Union Pacific Rules

Maintenance of Way

Effective November 17, 2008
Includes Updates as of July 2, 2013
PB-20339

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40.0: MAINTENANCE-OF-WAY SUPPLEMENTS TO THE GENERAL CODE OF OPERATING RULES (GCOR)

GCOR and Supplements: Employee Responsibility

M/W employees are responsible for complying with the GCOR rules, and their corresponding M/W supplements, that are listed in the table on the following pages.

The shaded boxes in the table contain GCOR rules that have a M/W supplement.

Rules 40.1-40.16 in this chapter cover M/W supplements to the GCOR. Employees can either place the supplemental pages directly behind the GCOR pages that have a M/W supplement, or leave them as a part of Chapter 40.
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40.1: Chapter 1 Supplements

Supplement: 1.1.2 Alert and Attentive

The employee in charge must take every precaution to ensure employees are warned about approaching trains. Employees must be warned in time for them to reach a safe place.

The employee assigned to warn employees of approaching trains must watch continuously for trains and for signals from other employees indicating a train is approaching. This assigned employee must not perform any other function until:

- Relieved by the foreman.
- All employees working at that location have been notified of any approaching train.

When notified of an approaching train, employees must immediately move away from and remain clear of tracks until they receive a signal to resume work.

Note: For additional information refer to Chief Engineer Instruction Bulletin 136.4.4 (Train Approach Warning).

Supplement: 1.5 Drugs and Alcohol

Drug & Alcohol Policy ("In Part")
(Effective April 15, 2004)

In applying GCOR Rule 1.5 (Drugs and Alcohol), the following applies:

The purpose of the Union Pacific Drug and Alcohol Policy is to ensure compliance with applicable federal regulations and to establish policies, priorities, and objectives for the company's drug and alcohol control program. Compliance with the requirements of this policy is a condition of employment at Union Pacific.

Union Pacific prohibits any illegal use of a controlled substance, and any possession, use of, or impairment by alcohol when any employee is subject to duty, reporting for duty, on duty, or on Union Pacific property.

If an employee is in doubt as to whether an over-the-counter or prescription drug may have an adverse effect on alertness, coordination, reaction, response, or safety, the employee should take the following steps:

1. The employee's treating medical practitioner or any other medical practitioner who has evaluated the individual should make a good faith judgment in writing, with notice of the employee's assigned duties and on the basis of the available
medical history, that the use of the substance by the employee at the prescribed or authorized dosage applicable is consistent with the safe performance of the employee's duties. A copy of this documentation must be available upon request; and

2. The substance must be used only in the manner and dosage, and for the purpose prescribed or authorized; and

3. In the event an employee is treated by more than one medical practitioner, at least one treating medical practitioner should be informed of all medications authorized or prescribed and should make a good faith judgment, in writing, that the combination of medications is consistent with the safe performance of the employee's duties. The employee must observe any restrictions imposed with respect to use of medications in combination.

Note: Every employee must recognize that the unauthorized use of another person's prescription is illegal and may cause a positive test result which would be a violation of Union Pacific's drug and alcohol testing policy.

The conduct of any employee leading to conviction of any misdemeanor or felony involving the unlawful use, possession, manufacture, distribution, dispensation, or transportation of any illegal drug or controlled substance is prohibited.

Employees convicted of any such misdemeanor or felony must notify their supervisor of that fact no later than the end of the first business day immediately following the day the employee receives notice of the conviction.

Certified locomotive engineers and remote control operators, whatever class of service, i.e., including hostlers, must report to the EAP any conviction for operating a motor vehicle while under the influence of or impaired by alcohol or a controlled substance. Report must be made either to the National Employee Assistance Help Line, (800) 779-1212, or to their supervisor, within forty-eight hours of the conviction.

Driving a motor vehicle owned, leased, or rented by the company, while under the influence of alcohol and drugs, both on or off Union Pacific property and both on or off duty, is prohibited. Any employee arrested, ticketed, or convicted for driving a motor vehicle owned, leased, or rented by the company under the influence of alcohol and/or drugs, must notify a supervisor as soon as possible, but no later than the end of the first business day immediately following the day the employee is arrested, ticketed, or convicted.

Union Pacific permits off-duty employees subject to duty, or called for duty, to layoff with an admission that they are under the influence of alcohol or drugs (illegal or legal).

All DOT certified drivers, including CMV operators, must notify a supervisor when their license has been revoked, suspended or withdrawn for any reason, including drug or alcohol-related revocations, within forty-eight hours.

Supplement: 1.8 Appearance

M/W employees must not wear red clothes when their duties require them to be on or near tracks.

Supplement: 1.10 Games, Reading or Electronic Devices

Rule Updated Date

May 4, 2011

System Special Instructions

Effective Date: May 4, 2011
40.2: Chapter 2 Supplements

Supplement: 2.3 Repetition

When communicating by radio to restore a track to service, the employee in charge and the subordinates in charge of specific elements of the work shall use the following language (example):

"UP foreman A. B. Smith calling foreman Robert Jones. Over."

"Robert Jones to Smith...go ahead. Over."

"Jones, advise when men and machines are clear of westward main track. Over."

"Jones to Smith...men and machines are clear of westward main track. Over."

"Smith to Jones...keep men and machines clear. I will release westward main track for service immediately. Do you understand? Over."

"Jones to Smith...acknowledged. I understand. Out."

Repeat this procedure to each employee responsible for any element of the work force.

Track must not be released for service until all responsible employees have confirmed the understanding.

Supplement: 2.21 Electronic Devices

Employees on duty must not:

- Play games.
- Read magazines, newspapers, or other literature not related to their duties.
- Have magazines, newspapers, and other literature not related to duties in their vehicles. This does not prohibit employees from having such material enclosed in their personal luggage.

Cell Phones and Computers

When cell phone use is allowed, employees must follow all applicable federal, state and local laws. Use of cell phones (including their PDA functions) and computers is governed by the following:

1. Before using a cell phone or computer, determine that it's safe to do so.

2. Employees, while on-duty or on company property, must not use cell phones or computer while driving motor vehicles except as follows. Exception: when initiating or receiving cellular phone calls, drivers of company vehicles must utilize hands-free equipment. If hands-free equipment is not available, bring the vehicle safely to a stop until the call is completed.
   Speed dialing should be used whenever possible. Passengers may use cell phones or computers as long as their use doesn't distract the driver from safely operating the vehicle.

3. Operators of equipment, including hyrails, must not use cell phones or computers while equipment is moving on-track. A computer may be used for business purposes, however, the operator must stop equipment when necessary to enter or view information. If the computer is not equipped with a screen black out process that blacks out the screen when equipment is
moving faster than 5 MPH, the device screen must not be viewable to the operator. Passengers may use cell phones or computers as long as their use doesn't distract the driver from safely operating the equipment.

4. Employees must not use cell phones when standing or walking foul of any track or when in close proximity to men or equipment working on or off-track.

5. Nothing in this rule prevents the use of cell phones in an emergency.

Rule Updated Date
July 2, 2013

System Special Instructions
Effective Date: May 4, 2011

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40.5: Chapter 5 Supplements

Supplement: 5.2.2 Signals Used by Employees

To give clear signals during the day and 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. All gang vehicles must carry a full railroad flagging kit in approved containers. Vehicles carrying hazardous materials must also carry the full flagging kit as long as the flagging kit is stored in a separate metal container or compartment that cannot be penetrated by the hazardous materials being transported. If a vehicle carrying hazardous materials cannot meet this requirement, employees must carry a plastic tube with two red flags and four staffs.

A full flagging kit will consist of the following:

Single Track:
   (4) Red flags, (6) Red fusees

Two or More Tracks:
   (6) Red flags, (8) Red fusees

Supplement: 5.4.2 Display of Yellow Flag
It may be necessary to issue a track bulletin to restrict movements because of track conditions or structures before yellow flags can be displayed. When this is necessary, give the information needed on the track bulletin to the train dispatcher or control operator with instructions "flags not displayed."
Display yellow flags as soon as possible and notify the train dispatcher or control operator.

**Supplement: 5.4.3 Display of Yellow-Red Flag**

When requesting a Form B track bulletin for protection of non-railroad employees and flags are not required (refer to Rule 15.2.2), give the information needed on the track bulletin to the train dispatcher or control operator with instructions "flags not displayed."

**Supplement: 5.4.4 Authorized Protection by Yellow or Yellow-Red Flag**

Delete all references to Yellow-Red flags. Retain references to Yellow flag.

**Supplement: 5.4.7 Display of Red Flag or Red Light**

When displaying a red flag that is intended to stop train movements, ensure that the full face of the flag is clearly visible to approaching trains and that the flag is displayed at a right angle to the track.

**Display Between Rails.** When a red flag or red light is displayed between the rails of any 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.

Place red flags to the right of the track as viewed by an approaching train when possible.

For two or more main tracks or sidings, place flags on the field side for outside tracks; for center tracks or when conditions warrant, red flags or lights may be placed between the rails.

**Supplement: 5.5 Permanent Speed Signs**

Permanent speed restriction signs, as prescribed in the timetable, will be placed 2,500 feet in advance of the point where a speed restriction becomes effective.

**EXCEPTION: When authorizing a higher speed restriction than the previous speed restriction, place the sign at the point of restriction.**

**Supplement: 5.16 Observe and Call Signals**

M/W employees who ride in the engine control compartment must observe and communicate the name of signals affecting their train in the same manner as train crew members.

**Rule Updated Date**

November 17, 2008
M/W employees who receive authority to occupy the main track after the arrival of a train or to follow a train must ascertain the train's location by one of the following methods:

- Direct communication with a crew member of the train.

or

- Receiving information about the train from the train dispatcher or control operator.

**Supplement: 6.5 Handling Cars Ahead of Engine**

When handling cars ahead of any piece of work equipment and other workers are present at the work site, the operator must ensure that another employee takes an easily seen position ahead of the move when shoving cars. This employee must be capable of and in position to give hand signals to stop movement if any workers or machines foul the track ahead of the move. Radios may be used instead of hand signals to protect this type of move.

**Supplement: 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, a track car must stop at least 400 feet from the signal or from the clearance point of the facing point switch.

**Supplement: 6.21.1 Protection Against Defects**

**Supplement: Broken Rail**

A qualified employee, such as a supervisor, foreman or signal maintainer, must specify a speed for train movement over broken rail that does not exceed 10 MPH. In addition, an employee must watch the train as it passes over the broken rail, and must give a stop signal when necessary.

**Curved Track.** When broken rails are located on a curve, do not permit a train to pass over them unless they have been secured at the break on both sides of the rail with joint bars or approved clamps.

**Straight Track.** When broken rails are located on straight track, stop the train at least 200 feet before the broken rails and notify the engineer when it is safe for train movement.

**Supplement: 6.32.2 Automatic Warning Device**

When a highway crossing warning apparatus fails to indicate the approach of trains, post a watchman or flagman at the crossing until repairs are made, or until otherwise directed.

Employees must immediately report the failure of a highway crossing warning apparatus to the train dispatcher and the track or signal manager.

**Rule Updated Date**

July 2, 2013

**System Special Instructions**

Effective Date: April 29, 2011
General Order
Effective Date: July 2, 2013

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40.7: Chapter 7 Supplements
Supplement: 7.13 Protection of Employees in Bowl Tracks

After receiving the block from the employee controlling switches, the employee will:

A. Electric switches:
   1. Take the switch off power.
   2. Line the switch away from the track(s) to be protected.
   3. Spike or clamp the switch.

B. Pneumatic switches:
   1. Ensure the switch is lined away from the track(s) to be protected.
   2. Physically block the open switch point and spike or apply a point clamp to the closed point.
   3. Remove the block from the open switch point.

If, for any reason, the employee needs to use the switch while the track or tracks are still out of service, the employee must communicate with the employee controlling switches and request permission to come out on the lead. Movement of on-track equipment in a remotely controlled hump yard requires switching lead or bowl tracks to be made inaccessible.

The employee controlling switches will not hump any cars into the group in which M/W personnel are working until after the employee spikes the switch.

After completing the movement and use of the switch, the employee will follow procedure A or B as detailed above. After completing procedure A or B the employee must:

1. Ensure the switch is lined away from the track(s) to be protected.
2. Re-spike or re-clamp the switch.
3. Tell the employee controlling switches that:
   o The movement is complete.
   o The switch is lined and spiked.

