Operating Rules

Revision Page

Employee signature and date are required as acknowledgement of inserted revision page(s).

The following revisions are in effect June 25, 2017 at 0001 hours.

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Employee Signature / Date

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202.2 Give hand, flag, or lantern signals as follows:

Motion	Indication
(a) Swing at right angle to the track	Stop
(b) Slight horizontal movement at arm's length at right angle to the track	Reduce Speed
(c) Raise and lower vertically	Proceed
(d) Swing vertically in circle at right angle to the track	Back
(e) Swing horizontally above the head at right angle to the track, when equipment is standing	Apply air brakes
(f) Hold at arm's length above the head, when equipment is standing	Release air brakes
(g) Any object waved violently by anyone on or near the track	Stop

202.3 Employees giving hand, flag, or lantern signals must remain in a position to be clearly seen and give signals that:

1. Prevent misunderstanding, and
2. Correspond to the direction the locomotive is headed.

202.4 Employees receiving hand, flag, or lantern signals must keep a constant lookout for signals. If there is any doubt as to the meaning of the instructions or for whom the instructions are intended, the movement must:

1. Stop immediately, and
2. Not resume until the instructions are understood.

202.5 A hand, flag, or lantern signal to proceed does not relieve employees from compliance with rules or fixed signals that restrict movement or require a stop.

202.6 Before changing from hand, flag, or lantern signaling to radio signaling or from radio signaling to hand, flag, or lantern signaling, all crewmembers must:

1. Be notified, and
2. Acknowledge their understanding.

203 - Locomotive Bell and Horn

203.1 Ring the locomotive bell before moving a locomotive that has been stopped one minute or more, and while:

1. Approaching and passing passenger stations,
2. Approaching and passing over public crossings at grade,
3. Moving through tunnels,
4. Approaching persons on or around the track structure,
5. Approaching and passing roadway workers identified by white or orange hard hats, and
6. Approaching and passing roadway maintenance machines.

203.2 Sound the horn signals as follows:

0 = Short Sound - = Long Sound	When Required.
(a) - - 0 -	Approaching public highway grade crossings. Sound the horn for at least 15 seconds, but no more than 20 seconds, before the lead locomotive enters the crossing. Trains or locomotives traveling at speeds greater than 45 MPH shall begin sounding the horn at or about, but not more than, one-quarter mile in advance of the nearest public crossing, even if the advance warning provided by the horn will be less than 15 seconds in duration. This signal is to be prolonged or repeated until the train or locomotive occupies the crossing or, where multiple crossings are involved, until the last crossing is occupied.
(b) - - 0 -	1. Approaching and passing roadway workers identified by white or orange hard hats, repeating as necessary with a succession of sounds until acknowledged. 2. Roadway maintenance mechanics or Hi-rail equipment on an adjacent track, repeating as necessary with a succession of sounds until acknowledged. 3. Roadway maintenance machines that are on or about the tracks, repeating as necessary with a succession of sounds until acknowledged.
(c) - - 0 -	Approaching tunnels, yards, or other points where railroad workers may be present.
(d) - - 0 -	Meeting and passing standing trains.
(e) 0	Approaching passenger stations.
(f) Succession of sounds	Warning to people and/or animals on or near the track.
(g) - -	Proceeding or reversing after being stopped for one minute or more. (Does not apply to switching movements.)
(h) 0 0	Acknowledging any signal not otherwise provided for.
(i) - 0	When running against the current of traffic: Approaching stations, curves, or other points where view may be obscured; and Approaching and passing passenger or freight trains.

203.3 The locomotive horn must:

1. Be sounded with intensity and duration to convey the intended warning, and
2. Not be used unnecessarily.

203.4 When the lead locomotive horn fails en route, notify Rail Traffic Controller, and:

a. Move another locomotive with a working horn to the lead, or
b. Stop and protect all highway-rail crossings at grade.

204 - Locomotive Lights

204.1 Locomotive number lights must only be illuminated on the locomotive identifying the train.

204.2 Leading end of trains must display headlight on bright unless otherwise specified by rule.

204.3 The headlight on the leading end of a train must be dimmed when:

a. Required to provide for the safety of employees, or
b. At yards where switching is being done, or
c. Approaching passenger stations where stops are to be made, or
d. Standing behind a stopped train, or
e. Standing on a main track in non-signaled territory, or
f. Approaching and passing a locomotive consist on the head end and rear end of a train on an adjacent track, or
g. Using hand signals.

204.4 Headlight may be turned off when:

a. Standing on a controlled track in signaled territory, or
b. Standing on a track other than a main track, or
c. On the end of the locomotive coupled to cars.

204.5 If the headlight on leading end of a train fails en route, notify Rail Traffic Controller, and:

a. Provided the lead locomotive has two working auxiliary lights, the train may continue unrestricted to the next point where headlight can be repaired, or
b. If lead locomotive does not have two working auxiliary lights, the train must operate under the following conditions:
    1. Display a white light on the leading end at night,
    2. Ring bell continuously when moving,
    3. Sound the horn frequently,
    4. Reduce train speed when necessary to ensure safety, and
    5. Continue to the next point where it can be repaired.

204.6 When the leading end of the lead locomotive of a train is equipped with auxiliary lights, both auxiliary lights must operate properly before departing the initial terminal. The auxiliary lights must be on when headlight is required to be on bright.

204.7 Auxiliary lights:

a. Must be turned off when stopped, or
b. May be turned off when vision is impaired by reflection from smoke, fog, or other condition and the train is not approaching or passing over a highway-rail crossing at grade.

204.8 If auxiliary lights fail en route, contact the Rail traffic Controller, and:

a. If one light fails, the train may continue unrestricted until the next calendar day inspection, or
b. If both lights fail:
    1. Do not exceed 20 MPH over highway-rail crossings at grade, and
    2. Continue to the next location where repairs can be made.

205 - End-of-Train Marker

205.1 A marker must be displayed on the rear car of a train when occupying a controlled track except where the authority for movement is or includes:

a. Main track yard limits non-signaled (YL).
b. Omitted.

205.2 From one hour before sunset until one hour after sunrise, or when conditions restrict visibility to one half mile or less on tangent track, the marker must be:

a. An illuminated red or orange-amber light, or
b. A red or orange-amber light equipped with automatic activation, or
c. A red flag only when moving no further than the next repair point if a defective car prevents the placement of an illuminated marker.

205.3 From one hour after sunrise until one hour before sunset the marker may be:

a. A red flag, or
b. A non-illuminated end-of-train device (EOT) or red (orange-amber) marker light.

205.4 The rear locomotive headlight on dim may be used as a marker for:

a. A locomotive consist without cars, or
b. A single locomotive, or
c. A locomotive on the rear of the train.

205.5 If a marker is required to be illuminated, it must be inspected before departing the initial station or crew change point by:

a. Crewmember or another qualified employee, or
b. Information displayed by the head-of-train device (HTD).

205.6 If the inspection of a marker is to be performed by an employee who is not a member of the train crew, protection must be provided before the employee fouls the equipment. The protection must be:

a. Blue signal protection when the train is standing on other than a main track, or
b. Obtained by the employee when the train is standing on a main track. Prior to fouling the equipment to perform the inspection, the employee must confirm three-step protection has been applied by the locomotive operator.

205.7 When performing an inspection of a marker that is required to be illuminated, the employee performing the inspection must:

1. Verify the marker is illuminated or will illuminate by pressing the activation switch or covering the photoelectric cell, and
2. Communicate the results to the locomotive operator.

205.8 Employees must observe passing trains for markers. If the marker is not properly displayed, notify the crew of the passing train. If unable to contact the passing train, notify the Rail Traffic Controller.

205.9 If a marker fails en route:

1. Report the occurrence to the Rail Traffic Controller, and
2. Proceed to the next location where the marker light can be repaired or replaced.

206 - Two-Way Telemetry

206.1 Freight trains must be equipped with armed and working two-way telemetry unless one of the following conditions is met:

a. Train is a BBRR local that has 4,000 trailing tons or less, or
b. Train is light locomotives only, or
c. A crewmember has the ability to initiate an emergency brake application from the rear third of the train, or
d. Train has 4,000 trailing tons or less and will not exceed 30 MPH or operate on a section of track where grade is 2% or more, or
e. Train has more than 4,000 trailing tons and will not exceed 30 MPH or operate on a section of track where grade is 1% or more.

206.2 Passenger trains must be equipped with tested, armed, and operable two-way telemetry unless one of the following conditions is met:

a. All cars are equipped with accessible emergency brake valves, or
b. The rear car is equipped with an accessible emergency brake valve and is occupied by a radio-equipped crewmember, or
c. The train has 24 cars or less and:
    1. Equipped as described in the table below:

Number of Cars	Emergency Brake Valve Must Be In or In a Car Behind
4	2nd car
5 or 6	3rd car
7 or 8	4th car
9 or 10	5th car
11 or 12	6th car
13	9th car
14 or 15	10th car
16	11th car
17 or 18	12th car
19	13th car
20 or 21	14th car
22	15th car
23 or 24	16th car

    2. Operating on a 2% grade or more:
        1. Prior to descending, the locomotive operator must confirm through the conductor that a radio-equipped crewmember is stationed in the rearmost emergency-brake-valve equipped car, and
        2. While descending, the crewmember located at the rearmost emergency brake valve must maintain constant radio communication with the locomotive operator until the train has descended the grade.

206.3 Inspection trains operating with passenger equipment do not require two-way telemetry.

206.4 Perform the following procedure to arm two-way telemetry:

1. Enter the ID code of the EOT into the head-of-train device,
2. Press the TEST button on the EOT,
3. Press the appropriate ARM NOW button on the HTD, and
4. Make certain that emergency capability is established as indicated by an EMERG ENABLED or ARMED message.

206.5 When notified by the mechanical department that the emergency capability of telemetry passed a bench test, no further test is required. When telemetry is not bench tested, perform the following test:

1. Charge the brake pipe to the required pressure for the train,
2. Close the angle cock between the rear car and the EOT,
3. Activate the emergency feature on the HTD,
4. Make certain the air pressure immediately exhausts from the EOT and the readouts on the EOT and HTD indicate zero pressure, and
5. Open the angle cock between the rear car and the EOT and verify that air pressure is restored.

206.6 Two-way telemetry must be disarmed when the locomotive is cut off and will no longer be the controlling locomotive on the train. To disarm emergency capability:

1. Change the code in the HTD to 00000, and
2. Press the appropriate button to disarm.

206.7 Telemetry can be used to perform air brake tests and meet two-way equipped requirements when the following conditions are met:

1. The controlling locomotive has an operative HTD,
2. The rear car is equipped with an operative EOT capable of two-way communication, and
3. The readouts displayed by the EOT and HTD do not differ by more than three PSI.

206.8 When a helper locomotive is coupled ahead of the controlling locomotive of the train, the helper locomotive is not required to be equipped with an HTD capable of two-way telemetry or to be armed to the EOT as long as all of the following conditions are met:

1. Two-way radio communication is established and maintained between the locomotive operators of the helper locomotive and the locomotive of the train,
2. The locomotive operators of the helper locomotive and the train must confirm radio communication before the train resumes operation and before reaching the crest of the grade, and
3. The train must be stopped when radio communication is lost.

206.9 Two-way telemetry must be regarded as failed en route when it cannot be armed at a location other than the originating terminal or when messages indicating the following are displayed on the HTD:

a. Dead battery, or
b. Replace battery, or
c. Valve failure, or
d. Disarmed, or
e. Front-to-rear no communication.

NOTE: Rear-to-front no communication is not a failure message.

