving the track warrant.

15.0 Track Bulletin Rules

15.1 Track Bulletins

The train dispatcher will issue track bulletin restrictions as required. Track bulletins will contain information on all conditions that affect safe train or engine movement. Form A restrictions will be used for speed restrictions. Form B restrictions will be used as a authority for MW employees. Forms other than track bulletin restrictions Forms A and B may be used when necessary.

15.2 Protection by Track Bulletin Form B

Display track flags as specified in Rule 5.4.3 (Display of Yellow-Red Flag) and Rule 5.4.7 (Display of Red Flag or Red Light).

A train must not enter the limits unless instructed by the employee in charge. A train within the limits at the time the track bulletin Form B takes effect must not make further movement until instructed by the employee in charge.

A crew member must attempt to contact the employee in charge of a track bulletin Form B to avoid delay, giving the train's location and track being used.

Before occupying a main track, controlled siding or any track where CTC is in effect, employees must have information concerning all Form B track bulletins in effect that may overlap their authority.

The employee in charge will use the following format to establish communication with the train:

Foreman (name and/or gang number) using Track Bulletin No.____ (specifying line number when necessary) between MP____ and MP____ (specifying subdivision when necessary).

Trains within the limits of a track bulletin Form B, unless otherwise restricted, must move at the speed(s) specified by the employee in charge as stated in Item A (Instructions).

A. Instructions

After communication with the train has been established, the employee in charge will use the following format to grant a train permission to proceed through the Form B limits:

- (Train ID) may pass the red flag (or red light) at MP____ (without stopping) and proceed at (one of the following), (specifying track when necessary):
  - "Maximum Authorized Speed"
  - "Restricted Speed"
  - A speed specified by the employee in charge

An additional speed may be given to restrict a train's movement through a portion of the limits, by adding the following:

- Do not exceed ____MPH between/at MP____ and MP____ (or other location).

To require a train to stop at a designated location within the limits, add the following:

- Stop at MP____ (or other location) until additional instructions are received.

When men or equipment foul adjacent track(s), add the following:

- Men or equipment fouling (specify track).

B. Repeat Instructions

A crew member must repeat the above instructions, and the employee giving the instructions must acknowledge them before they can be followed.

Once instructions are received from employee in charge, if the track route changes from previous instructions received, contact employee in charge to determine that original instructions received are valid on new track route before proceeding on the new route. The movement must not change direction without permission from the employee in charge.

C. Stop Column

"Stop" must always be written in the stop column. Trains and employees must not enter the limits unless instructed by the employee in charge.

A red flag must be displayed at the beginning of the limits and at main track junctions within the limits.

On-track equipment authorized under the provisions of Rule 15.2.1 (Authorization for On-Track Equipment) is not required to display red flags when traveling. When establishing working limits, red flags must be displayed at the location of the working limits.

On track equipment or a train within the limits at the time the track bulletin Form B takes effect, must not make further movement until instructed by employee in charge.

D. Entering Within Limits

Before entering the track governed by the track bulletin Form B from any location other than at the beginning of the Form B limits, obtain permission from the employee in charge.

E. Control Points

When Form B track bulletin restriction limits contain a dual control switch(es), a job briefing must be held with the control operator to determine if switches need to be blocked.

The job briefing must include the following:

- What track(s) will be occupied or fouled,
- Which, if any, of the dual control switch(es) in the limits will be occupied or fouled,
- What, if any, routing restrictions exist for movements through the limits,
- What, if any, MW activity will be affected by the change of position of any dual control switch(es) within the Form B limits.

The employee in charge must inform the control operator of any MW activity that would be affected by the change of position of any dual control switch(es) within the limits of the track bulletin Form B. When a MW activity will be affected by the change of position of a dual control switch(es), the employee in charge must ascertain that blocks have been applied by the control operator prior to occupying the track.

F. Crossovers

Outside of CTC or interlocking limits, when track bulletin Form B limits contain a crossover from the other main track, the employee in charge of the track bulletin Form B must ensure that all crossover switches providing access to the track segment to be occupied are:

- Lined in normal position.
- Spiked, clamped or locked with an effective locking device.
- Properly tagged.

G. Verifying Track Bulletin Form B

Employees must verify with the train dispatcher that the Form B is in effect. Additionally, the employee must record or cross-check all of the verification information on the form entitled "Request/ Verification of Track Bulletin Form B" or with a copy of the Form B. The verification information must be retained until the track bulletin Form B has expired and track flags have been removed.

15.2.1 Authorization for On-Track Equipment

Track bulletin Form B may be used to authorize on-track equipment, such as rail detector cars, without using yellow-red flags. Identify authorized equipment in the track bulletin.