Note: Use derails (with red flags), switches lined against or discontinuity in the rail to protect against the possibility of standing cars rolling into your working limits.

Rule Updated Date
February 26, 2010

System Special Instructions
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**40.8: Chapter 8 Supplements**

**Supplement: 8.2 Position of Switches**

Foremen are responsible for positioning switches used by their gang. When a main track switch is found lined for other than main track movement, the foreman must confer with the train dispatcher or control operator before lining the switch. After operating any main track switch in non-signaled territory, immediately restore the switch to its normal position after the intended move(s) is made.

Each employee holding a track authority in non-signaled territory must record the name and location of each switch that is operated, the time that each switch was initially reversed, the time that each switch was restored to normal position and the initials of the employee handling the switch. This information must be recorded on the Track Warrant, Track Permit, Record of Form B Clearance or Switch Position Awareness Form (line-up territory).

Before reporting clear of the limits of a track authority in non-signaled territory:

- Conduct a job briefing with all employees to verify that every switch that was operated has been restored to normal position and locked.
- Advise the train dispatcher that main track switches have not been operated or, if used, have been restored to normal and locked.

Track Warrants, Track Permits, Record of Form B Clearance and Switch Position Awareness Forms must be kept for 5 calendar days after the authority has been released or the Form B Track Bulletin or Line-up has expired.

Only employees who are trained and qualified on the Operating Rules or the M/W Rules may operate a hand-operated main track switch in non-signaled territory.

**Supplement: 8.9 Movement Over Spring Switches**

Where required, protect facing-point movements over spring switches with signals or indicators. Line spring switches by hand for the intended route before trailing through them with on-track equipment.

**Supplement to 8.14 Conflicting Movements Approaching Switch**

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

Main track switches in signaled territory must not be operated unless track authority is obtained over the switch or permission as required by Rules 9.13.1 and 40.9 (supplement to 9.17.1) is received from the dispatcher.

In non-signaled territory, employees must not operate a main track switch unless track authority has been obtained over the switch or employee-in-charge knows that no trains are closely approaching. The employee-in-charge can verify that no trains are approaching the switch by one of the following methods:

- Contacting the train dispatcher.
- Receiving information directly from trains.
Crossover switches must not be unlocked or lined for crossover movement when another movement is approaching or passing over either switch.

**Rule Updated Date**

July 2, 2013

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**40.9: Chapter 9 Supplements**

**9.15 Track Permits**

Supplement: 9.15 Track Permits - MW

**Requesting Track Permit.**

Employees requesting a track permit must:

1. State their name, occupation and exact location.
2. Specify the exact location where the track will first be occupied and the limits where protection is required.
3. Enter the required information on the correct form and verbally repeat back the authority granted by the train dispatcher or control operator. Track permit forms must be used and track cars operating in 9.15 territory must carry these forms.
4. After the train dispatcher or control operator responds with an "OK", record the time and initials of the train dispatcher or control operator when provided. The track permit is not in effect until the "OK" time is received.

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| Employees must take special care when requesting, copying and repeating a track permit. Do not enter information, other than your name, date and subdivision, on the form until transmitted by the train dispatcher or control operator. |

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**Joint Track Permit.**

Before granting a track permit to employees or trains that will operate in the same limits with other employees or trains, the dispatcher or control operator must notify each employee or train holding or requesting a track permit that the limits are jointly occupied.

When a track permit has been issued "joint with", a job briefing must be conducted with each employee or train listed as "joint with" before entering the limits. Job briefing must include the name of the EIC, exact location of working limits, and moves to be made.

Before reporting a track car clear of limits, ensure:

- The track car is completely clear of the limits.
- Switches are properly lined and locked.
Each employee holding a Track Permit must record the name and location of each main track switch operated, the time each switch was initially reversed, the time that each switch was restored to normal and the initials of the employee handling each switch. This information must be recorded on the Track Permit form. Before reporting clear of the limits of a Track Permit, advise the train dispatcher that main track switches have not been operated or, if used, have been restored to normal position and locked. Track Permit must be kept for 5 calendar days after the permit has been released.

**Supplement: 9.17.1 Signal Protection in ABS by Lining Switch**

When the train dispatcher grants permission, you may provide flag protection in ABS territory by lining a switch to establish block signal protection. The employee in charge must:

- Verify with the dispatcher that:
  - No trains or engines are approaching the area to be protected.
  - No trains have been authorized to move against the current of traffic.
- Verify that no trains or engine are occupying the track between the switch and the area to be protected.
- Ensure that the switch to be lined is in the same block as the area to be protected.
- Line the switch against main track movement.
- Remain at the switch for at least 5 minutes after the switch has been lined. If a train or engine is heard or seen approaching the protected block, immediately line and lock the switch for movement on the main track.
- If no train or engine is heard or seen approaching the area to be protected after 5 minutes, lock the switch and display red flags to establish working limits or protect unsafe track. A properly equipped flagman will be assigned at that location to flag all approaching trains or on-track equipment from both directions. M/W employees may then occupy the track or make the track impassable.

When protection is no longer required, the employee in charge must line the switch back for main track movement and advise the train dispatcher the switch has been lined and locked.

**Rule Updated Date**

July 2, 2013

**System Special Instructions**

Effective Date: April 20, 2012

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**40.14: Chapter 14 Supplements**

**14.5 Protecting Men or Equipment**

**Supplement: 14.5.1 Track Warrants - M/W**

**Requesting Track Warrant**

Employees requesting a track warrant must:
• State their name, occupation and exact location.
• Specify the exact location where the track will first be occupied and the limits where protection is required.
• Enter the required information on the correct form and verbally repeat back the authority granted by the train dispatcher or control operator. Track warrant forms must be used and track cars operating in TWC territory must carry these forms.

After the train dispatcher or control operator responds with an "OK", record the time and initials of the train dispatcher or control operator when provided. The track warrant is not in effect until the "OK" time is received. Track warrant must be kept for 5 calendar days after the warrant has been released.

Employees must take special care when requesting, copying and repeating a track permit. Do not enter information, other than your name, date and subdivision, on the form until transmitted by the train dispatcher or control operator.

Joint Track Warrant

Before granting a track warrant to employees or trains that will operate in the same limits with other employees or trains, the train dispatcher or control operator must notify each employee or train holding or requesting a track warrant that the limits are jointly occupied.

When a track warrant has been issued "joint with", a job briefing must be conducted with each employee or train listed as "joint with" before entering the limits. Job briefing must include the name of EIC, exact location of working limits, and moves to be made.

Supplement: 14.7 Reporting Clear of Limits - MW

Before reporting a track car clear of limits, ensure:

• The track car is completely clear of the limits.
• Switches are properly lined and locked.

Each employee holding a Track Warrant in non-signaled territory must record the name and location of each main track switch operated, the time each switch was initially reversed, the time that each switch was restored to normal and the initials of the employee handling each switch. This information must be recorded on the Track Warrant form. In non-signaled territory, before reporting clear of the limits of a Track Warrant, advise the train dispatcher that main track switches have not been operated or, if used, have been restored to normal position and locked.

Rule Updated Date

November 17, 2008

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40.15: Chapter 15 Supplements

Supplement: 15.2 Protection by Track Bulletin Form B

A. Establishing From B Protection
Form B protection must:

- Be requested at least 14 hours prior to work beginning.
- Include the following:
  - Subdivision.
  - Specify limits MP to MP.
  - Start and finish time.
  - Track(s) affected.
  - Foreman’s name & Gang number.

**Note:** In an emergency Form B may be issued without 14 hour notice.

A job briefing between the EIC and the train dispatcher or control operator must be conducted on the day the work is being performed to determine routes that will be affected by dual-control switches.

Protection may be required between the yellow-red flags of the Form B to prevent access through dual-control switches and/or specific route information given to trains that may enter the Form B limits between the yellow-red flags.

Before occupying track(s) the employee in charge must verify with the train dispatcher or control operator that:

- Form B has been issued as requested;
- Form B track bulletin has been received by all affected trains;
- The yellow-red and red flags are displayed;
- Job briefing with Dispatcher or control operator concerning dual-control switches has been completed.

If necessary to obstruct main track, make it unsafe for trains at normal speed or, men or equipment foul track prior to verification, other protection as prescribed by the rules must be provided.

**B. Placing Flags**

When placing and removing flags used with Form B track bulletins, use the following sequence:

- Placing Flags: Place the yellow-red flags first, then the red flags;
- Removing Flags: Remove the red flags first, then the yellow-red flags.

**C. Clearing Trains**

The employee in charge (or designated employee) must be alert for approaching trains to avoid delays. Format shown below must be used to issue instructions when contacted by approaching train. If unable to contact approaching train, employee in charge (or designated employee must go toward the train and use hand signals to stop train.

It is not necessary to stop train with hand signals when:

- All men and machines are clear of the track.
- The track is safe for train movement.

When clearing trains through the limits of the Form B, the employee in charge will:

- Give his/her name and gang number as required in Rule 15.2 (A).
• Transmit numbers in accordance with Rule 2.14.1.

**Rule 15.2.1 does not apply on the Union Pacific Railroad.**

Within the limits of a Form B track bulletin, track and time authority may be obtained before occupying a track in CTC territory that has an adjacent controlled track. A job briefing must be conducted with every train that is cleared through the Form B limits. This job briefing must follow the exact verbiage outlined below and must take place prior to the actual Form B clearance.

"(Train ID), my gang is occupying track (___). Do you understand that I will give you permission to proceed only on track(s) (___) and except when verbally authorized, crossover movement must not be made without receiving additional instructions from me?" (Wait for response)

**D. Hand-operated Switch Allows Access from another Subdivision or Railroad**

Where a hand-operated switch allows a train from another subdivision or railroad to enter that portion of track between the yellow-red flags, the EIC must discuss with the train dispatcher which of the following methods of protection will be used to prevent unauthorized entrance to the Form B limits.

- Obtaining track and time, track permit, foul time, track warrant or track out of service on the portion of track through the hand-operated switch.
- Applying a point clamp with a private lock and a "track out of service" tag, to the hand-operated switch.

or

- Displaying a yellow-red flag 2 miles in advance of the Form B limits on the adjoining subdivision or railroad. Because the yellow-red flag will be placed on a different subdivision or railroad than the Form B limits, the EIC must request that a Form Track bulletin be issued explaining the placement of this yellow-red flag.

If the yellow-red flag cannot be placed 2 miles in advance, place it in advance of the switch and note the milepost location on the Form C track bulletin.

Where the hand-operated switch is within the limits of the Form B (between red flags), a red flag should be placed in advance of the switch on the adjoining subdivision or railroad.

The employee-in-charge of the Form B must ensure that all switches operated have also been restored to normal position before clearing trains through the Form B limits and before the expiration time on the Form B Track Bulletin. In non-signaled and current of traffic territory, the EIC must record the name and location of each main track switch operated, the time each switch was initially reversed, the time that each switch was restored to normal and the initials of the employee handling each switch on the Record of Form B Clearance. This documentation must be kept for 5 calendar days after the expiration of the Form B Track Bulletin.

Before occupying any main track, employees must have information concerning all Form B track bulletins in effect that may overlap their track authority.

**Rule Updated Date**

July 2, 2013
40.16: Chapter 16 Supplements

(do not apply on UPRR)

16.4 Work and Time

Supplement: 16.4.1 Work and Time Authority - M/W

Requesting Work and Time Authority

Employees requesting work and time must:

1. State their name, occupation and exact location.
2. Specify the exact location where the track will first be occupied and the limits where protection is required.
3. Enter the required information on the correct form and verbally repeat back the authority granted by the train dispatcher or control operator. Work and time forms must be used and track cars operating in DTC territory must carry these forms.
4. After the train dispatcher or control operator responds with an "OK", record the time and initials of the train dispatcher or control operator when provided. The track permit is not in effect until the "OK" time is received.

Employees must take special care when requesting, copying and repeating a track permit. Do not enter information, other than your name, date and subdivision, on the form until transmitted by the train dispatcher or control operator.

Joint Work and Time Authority

Before granting work and time authority to employees or trains that will operate in the same limits with the other employees or trains, the train dispatcher or control operator must notify each employee or train holding or requesting work and time authority that the limits are jointly occupied.