206.10 A freight train that has an en route failure of two-way telemetry must not exceed 30 MPH and must not traverse a 2% grade unless one of the following conditions are met:

a. An occupied helper locomotive or an occupied caboose or shoving platform equipped to initiate an emergency brake application is coupled to the rear of the train. The employees on the head and rear must:
    1. Ensure radio communication is established and maintained,
    2. Verify communication just prior to cresting the grade,
    3. Stop the train if safe to do so if communication fails before cresting the grade, and
    4. Initiate an emergency application of the air brakes if train speed exceeds authorized speed by 5 MPH or more.
b. A radio-controlled locomotive capable of initiating an emergency brake application from a command from the controlling locomotive is in the rear one-third of the train and under the control of the locomotive operator on the head end.

206.11 A passenger train that has an en route failure of two-way telemetry must not move on 2% grades and must correct the condition at the first location where repairs can be made or when an air brake test is required unless a radio-equipped crewmember is positioned in the rearmost car containing an accessible emergency brake valve. Periodic Passenger Train Running Air Brake tests must be performed until the failure is corrected.

206.12 Immediately report the EOT or HTD defect to the Rail Traffic Controller when any of the following below occur. Record HTD defects on the locomotive work report.

a. Low or failed battery; or
b. Loss of communication; or
c. Failure to establish or loss of emergency capability; or
d. Defective or inoperative marker, motion detector, or
e. Air pressure sensing equipment.

310 - Omitted

311 - Railroad Crossings at Grade

311.1 At railroad crossings at grade be governed by Special Instructions for the crossing.

311.2 Do not leave equipment standing and unattended between:

a. Opposing signals of a railroad crossing at grade, or
b. Derails that protect a railroad crossing at grade.

312 - Highway-Rail Crossings at Grade

312.1 If equipment is standing or will be left at a highway-rail crossing at grade, or it is necessary to separate a train to open a highway-rail crossing at grade, protection must be provided for vehicular and pedestrian traffic unless the equipment is left a minimum of 200 feet from the crossing.

312.2 Unnecessary operation of automatic grade crossing warning devices is prohibited. Unless required by operating conditions, a stopped train or standing equipment must remain clear of the crossing island circuit until:

1. Rail Traffic Controller is notified and has provided information concerning approaching trains, and
2. Crewmember provides protection for adjacent tracks.

312.3 At highway-rail crossings equipped with constant warning time detectors, trains:

1. Must not increase speed between the beginning of the approach circuit and the crossing, and
2. That have stopped or are operating at 3 MPH or less must not occupy the crossing until the warning devices have been activated for at least 20 seconds and, if equipped with crossing gates, the gates are in the fully lowered position.

312.4 When operating conditions require manual stopping of automatic grade crossing warning devices, employees must:

1. Notify the Rail Traffic Controller and obtain information concerning approaching trains prior to operating the manual stop devices,
2. Comply with Special Instructions or instructions posted at the device,
3. Not operate the manual stop if a train is occupying or approaching the crossing,
4. Immediately notify the Rail Traffic Controller if the manual stop does not function properly,
5. Provide protection for affected adjacent tracks or comply with posted instructions governing adjacent tracks, and
6. Not make movement over the crossing unless protection is provided or devices are reactivated and gates, if equipped, are in the fully lowered position.

312.5 If an accident occurs at a highway-rail crossing at grade, employees must:

1. Immediately report the incident to the Rail Traffic Controller using the emergency channel, and
2. Observe and report the condition of the highway-rail crossing warning devices.

312.6 When motorists fail to comply with crossing warnings:

1. Record vehicle identification numbers or other identifying information, and
2. Promptly report motorists, school buses, and vehicles carrying dangerous or hazardous materials to the Rail Traffic Controller.
3. Omitted.

313 - Malfunction of Highway-Rail Crossings Warning Systems

313.1 The designated employee who receives a report of the malfunction of highway-rail crossing at grade warning systems must immediately take action to:

1. Determine the type of malfunction,
2. Provide for the appropriate alternate warning for the crossing,
3. Notify all trains, including those of other railroads, of the location and type of malfunction before any trains reach the location, and
4. Notify the local law enforcement agency having jurisdiction over the crossing.

313.2 The BBRR is responsible for maintaining records of malfunctions of highway-rail crossing at grade warning systems. The following information is required and must be included in the record:

1. Location of crossing to include highway name and DOT/AAR crossing inventory number,
2. Time and date of receipt of the reported malfunction,
3. Actions taken by BBRR prior to the crossing being repaired, and
4. Time and date of repair.

314 - Providing Protection at Highway-Rail Crossings at Grade

314.1 A train that has a Current Bulletin or Mandatory Directive instruction indicating the malfunction of the automatic warning devices at a highway-rail crossing at grade must comply with the chart below. Speed listed in the below chart are headend only.

Special Instruction, Current Operating Bulletin or Mandatory Directive Indicates.	Activation Failure	False or Partial Activation
No flaggers/No police officer or communication cannot be established with flaggers or police officer.	STOP and PROTECT crossing from the ground	Proceed with caution not to exceed 15 MPH
Flagger for only one direction of traffic and communication is established confirming that protection has been proven.	Proceed with caution not to exceed 15 MPH	Proceed with caution not to exceed 15 MPH
Flaggers for each direction or police officer present and communication is established confirming that protection has been provided.	Authorized Speed	Authorized Speed

314.2 When protection by a crewmember from the ground is required at highway-rail crossings at grade:

1. Stop the movement before fouling the crossing,
2. Position a crewmember or appropriately equipped flagman on the ground to stop vehicular and pedestrian traffic,
3. Place a burning fusee on each side of the crossing when the automatic warning devices are not functioning properly or when notified by the Current Operating Bulletin or Mandatory of an activation failure,
4. Only make movements as directed by the person providing the protection,
5. Sound the required locomotive horn and bell signals even if the crossing is located inside a quiet zone, and
6. Maintain protection until the leading end of the movement covers the crossing.

314.3 The employee responsible for providing protection from the ground at a highway-rail crossing at grade must not give:

1. A signal to proceed to pedestrian or vehicular traffic unless train movements are stopped or there is no train movement approaching the crossing,
2. A signal to proceed to a train unless all vehicular and pedestrian traffic is stopped, and
3. Hand signals instructing the train to proceed in a manner that could be misunderstood to apply to vehicular and pedestrian traffic.

314.4 Automatic warning devices of a highway-rail crossing at grade are not functioning properly when:

a. Flashing lights are not actuated at least 20 seconds prior to the leading end of the movement reaching the crossing, or
b. Crossing gates, if equipped, are not in the fully lowered position before the leading end of movement reaches the crossing.

404 - Releasing Hand Brakes

404.1 Do not release hand brake on:

a. Cars - until coupled to locomotive. On grades where the independent brake will not hold the equipment, charge air brakes and make a sufficient brake pipe reduction, or
b. Locomotives - until the main reservoir is fully charged and independent brake is cut in and fully applied.

405 - Switching Equipment

405.1 Two or more crews must not simultaneously perform work in the same track or adjacent tracks until:

1. A job briefing has been held, and
2. All crewmembers confirm their understanding of the work to be performed.

405.2 When at industries:

1. Movements must only be made when gates, doors, or other such devices are fully opened and fastened;
2. Visually determine that switches and derails occupied by standing equipment are properly lined and latched (if equipped with a latch) for the movement;
3. Do not move partially loaded cars unless the lading is secure;
4. Return cars to their original locations unless instructed otherwise;
5. Do not make movements on a portion of track when dirt, sand, gravel, or other debris covers the rail or obstructs the flange way of vehicular or pedestrian crossings and notify the proper authority of the condition; and
6. Initial movements must be made by a locomotive when track conditions cannot be clearly observed due to a buildup of snow or ice covering the rail or obstructing the flange way of vehicular or pedestrian crossings.

405.3 Before coupling to equipment make certain:

1. Employee directing the coupling is located on the ground and visually determines the couplers are aligned and at least one knuckle is open,
2. Any person riding the equipment and not seated in the locomotive dismounts until the coupling is made,
3. Persons in, on, or around the equipment are notified to remain clear,
4. Employee directing the coupling makes a visual determination that connections and devices used for loading, unloading, or fueling equipment are removed, and
5. Ensure that plug type and swinging doors on cars are properly closed or secure.

405.4 When initiating the movement to couple equipment:

a. Omitted
b. Do not exceed 4 MPH

405.5 After making a coupling, stretch the slack to ensure couplers are locked then connect:

1. Hoses, or
2. Electrical connections, or
3. Locomotive crosswalk chains.

405.6 When switching, cars must only be cut off in motion (kicked) when being pushed by a locomotive; do not cut cars off in motion when being pulled by a locomotive. When kicking cars:

1. Ensure you are clear of the equipment before giving the signal to move;
2. When the slack is bunched, pull the uncoupling lever, but do not attempt to hold the lever at a speed of more than walking speed (4 MPH);
3. When the desired speed is reached, give the signal to stop; and
4. Do not cut off a car routed to an adjacent track until it is known that the preceding car is clear and will remain clear of adjacent tracks.

405.7 Do not uncouple equipment in curves or turnouts where the curvature would prevent safe coupling to the equipment.

405.8 Equipment must not be moved by static drop unless provided in Special Instructions.

405.9 When switching passenger equipment, camp cars, or other equipment designed to carry riders:

1. Notify any occupants prior to making any switching movements,
2. Do not cut the equipment off in motion or allow it to be struck by equipment that was cut off in motion, and
3. Use air brakes when switching.

406 - Shoving or Pushing Equipment

406.1 Employees involved in shoving or pushing movements must not:

a. Engage in unrelated tasks, or
b. Provide protection while occupying an automobile or similar motorized vehicle.

406.2 Unless protected by shove lights or other technological means as provided in Special Instructions, shoving or pushing movements must be protected by a crewmember or other qualified employee.

406.3 After ensuring all couplings are made by stretching the slack, the employee directing the movement must know the track is clear by providing point protection or being in a position to make a positive visual determination. Track is clear means:

1. There are no conflicting movements,
2. All intervening switches and derails are properly lined for the intended movement,
3. There are no intervening highway-rail or pedestrian crossings at grade or such crossings have been made inaccessible, and
4. There is sufficient room in the track to hold the equipment being shoved.

406.4 The employee directing the move must give instructions sufficiently in advance to permit compliance. If there is any doubt as to the meaning of the instructions, or for whom such instructions are intended, the movement must:

1. Be stopped immediately, and
2. Not resume until the instructions are understood.

406.5 When using radios during a shoving or pushing movement, the:

1. Employee directing the movement must communicate the following to the employee receiving the instructions:
    1. Employee's physical location,
    2. Employee is in the clear of all tracks,
    3. Position of switches and derails involved with the move, and
    4. Distance of the movement to be made or the sight distance available, whichever is less, in 50-foot car lengths.
2. Employee controlling the movement must stop the movement in one-half of the last specified distance unless additional instructions are received.

406.6 When shoving or pushing equipment for purposes other than coupling:

1. The movement must stop 50 feet short of:
    a. A blue signal, or
    b. A derail, or
    c. An improperly lined switch, or
    d. On-track equipment, or
    e. An obstruction, or
    f. End of the track.
2. If necessary to make any further movement to place equipment, allow the slack to adjust before moving.

407 - Leaving Equipment in the Clear

407.1 Standing equipment must not foul connecting tracks. Where clearance points are not identified or visible, determine the clearance point by:

1. Standing outside the rail of the connecting track,
2. Extending arm toward the equipment,
3. Identifying the location where the equipment can no longer be touched, and
4. Positioning equipment an additional 50-foot car length into the track from the location identified in Step 3.

407.2 When the track length is insufficient to permit leaving equipment clear of connecting tracks and it is necessary to leave equipment beyond the clearance point, the equipment must completely occupy the switch of the connecting track.