While trains, engines, and authorized equipment are in track bulletin limits, they will otherwise be governed by Rule 15.2 (Authorization by Track Bulletin Form B). The same track bulletin must not authorize other gangs and equipment.

15.2.2 Time Limits Expire

If track bulletin Form B limits cannot be cleared prior to the expiration of time shown on Form B, obtain other authority from the train dispatcher to remain within the limits.

If the train dispatcher cannot be contacted, immediately provide protection as outlined in Rule 6.19 (Flag Protection).

15.4 Protection When Tracks Removed from Service

Before a track is removed from service, it must be protected.

This rule does not relieve MW employees or on-track equipment of their responsibility of obtaining authority or establishing protection as prescribed by Rules 6.3.1 and 6.3.2.

A track bulletin may protect tracks removed from service by designating the track and naming the points at each end of the track. Trains must not use this track, unless the track bulletin states the name or title of an employee who may authorize use, and this person directs all movement.

When required, the train dispatcher must advise crews of alternate routes and switch positions.

The train dispatcher, yardmaster, or other designated employee must be notified when the track can be returned to service.

15.5 Protection When Tracks Blocked with Equipment

Notify the train dispatcher when main tracks, controlled sidings, or other tracks that are normally clear are blocked with equipment and cannot be cleared.

When the main track or controlled siding is blocked, provide protection as specified by Rule 6.20 (Protection of Equipment Left on Main Track).

15.6 Change of a Rule, General Order or Special Instruction

When authorized by the designated manager, a track bulletin may be used to issue, change, or cancel rules, general orders, or special instructions.

General orders or special instructions cancelled by track bulletins must not be reinstated. The track bulletin must remain in effect until the general order that contains the change is posted.

This page left blank intentionally.

16.0 Not Used

This page left blank intentionally.

17.0 Rules Applicable in Foul Time

17.1 Foul Time

On-track equipment or employees may occupy a manual interlocking or control point within the specified limits and time periods verbally authorized by the train dispatcher or control operator.

17.2 Requesting Foul Time

Employees requesting foul time must:

1. State their name, occupation, and exact location.
2. Specify the control point or manual interlocking to be occupied, including track or route if necessary.
3. Repeat the foul time granted back to the train dispatcher or control operator.
4. The train dispatcher or control operator must apply blocking devices to the traffic control system to prevent authorizing any other movement into the foul time limits.

Foul time is not in effect until the “OK” time is received. Copy the information on a track and time form.

Employees must take special care when requesting, copying and repeating foul time authority. Do not enter information, other than your name, date and subdivision, on the form until transmitted by the train dispatcher or control operator.

17.3 Using Foul Time

Foul time may be granted to an employee only after all trains moving within the limits have passed the control point or manual interlocking to be occupied. When using foul time, know the following:

1. Track may be used in either direction within the control point or manual interlocking without providing protection against either trains or other on-track equipment.
2. Foul time limits will include only the track in the direction switches are lined between absolute signals governing movement through the control point, unless specific authority is issued for the entire control point, or authority is specified for a particular route within the control point or interlocking.
3. Foul time also may be issued between specific switches or signals of a manual interlocking, if the train dispatcher or control operator can lock or block the switch or signal to prevent other movements into those limits.
4. Foul time may not be issued “joint.”

This page left blank intentionally.

18.0 Occupancy Control System (OCS)

18.1 OCS for Men and On-Track Equipment

Within yard limits at locations designated under individual subdivision special instructions, OCS or other authority must be used to occupy the track.

Occupying the Main Track

Before occupying or fouling the main track, employees or equipment must obtain authority from the train dispatcher.

The employee requesting OCS will state the employee's name, occupation and location. The employee will repeat the authority granted. OCS must be copied on the prescribed form. If the authority is repeated correctly, the train dispatcher will acknowledge with "OK" and give time and initials. The employee who requests OCS must then retain the written OCS record until OCS is released.

Employee must advise the train dispatcher when they are clear of the limits. An employee releasing OCS must state the following:

- Their name.
- The OCS number being released.
- The track limits being released.
- The time the OCS limits were cleared.

Employees must write "VOID" across each copy of the OCS when reported clear of the limits or when the OCS has been made void.

Designated Limits

OCS limits must be designated by specifying track, where required, and exact points such as switches, mile posts or other identifiable points.

Direction of Movement

When employees receive authority to proceed from one point to another, they must move only in the direction specified. When employees receive authority to work between two specific points, they move in either direction between those points.

Same Limits with a Train or Engine

Before employees or equipment receive authority to occupy the same limits with a train or engine, the employee in charge and a crew member of the train or engine must be notified. When notified, all train movements must be made at restricted speed.

This page left blank intentionally.