When work and time authority has been issued "joint with", a job briefing must be conducted with each employee or train listed as "joint with" before entering the limits. Job briefing must include the name of EIC, exact location of working limits and moves to be made.

Rule Updated Date

November 17, 2008
41.0: RESPONSIBILITIES

M/W employees are responsible for performing work in accordance with Union Pacific's *Environmental Laws, Policies and Procedures Manual*. This includes but is not limited to:

- Tie disposal
- Battery disposal
- Equipment waste oil disposal
- PCB transformers

Rule Updated Date

November 17, 2008

41.1: Foremen

Foremen must:

- Supervise and engage in all work performed by their gang.
- Make reasonable efforts to perform work that does not:
  -- Result in an unstable or unsafe track condition.
  -- Create an unreasonable hazard to employees working on or near the track.
  -- Result in a negative environmental impact, including damage from fires.
- Make required reports.
- Call on other foremen for assistance, if necessary.

*Note: The foreman in whose territory the work is being performed is in charge.*
Foremen must not exceed their allowance of men or overtime unless authorized, or there is an emergency.

**Rule Updated Date**

November 17, 2008

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### 41.1.1: Leaving Gang

When called away from work unexpectedly, the foreman must:

- Assign the most reliable person to be in charge.
- Provide definite instructions as to the work to be performed.
- Notify the supervisor.

Work that would make a track or structure unsafe must not be performed until a qualified employee has taken charge.

**Rule Updated Date**

November 17, 2008

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### 41.1.2: Coordinate Track and Signal Work

When track work will affect the operation of signals, notify a signalman in advance.

When performing work near track circuits, take precautions to avoid damaging:

- Bond wires
- Underground wiring
- Other signal appliances

In addition, avoid short-circuiting tracks and report any damage to the signalman.

**Rule Updated Date**

November 17, 2008

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### 41.2: Operators

Operators of roadway machines and work equipment are responsible for the efficient operation and proper care of equipment.

Operators of roadway machines, work equipment and track cars must:
1. Operate, maintain and lubricate equipment according to manufacturer specifications.

2. Conduct and document thorough inspections prior to operating their equipment. In addition to other inspection criteria, these inspections must ensure that:
   - Floors, decks, stairs and ladders provide secure access and footing. They must be free of oil, grease or any obstruction that creates a slipping, falling or fire hazard.
   - Flagging kits are available for use. Roadway machines that are the lead or trailing pieces of equipment operating under the same track authority and all hyrails must carry flagging kits as prescribed by Rule 40.5.
   - An operative and properly charged fire extinguisher is readily available for use.
   - The operator's seat, if so equipped, is structurally sound.
   - The primary braking system is in good working order.

3. Immediately correct or tag out any unsafe condition found. Report other conditions and repair orders exceeding 7 working days before it is necessary to tie up the machine. Operator must assist mechanics with repairs, if required.

   **Note:** Operator must remove the machine or hy-rail from service if repairs are not made within 7 calendar days, unless parts are not available. If parts are not available, they must be ordered before the end of the next business day. The machine or hy-rail must then be repaired within 7 calendar days of the receipt of parts. In no case may a noncompliant machine or hy-rail be kept in service longer than 30 calendar days.

   - Complete the required inspection logs, production and repair order reports.
   - Prohibit other roadway workers from riding on their machines unless a safe and secure position for each rider is clearly marked by stenciling, marking or other written notice.
   - Prohibit their machine or hy-rail from being used to tow pushcars or other equipment if the towing would cause the machine or hy-rail to exceed the capabilities of the braking system. An approved tow bar must always be used.

**Rule Updated Date**

November 17, 2008

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41.2.1: Good Faith Challenge

Operators who determine that their machine or vehicle does not comply with FRA regulations or has a condition that inhibits the safe operation may refuse to operate the machine or vehicle. When this occurs, the operator must:

   - Inform their supervisor of the defective condition.
   - Allow the supervisor to make an inspection to determine compliance with safety standards.
   - If the employee making the challenge is still not satisfied the employee in charge will provide the next level supervisor with written documentation of the challenge.

Operators may not be subject to retribution or punishment for making a good faith challenge of equipment safety.

**Rule Updated Date**
41.3: Mechanics/Machinists

Work equipment mechanics and machinists must:

1. Make periodic inspections and repairs to ensure the safe and efficient operation of each machine.
2. Once the mechanic/machinist is aware of a non-complying condition, the following timetable will be in effect:
   - If parts are needed, they must be ordered before the end of the next business day.
   - Equipment must be repaired within 7 calendar days, unless parts are not available. If the machine or hy-rail is not repaired within 7 calendar days, it must be taken out of service.
   - If parts must be ordered to make a repair, the equipment must be repaired within 7 calendar days of the receipt of parts.

Note: In no case may a non-compliant machine be kept in service longer than 30 calendar days.

3. Ensure equipment shipped to another territory is in good working condition, or Notify consignee of necessary repairs and if material has been ordered.
4. Attach a "Do Not Operate" tag to the ignition switch before working on a machine.

Note: Take care to prevent moving cars or equipment from coming in contact with the machine.

Rule Updated Date
November 17, 2008
42.0: RULES FOR ON-TRACK OPERATION OF TRACK CARS, ROADWAY MACHINES AND WORK EQUIPMENT

- 42.1: Track Cars
  - 42.1.1: Qualifications
  - 42.1.2: Use of Track Cars
  - 42.1.3: Getting On/Off or Riding Track Cars
  - 42.1.4: Inspection
  - 42.1.5: Track Car Contents
  - 42.1.6: Stop Engine
  - 42.1.7: Safe Passage
  - 42.1.8: Handling Brakes
  - 42.1.9: Fueling Track Cars, Roadway Equipment and Automotive Units
  - 42.1.10: Attaching Push Cars or Trailers to Track Cars
  - 42.1.11: Protection of Cars Not in Use
  - 42.1.12: Equipment Cab Quiet Zone
- 42.2: Maximum Speeds
  - 42.2.1: Movement on Signal Indication
  - 42.2.2: Other Speed Requirements
  - 42.2.3: Operation of High-Speed Work Equipment
- 42.3: Main Track Authorization
  - 42.3.1: Requesting and Releasing Track Authority
- 42.4: Track and Time Authority
  - 42.4.1: Requesting Track and Time
  - 42.4.2: Using Track and Time Authority
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  - 42.4.4: CTC Interruption
- 42.5: Use of Yard Limits
  - 42.5.1: Movements Through Yard Limits
  - 42.5.2: Maintenance in Yard Limits
- 42.6: Grade Crossings
- 42.7: Railroad Crossings at Grade
  - 42.7.1: Manual Interlockings
  - 42.7.2: Automatic or Symbol (Z) Manual Interlockings
- 42.8: Following Cars or Trains
- 42.9: Signal to Stop
- 42.11: Operating Over Switches and Frogs
• 42.11.1: Speed when Passing Through Switches or Derails
• 42.11.2: Operating Switches
• 42.12: Operating Motor Cars in Reverse
• 42.13: Lineups
• 42.13.1: General Lineups
• 42.13.2: Prescribed Form of Lineup
• 42.13.3: Expired Lineup
• 42.13.4: Communicating with Trains
• 42.13.5: Tracks Removed from Service for Trains and Engines
• 42.14: Hy-Rails
• 42.14.1: Designated Employees
• 42.14.2: Hy-Rail Inspection
• 42.14.3: Headlights, Radios and Seat Belts
• 42.14.4: Operation of Hy-Rail Vehicles with Track Shunts
• 42.15: Flag Protection
• 42.16: Foul Time
• 42.16.1: Requesting Foul Time
• 42.16.2: Using Foul Time
• 42.17: Entering A Remote Control Zone

42.1: Track Cars

Rules that apply to track cars also apply to:

• Hy-rails
• Motor cars
• Roadway machines
• Work equipment

Rule Updated Date

November 17, 2008

42.1.1: Qualifications

To operate a track car or to move roadway or work equipment on a track, an employee must:

• Have a reliable watch as prescribed by Rule 1.48 (Watch Requirement).
• Pass the prescribed examination.
An employee who does not meet these qualifications must be under the direct supervision of a qualified employee.

Employees or contractors who operate hy-rail equipment on a track are governed by M/W Rule 42.14.1.

**Rule Updated Date**

July 2, 2013

**System Special Instructions**

Effective Date: April 23, 2013

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### 42.1.2: Use of Track Cars

Only employees in the discharge of their duties are permitted to use or ride track cars, unless they have permission from the proper authority.

Privately owned track cars are not allowed on the track, unless authorized by the proper authority. Operators of privately owned track cars must be qualified as outlined in Rule 42.1.1 (Qualifications).

**Rule Updated Date**

November 17, 2008

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### 42.1.3: Getting On/Off or Riding Track Cars

Do not get on or off any moving equipment.

**Exception:** Employees may get on and off equipment that is working at a slow speed. [Examples: P-811 concrete tie machine, CAT and other automatic tampers, etc.] Good communication between the machine operator and employees getting on and off the equipment is essential to prevent injuries.

Do not ride on track cars or push cars unless they are equipped with one of the following:

- Approved seats for all authorized riders.
- Safety railings around operator platforms, in which case only the operator is allowed.
  - or
- Closed-cab equipment where employees can prevent themselves from falling out of the equipment.

**Note:** Passengers must not interfere with the safe operation of the track car. No part of an employee's body may extend beyond the sides, front or rear of the track car while it is in motion.
42.1.4: Inspection
Before using a track car, inspect it for defects. If the track car is unsafe for any reason, remove it from service.

42.1.5: Track Car Contents
Secure all articles so that they do not fall off a track car or machine.
Place equipment and items on motor cars so that they do not block the lifting handles or end rods.

42.1.6: Stop Engine
Turn off a motor car's engine before placing it on or taking it off the track.

42.1.7: Safe Passage
Before a track car can occupy a main track, all information included in the track authority must be given to all track car occupants and others who will use that authority. This information also includes advice covering the movement to be made and the work to be performed.
Track cars, including roadway machines and work equipment, must have a working radio on at least one unit when moving together under the same track authority.
Occupants must keep a lookout for trains, obstructions in flangeways, animals and other objects that might affect the track car's safe passage.

When using gang motor cars, assign one employee on each end of the car to watch for obstructions and other hazards. Employees so assigned must face outward and must be seated to ensure secure footing and hand hold. Do not overload ends or sides of gang motor cars.

Rule Updated Date
November 17, 2008

42.1.8: Handling Brakes
Immediately after starting movement of a track car, test the brakes to ensure they are working properly.

When transporting employees on trailers, assign one employee to handle the trailer brakes.

Rule Updated Date
November 17, 2008

42.1.9: Fueling Track Cars, Roadway Equipment and Automotive Units
When dispensing fuel, do the following:

- Do not smoke or light a fire in the vicinity.
- Remove track cars, roadway equipment and work equipment from an enclosed storage building before fueling. (This does not apply to equipment in the shop for repair.)
- Turn off all engines before fueling.

Maintain contact between the side of the fuel tank or approved fuel can and the fuel nozzle to prevent a static electrical charge. If a fuel can is used, it must be an approved can equipped with a standard pouring nozzle.

- Be careful not to spill fuel.
- Report all spills to the supervisor.

Use spill materials to contain and clean up spills before attempting to start the engine.

- When additional lighting is necessary, use only electric lanterns or flashlights.

Rule Updated Date
42.1.10: Attaching Push Cars or Trailers to Track Cars

Use standard couplers to attach trailers or push cars to the rear of track cars.

Push cars and trailers must be pulled, rather than pushed, unless it is not practical to do so. If you must push a trailer or push car, operate the track car at a slow and safe speed.

Rule Updated Date
November 17, 2008

42.1.11: Protection of Cars Not in Use

Track cars not in use must not foul any track. When removing a track car or machine from the track, observe the following requirements:

- Place the track car or machine not less than 7 feet from the nearest rail.
- Do not leave the track car or machine at a public or private crossing when it will interfere with the crossing in any way.

In addition, when motor cars or push cars are not housed, chain and lock their wheels.

Rule Updated Date
November 17, 2008

42.1.12: Equipment Cab Quiet Zone

To ensure the vehicle or on-track equipment (OTE) is operated safely and rules are observed, all occupants in the vehicle/equipment must act responsibly to assist the driver/operator to prevent accidents or rule violations.