408 - General Securement Requirements

408.1 Conduct a job briefing when required to secure any train or equipment that will be left unattended.

408.2 Prior to leaving trains and equipment unattended, secure with tested hand brakes or by an alternative method specified in Special Instructions.

409 - Securement of Cars

409.1 Complete the following steps before applying hand brakes to cars that will be left unattended:

1. Bunch slack when applying hand brakes on the low end of a grade and stretch slack when applying on the high end,
2. Fully apply the independent brake, and
3. Make a full service application of the automatic brake.

409.2 Apply and test hand brakes on the required number of cars to be left unattended as follows:

a. The number specified in Special Instructions, or
b. On each car when one or two cars are to be left unattended, or
c. On a minimum of 10 percent, but no less than, two cars if three or more cars are to be left unattended, or
d. Single cars left unattended must be chocked on the downhill side.

409.3 After applying the required number of hand brakes to the cars:

1. Verify hand brake chains are tight,
2. Instruct the locomotive operator to release the independent and automatic brakes, and
3. Verify the brake shoes on the B end of cars are against the wheels of cars with hand brakes applied.

409.4 To test that hand brakes are sufficient to hold the equipment, observe equipment for one minute with air brakes released:

a. Hand brakes are sufficient if no movement occurs after one minute, or
b. Hand brakes are not sufficient if movement occurs. Stop the movement by applying the independent brake and making a full service application of the automatic brake then apply additional hand brakes and repeat the test for sufficient hand brakes until no movement occurs during the one-minute observation.
c. During switching operations, with hand brakes set, pull the car(s) with locomotive to test the brake, before cutting the locomotive away from the car(s).

409.5 To test that a hand brake on a single car is sufficient to hold the equipment, push against the car with the locomotive:

a. The hand brake is sufficient when a retarding effect is observed, or
b. The hand brake is not sufficient if no retarding effect is observed. Do not leave a single car that fails the test for sufficient hand brake unattended unless a minimum of two additional cars with tested hand brakes are coupled to the car.

409.6 Before cutting away from cars connected to air:

1. Make a full service brake pipe reduction,
2. Verify that the brake pipe exhaust stops before closing the angle cock, and
3. Ensure the angle cock is open on the equipment to be left unattended.

410 - Securement of Locomotives

410.1 When a single locomotive or a locomotive consist is not attached to cars and will be left unattended, fully apply the independent brake before applying hand brakes.

410.2 Apply and test hand brakes on all locomotives to be left unattended.

410.3 After applying the required number of hand brakes to a single locomotive, or locomotive consist without cars attached, release the independent and automatic brakes, allowing four seconds per locomotive to ensure a complete release of the air brakes before beginning a test for sufficient hand brakes.

410.4 To test for sufficient hand brakes on locomotives without cars attached, select a direction and place the throttle in the #1 power position. The locomotive operator must observe that amperage or tractive effort is developed:

a. Hand brakes are sufficient if no movement occurs or if movement occurs but stops within 10 feet, or
b. Hand brakes are not sufficient if movement occurs and does not stop within 10 feet. Stop the movement by applying the independent brake.

410.5 If the hand brake on a single locomotive, or hand brakes on a locomotive consist, to be left unattended without cars is not sufficient or if a single locomotive is not equipped with a hand brake, secure as follows:

1. Apply an approved chock or chain, provided by a mechanical department employee, behind the R2 wheel, and
2. Verify the chock or chain will hold the equipment by releasing the independent and automatic brakes, waiting four seconds to allow the air brakes to fully release. If the locomotive does not move, the chock or chain is sufficient.

410.6 Omitted

410.7 When left unattended, the switches and levers on a single locomotive or the controlling locomotive of a locomotive consist must be positioned as directed in the table below:

Switch/Lever	Position
Independent Brake	Cut in and fully applied.
Automatic Brake	No cars attached – Cut in and in the release position. With cars attached – Cut in and full service application applied.
Reverser	Key train – Removed from the locomotive and in the possession of the locomotive operator. Not a Key train – Removed and stored.
Control/Fuel Pump	Engine left running – On position. Engine manually shut down – Off position.
Generator Field	Off Position.
Engine Run	Engine left running – On position. Engine manually shut down – Off position.
Isolation Switch	Start/Stop/Isolate position.
Battery Knife Switch	Engine left running – Closed position. Engine manually shut down and no mechanical system restart is planned – Open position.

411 - Securement of Trains

411.1 If necessary to leave a train unattended with cars and locomotive(s) attached:

1. Secure cars in accordance with rules governing the application and testing of hand brakes on cars to be left unattended,
2. Position the switches and levers of the controlling locomotive as directed by the rules governing leaving a locomotive unattended, and
3. Apply the hand brake on each locomotive in the consist equipped with a hand brake.

412 - Securement of Key Trains

412.1 Do not leave Key trains or cuts of cars that meet the Key train definition unattended on a controlled track outside of a yard or station unless the location is authorized in Special Instructions or permission is received from the Rail Traffic Controller. This does not apply when the assigned or attached crew is performing normal railroad operations in connection with their train:

a. Picking up, setting off, or repositioning cars at an industry; or
b. Assembling cars from tracks adjacent to the main track; or
c. Adding, removing, or changing locomotives; or
d. Moving part of a train when doubling hills or cutting crossings; or
e. Assisting a disabled train.

412.2 If permitted to leave a Key train, or cut of cars that meets the Key train definition, unattended on a controlled track outside of a yard or station, secure it with tested hand brakes in accordance with all rules and Special Instructions.

412.3 Except when the assigned or attached crew is performing normal railroad operations in connection with their own train, prior to leaving a secured Key train, or cut of cars that meets the definition of a Key train, unattended on a controlled track outside of a yard or station, the train crew must provide the following information to the Rail Traffic Controller:

1. Milepost location of both ends of the train;
2. Length of train, tonnage, type of train (mixed freight, intermodal, unit train), number of cars, and number of locomotives;
3. Number of hand brakes applied and tested on cars and applied on locomotives;
4. Track features (curve or tangent) and grade (ascending, descending, flat, or undulating);
5. Current weather conditions; and
6. Name of employee reporting the securement information.

412.4 When cutting away from a cut of cars that meets the Key train definition to be left unattended on a controlled track with locomotive detached, allow the cut to go into emergency.

412.5 When leaving a Key train with locomotives attached on any controlled track, the locomotive operator must:

a. For CSX locomotives:
    1. Remove the reverser from the controlling locomotive,
    2. Keep the reverser in his or her possession, and
    3. Return the reverser to the proper storage location at the off-duty location, if hours of service permit.
b. For BB locomotives:
    1. Stow the reverser in the designated location, and
    2. Lock locomotive cab doors.

413 - Defective Hand Brakes

413.1 Report equipment determined to have a defective hand brake to the proper authority and:

1. Couple a car with defective hand brakes to one car with a chock or with a minimum of two additional cars with tested hand brakes before leaving it unattended, and
2. Record locomotive hand brake defects on the locomotive work report.

414 – Fouling Equipment

414.1 The rules in this section apply only when blue signal protection is not required.

414.2 Do not foul equipment not coupled to a locomotive or coupled to a locomotive that is not under the control of a locomotive operator until known the equipment:

1. Is secured, and
2. Will not be coupled to.

414.3 When necessary to secure equipment that in is not coupled to a locomotive or is coupled to a locomotive that is not under the control of a locative operator, make certain:

1. Equipment is stationary, and
2. No other train or job is located on the same track or intends to couple to the equipment.

414.4 Do not foul equipment coupled to a locomotive or locomotive consist that is under the direct control of a locomotive operator until 3-step protection has been verbally:

1. Requested by the employee that requires the protections, and
2. Verified that it has been established by the locomotive operator.

414.5 After verbal confirmation that 3-Step protection has been established, other employees may foul the equipment after a job briefing is held with the employee who requested the protection.

414.6 To provide 3-Step protection on conventional equipment, the locomotive operator must:

1. Fully apply the independent brake, and if necessary, make an automatic brake pipe reduction sufficient to prevent movement,
2. Center the reverser,
3. Place the generator field in the off position,
4. Remain in a position to ensure the switches and levers are not changed, and
5. Maintain the protection until verbally notified by the employee who requested the protection that it may be released.

414.7 Omitted

414.8 Only the employee who requested 3-Step protection can release the protection. To release 3-Step protection, the employee must:

1. Verify any other employees that were protected are clear of the equipment and confirm such employees understand the protection will be released, and
2. Verbally notify the locomotive operator that 3-Step protection may be released.

414.9 Locomotive operators in conventional service may foul the locomotive(s) in his/her charge when all the following conditions are met:

1. Independent brake is fully applied, and if necessary, sufficient automatic brake pipe reduction is made to prevent movement,
2. Generator field is in the off position, and
3. Reverser is removed and kept in the possession of the locomotive operator.

Note: Other members of the same crew may foul the locomotive or locomotive consist to assist the locomotive operator after a job briefing is held to confirm steps 1 through 3 have been met.

Chapter 7 - Roadway Worker and On-Track Safety

Introduction

This sections defines procedures to prevent cars, locomotives, on-track equipment, or other equipment from striking roadway workers (including contractors) performing their duties. The rules in this section comply with the relevant regulations contained in the Code of Federal Regulations (CFR) Title 49, Part 214.

700 - General Requirements of Engineering Department Employees

700.1 BBRR has overall responsibility for ensuring employees understand and comply with the rules governing on-track safety. The following are the responsibility of each roadway worker:

1. Compliance with operating rules,
2. Remaining clear of tracks until required by job task,
3. If crossing tracks is required, ensure adequate sight distance exists to be clear of any on-track movement, and
4. Determining that the appropriate on-track safety has been established before engaging in inspection, construction, maintenance or repair of a track. This includes carrying tools or material that restricts motion, impairs sight or hearing, or prevent employee from promptly clearing track.

700.2 Only one qualified roadway worker, referred to as the employee-in-charge, establishes and controls working limits for the purpose of on-track safety.

700.3 Do not perform any work that:

a. Interferes with the safe passage of trains, or
b. Is not properly protected, or
c. Is not in accordance with operating rules, or
d. Interferes with the proper functioning of switch machines or code apparatus, or
e. Interferes with the proper functioning of signal control machines or code apparatus.

700.4 Do not operate any switch or derail on a controlled track without the permission of the Rail Traffic Controller.

700.5 An employee must obtain the required permission from the Rail Traffic Controller before taking a controlled location off line and maintain communication with the Rail Traffic Controller after receiving permission.

700.6 When no designated supervisor is on site and in cases of emergency, comply with the instructions of the Rail Traffic Controller.

700.7 Upon discovery of damage to a facility, make the necessary repairs then report the occurrence to the designated supervisor and the Rail Traffic Controller.

700.8 When applying or removing temporary speed restrictions, make certain to pronounce all numbers digit by digit and comply with the following:

Step	Responsible Party	Action
1	Engineering	Make the request to the Rail Traffic Controller.
2	Rail Traffic Controller	Repeat the entire request and issue the restriction.
3	Engineering	Make certain that the proper signs are displayed.

700.9 When handling gasoline or other flammables, make certain to keep material away from the following:

a. Operating internal combustion engines, or
b. Smoking, or
c. Open flames.

700.10 All parked or secured equipment and vehicles must remain a minimum of seven feet from the nearest rail of any track unless protected by the appropriate track protection.

700.11 A train list or train line up provided by the Rail Traffic Controller must be recorded in writing by the receiving employee. It is for informational purposes only and does not authorize any employee to foul a track.

700.12 Work performed by contractors must be monitored to ensure:

1. No work, activity, or equipment interferes with the safe passage of trains, and
2. Neither contractors nor their equipment fouls a track unless protection has been provided.

700.13 Employees operating switches or derails are responsible for the position of the devices and must:

1. Visually determine switches and derails are properly lined for the intended route, and
2. Obtain permission from the Rail Traffic Controller or other designated employee before switches and derails are spiked.