Glossary

Abbreviations

Use only the following abbreviations:

ABS ..... Automatic Block Signal System
AMTK..... Amtrak
AS..... Absolute Signal
AUTH..... Authority
BRN..... Branch
C..... Center
C & E ..... Conductor and Engineer
CNT ..... Connection
COFC ..... Container on Flat Car
CONDR ..... Conductor
CP..... Control Point
CTC ..... Centralized Traffic Control
DISPR..... Dispatcher
DIST ..... District
DIV..... Division
DT..... Double Track
E ..... East
EBCS..... Eastbound Controlled Signal
EE..... East End
ENG..... Engine
ENGR ..... Engineer
ESS ..... East Siding Switch
EWD ..... Eastward
EXO..... East Crossover
FRT..... Freight
HER..... Head End Restriction
IM ..... Intermodal
JCT..... Junction
MAX..... Maximum
MMT ..... Multiple Main Track
MP ..... Mile Post
MPH..... Miles Per Hour
MT ..... Main Track
MW ..... Maintenance of Way
N..... North
NA..... Not Applicable
NBCS..... Northbound Controlled Signal
NE..... North End
NO ..... Number
NSS ..... North Siding Switch
NWD ..... Northward
NXO..... North Crossover
OK ..... Correct
OPR..... Operator
ORIG ..... Originating
PSGR ..... Passenger
RC ..... Radio Channel
RCO..... Remote Control Operator
RCZ ..... Remote Control Zone
RECD ..... Received
RE..... Region
RESTRN.... Restriction
RL..... Restricted Limits
RP..... Release Point
S ..... South
SBCS..... Southbound Controlled Signal
SDG..... Siding
SE..... South End
SS..... Station Sign
SSS ..... South Siding Switch
SUB ..... Subdivision
SUBDIV ..... Subdivision
SUPT..... Superintendent
SW..... Switch
SWD ..... Southward
SXO..... South Crossover
TFND..... Track Flags Not Displayed
TOFC..... Trailer on Flat Car
TRK ..... Track
TRN ..... Train
TWC ..... Track Warrant Control
W ..... West
WBCS..... Westbound Controlled Signal
WE..... West End
WSS ..... West Siding Switch
WWD ..... Westward
WXO..... West Crossover
XO ..... Crossover
YL ..... Yard Limits
YM ..... Yardmaster

Use the normal abbreviations for names of months.

ABS

See Automatic Block Signal System.

Absolute Block

A length of track that no train is permitted to enter while the track is occupied by another train.

Absolute Signal

A block or interlocking signal without a number plate, or designated by an A marker.

Adjacent Tracks

Two or more tracks with track centers spaced less than 25 feet apart.

Automatic Block Signal System (ABS)

A series of consecutive blocks governed by block signals, cab signals, or both. The signals are activated by a train or by certain conditions that affect the block use.

Automatic Switch

A switch that, when movement over the switch is complete, will automatically return to its normal position.

Block
A length of track:

- between consecutive block signals.
- between a block signal and the end of block system limits.

  or

- in ATC limits the use of which is governed by cab signals and/or block signals.

Block Signal
A fixed signal at the entrance of a block that governs trains entering and using that block.

Block System
A block or series of consecutive blocks within ABS, ACS, CTC, or interlocking limits.

Cars
Railroad cars.

Centralized Traffic Control (CTC)
A block system that uses block signal indications to authorize train movements.

Conductor
Employee in charge of train or yard movement.

Control Operator
Employee assigned to operate a CTC or interlocking control machine or authorized to grant track permits.

Control Point
The location of absolute signals controlled by a control operator.

Controlled Siding
A siding within CTC or interlocking limits where a signal indication authorizes the siding's use. Rules applicable in CTC apply on these sidings.

Controlled Signal
An absolute signal controlled by a control operator.

Correspondence of Crossover Switches
Correspondence of crossover switches means both crossover switches are lined for the crossover or both are lined for the straight tracks.

Crossings at Grade
Crossings that intersect at the same level.

Crossover
A combination of two switches that connect two adjacent tracks.

CTC
See Centralized Traffic Control.

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

Distant Signal
A fixed signal outside a block system that governs the approach to a block signal, interlocking signal, or switch point indicator. A distant signal does not indicate conditions that affect track use between the distant signal and block or interlocking signals or between the distant signal and switch point indicator. A distant signal is identified by a D.

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

Dual Control Switch
A power-operated switch, moveable point frog, or derail that can also be operated by hand.

Effective Locking Device
When used in relation to a manually operated switch or derail, a lock that can be locked or unlocked only by the craft or group of workers applying the lock.

Electric Switch Lock
An electrically controlled lock that restricts the use of a hand-operated switch or derail.

Employee in Charge (EIC)
A rules qualified MW employee who is assigned the duty of being responsible for the protection and direction of his/her self and his/her co-workers in any engineering work activity.