An "Equipment Cab Quiet Zone" exists during critical times when multiple tasks are occurring such as:

- Setting on or setting off a hy-rail vehicle.
- Anytime sight of OTE being followed is lost.
- While requesting, repeating or releasing a track authority.
- Approaching a Form B restriction.
- Approaching the end of the vehicle/equipment(s) track authority
- Making a reverse movement on-track or off-track.
Reference the applicable JSA (Operating On-Track Equipment or Operating a Hy-Rail On-Track) before operating on-track.

During an equipment cab quiet zone, an environment must be created in the vehicle/OTE that allows the driver/operator to focus exclusively on controlling the movement to comply with company rules. The driver/operator must call out "Equipment Cab Quiet Zone" (ECQZ) when the situation or conditions dictate. All occupants in the vehicle/OTE must heighten their sense of alertness and assist the driver/operator by notifying him or her verbally of any hazards or risks seen. Conversation not related to the movement of the equipment and radio/phone usage must be discontinued during the time the ECQZ is in effect.

An employee other than the driver/operator will be required to handle radio communications when present. If no other employee is present, the driver/operator must bring the equipment to a complete stop before engaging in any computer or phone usage. If proper action is not being taken, the driver/operator must remind others of the cab quiet zone and not continue movement of the equipment until the quiet zone procedures are being followed.

**Rule Updated Date**

July 2, 2013

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### 42.2: Maximum Speeds

The maximum track speeds for track cars are listed below. Reduce speed, if necessary to ensure safety.

<table>
<thead>
<tr>
<th>Category</th>
<th>Maximum Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Duty Hy-rail inspection vehicles including suburbs and bridge inspection trucks. *Except as noted below in Maximum speeds for curves.</td>
<td>45 MPH</td>
</tr>
<tr>
<td>Gang Hy-rail vehicles and Rail Detector Cars. *Except as noted below in Maximum speeds for curves.</td>
<td>25 MPH</td>
</tr>
<tr>
<td>Roadway machines and work equipment</td>
<td>30 MPH</td>
</tr>
<tr>
<td>Continuous action tampers (CATs)</td>
<td>45 MPH</td>
</tr>
<tr>
<td>Track evaluation cars (self-propelled)</td>
<td>70 MPH</td>
</tr>
<tr>
<td>Track evaluation cars (handled in-train)</td>
<td>80 MPH</td>
</tr>
<tr>
<td>Ballast undercutters (BUC)</td>
<td>50 MPH</td>
</tr>
<tr>
<td>One-man motor cars</td>
<td>30 MPH</td>
</tr>
<tr>
<td>Gang motor cars without trailers</td>
<td>25 MPH</td>
</tr>
<tr>
<td>Gang motor cars with push cars or trailers attached</td>
<td>20 MPH</td>
</tr>
<tr>
<td>Rail grinders and in-track welders</td>
<td>45 MPH</td>
</tr>
<tr>
<td>Track construction machines (must be handled at the rear of the train)</td>
<td>30 MPH</td>
</tr>
<tr>
<td>Equipment Description</td>
<td>Speed</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Trackmobile (light)</td>
<td>20 MPH</td>
</tr>
<tr>
<td>Trackmobile (handling cars)</td>
<td>10 MPH</td>
</tr>
<tr>
<td>Brandt Truck on grades less than 1% with cars attached or when operating without cars attached</td>
<td>25 MPH</td>
</tr>
<tr>
<td>Brandt Truck on grades 1% or greater with cars attached</td>
<td>15 MPH</td>
</tr>
</tbody>
</table>

Maximum speeds for equipment not listed will be designated by the Chief Engineer.

* Approved maximum speeds for curves:

<table>
<thead>
<tr>
<th>Degree of curvature</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 2</td>
<td>45 MPH</td>
</tr>
<tr>
<td>2 - 6</td>
<td>30 MPH</td>
</tr>
<tr>
<td>6 - 8</td>
<td>25 MPH</td>
</tr>
<tr>
<td>Over 8</td>
<td>20 MPH</td>
</tr>
</tbody>
</table>

**Rule Updated Date**
July 23, 2010

**System Special Instructions**
Effective Date: December 3, 2010

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### 42.2.1: Movement on Signal Indication

**A. Movement of On-track Equipment on Signal Indication within Block Signal Territory**

While traveling under the supervision of a conductor/engineer pilot, all self-propelled rail grinders, in-track welders and other equipment designated by the Chief Engineer will run on signal indication not to exceed 50 MPH. Personnel operating M/W equipment on signal indication must have a copy of all track bulletins in effect.

**B. Movement of On-track Equipment on Signal Indication within Cab Signal Territory**

On-track equipment as designated above, equipped with a working cab signal device, may operate on signal indication within cab signal territory. On-track equipment may not operate on signal indication within ATC or ATS territory regardless if equipped with cab signals. On-track equipment, not equipped with a working cab signal device, will operate as follows:

- In CTC or Rule 9.15 ACS, CBS or ATC territory, all movement will be made on track and time or track permit authority.
• In Rule 9.14 ACS or ATS territory, all movement will be made with absolute block established in advance of the movement.

Note: When moving more than one piece of on-track equipment on signal indication, the equipment must be coupled together. If it is not possible to couple the equipment, a separate engineer/conductor pilot must be present for each piece of on-track equipment or track authority other than signal indication must be used.

C. Movement of Track Geometry Cars on Signal Indication

Geometry cars may operate on signal indication at track speed within block signal and ATS territory and with working cab signal device, within ACS and ATC territory. Personnel operating geometry cars on signal indication must have a copy of all track bulletins in effect. Geometry cars with inoperative cab signal device will operate as follows:

• In CTC or Rule 9.15 ACS, CBS, or ATC territory, all movement will be made on Track and Time or Track Permit authority.
• In ABS or Rule 9.14 ACS territory, all movement will be made with absolute

Rule Updated Date
November 17, 2008

42.2.2: Other Speed Requirements

• Track cars and machines must be operated at a speed that will allow the operator to stop in ½ the distance the track is seen to be clear.
• Where maximum freight train speed is lower, it will govern.
• Reduce speed on curves and branch lines as conditions require and when hy-railing at night.
• When it is raining, or when the rail is wet, only essential hy-rail vehicles are permitted on the track. All other hy-rail vehicles must leave the track as soon as possible.

Operators must take into consideration that a greater distance is required to stop a track car under these conditions.

• When approaching workmen or others on or near the track, reduce speed and, if necessary, stop.
• Operators of on track equipment (track cars, roadway machines, work equipment and hy-rails) must ascertain that no employees are fouling the track at a TAWS certified control point or interlocking before entering the control point or interlocking.

Rule Updated Date
July 23, 2010
42.2.3: Operation of High-Speed Work Equipment

A. General

The following rules govern the movement of high-speed work equipment operating on signal indication or track authority other than signal indication. High-speed work equipment consists only of the following type of equipment:

- Rail-bound production rail grinders (does not include switch and crossing grinders).
- Rail-bound evaluation/geometry cars.

1. Equipment must have a locomotive-equivalent horn, headlight and ditch lights to the front in the direction of travel.
2. Equipment must sound horn as prescribed by Rule 5.8.2 (7) when approaching public crossings at grade and when approaching men or equipment on/near the track.
3. Equipment must comply with provisions of Rule 6.32.2.
4. A contractor supervisor or operator who is GCOR trained and examined must be present on the rail grinder.
5. The engineering supervisor or engineer/conductor pilot will be responsible for all track authorities and must:
   - have a copy of and be governed by all track bulletins in effect,
   - be familiar with all general orders in effect. The engineering supervisor must have a copy of all general orders in effect.
6. An employee must establish a train ID to ensure notification by the dispatcher of unforeseen restrictions, track bulletins on crossing warning signals out of service, etc. The request for this train ID must be made to MWOC at least 12 hours in advance of the move.
7. Equipment may operate at high-speed in the same block as other on-track equipment only when a job briefing has been conducted and it has been established that all high-speed movements will be made in a direction away from the on-track equipment. When movement is to be made in the direction of other on-track equipment in the same block, all of the requirements of Rule 42.2.2 must be complied with.
8. Where the maximum freight train speed is lower, it will govern.
9. Equipment will be exempt from all other restrictions contained in the following rules:
   - 42.2.2 Other Speed Requirements (except for item #6 above)
   - 42.6 Grade Crossings
   - 42.11 Operating Over Switches and Frogs
   - 42.11.1 Speed When Passing Through Switches or Derails

B. Movement on Signal Indication

High-speed work equipment may operate on signal indication in CTC, Rule 9.14 and Rule 9.15 territories as long as the following rules are complied with:

1. When operating in lineup territory, Rule 9.14, the EIC must ensure that the equipment is shown on the lineup.
2. Equipment operating in cab signal territory must be equipped with cab signal equipment regardless of the presence of wayside signals. Cab signal equipment must be tested per Rule 13.1.5.

3. An engineering supervisor or engineer/conductor pilot who is GCOR qualified will be present on the equipment and is responsible for all track authorities.

4. At automatic interlockings, equipment may proceed as follows:
   - If the absolute signal displays a proceed indication (any signal more favorable than STOP), occupy the interlocking limits without stopping. Note: High-speed work equipment must always approach the absolute signal prepared to stop, regardless of the approach signal indication.
   - If the absolute signal displays STOP, stop the equipment and either wait for a proceed indication, or wait for the EIC to follow the instructions on the release box or to operate the M/W key release, if equipped.

C. Movement on Other Than Signal Indication

High-speed work equipment may be operated at speeds up to 49 MPH on track authority as long as the following rules are complied with:

1. In Track Warrant Control territory, equipment will only be granted Box 4 "Work Between" authority. Yard limits apply.

2. An engineering supervisor who is M/W rules qualified or an engineer/conductor pilot who is GCOR qualified will be present on the equipment and is responsible for all track authorities.

3. Equipment must approach all control points and interlockings prepared to stop. Operators of equipment must ascertain that no employees are fouling the track at a TAWS-certified control point or interlocking before entering the control point or interlocking. In addition, equipment must approach all grade crossings within 3000 feet beyond all control points and interlockings prepared to stop.

Rule Updated Date

November 17, 2008

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42.3: Main Track Authorization

Do not occupy a main track unless authorized by one of the following:

- Rule 9.15 (Track Permits)
- Rule 14.1 (Authority to Enter TWC Limits)
- Rule 15.2 (Protection by Track Bulletin Form B)
- Rule 16.4 (Authority to Enter DTC Limits)
- Rule 42.4 (Track and Time Authority)
- Rule 42.5 (Use of Yard Limits)
- Rule 42.7 (Railroad Crossings at Grade)
- Rule 42.13 (Lineups)
- Rule 42.16 (Foul Time)
- Timetable or general order
- CE Bulletin 136.4.1G (Track Out-of-Service)
When it is necessary to foul or occupy the main track with roadway machines or work equipment and authority cannot be obtained, provide protection in both directions as prescribed by Rule 42.15 (Flag Protection). Employees must be familiar with the territory they are operating on or be accompanied by an employee who is.

An EIC may provide protection for other work groups using the track authority issued to him/her. If the authority includes trains or other M/W (i.e. joint, joint with, behind/following, do not foul limits ahead of) that EIC must verify that all train(s) have passed the location where the track will be occupied or fouled by the additional work group(s). The EIC must document all additional work groups being protected on their track authority form.

Rule Updated Date
July 2, 2013

42.3.1: Requesting and Releasing Track Authority

After an employee requests a track authority, either verbally or by Remote Track Authority, the employee must confirm the limits prior to the authority being issued. This confirmation is intended to ensure that there is no misunderstanding of the limits of the authority.

When verbally releasing a track authority, the employee will provide their identification, location and their intent to clear or release an authority, including the limits of that authority. The employee will then ask the dispatcher or control operator to advise when ready. When the train dispatcher or control operator advises that he/she is ready, the employee will release the authority in the normal manner. The employee must then listen carefully to the dispatcher's or control operator's repeat to ensure that the proper track authority is being released.

Track authorities may also be released remotely which does not require a conversation with the dispatcher.

Do not copy, repeat or release a track authority while vehicle or track car is moving.

Use of cell phones and computers to request track authority is governed by the following:

1. Before using a cell phone or computer, determine that it's safe to do so.
2. Operators of equipment, including hy-rails, must not use cell phones or computers while equipment is moving. A computer may be used for business purposes but the operator must stop equipment when necessary to enter or view information. Passengers may use cell phones or computers as long as their use doesn't distract the driver from safely operating the equipment.