704 –Track Authority

704.1 Before occupying or fouling a controlled track to perform short-term work or move on-track equipment, the employee-in-charge must:

1. Have a copy of the current day operating bulletins for the territory involved, and
2. Receive authority to occupy or foul track and copy the authority onto track authority form.

704.2 Use radio communication, if possible, when requesting track authority and provide the following to the control station:

1. Your name,
2. Specific location and milepost of initial occupancy,
3. Specific track name or number,
4. Beginning and ending limits of the request,
5. Direction of travel needed, and
6. Length of time necessary to complete work and clear the track.

704.3 Copy track authorities onto the prescribed form in the prescribed format.

704.4 A track authority may be issued in cases of emergency when a conflicting train is stopped within the required limits provided the Rail Traffic Controller confirms that the train is stopped. The employee requesting authority must:

1. Hold a job briefing with the crewmembers of the stopped train, and
2. Identify the train ID, locomotive number, and location and record that information on Track Warrant.

704.5 When receiving and copying track authority, copy the following into the form:

1. Required information not contained in Current Operating Bulletin, and
2. The following required information on any preceding train:
    1. Locomotive number,
    2. Omitted
    3. Direction of travel, and
    4. Location.

704.6 After receiving and copying track authority:

1. Conduct a job briefing with all employees who will operate or work under the authority,
2. In multiple track territory, ensure all employees covered by the protection acknowledge the specific track to be occupied or fouled,
3. Ensure all occupants of on-track equipment initial the copied Track Warrant , and
4. If it has been 30 minutes or more between the initial job briefing and time the track will be occupied or fouled, read Track Warrant aloud and conduct another job briefing.

704.7 When issued a track authority to follow a preceding train, do not foul or occupy the track until confirming the preceding train has passed the initial point of occupancy by:

a. Visually identifying the train by locomotive number or verbal confirmation from the train crew or Rail Traffic Controller, and
b. Record on the authority the time of passage and engine number(s) of the affected train(s).

704.8 When issued a track authority with the same or overlapping limits:

1. The Rail Traffic Controller will designate the first employee-in-charge,
2. Employees must receive permission of the employee-in-charge before entering limits, and
3. Movements must be made under the direction of the employee-in-charge.

704.9 Do not operate into any authority issued to another employee until that employee gives permission to occupy the track within the authority. If granted permission of opposing limits within the authority, operators of opposing equipment must:

1. Announce passing all mileposts, and
2. Confirm understanding of any do not pass limit.

704.10 When operating within the limits of a track authority, employees must:

1. Stop at each control point and conduct a job briefing to verify authority extends beyond the control point before proceeding,
2. Not pass a preceding train without the permission and protection of the Rail Traffic Controller,
3. Not occupy or foul any track not covered by the authority,
4. Not move in a direction other than the one authorized, and
5. Not occupy a section of track after that section has been released or reported by.

704.11 Employees operating within the limits of track authority must make radio announcements:

1. Stating initial occupancy location prior to fouling or occupying the track,
2. Prior to passing a control point, and
3. In non-signal territory, prior to passing each end of siding locations.

704.12 When making required radio announcements, employees must use positive identification and state:

1. Track name or number,
2. Direction of travel, and
3. Name and milepost of location.

704.13 When instructed by the Rail Traffic Controller to report by specific locations, make sure:

1. The entire movement is clear of the location in the specified direction before reporting by the location, and
2. To receive a new authority for those limits prior to occupying any portion of track reported by.

704.14 When releasing track authorities to the Rail Traffic Controller:

1. A job briefing must be conducted with any remaining work group to establish a new employee-in-charge , and
2. The name of the new employee-in-charge must be given to Rail Traffic Controller, and
3. Promptly release track authorities to the Rail Traffic Controller after the entire movement clears the limits of the authority. Make every effort to clear the limits before the expiration of the time authorized and do not consider the authority clear until the Rail Traffic Controller acknowledges his or her understanding.

704.15 If unable to clear the limits of an authority before the time limit expires, contact the Rail Traffic Controller and request a time extension. If unable to contact the Rail Traffic Controller or if the Rail Traffic Controller does not grant a time extension, do not exceed restricted speed until the authority is cleared.

705 - Individual Train Detection, Train Approach Warning, and Train Coordination

705.1 A lone worker may use Individual Train Detection for on-track safety when he or she:

1. Knows the required sight distance and has completed a Statement of On-Track Safety (SOTS1) before fouling the track,
2. Has access to a working radio,
3. Is performing routine maintenance or minor repairs that will not affect the safe passage of trains or on-track equipment,
4. Has completed a required job briefing, when communication is available,
5. Is not performing work in an interlocking, control point, or remotely controlled hump yard,
6. Has established a place of safety,
7. Has the ability to see and hear the approach of a train or on-track equipment and that ability is not impaired by noise, lights, weather conditions, passing equipment on adjacent tracks, or any other condition,
8. Is not prevented from hearing the approach of a train or on-track equipment and no power-operated tools or roadway maintenance machinery is in use,
9. Maintains the required sight distance and has the unrestricted ability to reach the predetermined place of safety at least 15 seconds before a train moving at the maximum authorized track speed reaches his or her location, and
10. Is not using a roadway maintenance machine, equipment, or material that cannot be readily removed by hand.

705.2 When using Individual Train Detection:

1. Do not perform any work that interferes with the ability to see or hear the approach of a train or on-track equipment,
2. Maintain a constant lookout for approaching trains and on-track equipment,
3. Keep the completed SOTS1 form in your possession at all times when fouling the track, and
4. When a train or on-track equipment approaches, move to the designated place of safety at least 15 seconds before the train or on-track equipment reaches the location.

705.3 Use Train Approach Warning for on-track safety only if:

1. At least two qualified roadway workers are working together and one of the employees is designated as the watchman,
2. All employees can reach an established place of safety at least 15 seconds before a train or on-track equipment reaches the location,
3. A method of communicating the approach of a train is established,
4. Employees hold a job briefing and all confirm their understanding and responsibilities,
5. Employees are performing routine maintenance or minor repairs that will not affect the safe passage of trains or on-track equipment,
6. Watchman/lookout knows and maintains required sight distance,
7. Watchman/lookout has unrestricted ability to see and hear approaching trains or on-track equipment, and
8. Watchman/lookout has access to a working radio.

705.4 The employee protected by Train Approach Warning must:

1. Remain in a position that allows receiving a train approach warning from the watchman, and
2. Immediately move to the predetermined place of safety when a warning is received.

705.5 When Train Approach Warning is used to protect more than one employee, the watchman must be equipped with and use the following devices to provide warning:

1. Whistle or air horn,
2. White disc or flag when visibility is good, and
3. White light or red fusee when visibility is poor.

705.6 When Train Approach Warning is used to protect only one employee, audible and visual warnings are not required when:

1. Advanced watchman is not required, and
2. Watchman can physically touch the employee being protected.

705.7 The employee providing watchman duties for Train Approach Warning must:

1. Not foul any track unless necessary to provide warning,
2. Not perform any tasks unrelated to providing warning or that interfere with providing warning to the employee being protected,
3. Provide warning as if every train or on-track equipment movement is approaching at the maximum authorized speed allowed, and
4. Provide warning sufficiently in advance to allow all workers and watchman to reach the predetermined place of safety at least 15 seconds before the train or on-track equipment reaches the location.

705.8 When necessary to establish on-track safety on controlled tracks with Train Coordination, the employee-in-charge must:

1. Visually determine the train is stopped,
2. Conduct a job briefing with the crew of the train,
3. Determine the limits of the train's authority,
4. Determine which method of operation and related rules are in effect,
5. Instruct the train crew not to move unless directed by the employee-in-charge, and
6. Instruct the train crew not to release any authority until notified by the employee-in-charge that it is safe to do so.

705.9 Once Train Coordination is established, the employee-in-charge must ensure no members of the working group foul any track outside of the train's authority.

705.10 When Train Coordination on-track safety is no longer required:

1. Ensure all roadway workers are clear of the track, and
2. Inform the train crew that protection is no longer required and the instructions of the Rail Traffic Controller will govern their movements.

706 - Working Limits on Non-Controlled Tracks

706.1 To establish working limits on non-controlled tracks:

1. Make prior arrangements with the employee responsible for the track or tracks involved,
2. Ensure the tracks are not occupied by any equipment not under the control of the employee in-charge, and
3. Make the tracks inaccessible to all trains, locomotives, and on-track equipment.

706.2 Make non-controlled tracks inaccessible to all trains, locomotives, and on-track equipment by one of the following methods:

a. A flagman posted with instructions and the capability to hold all movements clear of the limits, or
b. Lining and locking switches with an effective locking device in a position that prevents movement into the tracks, or
c. Applying a derail that is locked with an effective locking device at a location that prevents movement into the working limits, or
d. Place a locomotive or train in a position to prevent access to the working limits, or
e. Discontinuity of the rail to prevent movement into the working limits.

706.3 When remotely controlled switches provide access to non-controlled tracks, the employee-in-charge must verify all of the following with the employee responsible for operating the remotely controlled switches:

1. Switches are lined in a position that prevents access into the tracks,
2. Locking devices or blocking has been applied to the switches to prevent operation, and
3. Locking or blocking will not be removed until permission has been granted by the employee-in-charge.

706.4 Working limits are not required on non-controlled tracks when moving on-track equipment from the clearing location to the work site or back. When moving equipment on non-controlled tracks:

1. Make prior arrangements with the employee who is responsible for movement on the tracks, and
2. Make all movements prepared to stop within one-half the range of vision, not exceeding 10 MPH.

707 - Working Limits on Controlled Tracks (Conditional Stop), Form B

707.1 When long-term working limits will be necessary, the responsible party must request a Form B to be issued. The request must be made at least 12 hours in advance and include:

1. Subdivision;
2. Date;
3. Time limits;
4. Name and initials of the flagman;
5. Specific track limits of either milepost, control point, or main track yard limits; and
6. Any instructions related to the posting of signs.

707.2 Before any member of the working group fouls or occupies the track within the working limits, the flagman must:

1. Obtain a current operating bulletin that contains the Form B governing the working limits for that day;
2. Contact the Rail Traffic Controller and confirm the Current Operating Bulletin date and Form B number for the working limits;
3. Inform the Rail Traffic Controller if the signal system will be affected;
4. When control points are within the work limits, confirm with the Rail Traffic Controller how trains will move through the control point;
5. In multiple track territory, confirm with the Rail Traffic Controller which track will be occupied by work forces and which track will be used to pass trains;
6. Confirm with the Rail Traffic Controller the use and position of switches within the work limits;
7. Receive from the Rail Traffic Controller and copy on the Current Operating Bulletin an authority number, Rail Traffic Controller OK and initials, and time authorized; and
8. Ensure signs are properly posted.

707.3 Signs are required in conjunction with long-term working limits and must be:

1. Clean and easily recognizable, and
2. Posted no more than 1 hour in advance of the effective time, as long as the flagman has the ability to communicate with any train or equipment that approaches the working limits.

707.4 If permanent conditions prevent the display of wayside signs as directed by rule:

1. Rail Traffic Controller must be notified, and
2. A Form B must be issued stating how signs are displayed.

710.5 Prior to returning track to service, the employee-in-charge must:

1. Notify the Rail Traffic Controller of any restrictions necessary to ensure safe passage of trains or on-track equipment,
2. Ensure track is clear of all trains and on-track equipment, and
3. If track is not clear of trains or on-track equipment, be governed by the Rail Traffic Controller's instructions before returning the track to service.