Engine
A unit propelled by any form of energy or more than one of these units operated from a single control. Engines are used in train or yard service. Rules that apply to engines also apply to cab control cars.

Engineer
Also includes student engineers, firemen, and hostlers (See also Remote Control Operators).

Equipment
Railroad equipment.

Escort
An employee familiar with the territory and assigned by the employee in charge to assist the movement of equipment operated by employees, contractors, or other outside personnel unfamiliar with the territory.

Fixed Signal
A signal that is fixed to a location permanently and that indicates a condition affecting train movement.

Flagger
A person providing warning for malfunctioning crossing devices.

Flagman
Any rules qualified employee providing flag protection.

Foreman
Employee in charge of work.

Foul of Track
Within four feet of the nearest rail of a track.

General Track Bulletin
A notice containing track bulletin restrictions and other conditions affecting train movement.

Interlocking
Signal appliances that are interconnected so that each of their movements follows the other in a proper sequence. Interlockings may be operated manually or automatically.

Interlocking Limits
The tracks between outer opposing absolute signals of an interlocking.

Interlocking Signals
The fixed signals of an interlocking that govern trains using interlocking limits.

Lone Worker
A rules-qualified person not engaged in a common task with another person or group.

Lookout
A rules qualified employee assigned to warn roadway workers of approaching trains or on-track equipment.

Machine Operators
Operators of on- and off-track equipment.

Main Track
A track extending through yards and between stations that must not be occupied without authority or protection.

Men
Railroad employees.

Men and Equipment
A term referring to Engineering Department employees and their related equipment.

Minor Work
Work being performed which could not derail a train.

Multiple Main Tracks
Two or more main tracks that are used according to the timetable.

Off-Track Equipment
Machines that may be operated on the right-of-way foul of track. Off-track equipment includes tractors, scrapers, graders, cranes, trucks, and similar equipment.

On-Track Equipment
Machines that may be operated on the rails. On-track equipment includes motor cars, push cars, trailers, hy-rail vehicles, cranes, tampers, power jacks, ballast shapers, brooms, trucks, and similar equipment.

Overlap Sign
A sign that indicates the limits of a block.

Pilot
An employee assigned to a train to assist an engineer or conductor who is unfamiliar with the rules or the portion of railroad the train will operate on.

Proceed Indication
Any block signal indication that allows a train to proceed without stopping.

Radio
As used in these rules, the term ‘radio’ also applies to wireless communication devices when used in radio operation.

Remote Control Operator (RCO)
Trainman operating Remote Control Locomotive (RCL) equipment.

Remote Control Zone (RCZ)
A portion of track(s) within definite limits designated in the timetable special instructions.

Reverse Movement
A movement opposite the authorized direction.

Siding
A track connected to the main track and used for meeting or passing trains. Location of sidings are shown in the timetable.

Signal Aspect
The appearance of a fixed or cab signal.

Signal Indication
The action required by the signal aspect.

Single Track
A main track where trains are operated in both directions.

Special Instructions
Instructions contained in the timetable or other publication.

Spring Switch
A switch with a spring mechanism that returns the switch points to the original position after they are trailed through.

Station
A place designated by name in the timetable station column.

Switch Point Indicator
A light type indicator used during movement over certain switches to show that switch points fit properly.

Timetable
A publication with instructions on train, engine, or equipment movement. It also contains other essential information.

Track Bulletin
A notice of conditions affecting train movement.

Track Occupancy Indicator
An indicator that tells whether a length of track is occupied or not.

Trackside Warning Detector
A device that indicates conditions such as overheated journals, dragging equipment, excess dimensions, shifted loads, high water, or slides.

Track Warrant Control (TWC)
A method to authorize train movements or protect men or machines on a main track within specified limits in a territory designated by the timetable.

Train
One or more engines coupled, with or without cars, displaying a marker, and authorized to operate on a main track. A term that when used in connection with speed restrictions, flag protection, and the observance of all signals and signal rules also applies to engines.

Train Coordination
Working limits established by a roadway worker through the use of a train's authority on a main track or other track where specific authority is required from a control operator or train dispatcher.

Trainmen
Conductors, assistant conductors, brakemen, yard engine foremen, switchmen, and yard helpers.

TWC
See Track Warrant Control.

Variable Switch
A switch identified by a "V" or a bowl painted yellow. When trailed through, the switch points remain lined in the position they were forced.

Working Limits
A segment of track within definite boundaries on which movements may be made only as permitted by the employee in charge. Boundaries may be established using mile posts, station signs, timetable locations, or clearly identifiable points.

Yard
A system of tracks, other than main tracks and sidings, used for making up trains, storing cars, and other purposes.

Yard Limits
A portion of main track designated by yard limit signs and timetable special instructions or a track bulletin.

Index