Rule Updated Date
November 17, 2008

42.4: Track and Time Authority
In CTC territory, track cars and machines may occupy a main track or controlled siding within the specified limits and time periods verbally authorized by the train dispatcher or control operator. Limits will be designated by control points or switches.

Rule Updated Date
November 17, 2008

42.4.1: Requesting Track and Time

Employees verbally requesting track and time must:

1. State their name, occupation and exact location.
2. Specify the exact location where the track will first be occupied and the limits where protection is required.
3. Enter the required information on the correct form and verbally repeat back the authority granted by the train dispatcher or control operator. Track and time forms must be used and track cars operating in CTC territory must carry these forms.
4. After the train dispatcher or control operator responds with an "OK," record the time and initials of the train dispatcher or control operator when provided. The track and time authority is not in effect until the "OK" time is received.

Employees must take special care when verbally requesting, copying and repeating track and 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.

Rule Updated Date
November 17, 2008

42.4.2: Using Track and Time Authority

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, except as outlined in Rule 42.4.3 (Joint Track and Time). When using track and time authority, know the following:

- The track may be used in either direction within the limits specified.
- Track and time must be obtained before occupying any siding in CTC territory.
- When the limits are designated *BY A CONTROL POINT* and the permit includes "SWITCH NO," the limits extend only to the signal governing movement through that control point. However, when the track and time permit includes "SWITCH YES," the limits will include that switch, or those switches, and the track in the direction lined between absolute signals governing movement through that control point.
• When the limits are designated *BY A SWITCH*, the limits extend only to the signal governing movement over that switch. However, when track and time is granted *ON A SWITCH*, the limits will include that switch, or those switches, and the track in the direction lined between absolute signals governing movement over that switch.

• Unless otherwise specified in timetable special instructions (SI-08), track and time authority does not authorize occupancy of track within interlocking limits.

**Note:** Track and time limits are sometimes issued "across" an interlocking. For example, track and time limits may be issued between CP 1 and CP 10, with an interlocking at CP 5. The track and time permit provides authority to be on the main track in CTC on both sides of the interlocking; however, it does not provide authority to occupy the interlocking limits. Therefore, comply with Rule 42.7 and Rule 42.15. This authority is required in addition to the track and time granted.

**Exception:** At movable span bridges designated as a manual interlocking and there are no switches within the limits. When track and time is issued "across" a movable span bridge and EIC of the authority has confirmed with the bridge operator that the bridge will not be moved, the track and time will authorize occupancy of the interlocking limits. The bridge may not be moved without the permission of the EIC of the limits.

• Track and time authority must be released before the expiration of time granted. If additional time is required, obtain authority from the train dispatcher or control operator before the authorized time limit expires. If the train dispatcher or control operator cannot be contacted and the time limit expires, authority is extended until the train dispatcher or control operator can be contacted.

| Track cars must be clear of the track limits granted before track and time authority is released. |

**Rule Updated Date**

April 29, 2011

**System Special Instructions**

Effective Date: April 29, 2011

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### 42.4.3: Joint Track and Time

Before granting track and time authority to employees or trains that will operate in the same limits with other employees or trains, the train dispatcher or control operator must notify each employee or train holding or requesting track and time authority that the limits are jointly occupied.

When a track and time authority has been issued "joint with", a job briefing must be conducted with each employee or train listed as "joint with" before entering the limits. The job briefing must include the name of the EIC, exact location of working limits, and moves to be made.

If joint track and time is issued with trains and the track is not safe for trains to move at restricted speed, the employee must protect the track with red flags as outlined in Rule 5.4.7 (Display of Red Flag or Red Light).
42.4.4: CTC Interruption

When CTC operation is interrupted, track cars may be operated on a lineup issued by the train dispatcher or control operator or on track and time authority after the train dispatcher or control operator has followed dispatcher code line failure procedures.

42.5: Use of Yard Limits

42.5.1: Movements Through Yard Limits

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

• Verify with the train dispatcher, control operator or yardmaster that movements in or movements about to enter the yard limits will not conflict.

Note: The track car operator must communicate directly with trains or engines when conflicting movements are known to be present.

• Secure track and time within CTC territory.

• Secure a track permit within Rule 9.15 territory.

• Provide protection as outlined in Rule 42.15 (Flag Protection).

Exception to rule 42.15: In non-signaled territory or when flag protection is provided by lining a switch in ABS territory per Rule 40.9 (Supplement to 9.17.1), display red flags to establish working limits or protect unsafe track. A properly equipped flagman will be assigned at that location to flag all approaching trains or on-track equipment from both directions.
April 29, 2011

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Effective Date: April 29, 2011

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42.5.2: Maintenance in Yard Limits

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

- Using a Form B track bulletin
- Obtaining track and time
- Obtaining track permit in Rule 9.15 territory
- Removing the track from service
- Applying Rule 42.15 (Flag Protection)
- Obtaining a track warrant in non-signalized TWC territory

Exception to rule 42.15: In non-signaled territory or when flag protection is provided by lining a switch in ABS territory per Rule 40.9 (Supplement to 9.17.1), display red flags to establish working limits or protect unsafe track. A properly equipped flagman will be assigned at that location to flag all approaching trains or on-track equipment from both directions.

Rule Updated Date
July 2, 2013

System Special Instructions
Effective Date: April 29, 2011

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42.6: Grade Crossings

Track cars and 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 a track car or on-track equipment. When approaching any grade crossing equipped with automatic warning devices and the automatic warning devices are not activated, all track cars and on-track equipment must stop short of the crossing and not proceed until safe to do so unless the crossing has been closed or barricaded or is protected by properly equipped flaggers.

Rule Updated Date
November 9, 2011
42.7: Railroad Crossings at Grade

Track car operators must stop track cars and verify that the route is clear before passing over railroad crossings at grade, unless the crossing is protected by gates that are set against the other route. At interlockings, track car operators must follow the requirements outlined below.

Rule Updated Date

November 17, 2008

42.7.1: Manual Interlockings

The employee in charge of track cars must:

- Receive foul time from the train dispatcher or control operator to proceed through the interlocking limits. If foul time cannot be granted, the train dispatcher or control operator may issue verbal authority to proceed through the interlocking limits. The dispatcher or control operator may also issue verbal authority to proceed through the interlocking limits if the interlocking is an end of siding control point or moveable span bridge and track authority is obtained on both sides of the interlocking limits.
- Advise the train dispatcher or control operator when track cars have cleared interlocking limits.

Rule Updated Date

July 23, 2010

System Special Instructions

Effective Date: July 23, 2010

42.7.2: Automatic or Symbol (Z) Manual Interlockings

Moving Through (not working within) Automatic or (Z) Manual Interlocking Limits.

Before moving through automatic or (Z) manual interlocking limits, the track car operator must turn off or raise and lock the track car's track shunts. In addition, the track car operator must:
• Operate the M/W key release, if the interlocking is so equipped, and follow the instructions inside the box.
• Stop and look in both directions to ensure that a safe movement can be made across the interlocking.

or

• Receive foul time at (Z) manual interlockings.

Note: When foul time is granted by a UP train dispatcher within "Z" manual interlocking limits, the protection applies only on the UP route within the interlocking. M/W key release must be operated to provide protection on conflicting routes.

If the shunts cannot be turned off or raised and locked, the track car operator may protect the movement through the interlocking by operating the M/W key release and following the instructions inside the box.

If not equipped with a M/W key release follow these steps:

Step 1:

  a. Stop equipment before passing the absolute signal governing movement through the interlocking.
  b. Place a shunt clamp #1 in front (on the equipment side) of both insulated joints at the absolute signal. Request the signal from the control operator if necessary.
  c. Observe the absolute signal to determine that it displays a signal indication more favorable than STOP.

Note: Shunt #1 must be placed even if the equipment has shunted the track and caused a proceed signal (anything more favorable than STOP) to be displayed.

  d. If the signal continues to display an indication more favorable than STOP, go to Step 3.

Step 2:

  a. If the absolute signal continues to display a STOP indication, read and comply with the instructions in the UP release box, except do not move the equipment past the signal even if the instructions tell you to do so.
  b. If the signal now displays an indication more favorable than STOP, go to Step 3.
  c. If the signal continues to display a STOP indication, do not occupy the interlocking limits. Call a signalman for assistance.
  d. A signalman may authorize movement of the equipment through the interlocking after providing proper protection against conflicting movements. If a signalman cannot provide protection, make further movements only under flag protection (Rule 42.15).

Step 3:

  a. Walk to the absolute signal and locate the two insulated joints associated with that signal. The first insulated joint should be located close to the signal and the second insulated joint should be located no more than 13 feet past the signal.
  b. Place a shunt clamp #2 a few feet past the second insulated joint so that the signal and the two insulated joints are between shunt # 1 and shunt #2.

Step 4:

  a. Return to the equipment and verify that the signal now displays a STOP indication.
b. If the signal still displays a proceed indication, check shunt #2 and repeat this step until the signal displays a STOP indication.
c. Move the equipment through the interlocking.

Step 5:

a. Remove shunt clamp #1.
b. Remove shunt clamp #2.

When working within automatic or (Z) manual interlocking limits, Chief Engineer Instruction Bulletin 136.4.8 (Automatic or Symbol (Z) Manual Interlockings), applies.

Rule Updated Date
November 17, 2008

42.8: Following Cars or Trains

On-track equipment must remain at least 300 feet behind other on-track equipment, trains or engines while traveling. Maintain greater intervals between large machines such as ballast regulators, tampers, cranes and yard cleaners.

Rule Updated Date
November 17, 2008

42.9: Signal to Stop

When two or more track cars are traveling together on the same track, the operators of all cars must agree upon and use a predetermined signal to stop that is easily seen and understood.

The operator of a track car that follows must watch for signals and must acknowledge a signal with the same signal. If necessary to dismount the equipment, the operator must stand on the field side of the track and not foul the track until one of the following has been complied with:

- The operator has signaled the following machine and the machine has stopped.
- Another employee is providing lookout protection.
  -- Upon seeing the following machine approaching, the lookout must first warn the employee(s) to clear the track and then flag the following machine to a stop.
- The operator has conducted a job briefing with the following operator to discuss the location of the first machine and specify where the following operator will stop.
Once stopped, the operator of the following machine must, in turn, flag the next machine to a stop unless he/she is operating the last machine.

**Rule Updated Date**
November 17, 2008

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**42.11: Operating Over Switches and Frogs**

Do not operate track cars through the spring side of spring-rail frogs, except as outlined below.

- The track car must stop before moving through the springrail frog.
- When available, an employee must remain on the ground to guard against derailment and direct the track car operator through the spring side of spring-rail frogs.
- Spring switches must be lined and locked for the route to be used before moving through the switches.

**Rule Updated Date**
July 2, 2013

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**System Special Instructions**

**Effective Date:** June 21, 2009

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**42.11.1: Speed when Passing Through Switches or Derails**

Operators must look to ensure that switches are properly lined for movement before passing through the switches. Track cars must not exceed the speeds outlined below.

**Power-Operated Switches and Derails**

Track cars operating over power-operated switches and derails must not exceed 5 MPH.

**Hand-Operated Switches and Frogs**

Motor cars operating over hand-operated switches and frogs must reduce to ½ the authorized speed.

*Track cars must not exceed 5 MPH when moving over self-guarded frogs and jump frogs.*

**Rule Updated Date**
May 5, 2009
System Special Instructions
Effective Date: June 21, 2009

42.11.2: Operating Switches

**Hand-Operated Switch.** When operating a hand-throw switch for track car movement, return and lock it in the normal position after the track car has passed the switch.

**Dual-Control Switch.** When the train dispatcher or control operator is unable to line a dual-control switch for the desired route, the track car operator must first receive permission to operate the switch by hand as outlined in Rule 9.13.1 (Hand-Operation of Dual-Control Switches).

Rule Updated Date
November 17, 2008

42.12: Operating Motor Cars in Reverse

Do not operate motor cars in reverse, except:

- In an emergency.
- For very short distances to load and unload tools or material.
  or
- To reach a point where the car can be turned.

When you must operate a motor car in reverse, reduce speed and take special precautions to prevent injury to persons or derailment of car.