711 – Highway-Rail Crossing at Grade, Railroad Crossings at Grade, and Drawbridges

711.1 – 711.5 Omitted

711.6 If equipment is standing or work performed between the approach circuit and the highway-rail crossing at grade:

1. Protection must be provided by the signal department,
2. The signal department must provide instruction before any apparatus is used that prevents the highway-rail crossing signals from working, and
3. The Rail Traffic Controller must be notified of any apparatus used.

711.7 Upon completion of work performed between the approach circuit and the crossing:

1. All apparatus must be removed,
2. The highway-rail crossing signals must be tested by signal department, and
3. The Rail Traffic Controller must be notified of removal of apparatus.

712 - Operating Machines and On-Track Equipment

712.1 Employees who operate roadway maintenance machines must:

1. Pass a test certifying the employee understands how to apply proper on-track safety procedures for roadway maintenance machines,
2. Receive training, and
3. Be qualified as a roadway maintenance machine operator or as an employee-in-charge. Anyone not meeting this requirement must only operate the machine under the direct supervision of a qualified operator.

712.2 On-track equipment must be inspected before it is operated to make certain it is safe and in compliance with BBRR standards and federal regulations.

712.3 Each on-track roadway maintenance machine and hi-rail vehicle must:

1. Be inspected each calendar day before use, and
2. Have the operator's manual located on the equipment.

712.4 When inspecting on-track roadway maintenance machines and hi-rail vehicles, make certain each is equipped with the following:

1. Effective brakes;
2. Operable horns/audible devices and change-of-direction alarms;
3. Operable headlights and strobe lights;
4. Fire extinguisher, first aid kit, and flagging kit;
5. Safety glass and operable windshield wipers;
6. Locking pins, if it is equipped with turntables; and
7. Operable heater and ventilation system.

712.5 When inspecting on-track equipment that is not a roadway maintenance machine or a hi-rail vehicle, make certain it is equipped with the following:

1. Effective brakes,
2. Lock-up devices that are in place, and
3. Audible warning device unless operator is equipped with a whistle.

712.6 The following roadway maintenance machines must have a pressurized cab:

1. Tampers,
2. Ballast regulators,
3. Tie bed scarifiers, and
4. Undercutters.

712.7 If a component listed as an FRA safety required component is defective and the condition will not make the equipment unsafe to operate, then:

1. Complete and attach an exception tag to the defective machine or hi-rail vehicle at or near the operator's control panel,
2. Report the condition to the employee-in-charge, and
3. Document the defect on the daily inspection form.

712.8 If a defective condition makes the machine unsafe to operate:

1. Do not operate the equipment until repaired,
2. Affix an out-of-service tag to the ignition switch or similar device, if the equipment cannot be repaired, and
3. Report the condition to the employee-in-charge and document on the daily inspection report.

712.9 If a defective condition does not make the machine unsafe to operate, the machine may be operated for up to seven days with the defect.

712.10 When machine repairs are completed:

1. Document repairs in the machine's logbook.

712.11 Any piece of equipment or vehicle large enough to carry its instructional manual must have the document(s) on the equipment or vehicle.

712.12 Before occupying a controlled track, the leading and trailing pieces of on-track equipment working or traveling together as a group must have the flagging devices listed below. A single piece of on-track equipment operating independently, including hi-rail vehicles, must also have these flagging devices:

1. Four red fusees,
2. Two red flags, and
3. One white light.

712.13 On-track equipment required to have operable lights must have those lights on when the equipment is moving.

712.14 On-track equipment not equipped with lights must have a white light to the front and a red light on the rear when operating:

a. At night, or
b. In tunnels, or
c. In fog or other weather conditions that limit visibility.

712.15 When operating on-track equipment, employees must:

1. Ensure all occupants are seated in permanently installed seats,
2. Instruct occupants to look out in both directions,
3. Specify each employee's duties when the equipment must be removed from the track,
4. Apply brakes gradually unless a condition requires stopping in the shortest possible distance,
5. Communicate to workers on or about tracks before getting closer than 15 feet to them, and
6. Perform required maintenance, tests, and other adjustments in accordance with the manufacturer's recommendations.

712.16 When operating on-track equipment, employees MUST NOT:

a. Use the equipment for any purpose other than company business, or
b. Permit tools or materials to obstruct the operation of the brakes or warning devices, or
c. Restrict or interfere with the intended function of any device or equipment, or
d. Permit employees to ride in or on the equipment unless authorized to do so by the proper authority and the employees are riding as part of their assigned duties, or
e. Apply any device to any on-track equipment unless approved by the Chief Engineer, or
f. Tow equipment if doing so exceeds the braking capacity of the towing machine, or
g. Operate equipment that is loaded beyond its maximum capacity.

712.17 When operating on-track equipment, operate at a speed that permits stopping within one-half the range of vision. Do not exceed the speed authorized for trains on the same track or listed in the table below, whichever is less.

Type of Equipment or Operation	Must Not Exceed
Rail Detector Car	40 MPH
Rail-Highway vehicle less than 10,001 GVW	Forward – 40 MPH
	Reverse – 20 MPH
Rail-Highway vehicle more than 10,000 GVW	Forward – 30 MPH
	Reverse – 10 MPH
Type of Equipment or Operation	Must Not Exceed
Rail Grinders	50 MPH
Ballast shoulder cleaner and Loram Ditcher	40 MPH
Tampers, ballast regulators, and other self-propelled on-track equipment not previously designated	30 MPH
Burro Cranes	20 MPH
When pulling a push car	30 MPH
When pushing a push car	Straight Track – 10 MPH
	Curves – 5 MPH
All on-track equipment moving over self-guarded frogs or through the spring rail side of the frog	1 MPH
Type of Equipment or Operation	Must Not Exceed
Operating through the limits of long-term working limits or when more than one vehicle is operating within the limits of a single Form B, Tack Warrant, Track and Time	20 MPH unless a higher speed is authorized by the employee-in-charge
Operating through turnouts, over facing point hand-operated switches or facing point frogs, over power-operated switches, over RR crossings at grade, passing people working around the tracks, passing passengers waiting for trains at passenger stops	5 MPH

712.18 When using push carts:

1. Do not load beyond rated capacity, and
2. Unload before ramping on or off flat cars.

712.19 Transport heavy materials only on push cars or trailer cars coupled behind self-propelled on-track equipment. Do not permit riders on push cars loaded with heavy materials except in cases of emergency and only after taking the necessary safeguards.

712.20 Omitted

712.21 Maintain the following minimum distances between the machine you are operating and the machine ahead for the described activity, when:

a. Working: 40 feet unless a different distance is specified. Ballast regulators must maintain
b. 200 feet, or
c. Traveling: 200 feet. Ballast regulators must maintain 400 feet, or
d. Bunching: 40 feet unless speed is 5 MPH or less, then maintain sufficient distance to prevent an accident.

712.22 The Red Zone for on-track equipment that does not have extendible parts is as follows:

1. From 15 feet in front of the equipment to 15 feet behind the equipment, and
2. From the sides of the equipment as defined in the job briefing.

712.23 Red Zone for on-track equipment that has extendible parts is as follows:

a. From 15 feet in front of the equipment to 15 feet behind the equipment, or
b. A minimum of 15 feet beyond the maximum reach of the extendible parts of the equipment on all sides.

712.24 Employees must not enter the Red Zone of other equipment until the operator:

1. Notifies employees that it is safe to enter the Red Zone,
2. Establishes eye contact, and
3. Receives verbal notification that employees wish to enter the Red Zone.

712.25 Operators of on-track equipment must not resume work when employees are located within the Red Zone of the equipment until holding a job briefing to establish safe work procedures.

712.26 Employees and backhoe operators must take the following actions before employees enter the Red Zone of the backhoe:

1. The operator and the employee(s) must establish eye contact,
2. The backhoe operator must receive verbal communication from the employee(s) stating that the employee(s) wish to enter the Red Zone,
3. The backhoe operator must notify the employee(s) when it is safe to enter the Red Zone and employee(s) must not enter until it is safe to do so,
4. The backhoe operator must stop all movement of the equipment and place the backhoe in neutral, and
5. Backhoe operator must remove and raise hands from controls of the boom and bucket.

712.27 When operating on-track equipment and it is necessary to inspect a switch:

1. Stop before reaching the switch,
2. Inspect the switch,
3. Restore the switch to the normal position,
4. Make certain switch points fit properly,
5. Lock the switch, and
6. Then proceed over the switch.

712.28 When a main track switch has been lined for movement of on-track equipment or for other reasons, the switch must be:

1. Restored to the normal position,
2. Locked and the lock tested, and
3. Omitted

712.29 When approaching a highway-rail crossing at grade:

1. Be prepared to stop short of the crossing,
2. Do not operate on-track equipment over the crossing unless the way is known to be clear, and
3. If necessary, use a flagman wearing a lime yellow vest to stop highway traffic.

712.30 Do not operate on-track equipment between a passenger train that is receiving or discharging passengers and the station or station platform.

712.31 When operating behind a train, employees must not:

a. Follow a moving train closer than 600 feet, or
b. Approach a standing train closer than 200 feet unless necessary to clear the track.

712.32 When operating equipment or hi-rail vehicles on a track that will be passed by a train on an adjacent track:

a. If safe to do so, stop and exit the vehicle, or
b. If it is not safe or practical to stop and exit the vehicle, reduce speed to 10 MPH and maintain a lookout for objects falling or swinging from the train.

712.33 When a train is approaching a work location on an adjacent track:

1. Ensure all employees and equipment are clear of the adjacent track,
2. Secure rotating machinery to prevent it from fouling the adjacent track, and
3. Lower all buckets and boom attachments to rest with the boom parallel to the track and load line tightened.

712.34 When being passed by a train on an adjacent track, inspect the passing train for defects as follows:

1. Stand at least 30 feet from the passing train when possible,
2. If two or more employees are present, position at least one employee on each side of the train, and
3. Promptly notify the train crew of the results of the inspection.

712.35 When handling railcars, make certain to:

1. Only handle two cars at a time unless using a Brandt-type vehicle or car mover, and
2. Test the rail car air brakes when required as specified by BBRR Air Brake and Train Handling Rules.

712.36 A qualified BBRR employee must directly supervise and instruct any non-BBRR person operating equipment on BBRR track. The BBRR employee is responsible for establishing on-track safety, obtaining required authorities, and complying with all rules.

713 - Operating Cranes

713.1 When operating cranes, employees must not:

a. Operate a crane the employee is not qualified to operate unless under the direct supervision of a qualified operator, or
b. Move a load over people, or
c. Permit anyone to be under a load or between a load and a magnet attachment.

713.2 The following signals must be given before a crane is moved:

a. Two short blasts of the whistle before making a forward move, or
b. Three short blasts of the whistle before making a reverse move.

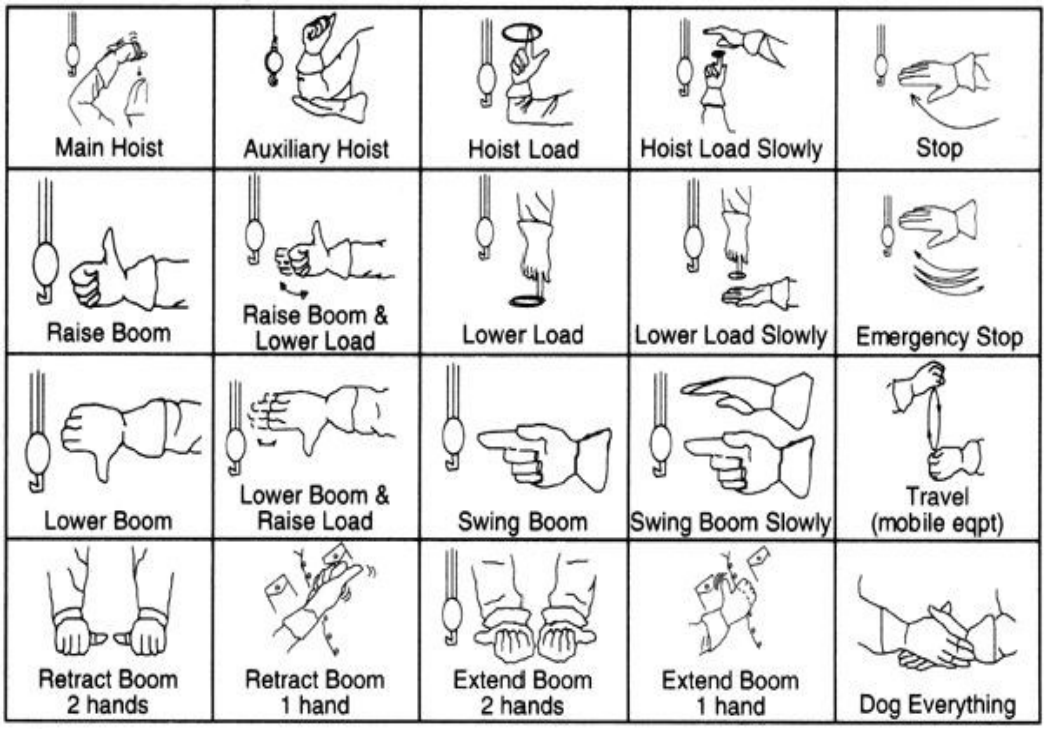
713.3 Do not allow any part of the boom, cable, or equipment to come within 12 feet of any power line or other overhead aerial cables until all of the following safety precautions have been taken. Signal, communications, and cable lines may remain in operation at the discretion of the responsible and qualified person on-site after precautions have been taken to protect the lines from physical damage.

1. The owner of the power lines is present on-site and:
    1. Determines the voltage and required procedure to de-energize and ground the lines,
    2. De-energizes and grounds the lines, and
    3. Verifies the power lines are de-energized and it is safe to work.
2. After the power lines are de-energized, grounded, and verified to be safe by the qualified person on-site, the work may continue provided all other safety aspects are covered, and
3. After the work has been completed, make certain all booms, cables, and equipment are at least 12 feet clear of power lines before power is restored to the lines.

713.4 Only the designated employee is allowed to give signals to the crane operator. When giving signals:

1. Use standard crane and derrick signals,
2. Have a clear understanding with the crane operator regarding the meaning of signals to be used, and
3. Remain in position that is in clear view of the crane operator.

713.5 Use the following hand signals when directing crane movements:



Chapter 10 - Electronic Devices and Radio Communication

1000 – Use of Electronic and Electrical Devices – General Rules

1000.1 No individual shall use a personal or railroad supplied electronic or electrical device if this would interfere with the employee's or any other employee's safety or performance of safety related duties.

1000.2 Personal electronic and electrical devices and all accessories must be powered off and stored out of sight except as authorized by other rule when:

a. Located within BBCC, or
b. Within the operating cab of a moving locomotive, or
c. Within the operating cab of a locomotive and any person is engaged in the fueling, repair, or other preparation of the train or locomotive for movement, or
d. At the controls of moving on-track equipment except a hi-rail truck less than 10,001 GVW, or
e. Operating mechanized equipment, or
f. A member of the crew or work group is on the ground or riding on equipment during a switching operation, or
g. Located within the defined red zone of on-track or mechanized equipment, or
h. Located within four feet of the nearest rail, or
i. When designated by rule, signage or special instructions.

1000.3 When a personal electronic or electrical device is required by other rule to be turned off, the digital storage and viewing functions of the device may be used to view rules, timetables special instructions, or other railroad directives when all of the following conditions are met:

1. Not at the controls of a moving locomotive or on-track equipment,
2. Not operating mechanized equipment,
3. All cellular and internet functionality has been disabled on the device (airplane mode), and
4. All members of the crew or work group conduct a job briefing and all agree that use is safe and will not distract or interfere with the performance of safety related duties.

1000.4 Personal or railroad supplied electronic and electrical devices may be used to communicate or respond during an emergency.

1000.5 If railroad radio communication failure occurs, railroad supplied or personal electronic and electrical devices may be used for railroad communication after a job briefing is conducted confirming:

1. All crewmembers understand how the devices will be used, and
2. Use will be in compliance with operating rules governing the use of railroad radios.

1000.6 The use of the following electrical and electronic devices is not restricted:

a. A medical device that has been prescribed by a medical professional and approved for use by the BB approved doctor or BB management, or
b. A digital watch whose only purpose is as a timepiece, or
c. A stand-alone calculator, or
d. Electronic control systems and information displays, either fixed or portable, within the cab of equipment, or
e. Omitted
f. Railroad issued radios, or
g. Railroad approved electronic devices to monitor air quality, noise, or other environmental conditions.

1001 – Use of Electronic and Electrical Devices on Locomotives

1001.1 Personal cameras or the camera feature of a personal electronic or electrical device may only be used on a locomotive by authorized personnel when the use is necessary to document a condition or for the analysis of a locomotive system. Authorized personnel are:

a. BB Management, or
b. BB Mechanical department employees, or
c. Contractors assigned to perform work for BBRR.

1001.2 Personal electronic and electrical devices may be used on a locomotive for minimal use when all of the following conditions are met:

1. Locomotive is stopped,
2. No crewmember is riding on equipment or on the ground during a switching operation,
3. No person is engaged in the repair, fueling, or other preparation of the train or locomotive for movement, and
4. All crewmembers conduct a job briefing and all agree the use is safe and will not distract or interfere with the performance of safety related duties.

1001.3 The employee at the controls of a locomotive may use a railroad supplied electronic or electrical device for business purposes after all the following conditions are met:

1. Locomotive is stopped,
2. No crewmember is riding on equipment or on the ground during a switching operation,
3. No person is engaged in repair, fueling, or other preparation of the train or locomotive for movement, and
4. All crewmembers conduct a job briefing and all agree the use is safe and will not distract or interfere with the performance of safety related duties.

1001.4 Employees in the cab of a controlling locomotive and not at the controls may use a railroad supplied electronic or electrical device for business purposes after the following conditions are met:

1. Omit, and
2. All crewmembers conduct a job briefing and all agree the use is safe and will not distract or interfere with the performance of safety related duties.

1001.5 Electronic and electrical devices may be used for the following business purposes on a locomotive:

a. Receiving, reporting, or documenting railroad work, or
b. Communicating with a customer, management, or RTC related to company business, or
c. Using the digital storage and viewing functions to access railroad rules, special instructions, or other directives.

1002 – Use of Electronic and Electrical Devices on or About Tracks

1002.1 Personal cameras or the camera feature of a personal electronic or electrical device may be only used for business purposes on or about tracks and only by the following authorized personnel:

a. BB Management, or
b. BB Mechanical department employees, or
c. BB Engineering department employees, or
d. Contractors assigned to perform work for BBRR.

1002.2 Engineering and mechanical department employees may use personal electronic and electrical devices for business purposes when all of the following conditions are met:

1. Employee is not at the controls of moving equipment or working mechanized equipment,
2. Employee is not located within the defined “Red Zone” of operating mechanized equipment,
3. Employee is not fouling a track unless the appropriate protection for the type of worker has been established, and
4. Use will not distract or interfere with the performance of safety related duties.

1002.3 Transportation employees may use electronic and electrical devices for business purposes when on or about tracks after the following conditions are met:

1. Employee is not fouling a track or otherwise within four feet of the nearest rail, and
2. A job briefing is held and all agree the use is safe and will not distract or interfere with the performance of safety related duties.

1002.4 Personal electronic and electrical devices may be used for minimal personal use when on or about tracks or within the operating cab of on-track or mechanized equipment after all the following conditions are met:

a. Not at the controls of moving on track equipment or working mechanized equipment,
b. No member of the crew or work group is riding on equipment or involved in a switching operation,
c. No employee is engaged in repair, fueling, or preparation of the equipment including cars or locomotives,
d. The employee is not located within the defined “Red Zone” of operating mechanized equipment,
e. The employee is not fouling a track or otherwise located within four feet of the nearest rail, and
f. A job briefing is held and all agree the use is safe and will not distract or interfere with the performance of safety related duties.

1002.5 Railroad supplied electronic and electrical devices may be used in the operating cab of on-track or mechanized equipment for business purposes after a job briefing is held and all agree the use is safe and will not distract or interfere with the performance of safety related duties.

1003 - General Radio Rules

1003.1 Use radios only:

a. To perform company business, or
b. To contribute to safety.

1003.2 Employees must not knowingly transmit any:

a. False emergency communications; or
b. Obscene, indecent, or profane remark; or
c. Unnecessary, irrelevant, or unidentified communication.

1003.3 Do not use radio communications to convey instructions that would have the effect of overriding the indication of a fixed signal, except in the case of a Rail Traffic Controller providing permission to pass a Stop indication in accordance with the operating rules.

1003.4 Only a member of the same crew may transmit information about the position or aspect displayed by a fixed signal to train and engine employees.

1003.5 Employees must keep radios:

1. In the ON position with volume adjusted to receive communications, and
2. Set for the proper channel.

1003.6 Special Instructions designate:

1. Location of base and wayside stations,
2. Hours of operation, and
3. Channels assigned to stations.

1003.7 If non-railroad communication interferes with radio or other wireless communications, the employee must attempt to determine the origin or identity of the interference and report the occurrence to the proper authority. The report must include:

1. Exact date and time,
2. Nature of the interference, and
3. Origin or identification of the interference.

1003.8 Only persons authorized by the Federal Communications Commission (FCC) can make internal adjustments to a radio.

1003.9 Employees must permit FCC representatives to inspect radio equipment and required FCC documents.

1004 - Radio Requirements for Trains and On-Track Equipment

1004.1 Before departing an originating station, each train must be equipped with the following:

1. A working radio in the occupied controlling locomotive, and
2. One of the following:
    a. Working radio on another locomotive in the consist, or
    b. Other means of wireless communications.

1004.2 When roadway workers are present and trains have access to work locations or adjacent tracks, the following apply:

a. Each employee-in-charge and lone worker must:
    1. Have immediate access to or be equipped with a working radio, and
    2. Monitor transmissions from train movements in the vicinity.
b. Maintenance of way equipment traveling together under the same authority without locomotive assistance must have:
    1. A working radio on at least one piece of equipment,
    2. Capability to communicate between the equipment traveling together, and
    3. Intra-group communications capability upon reaching the work site.

1005 - Testing Radio Equipment

1005.1 Test each radio and wireless voice communication device prior to beginning a work assignment by:

1. Initiating a voice transmission with another radio, and
2. Receiving a confirmation of clarity.

1005.2 When a radio or wireless voice communication device fails a required test, the employee must:

1. Remove the device from service,
2. Report the failure to the Rail Traffic Controller or supervisor, and
3. Establish other means of communication to ensure safety and reduce delay.

1005.3 If a working radio on an occupied, controlling locomotive fails en route, the train can continue until the earlier of the following:

a. Next calendar day inspection is performed, or
b. Reaching the next forward location where facilities are available to repair or replace the radio.

1006 - Positive Identification

1006.1 When required to provide positive identification, the employee must provide the name or initials of the railroad and:

a. Name and location of base or wayside station, yard office, or unique designation, or
b. Mobile radio unit by:
    1. Words that identify the precise mobile unit,
    2. Individual's title and name, and
    3. If applicable, the location of the equipment, including track.
c. Train by:
    1. Train number,
    2. The word locomotive followed by its initials and number, and
    3. Location of the equipment, including track.
d. On-track equipment by:
    1. The letters OTE,
    2. Initials and number, and
    3. Location of the equipment, including track.

1006.2 Employees may use short identification, including the locomotive number, in switching, classification, and similar operations when wholly within a yard and after establishing positive identification.