Rule Updated Date
November 17, 2008

42.13: Lineups

Rule has been deleted

Rule Updated Date
May 5, 2009

System Special Instructions
Effective Date: June 21, 2009

42.13.1: General Lineups
Rule has been deleted

Rule Updated Date
May 5, 2009

System Special Instructions
Effective Date: June 21, 2009

42.13.2: Prescribed Form of Lineup
Rule has been deleted

Rule Updated Date
May 5, 2009

System Special Instructions
Effective Date: June 21, 2009

42.13.3: Expired Lineup
Rule has been deleted

Rule Updated Date
May 5, 2009

System Special Instructions
Effective Date: June 21, 2009

42.13.4: Communicating with Trains
Rule has been deleted

Rule Updated Date
May 5, 2009

System Special Instructions
Effective Date: June 21, 2009

42.13.5: Tracks Removed from Service for Trains and Engines
Rule has been deleted

Rule Updated Date
May 5, 2009

System Special Instructions
Effective Date: June 21, 2009

42.14: Hy-Rails

Rule Updated Date
November 17, 2008

42.14.1: Designated Employees
Only employees instructed, examined and qualified on the M/W Rules may operate hy-rails on track. In addition, employees must be qualified on the safe operation of hy-rails by a designated field supervisor.
Contractors

The operation of contractors' hy-rail equipment must be supervised by a designated railroad employee.

Rule Updated Date

November 17, 2008

42.14.2: Hy-Rail Inspection

To prepare a hy-rail for on-track operation, visually inspect the guide wheel arrangement to ensure:

- There is no uneven or undue wear of the guide wheels.
- Safety pins and other wearing parts are in good condition.
- Guide wheels turn freely.

Do not use guide wheel assemblies that have been damaged or that have uneven flange wear until they have been inspected and repaired.

After placing a hy-rail in the on-track position:

- Walk around and inspect the vehicle to ensure all guide wheels are down on the rail with flanges inside the rail.
- Ensure all safety pins are locked in place.
- Secure the front tires in the straight-ahead position using the steering wheel lock located on the steering column.

Rule Updated Date

November 17, 2008

42.14.3: Headlights, Radios and Seat Belts

While operating a hy-rail vehicle on track:

- Ensure that headlights are on.
- Turn on rotating amber lights.
- Ensure that the company radio is on.
- Fasten seat belts.

Rule Updated Date

November 17, 2008
42.14.4: Operation of Hy-Rail Vehicles with Track Shunts

All hy-rail vehicles must be equipped with and use operative track shunts. This does not apply to hy-rail patrol vehicles operating in accordance with general orders or to vehicles used by signal employees when performing required Federal Railroad Administration (FRA) tests of signals.

Note: Hy-rail shunts that are not operable must be repaired or replaced as soon as practicable within 7 calendar days. When operating a hy-rail on-track and it is known that the shunts are not operable, stop before passing over any grade crossings equipped with automatic warning devices and then proceed when safe to do so.

When working in the approach to a grade crossing equipped with automatic warning devices, operators of hy-rail vehicles may turn off their shunts if the vehicle is stopped in the approach to allow employees to perform work. Operators of hy-rail vehicles may also turn off their shunts when approaching grade crossings equipped with automatic warning devices if it will not compromise the safety of either movements over the crossing or highway vehicular traffic.

Track shunts are not always effective in maintaining a shunt in the track circuit and cannot be depended on to actuate block signals, interlocking signals or highway crossing signals. Therefore, do not use track shunts for protection while operating on track.

Automatic Interlockings
Do not use track shunts between the opposing absolute signals of an automatic interlocking. Before entering the limits of the interlocking, the operator must turn off or raise and lock shunts.

Rule Updated Date
July 2, 2013

System Special Instructions
Effective Date: June 21, 2009

42.15: Flag Protection

To provide flag protection, contact the train dispatcher or control operator and request positive protection using the emergency radio call-in system, if necessary. In ABS territory, apply Rule 40.9 (9.17.1 Signal Protection in ABS by Lining Switch), if possible.

When flag protection is provided to protect on-track equipment, employees or track conditions, flaggers must immediately go 2 miles in each direction and protect all possible access to the restriction. When reaching the correct distance, the flagger must remain there until he or she stops a train or is recalled.
Exception: When trains are required to move at restricted speed, 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, the flagman must go toward the approaching train and flag it with a red flag.

Flaggers must:

- 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 flagger must notify the train dispatcher when he or she is clear of the track.
- Devote their entire attention to watching for approaching trains and on-track equipment and flagging them as prescribed by the rules.
- Never rely on others for information about approaching trains.
- Never estimate the nature, speed or probable time of the next approaching train.
- If only one flagger is available, the flagger must immediately provide protection in the direction from which the first train is expected. Before flagging, a red flag must be placed at the obstruction to protect against trains from the opposite direction. When only one flagger is available, flag protection cannot be used to establish On-Track Safety unless flagger is located at the point to be protected and trains are required to move at restricted speed.
- When flag protection is required within an interlocking, flag all affected routes.

Rule Updated Date

April 20, 2012

42.16: Foul Time

Track cars 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.

Rule Updated Date

November 17, 2008

42.16.1: Requesting Foul Time

To request foul time:

1. State your 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.

Foul time is not in effect until the "OK" time is received. Copy the information on a track and time form.
42.16.2: 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:

- Track may be used in either direction within the control point or manual interlocking without providing protection against either trains or other M/W equipment.
- 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.
- 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.
- Foul time may not be issued "joint."
- Foul time must be released before the expiration of the time granted. If additional time is required, authority must be obtained before the authorized time limit expires. If the train dispatcher or control operator cannot be contacted and the time limit expires, authority is extended until the train dispatcher or control operator can be contacted.

42.17: Entering A Remote Control Zone

Before entering a designated remote control zone, employees must determine whether the zone is activated. Employees may receive this information from the remote control operator or from the supervisor in charge of yard movements. When the remote control zone is activated, track(s) within the zone must not be occupied or fouled by equipment, or made unsafe until the zone has been deactivated.

Switches may not be operated until either the zone has been deactivated or permission has been received from the Remote Control Operator. Before leaving, employee must line switches to their original position and notify Remote Control Operator of that fact.
Note: See Chief Engineer Instruction Bulletin 136.4.2 (Inaccessible Track) when necessary to establish working limits in areas where remote control operations may be in effect.

Rule Updated Date
January 26, 2009

System Special Instructions
Effective Date: June 21, 2009
43.0: ROADWAY MACHINES AND WORK EQUIPMENT

- **43.1: Qualifications**
- **43.2: Employee Safety**
- **43.3: Special Tools and Manuals**
- **43.4: Equipment Tie-Up**
- **43.5: Unattended Equipment**
- **43.6: Disabled and Towed Machines**
- **43.7: Mechanical Inspections**
- **43.8: Preparing for Equipment for Movement In-Train**
- **43.9: Shipping Work Equipment**
- **43.10: Protecting Against Passing Trains**
- **43.11: Test Hand Brakes**
- **43.12: Handling Cars**
- **43.13: Power Lines**
- **43.14: Swinging Cranes**

**43.1: Qualifications**

To operate roadway machines or work equipment, an employee must be qualified by both the manager of M/W equipment and the track manager/supervisor, or must be under the direct supervision of a qualified employee.

**Rule Updated Date**

November 17, 2008

**43.2: Employee Safety**

Machine operators and other employees must observe the following safety precautions:

- Before moving their machines, operators must warn employees and ensure they are in the clear.
- Tools and materials must be stored in the area designed for that purpose.

**Rule Updated Date**

November 17, 2008
43.3: Special Tools and Manuals

Operators must ensure the special tools furnished with a machine are kept with the machine at all times. Keep tools in proper working condition and place tools not being used in racks or tool boxes.

Operators' manuals and parts books must be kept with machines at all times. Keep manuals and books in good condition, and request replacements when necessary.

Rule Updated Date
November 17, 2008

43.4: Equipment Tie-Up

When tying up 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.
- When tying up equipment on track, properly line, lock, spike and tag switches to prevent the movement of a train onto the occupied track, and notify the dispatcher or yardmaster. You may protect equipment on non-controlled tracks by placing portable derails and red flags 150 feet, or as conditions warrant, in advance of the equipment. Lock derails with a private lock and notify the dispatcher or yardmaster.
- Ensure that the equipment is properly enclosed to prevent theft or vandalism. If necessary, notify railroad police to provide protection of company equipment.

Rule Updated Date
November 17, 2008

43.5: Unattended Equipment

Before leaving a machine unattended, the operator must:

- Stop the engine, when practicable.
- Lower or securely support working heads, suspended loads, buckets and blades.
- Set the hand brake.
- Block wheels securely.
43.6: Disabled and Towed Machines

When towing machines, observe the following requirements:

- Use an approved tow bar.
- Ensure the towing equipment has a brake system that will stop both machines.

43.7: Mechanical Inspections

Load ditchers, cranes, draglines or other similar equipment on cars and secure them in accordance with loading rules. Ensure they are inspected by mechanical forces before moving.

At stations where mechanical forces are not available, cars loaded with roadway machinery must be inspected by a M/W or an operating department supervisor. Cars must not be moved until authorized by the corridor manager. The corridor manager will authorize movement only after receiving notice from the supervisor that cars are safe to move. Restrictions for movement and speed must be given to the corridor manager for handling.

43.8: Preparing for Equipment for Movement In-Train

When securing booms, wings, plows and other external attachments, comply with the following guidelines:

- When handling locomotive cranes and similar work equipment, booms must be properly secured and, except when in work train service, must be trailing.
- The front of spreaders, undercutters, shoulder cleaners, track construction machines and other similar equipment, except in work trains, must face the direction the train is moving.
- Front plows must be properly secured in the raised position. Side wings must be in a closed position and secured on resting pins. All extra equipment such as small wings, re-railing frogs, chains, etc., must be properly secured.
• Cutout cocks and operating valves in air lines leading to the main reservoir must be closed.
• All equipment must be inspected before being moved.
• Booms on Burro cranes or similar equipment loaded on flat cars must be in the trailing position with the boom secured on the boom rest, except when otherwise authorized by special instructions.

Before moving locomotive cranes or similar equipment:

• Tighten and lock jacks and turnbuckle braces into position.
• Disconnect buckets and magnets and fasten them securely to the car.

Before moving a locomotive crane with its boom attached:

• Secure the boom to the boom rest on the idler car.
• Block the rear end of the crane.

Rule Updated Date
November 17, 2008

43.9: Shipping Work Equipment

Work equipment that can be handled in-train on its own wheels must be prepared for shipment in accordance with the Association of American Railroads (AAR) loading rules covering open-top cars.

Roadway equipment must be properly loaded on cars for shipment.

Train Speed. Trains handling work equipment, except those prepared for shipment in accordance with AAR loading rules that apply to open-top cars, must not exceed speed restrictions in the timetable or special instructions.

Propelling Gear. If a machine's propelling gear cannot be removed from the axle, it must be disengaged from the driving gear and securely fastened before the machine is moved in a train.

Inspections. Locomotive cranes or similar boom-type work equipment being moved in a train must be accompanied by the crane operator. The crane operator must ensure the crane is inspected within the first 50 miles of the initial terminal from which the crane departs and at least every 100 miles thereafter.

The crane operator will work with the dispatcher and train crews to identify suitable inspection locations.

During inspection, the conductor and crane operator must ensure that:

• The crane is headed in the right direction with the boom trailing.

Note: If the boom is not in a trailing position, the crane must not be moved in a train without the authority of the corridor manager, and then only to the first location where it can be turned.
43.10: Protecting Against Passing Trains

Operating Machines

Do not operate machines or equipment that can foul the adjacent track except as outlined in Chief Engineers Instruction Bulletins 121 (Protection for Gangs from Trains on Adjacent Track) and 136 (On-track Safety).

When employees are working between tracks to unload ballast, rail or other material out-of-face for programs or projects, and where track centers are less than 25 feet apart, track bulletin Form B must be in effect, or other protection must be provided on adjacent tracks.

Rule Updated Date
November 17, 2008

43.11: Test Hand Brakes

When it is necessary to move a car, an employee must test the car’s hand brake to ensure it is working properly.