1006.3 If an exchange of communications using short identification continues without interruption, positive identification must be repeated every 15 minutes.

1007 - Transmitting by Radio

1007.1 Before transmitting by radio:

1. Listen to ensure the channel is not being used,
2. Use positive identification procedures to identify the station calling from and to, and
3. Receive acknowledgment before proceeding with the transmission.

1007.2 To clarify pronunciation, use the appropriate procedure below:

a. Words:
    1. Pronounce,
    2. Spell directional points, and
    3. If needed, spell again using the phonetic alphabet table.
b. Initials:
    1. Pronounce, and
    2. If needed, use phonetic alphabet.

Letter	Phonetic Word	Letter	Phonetic Word	Letter	Phonetic Word	Letter	Phonetic Word
A	Alpha	H	Hotel	O	Oscar	V	Victor
B	Bravo	I	India	P	Papa	W	Whiskey
C	Charlie	J	Juliet	Q	Quebec	X	X-ray
D	Delta	K	Kilo	R	Romeo	Y	Yankee
E	Echo	L	Lima	S	Sierra	Z	Zulu
F	Foxtrot	M	Mike	T	Tango		
G	Golf	N	November	U	Uniform		

1007.3 State numbers by:

1. Digit, spelling single digits,
2. Decimal point by the word point or dot, and
3. Exact multiples of hundreds and thousands.

1008 - Receiving, Acting Upon, and Ending Radio Transmissions

1008.1 Do not act on a radio communication if:

a. Misunderstood, or
b. Not completed, or
c. Not in compliance with operating rules.

1008.2 Promptly acknowledge radio transmissions by using positive identification unless doing so would interfere with safety. Repeat the transmission, except when it:

a. Relates to yard switching operations, or
b. Is a recorded message from an automatic alarm device, or
c. Is general in nature and does not contain any information, instructions, or advice affecting railroad safety or train movement.

1008.3 Repeat radio communications from the Rail Traffic Controller that govern the movement of trains or on-track equipment on controlled tracks. Before acting upon any instructions, both parties must:

1. Confirm their mutual understanding of the communication, and
2. Confirm the Rail Traffic Controller's initials.

1008.4 End all radio transmissions not related to yard switching with the following:

a. The word OVER when a response is required, or
b. Positive identification followed by the word OUT when a response is not required.

1009 - Information That Must Be Copied

1009.1 Employees operating moving trains or equipment must not copy or repeat copied information.

1009.2 Information that is required to be copied must only be transmitted to moving equipment when:

1. It can be received and copied without impairing safety,
2. Receiving employee is not operating the controls of the equipment, and
3. Restriction is not within 3 miles unless:
    1. Movement has been stopped, and
    2. Employee operating the controls of the equipment has been advised of the situation and can comply.

1009.3 Follow the procedure below for transmitting and repeating Mandatory Directives:

Step	Responsible Party	Action
1	Rail Traffic Controller	Call the employee or train addressed and state the intention to transmit a Mandatory Directive.
2	Receiving Employee	State title, name and location. Confirm being prepared to receive Mandatory Directive.
3	Rail Traffic Controller	State name of person copying Mandatory Directive. Transmit the Mandatory Directive.
4	Receiving Employee	Copy the Mandatory Directive in writing on the prescribed form and in the prescribed format. Read back to the Rail Traffic Controller what has been written.
5	Rail Traffic Controller	Ensure accuracy of repeated directive. State time and initials of employee authorized to issue Mandatory Directives.
6	Receiving Employee	Record the time and initials given. Acknowledge the Rail Traffic Controller by repeating that information. State receiving employee's initials.

1009.4 Only those addressed by Mandatory Directives may act on them. Before acting on a Mandatory Directive, the employees affected must:

1. Have a written copy, and
2. Make certain all members of the crew or work group read and understand it.

1009.5 When Mandatory Directives have been fulfilled, annulled, or canceled, employees must:

1. Clearly mark the directive with "void"; and
2. Retain track authority form for a period of 7 days.

1010 – Emergency Transmissions

1010.1 Emergency transmissions have priority over all other transmissions. Employees not involved in transmitting or responding to emergency transmissions must keep the channel clear for the duration of the emergency communications.

1010.2 When making an emergency transmission:

1. Transmit the words EMERGENCY, EMERGENCY, EMERGENCY,
2. Describe the situation and location, and
3. If no response is received, take necessary actions to ensure safety.

1010.3 Use emergency transmissions to report:

1. Accidents;
2. Emergency applications of the air brakes;
3. Storms, washouts, or flooding that affect safe rail operations;
4. Fires on the right-of-way, bridges, or track structure;
5. Obstructions to the track; and
6. Any other conditions that could cause:
    a. Injury to employees or the public, or
    b. Derailment or damage to property.

1010.4 The station transmitting the emergency message must broadcast the words EMERGENCY MESSAGE TERMINATED when normal radio communications can resume.

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Crossover - A track connection between two adjacent, but not necessarily parallel, tracks consisting of two switches whose primary purpose is to allow crossing from one track to the other.

Crossing Island Circuit - That portion of the highway-rail crossing at grade where the highway directly crosses the railroad tracks. For detection purposes, a train is considered to be occupying the island when it is a minimum of 100 feet from either edge where the highway crosses the tracks. Island may or may not be defined by insulated joints. Crossing will not recover if a train is occupying this circuit.

Defect Detector - A wayside device used to detect mechanical malfunctions of equipment or equipment that is too high or wide to move safely.

Derail - A track safety device designed to guide equipment off the rails at a selected spot as a means of protection against collisions or other accidents.

Division - That portion of a railroad assigned to the supervision of a division manager.

Dual-Controlled Switch - A power-operated switch also equipped for hand operation.

Effective Locking Device - Manually Operated Switch or Derail - A device that is:

1. Vandal resistant,
2. Tamper resistant, and
3. Designed to be applied, secured, uniquely tagged, and removed only by the class, craft, or group of employees for whom protection is being provided.

Effective Locking Device - Remotely Controlled Switch - A blocking device that effectively prevents the lever or button controlling the switch from being operated.

Electric Lock - An electrical locking device applied to a hand-operated switch, derail, or gate.

Electric Lock Switch - A hand-operated switch with an electric locking device applied.

Emergency Inspection or Repairs - Inspection or repairs required to ensure the safe movement of trains and on-track equipment due to unforeseen circumstances such as, but not limited to, a derailment or forces of nature.

Employee-In-Charge (EIC) - A designated roadway worker qualified on Operating and On-Track Worker Rules and physical characteristics who is responsible for all movements and on-track safety for a roadway work group within working limits.

End-of-Train Device (EOT) - A portable sensory transmitter unit mounted on the last car of a train.

Engine - A term that is synonymous with locomotive. See also Locomotive.

Equipment - When used in the operating rules this refers to locomotives, railroad cars, and any maintenance of way equipment designed to be placed on or operate on the rail.

Excepted Track - A segment of track that is identified in Special Instructions, where:

a. No train shall be operated at speeds more than 10 MPH, or
b. No revenue passenger train shall be operated, or
c. No freight train shall be operated that contains more than five cars required to be placarded by the Hazardous Materials Regulations (49 CFR).

Exclusive Authority to Move - A condition that exists when a train or on-track equipment is the only movement authorized to occupy and move within a block or within the limits of an track authority.

Exclusive Track Occupancy - A method of establishing working limits on a controlled track in which movement authority of trains and other equipment is withheld by the Rail Traffic Controller or, in case of emergency, restricted by flagman.

False Activation - A condition when the highway-rail crossing at grade automatic warning devices indicate to motorists that it is not safe to cross when, in fact, it is safe to do so.

Field Side of Rail - The face pointing away from the track or the outside face.

Fixed Signal - A permanent signal or sign indicating a condition affecting train movement.

Flagger (Crossing) - A person other than a train crewmember who is equipped with a vest, shirt, or jacket of a color appropriate for daytime flagging such as orange, yellow, strong yellow, green, or fluorescent versions of these colors or other generally accepted high visibility colors. For nighttime flagging, similar outside garments shall be retro-reflective. Acceptable hand signal devices for daytime flagging include STOP/SLOW paddles or red flags. For nighttime flagging, a flashlight, lantern, or other lighted signal shall be used.

Flagman - A designated employee whose only responsibility is to direct or restrict the movement of trains at a specific point to provide on-track protection for roadway workers.

Fouling a Connecting Track - When equipment is standing so that the end of the equipment is between the clearance point of the track and the switch points of a connecting track, or when an individual is within four feet of the field side of the nearest rail or between the rails of a track.

Fouling an Improperly Lined Switch - When equipment is standing or proceeds past the clearance point of an improperly lined switch.

Fouling Equipment – To extend any part of the body between or under equipment or to be within 25 feet of the end of equipment to include applying or releasing a hand brake mounted on the end of a car with or without a brake stick. It does not include:

A. Operating a bleed rod or a cut lever, or
B. Operating a side mounted hand brake, or
C. A transportation employee stationed at an EOT of his/her train for the purpose of performing a brake test.

Frog - A device made of rail section constructed and assembled to permit the wheels on one rail of a track to cross another rail of an intersecting track. When viewed from above, it resembles an X.

General Order - Written or electronically transmitted Special Instructions issued by a division concerning the safety of employees and the movement of trains.

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

Hand-Operated Switch - Any type of switch when operated by manual manipulation. Push button or radio control operated switches are governed by the rules for hand operated switches if the switches are not equipped with a signal or switch position indicator light.

Head-of-Train Device (HTD) - A device on a locomotive that receives information from and transmits to an end-of-train device.

Highway-Rail Crossing at Grade - A location where a highway, road, street, or pedestrian walkway crosses one or more railroad tracks at grade.

Hi-Rail Vehicle - A roadway maintenance machine that has been:

1. Equipped with retractable, flanged wheels to permit operation on highways or railroad tracks, and
2. Manufactured to meet federal motor vehicle safety standards.

Home Signal - An absolute fixed signal, capable of displaying a Stop indication, governing the entrance to a route, block, or interlocking.

Immediate Access to a Radio - When a radio is sufficiently close to an employee to allow him or her to make and receive radio transmissions.

Improper Signal Aspect - A signal aspect that permits a train to proceed when the condition of the block does not justify such an aspect.

Inaccessible Track - A non-controlled track where entry to the track by trains or on-track equipment has been physically prevented as a method of establishing working limits.

Individual Train Detection - An on-track safety procedure where a lone worker has the ability to see approaching trains and the ability to leave the track before they arrive.

Industry - A customer that is serviced by the railroad.

Initial Track Warrant - A Track Warrant advising of a warrant number and the operating bulletins in effect.

Inspection - A careful review or examination for conditions that affect safe movement. Inspections may be:

a. **Visual** - An inspection performed by a qualified employee using sense of sight to look for readily visible defects or damage.
b. **Roll-by** - An inspection performed by a qualified employee located on the ground in which the train pulls by the employee not exceeding the designated speed.
c. **Walking** - An inspection of a standing train performed by a qualified employee on the ground who walks the required portion of the train.

Interlocking - An arrangement of interconnected signals and signal appliances that succeed each other in proper sequence and for which interlocking rules are in effect.

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

Interlocking Signals - Fixed signals of an interlocking.

Intermediate Signal - A block signal equipped with a number plate that conveys Restricted Proceed as the most restrictive aspect.

Key Train - Any train as described in either a, b, or c below:

1. One or more loads of spent nuclear fuel (SNF) or high level radioactive waste (HLRW) moving under the following Hazardous Materials Response Codes 4929142, 4929143, 4929144, or 4929147, or
2. One or more loaded tank cars containing materials that require the phrase POISON/TOXIC - INHALATION HAZARD on the shipping papers (Hazard Zone A, B, C, or D), anhydrous ammonia (UN 1005), or ammonia solutions (UN 3318), or
3. Twenty or more loaded hazardous materials shipments or intermodal portable tank loads having a combination of materials that require the phrase POISON/TOXIC - INHALATION HAZARD on the shipping papers (Hazard Zone A, B, C, or D), anhydrous ammonia (UN 1005), ammonia solutions (UN3318), flammable gas (2.1), Class 1.1 or 1.2 explosives, or environmentally sensitive chemicals (see Table 3 in United States Hazardous Materials Instructions for Rail).

   Exception: Do not count box cars, trailers, containers carrying mixed loads of hazardous materials when determining Key train status.

Limited Speed - A speed not exceeding 45 miles per hour.

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

Locomotive Consist - A locomotive or combination of locomotives properly coupled for multiple unit operation and operated from a single control.

Locomotive Operator - An employee who is certified as a locomotive engineer or remote control operator and works in a designated locomotive operator, engineer, or remote control operator position.

Locomotive Servicing Track Area - One or more tracks within an area in which the testing, servicing, repair, inspection, or rebuilding of locomotives is under the exclusive control of mechanical department personnel.

Lone Worker - An individual roadway worker who is not:

1. Being afforded on-track protection by another employee,
2. A member of a roadway worker group, and
3. Engaged in a common task with another employee.

Main Track - A controlled track designated in Special Instructions as a main track. Main tracks extend through yards and between stations.

Mandatory Directive - Any instruction issued by the Rail Traffic Controller or control station required to be recorded in writing that grants authority for occupancy of a controlled track or requires a train or on-track equipment to take a defined action.

Medium Speed - A speed not exceeding 30 miles per hour.

Motion Detection Equipment - Shall provide sensitivity capable of assuring a warning time of 20 second minimum for constant train speeds of 2 MPH or greater.

Non-Controlled Track - Any track not designated as a controlled track upon which trains are permitted by rule or Special Instruction to move without receiving authorization from a Rail Traffic Controller or control operator.

On-Track Equipment - Vehicles equipped with hi-rail attachments, rail detector cars, or other engineering equipment.

On-Track Equipment Operator - The operator of on-track equipment or the employee-in-charge of on-track equipment.

On-Track Roadway Maintenance Machine - A self-propelled, rail-mounted maintenance machine whose light weight exceeds 7,500 pounds. An on-track roadway maintenance machine is not designed for highway use or for use in rail inspection.

On-Track Safety - A state of freedom from the danger of being struck by a train or other equipment provided by operating and safety rules that govern track occupancy by personnel, train, and on-track equipment.

Operating Bulletin - A computer-generated form issued by the Rail Traffic Controller containing current operating instructions that apply to the train addressed as well as information relating to the most recently issued system and division bulletins.

Operating Message - Part of an operating bulletin containing instructions and Mandatory Directives issued by the Rail Traffic Controller that govern the operations of trains.

Partial Activation - A condition when the highway-rail crossing at grade automatic warning devices indicate the approach of a train; however, the full, intended warning is not provided.

Passenger Station - A location identified in Special Instructions where passengers are loaded and unloaded from passenger trains.

Personal Electronic or Electrical Devices - Any electronic or electrical device not provided to employees by BBRR for authorized business purposes.

Pilot - An employee assigned to a train or track car when the locomotive operator, conductor, or track car driver is not qualified on the physical characteristics or the operating rules of the territory to be traversed.

Power-Operated Switch - A remotely controlled switch operated electrically.

Private Highway-Rail Crossing at Grade - A highway-rail crossing at grade which does not meet the definition of a public highway-rail crossing.

Public Highway-Rail Crossing at Grade - A highway-rail crossing at grade where the highway, road, street, or pedestrian walkway is maintained on both sides by a public authority.

Qualified Employee - An employee who has successfully completed all required training for, demonstrated proficiency in, and is authorized to perform the duties of a particular position or function.

Quiet Zone - A segment of track identified in Special Instructions that contains consecutive highway rail crossings at grade where the locomotive horn is not routinely sounded.

Railroad Bridge Worker - An employee of a railroad, or employee of a contractor, who is responsible for the construction, inspection, or maintenance of a bridge and whose assigned duties, if performed on the bridge, include inspection, testing, maintenance, repair, construction, or reconstruction of the:

a. Track; or
b. Bridge structural members; or
c. Operating mechanisms and water traffic control systems; or
d. Signal, communication, or train control systems integral to that bridge.

Railroad Operating Employee - Any employee engaged in or connected with the movement of a train, including a hostler or engine mover, or any employee subject to the hours of service requirements governing train service employees.

Railroad Supplied Electronic and Electrical Devices - Any electronic or electrical device provided or reimbursed by BBRR for authorized business purposes.

Ranking Employee - The member of the train crew who is responsible for the administration of the train. When more than one employee is assigned to a crew, the ranking employee is the conductor.

Red Zone - The area surrounding working equipment, employees using tools, and lifting operations which, if entered by an individual(s), creates the potential for injury as a result of being struck by equipment, tools, or material. A red zone may be specifically defined by rule.

Remotely Controlled Railroad Crossing - A railroad crossing at grade operated by a control station.

Restricted Speed - A speed that permits stopping within one-half the range of vision. It also permits stopping short of a train, a car, on-track equipment, an obstruction, a Stop signal, a derail, or an improperly lined switch. It permits looking out for broken rail. It is not to exceed 20 MPH.

Roadway Maintenance Machine - Powered equipment, other than by hand, in use on or near the track for maintenance, repair, construction, or inspection of track, bridges, roadway, or signal, communication, or electric traction systems. These machines may have road or rail wheels or may be stationary.

Roadway Maintenance Work Train - A train operated within working limits in conjunction with roadway maintenance, construction, or repairs, under the direction of a designated employee-in-charge.

Roadway Work Group - Two or more roadway workers working together on a common task.

Roadway Worker - Any employee of a railroad, or a contractor to a railroad, whose duties include and who is engaged in the inspection, construction, maintenance, or repair of the following:

a. Railroad track, or
b. Bridge, or
c. Roadway, or
d. Signal and communications systems, or
e. Electric traction systems, or
f. Roadway facilities, or
g. Roadway maintenance machinery on or near the track or with the potential of fouling a track.
h. Roadway worker also includes any employees responsible for on-track protection, flagmen, and watchmen/lookouts.

Roll-by Inspection - An inspection performed by a qualified employee, located on the ground, where the train pulls by such employee not exceeding the designated speed.

Rolling Equipment - Locomotives, railroad cars, and one or more locomotives coupled to one or more cars.

RTC Manual - Written instructions issued to Rail Traffic Controllers concerning the safety or movement of trains and employees.

Rule Book - Operating rule book, Safety book, Air Brake Train Handling and Equipment Handling Rule Book or the corresponding books of a foreign carrier.

Safety Stop - A stop of at least 50 feet, but not more than 250 feet, made prior to coupling to equipment.

Shoving Platform - A rail car that has been modified for the purpose of providing employees a means to ride the leading end of equipment on a shoving move.

Siding - An auxiliary track designated in Special Instructions for meeting or passing trains.

Signal Aspect - The appearance of a fixed signal as viewed from the direction of an approaching train.

Signal Imperfectly Displayed - A block or interlocking signal, displaying lights that are:

a. Not in conformity with the rules, or
b. Absent light where a color light should be, or
c. Absent signal at a place where a signal is usually displayed, or
d. A high color light signal displaying more than one light per signal unit.

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

Signaled Siding - A siding equipped with block signals that govern train movements on the siding.

Signaled Track - A track equipped with block or interlocking signals that govern train movements.

Single Track - A main track upon which trains operate in both directions.

Slow Speed - A speed not exceeding 10 miles per hour.

Special Instructions - Information contained in timetables, system bulletins, division bulletins, and BBRR procedural instruction manuals.

Static Drop - Where gravity provides sufficient energy to move equipment without any assistance from a locomotive or other equipment when hand brakes are released.

Station - A place designated in Special Instructions by name and milepost location.

Steep Grade - A section of controlled track where the average grade is 1% for three continuous miles or 2% for two continuous miles.

Subdivision - A portion of the railroad designated by timetable.

Switch - A device consisting of necessary rails and connections designed to change the direction of a movement from the track on which it is moving to another track.

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

Tangent Track - Straight track.

Telemetry - The combination of a head-of-train device (HTD) on the controlling locomotive and an end-of-train device (EOT) mounted on the rear car of the train that has the ability to communicate train-related information to and from the controlling locomotive.

Temporary Speed Restriction - A portion of a controlled track with defined limits where the authorized speed has been reduced as specified by operating message, Form EC-1, Special Instruction, or verbal notification by an engineering department employee.

Three-Step Protection - A procedure using the following steps that provides protection for employees before they foul equipment:

1. Apply the brake,
2. Center the reverser, and
3. Put the generator field switch in the OFF or OPEN position.

Thru Truss Bridge - A bridge span in which the steel framework extends above and over the top of the rail.

Timetable - A publication containing instructions and other essential information relating to the movement of trains or equipment.

Track and Time - Authorization to use a controlled track in signaled territory, received in writing or copied on the prescribed forms and repeated at the direction of the Rail Traffic Controller using radio or other communication.

Track Barricade - A designated sign or obstruction fastened to a track that prevents access to the track.

Track Centers - The distance from the centerline of one track to the centerline of an adjacent track.

Track Warrant - Authorization to use a controlled track received in writing or copied on the prescribed forms and repeated at the direction of the Rail Traffic Controller using radio or other communication.

Track Warrant Control (TWC) - A method of authorizing movements or protecting employees or on-track equipment in signaled or non-signaled territory on controlled track within specified limits. Movement within TWC territory is under the jurisdiction of the Rail Traffic Controller.

Train - A locomotive, with or without cars, displaying a marker.

Train Approach Warning - An on-track safety procedure where one or more watchmen/lookouts warn roadway workers performing routine inspections or minor corrections of the approach of trains in ample time to move to a place of safety.

Train Coordination - A method of establishing working limits on tracks where the crew of a train that holds exclusive authority to move yields that authority to a roadway worker to perform materials distribution with a work train, snow duty, or track work at a derailment site.

Turnout - An arrangement of a switch and a frog with closure rails by which equipment can be diverted from one track to another.

Unattended Equipment - Equipment left standing and unmanned in such a manner that a qualified employee cannot readily control the brake system of the equipment.

Unmanned - Locomotives or on-track equipment left standing with no assigned employee located within the operating cab.

Utility Employee - An employee who must be attached to a single crew to perform duties specified by rule or may perform work independently of a train crew when properly protected by blue signal protection when required.

Warning Tag - A tag used to indicate that equipment is out of service and should not be operated.

Watchman/Lookout - An employee designated to provide warning to roadway workers of approaching trains or on-track equipment.

Work Train - A train assigned to serve the maintenance-of-way department in track repair and maintenance.

Working Limits - A segment of track with definite boundaries established in accordance with the rules upon which trains, locomotives, and on-track equipment may move only as authorized by the roadway worker having control over that defined segment of track.

Working Radio - A radio that can communicate with the Rail Traffic Controller of the railroad, or the host railroad if in joint operations (through repeater stations if necessary), from any location within the rail system, except:

1. In tunnels or other localized places of extreme topography, and
2. During temporary lapses of coverage due to atmospheric or topographic conditions.

Workmen - Railroad employees assigned to inspect, test, repair, or service railroad rolling equipment, or their components, including brake systems. Train and yard crews are excluded except when assigned to do such work on railroad rolling equipment that is not part of the train or yard movement they have been called to operate.

Yard - A system of tracks other than main tracks and sidings. A yard is used for making up trains, for storing cars, and for other purposes.

Yard Engine - A locomotive being used in yard service.

Yard Limits - A portion of main track designated in Special Instructions and defined by signs.