After completing a move:

- Ensure the car is clear of:
  - Other tracks
  - Streets
  - Highways
  - Other crossings
- Set the car’s hand brake.
43.12: Handling Cars

Locomotive cranes may handle no more than three cars in any one move, including the idler car, unless otherwise authorized by the Chief Engineer.

To prevent damage to traction motors, locomotive crane operators must bring the crane to a complete stop before changing its direction of travel.

Rule Updated Date
November 17, 2008

43.13: Power Lines

When working in the vicinity of power lines, maintain proper clearance at all times between power lines and booms.

When proper clearance cannot be maintained, do not begin work until advised by a signal department employee or other proper authority that power has been turned off.

In addition, before beginning work, a clear understanding must be established between employees and a signal department employee or other proper authority that power will not be turned on without notice.

Note: Reference Safety Rule 78.7.1 (Proper Clearances) for more information concerning voltages and clearances.

Rule Updated Date
November 17, 2008

43.14: Swinging Cranes

Locomotive cranes, hy-rails with booms or other on-track work equipment must not be turned or swung while moving, unless it is determined the boom angle and load weight will permit safe operation. Special care must be taken when operating on curves or other locations where the track is superelevated or out of crosslevel.

Rule Updated Date
November 17, 2008
44.0: WORK PROCEDURES

- 44.1: Work Standards
- 44.1.1: Reporting Labor and Material Used
- 44.2: Excavation
- 44.3: Protecting Excavations and Ditches
- 44.4: Heating Containers
- 44.5: Protecting Existing Fiber Optic Facilities

44.1: Work Standards

All work on tracks, bridges, structures, signal systems and other track facilities must be performed as shown on Standard Drawings, or other prescribed standards, plans and specifications.

Work must be performed in the manner prescribed by M/W Rules, Chief Engineer Instruction Bulletins and Engineering Field Maintenance Handbooks.

Rule Updated Date
November 17, 2008

44.1.1: Reporting Labor and Material Used

When part or all of a project's expenses are to be paid by others, report the labor and material used to the appropriate manager when the job is complete, or at intervals determined by your supervisor. Make reports using the prescribed form.

Rule Updated Date
November 17, 2008

44.2: Excavation

When an excavation is more than 5 feet deep, shoring or sloping the sides of the excavation is mandatory.

All employees are responsible for ensuring that:
• The sides of trenches where employees are working are shored and/or sloped.
• A ready means of exit is available.

Shoring or sloping must be in accordance with Chief Engineer Instruction Bulletins, or with plans provided by the Chief Engineer. If in doubt or uncertain about how to proceed with the work, obtain advice from the Chief Engineer’s office.

Rule Updated Date
November 17, 2008

44.3: Protecting Excavations and Ditches

Place warning signals and barricades to protect excavations, ditches or other conditions that may affect the safety of employees and the public.

If work will affect employee safety or train operations, notify the train dispatcher or yardmaster and ensure a track bulletin is issued.

Rule Updated Date
November 17, 2008

44.4: Heating Containers

When heating any metal barrel, tank or drum, either full or empty, employees must:

• Remove bungs, plugs or manhole covers before heating.
• Ensure the container is safely vented outside.
• Not replace bungs, plugs or manhole covers until the container and its contents have cooled to the temperature of the outside air.

This rule applies to the heating of any metal container, whether to warm the container's contents, clean the container or make repairs.

Rule Updated Date
November 17, 2008

44.5: Protecting Existing Fiber Optic Facilities
At least 48 hours before performing work requiring excavation or construction along the railroad's right-of-way, telephone Union Pacific's "Call Before You Dig" hotline (1-800-336-9193) to determine whether fiber optic cables are present in the proposed work area. When calling the hotline, provide the following information about the work area:

- Service Unit, subdivision and milepost limits.
- Description of work to be performed.
- Date excavation will begin.
- Name, title and telephone number of a contact person associated with the work.

If fiber optic cables are present, do not begin work before the cables have been located and protected by the fiber optic communications company.

**Rule Updated Date**

November 17, 2008
45.0: LOADING AND UNLOADING MATERIAL

45.1: Loading/Unloading Precautions

Employees are not allowed in or on cars when loads are being lifted, unless there is room and opportunity to clear any side or end drift of the load.

Employees are not allowed in cars that are being loaded or unloaded by use of a magnet or bucket.

Employees must not enter a car loaded with panel switches, except as outlined in Chief Engineer Instruction Bulletins.

When using a crane to load or unload material and it is necessary to stabilize the load, employees must use tag lines.

Rule Updated Date
November 17, 2008

45.2: Loading Materials on Flat Cars

When loading material on flat cars, be careful to secure the load properly.

Rule Updated Date
November 17, 2008

45.3: Unloading Ballast

Employees unloading ballast must:

- Wear respirators.
• Report cars with defective doors to the supervisor.
• Use the proper tool for opening and closing ballast doors.
• Regulate the ballast flow so that ballast does not go above the top of the rail.
• Plow ballast from between the rails.
• Clean ballast from switches as soon as possible.
• Ensure cars are completely unloaded, with doors closed and locked, before they are released as empties.
• Use dust control methods, where applicable.

Rule Updated Date
November 17, 2008

^Top

45.4: Clearance From Track
Materials, except out-of-face replacement materials, must be stacked in an orderly manner and placed:

• Not less than 15 feet from the center of a main track.
• Not less that 12 feet from the center of all other tracks.

Do not place materials:

• On any public highway or sidewalk.
• Where it might cause injury.
• Where it might cause environmental damage.
• Where it might obstruct visibility by motorists.
• Materials distributed for out-of-face replacement that constitute a stumbling hazard must be covered by a track bulletin.

Rule Updated Date
November 17, 2008

^Top

45.5: Containerized Material
Drums and other containers containing petroleum chemicals must be:

• Properly labeled with permanent markings.
• Stored in an upright position.
• Properly sealed.
46.0: MAINTENANCE OF TRACK AND STRUCTURES

- 46.1: General Requirements
- 46.2: Storm Conditions
- 46.2.1: Patrolling Track
- 46.3: Slide Warning Device
- 46.4: Walking Inspections
- 46.5: Protecting Highway Crossings
- 46.6: Work by Others
- 46.7: Track on Bridges
- 46.8: Run Through Switches
- 46.9: Insulated Joints and Bond Wires
- 46.10: Maintenance of Right-of-Way
  - 46.10.1: Ditches
  - 46.10.2: Cut Cleaning
  - 46.10.3: Livestock
  - 46.10.4: Fires

46.1: General Requirements

Track and structures must be maintained in compliance with Federal Railroad Administration (FRA) Track Safety Standards or Union Pacific Standards, where more restrictive.

Rule Updated Date

November 17, 2008

46.2: Storm Conditions

When there is a storm or an indication of a storm or high water that may cause an unsafe condition, section and bridge foremen must:

- Place watchmen at structures and other locations that may be affected.
- Take action, including patrolling track, to ensure the safety of trains.
46.2.1: Patrolling Track

During a storm, section and bridge foremen must:

- Patrol track and not wait for instructions to do so.
- Patrol track ahead of train movement until past the last place where trouble might reasonably be expected.
- Use any additional employees necessary to ensure the track is safe for movement of trains.

When a train is approaching an employee patrolling track, the employee must:

- Stop the train and notify the engineer that conditions ahead are unknown.
- Patrol the track ahead of train movement through the storm area.

Employees patrolling track must frequently advise the train dispatcher about track conditions.

46.3: Slide Warning Device

When a slide warning device plug is found pulled and there is no visible obstruction on or damage to the track:

- Replace the plug, if practicable.
- Report it to the train dispatcher.

46.4: Walking Inspections

When performing a walking inspection, walk:

- On the track structure
- Against the current of traffic, where applicable
When walking against the current of traffic, employees must know that trains may operate in either direction and must watch for trains approaching from both directions.

Rule Updated Date
November 17, 2008

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46.5: Protecting Highway Crossings

Rule has been deleted

Rule Updated Date
April 29, 2011

System Special Instructions
Effective Date: April 20, 2012

Top

46.6: Work by Others

When contractors or others who are not under a foreman's supervision are performing work, the foreman responsible for the area in which work is being performed must determine that:

- Contractors or others comply with Union Pacific safety rules and standards.
- Work is being performed on proper authority.
- Work is being performed under proper protection to ensure safety of track and movement of trains.

Foremen must notify persons found trespassing or encroaching to STOP until proper authority to be on company property can be confirmed or, if necessary, obtained.

Rule Updated Date
November 17, 2008

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46.7: Track on Bridges
Track foremen are responsible for the maintenance of:

- Rails.
- Ties (ballast deck only).
- Track fastenings.
- Gauge.
- Bridge approaches.

Bridge foremen are responsible for restoring track on bridges during bridge maintenance or construction.

**Rule Updated Date**

November 17, 2008

^Top

**46.8: Run Through Switches**

Notify the track manager and the train dispatcher/yardmaster when:

- A switch has been run through.
- It is necessary to spike a switch.
- or
  - The switch is ready for use.

**Rule Updated Date**

November 17, 2008

^Top

**46.9: Insulated Joints and Bond Wires**

Section foremen and signal maintainers are jointly responsible for the inspection and maintenance of insulated rail joints, switch rods and gauge plates.

Maintain insulated rail joints in good condition. Ensure that:

- There is enough drainage.
- Bolts are tight.
- Ties are properly spaced and tamped.
- The signalman is immediately notified when replacing rails or adding joints in track.

**Rule Updated Date**
46.10: Maintenance of Right-of-Way

46.10.1: Ditches
Cut ditches through the snow at locations where a sudden thaw might flood the track.
Keep all waterways clean and free of obstructions and in compliance with Union Pacific environmental policies.

46.10.2: Cut Cleaning
When cleaning cuts, do not throw material on slopes where it will wash back into the ditches and block drainage. Where feasible, construct surface ditches along the top of banks for protection of cuts.

46.10.3: Livestock
Employees must keep right-of-way gates closed and drive away livestock found on the right-of-way.
When a train kills or injures livestock:

- Notify the owner, if known, and ask the owner to remove the carcass.
- If the owner is not known or does not remove the carcass, contact the local Department of Health for proper disposal instructions.
- Report the incident to the track manager using the prescribed form.
In addition, notify the brand inspector when livestock is killed.

**Rule Updated Date**

November 17, 2008

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**46.10.4: Fires**

If a fire is found on or close to the right-of-way:

- Make an effort to extinguish the fire, if it can be done safely.
- Notify dispatcher if additional resources are needed or if it is necessary to stop the movement of trains.
- Notify proper company and civil authorities.

**Rule Updated Date**

November 17, 2008
Union Pacific Rules
Maintenance of Way

53.0: ROAD CROSSINGS AND SIGNS

- 53.1: Public Crossings
  - 53.1.1: Road Crossing Condition
  - 53.2: Obstructions to View
  - 53.3: Sign Maintenance
  - 53.4: Sign Location

53.1: Public Crossings

Public crossings must comply in width and construction with local laws. In the absence of local laws, or an agreement, public crossings must not be less than 16 feet wide measured at right angles to the highway.

Rule Updated Date

November 17, 2008

53.1.1: Road Crossing Condition

Items to watch include:

- Signage
- Crossing surfaces
- Gates and lights
- Impaired visibility due to vegetation, other material or equipment on the railroad right of way
- Engines, railroad cars or on-track equipment

Immediately report any condition that does not comply with Union Pacific Rules and/or Standards. Employees will notify the dispatcher and issue a 15-MPH (XI) track bulletin for the affected crossing whenever any of the following conditions are found:

A. As to public grade crossings:
   1. Railroad right of way visibility out of compliance with applicable state statute or regulation in a manner that obstructs a motorist's view of an approaching train.
   2. Vegetation on the right of way out of compliance with company vegetation control specifications that obstructs a motorist's view of an approaching train.
   3. Vegetation that obstructs the motorist's or train crew's view of warning signs or signals on railroad property intended to alert them to the presence of the crossing.
4. Other material or equipment (not covered by subparagraphs 1 or 2 above) placed on railroad right of way within 250 feet of the crossing (300 feet in Arkansas and Louisiana; 330 feet in Wisconsin; and 500 feet in Illinois) that obstructs a motorist's view of an approaching train.

5. Broken crossbuck posts.


8. Missing/damaged stop signs attached to the crossbuck post.

9. Missing/damaged yield signs attached to the crossbuck post.

10. Missing whistle posts.

B. As to private grade crossings:

1. Missing or damaged stop sign (non field/field locations).

2. Vegetation at private crossing included in the company vegetation control program and out of compliance with that program that obstructs a motorist's view of an approaching train.

Note: Signs referenced in Sections A and B are considered damaged if they no longer fulfill their intended function.

Employees must report malfunctioning automatic crossing warning devices to the train dispatcher or to the Grade Crossing Safety Hotline (1-800-848-8715) per Rule 6.32.2.

**Rule Updated Date**

November 17, 2008

53.2: Obstructions to View

Remove, or notify the proper authority to remove, vegetation, trees and other readily removable objects on railroad right-of-way that obstruct the view, as prescribed in Rule 53.1.1.

**Rule Updated Date**

November 17, 2008

53.3: Sign Maintenance

Section foremen must ensure roadway signs are in proper position, in good condition and standing plumb.
53.4: Sign Location

Do not, without proper authority, change the standard location of any sign.

Rule Updated Date

November 17, 2008
54.1: Wires and Structures

The minimum overhead and side clearance for structures and wires, as outlined in the following chart, must be observed.

<table>
<thead>
<tr>
<th>Voltage (on ground)</th>
<th>Minimum Clearance Required Above Top of Rail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum Clearance Required Above Other Lines Including Auxiliary Trks.</td>
</tr>
<tr>
<td>0 to 750</td>
<td>35.0'</td>
</tr>
<tr>
<td>0 to 8,700</td>
<td></td>
</tr>
<tr>
<td>750 to 15,000</td>
<td>36.0'</td>
</tr>
<tr>
<td>8,700 to 15,000</td>
<td></td>
</tr>
<tr>
<td>15,000 to 50,000</td>
<td>38.0'</td>
</tr>
<tr>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>80,000</td>
<td>39.0'</td>
</tr>
<tr>
<td>110,000</td>
<td>40.0'</td>
</tr>
<tr>
<td>140,000</td>
<td>41.0'</td>
</tr>
<tr>
<td>170,000</td>
<td>42.0'</td>
</tr>
<tr>
<td>200,000</td>
<td>43.0'</td>
</tr>
</tbody>
</table>

*Potential Electrified Lines
### Table

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Clearances</th>
</tr>
</thead>
<tbody>
<tr>
<td>230,000</td>
<td>44.0'</td>
</tr>
<tr>
<td>260,000</td>
<td>45.0'</td>
</tr>
<tr>
<td>290,000</td>
<td>46.0'</td>
</tr>
<tr>
<td>320,000</td>
<td>47.0'</td>
</tr>
<tr>
<td>350,000</td>
<td>48.0'</td>
</tr>
</tbody>
</table>

**Formula:** .4” increase for every 1,000 volts in excess of 50 KV. (4” increase for every 10,000 volts in excess of 50 KV.)

*Potential Electrified Lines as designated by the Chief Engineer.*

When state law requires clearances that are more restrictive, those requirements will govern.

Report immediately any changes in operating clearances to the Chief Engineer.

### Rule Updated Date

November 17, 2008

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### 54.1.1: Tangent Track

On tangent track, side clearance for structures supporting wire lines must be at least:

- 15 feet from center of main tracks
- 10 feet from center of sidings and yard tracks

Where wire lines are installed with less than the minimum required clearance above the top of rail, a side clearance of at least 9 feet must be maintained from crossarms, cables, wires, etc.

### Rule Updated Date

November 17, 2008

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### 54.1.2: Curved Track

On curved track, increase the horizontal clearances 1-1/2 inches on each side of the track for each degree of curvature to 20 feet beyond the end of the curve.
In addition, on superelevated track, an additional 4-1/2 inch width on the inside of the curve must be allowed for each 1 inch of superelevation, tapering to 0 inches additional clearance at the top of rail to accommodate tilt of cars and equipment.

Rule Updated Date
November 17, 2008

54.1.3: Side Clearances
Side clearance for all buildings, structures, facilities, platforms/docks and appurtenances must be a minimum of 9 feet from the center of the track.

Rule Updated Date
November 17, 2008

54.1.4: Bridge Handrails
Bridge handrails must be a minimum of 8 feet from the center of the track.

Rule Updated Date
November 17, 2008
55.1: Structure Inspections and Maintenance

Refer to the Structures Field Maintenance Handbook for policies governing the inspection, maintenance and construction of bridges and other structures.

Rule Updated Date

November 17, 2008
56.0: INSTALLATION, INSPECTION, MAINTENANCE, AND REPAIR OF SIGNAL SYSTEMS AND APPLIANCES

- 56.1: Signal Employees
- 56.1.1: Making Inspections
- 56.1.2: Testing for Quality
- 56.1.3: Compromising Signal System Safety
- 56.2: Reporting Failures

56.1: Signal Employees

Signal employees are responsible for the proper installation, maintenance and safe condition of:

- Signals
- Interlockings
- Car retarder systems
- Highway crossing warning systems
- Other signal-related equipment, as assigned

Signal personnel shall not perform work that interferes with the safe passage of trains without proper protection.

Rule Updated Date

November 17, 2008

56.1.1: Making Inspections

As outlined in Signal Maintenance Instructions, make inspections of:

- Signals
- Interlockings
- Car retarder systems
- Highway crossing warning system
- Other signal-related equipment, as assigned

Report all defects found and repairs made during inspection on prescribed forms.
56.1.2: Testing for Quality

When signal apparatus is replaced or placed in service, perform tests according to Union Pacific FRA Inspection and Maintenance Instructions and standard signal drawings. Make tests and record test results on prescribed forms.

Install and maintain signal apparatus so that it will not pose a danger to trains or the public.

56.1.3: Compromising Signal System Safety

Signal employees must not perform work that:

- Causes improper proceed signal indications.
- Causes activation failures of crossing warning systems.
  or
- Defeats signal locking circuits.

56.2: Reporting Failures

Promptly investigate and correct any known or reported failure. If unable to correct a failure, immediately notify the signal manager.

Failures must be given preference over all other work. Prioritize and correct failures in the following order:

1. Failures involving the safety of train movements.
2. Failures involving highway crossing warning systems.
3. Failures involving signals at interlockings.
4. All other failures.
Rule Updated Date
November 17, 2008
57.0: ELECTRICAL

- 57.1: Electrical Safety Rules

57.1: Electrical Safety Rules

All employees whose duties require them to work on or around electrical lines in excess of 50 volts must obtain and comply with UP's Electrical Safety Rules.

Rule Updated Date

November 17, 2008
## GLOSSARY: Glossary

### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS</td>
<td>Automatic Block Signal System</td>
</tr>
<tr>
<td>ACS</td>
<td>Automatic CAB Signal System</td>
</tr>
<tr>
<td>AMTK</td>
<td>Amtrak</td>
</tr>
<tr>
<td>AUTH</td>
<td>Authority</td>
</tr>
<tr>
<td>BRN</td>
<td>Branch</td>
</tr>
<tr>
<td>BRT</td>
<td>Block Register Territory</td>
</tr>
<tr>
<td>C</td>
<td>Center</td>
</tr>
<tr>
<td>C &amp; E</td>
<td>Conductor and Engineer</td>
</tr>
<tr>
<td>COFC</td>
<td>Container on Flat Car</td>
</tr>
<tr>
<td>CONDR</td>
<td>Conductor</td>
</tr>
<tr>
<td>CP</td>
<td>Control Point</td>
</tr>
<tr>
<td>CTC</td>
<td>Centralized Traffic Control</td>
</tr>
<tr>
<td>DISPR</td>
<td>Dispatcher</td>
</tr>
<tr>
<td>MMT</td>
<td>Multiple Main Track</td>
</tr>
<tr>
<td>ENG</td>
<td>Engineer</td>
</tr>
<tr>
<td>EIC</td>
<td>Employee in Charge</td>
</tr>
<tr>
<td>EWD</td>
<td>Eastward</td>
</tr>
<tr>
<td>ENGR</td>
<td>Engineer</td>
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<tr>
<td>FRT</td>
<td>Freight</td>
</tr>
<tr>
<td>HER</td>
<td>Head End</td>
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<td>IM</td>
<td>Intermodal</td>
</tr>
<tr>
<td>JCT</td>
<td>Junction</td>
</tr>
<tr>
<td>MAX</td>
<td>Maximum</td>
</tr>
<tr>
<td>SSS</td>
<td>South Siding Switch</td>
</tr>
</tbody>
</table>

**Notes:**
-ABB: Automatic Block Signal System
-DIV: Division
-DT: Double Track
-DTC: Direct Traffic Control
-MAX: Maximum
### Definitions

**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.

**ACS**

See Automatic Cab Signal System.

**ATS**
See Automatic Train Stop System.

**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 Cab Signal System (ACS)**

A system that allows cab signals and the cab warning whistle to operate automatically.

**Automatic Train Stop System (ATS)**

A system activated by wayside inductors positioned to apply the brakes automatically until the train stops.

**Block**

A length of track between consecutive block signals or between a block signal and the end of block system limits.

**Block Register Territory (BRT)**

A method of operation in non-signaled territory where trains, men, and equipment are authorized to occupy the main track in limits designated by the timetable.

**Block Signal**

A fixed signal at the entrance of a block. The signal governs trains entering and using that block.

**Block System**

A block or series of consecutive blocks within ABS, CTC, or interlocking limits.

**BRT**

See Block Register Territory.

**Cab Signal**

A signal in the engineer's compartment or cab that indicates a condition affecting track movement. Cab signals are used with interlocking or block signals or without block signals.

**Cars**

Railroad cars

**Centralized Traffic Control (CTC)**

A block system that uses block signal indications to authorize train movements.

**Continuous Welded Rail (CWR)**

A number of rails welded together in lengths of 400 feet or longer.

**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.

**Controlled Signal**

An absolute signal controlled by a control operator.

**Crossings at Grade**

Crossings that intersect at the same level.

**Crossover**

A track connection between 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.

**Direct Traffic Control (DTC)**

A DTC block or a series of DTC blocks where the train dispatcher authorizes track occupancy.

**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.

**DTC**

See Direct Traffic Control.

**DTC Block**

A length of main track specified by name. DTC block name and limits are identified by wayside signs reading "Begin (name) Block" and "End (name) Block," and by mile post location in the timetable.

**Dual Control Switch**

A power-operated switch, moveable point frog, or derail that can also be operated by hand.

**Electric Switch Lock**
An electrically controlled lock that restricts the use of a handoperated switch or derail.

**Engine**

A locomotive 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.

**Equipment**

Railroad equipment

**Fixed Signal**

A signal that is fixed to a location permanently and that indicates a condition affecting train movement.

**Flagman**

Any employee providing flag protection.

**Foreman**

Employee in charge of work.

**Hy-Rail**

Automobiles or trucks equipped with flanged wheels to permit operation on-track as well as on highways. When on-track, a hy-rail is considered a track car.

**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.

**Main Track**

A track extending through yards and between stations that must not be occupied without authority or protection.

**Men**

Railroad employees

**Multiple Main Tracks**

Two or more main tracks that are used according to the timetable.

**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.

**Restricted Speed**

A speed that will permit stopping within ½ the range of vision; short of train, engine, on-track equipment, railroad car, stop signal, derail or switch not properly lined, looking out for broken rail, not exceeding 20 MPH.

**Reverse Movement**

A movement opposite the authorized direction.

**Roadway Equipment**

Equipment or machines that can be operated on-track, offtrack, or both, but that cannot be handled in a train on its own wheels. (See also Work Equipment.)

**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.

**Subdivision**

A portion of a division designated by a timetable.

**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 and Time Authorization**
An authorization for trains or engines, track cars, and men or machines to occupy track or tracks within CTC territory.

**Track Bulletin**
A notice of conditions affecting train movement.

**Track Car**
Any on-track vehicle that can be removed readily from track.

**Track Occupancy Indicator**
An indicator that tells whether a length of track is occupied or not.

**Track Shunt**
An approved device for actuating signals.

**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.

**Trackside Warning Detector**
A device that indicates conditions such as overheated journals, dragging equipment, excess dimensions, shifted loads, high water, or slides.

**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.

**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.

**Work Equipment**
Equipment operated exclusively on-track that can be handled in a train on its own wheels.

**Working Radio**
A radio that can be used to communicate with the train dispatcher or control operator.
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.

Rule Updated Date

November 17, 2008