Canadian Rail Operating Rules Guidelines for British Columbia Provincial Heritage Railways

October 14, 2015
Canadian Rail Operating Rules

GENERAL NOTICE

Safety and a willingness to obey the rules are of the first importance in the performance of duty.

If in doubt, the safe course must be taken.

DEFINITIONS

For the purpose of these rules and special instructions, the following definitions apply:

CROSSOVER
A track joining adjacent main tracks, or a main track and another track.

ENGINE
A locomotive(s) operated from a single control or a cab control car, used in train, transfer or yard service.

ENGINE IN YARD SERVICE
An engine with or without cars utilized exclusively in switching, marshalling, humping, trimming and industrial switching.

EQUIPMENT
One or more engines and/or cars which can be handled on their own wheels in a movement.

FIXED SIGNAL
A signal or sign at a fixed location indicating a condition affecting the operation of a movement.

METHOD OF CONTROL
Rules and/or special instructions governing the use of a track(s).

MOVEMENT(S)
The term used in these rules to indicate that the rule is applicable to trains, transfers or engines in yard service.

NON-MAIN TRACK (NMT)
Any track(s) other than those listed in time table columns as having CTC, OCS, ABS or Cautionary Limits applicable and unless otherwise provided include a requirement to operate at REDUCED speed.

OCCUPATIONAL TERMS:

Assistant Conductor
An employee working under the supervision of a conductor. May also be referred to as trainman or yardman.

Conductor
An employee in charge of the operation of a movement.

Employee
A person qualified to regulatory and company standards employed by the company. Applies to contract employees and employees of other companies and railways operating and/or performing other rules related duties on the host railway trackage.
Foreman
An employee in charge of the protection of track work and track units.

Locomotive Engineer
An employee in control of the engine.

Pilot
An employee assigned to a movement when the locomotive engineer or conductor, or both, are not fully acquainted with the physical characteristics or rules of the railway over which the movement is to be operated.

Proper Authority
The appropriate railway supervisor.

Sub-foreman
A rules qualified employee that works under the protection held by a foreman.

Switchtender
An employee that handles switches for other employees.

Utility Employee
An employee who can be used as a temporary crew member or perform other assigned duties.

SIDING
A track adjacent and connected to the main track which is so designated in the time table, GBO or operating bulletin.

SWITCHES:

Non-Main Track Hand Operated Switch
A switch used to route equipment or a track unit within non-main track territory.

Normal Position  Reverse Position

Non-Main Track Hand Operated Switch

Note: Switch targets may be different shapes than illustrated but must not be diamond shape.

Semi-Automatic Switch
A non-main track switch equipped with an internal securing mechanism that permits equipment to trail through the switch points thus setting the switch for the route being used.
Semi-Automatic Switch

Note: Switch targets must be diamond shaped.

Spring Switch
A switch equipped with a spring mechanism arranged to restore the switch points to normal position after having been trailed through.

Switch
A device used to route equipment or a track unit from one track to another.

SPEEDS:

REduced Speed
A speed that will permit stopping within one-half the range of vision of equipment.

RESTRICTED Speed
A speed that will permit stopping within one-half the range of vision of equipment, also prepared to stop short of a switch not properly lined and in no case exceeding SLOW speed.

When moving at RESTRICTED speed, be on the lookout for broken rails.

When a broken rail is detected, the movement must be stopped immediately and must not resume until permission is received from the proper authority.

SLOW Speed
A speed not exceeding 15 miles per hour.

TURNOUT Speed
Unless otherwise provided by signal indication or special instructions, a speed not exceeding 15 MPH.

TRACK UNIT (TU)
A vehicle or machine capable of on-track operation utilized for track inspection, track work and other railway activities when on a track.

TRACK UNIT SPEED
A speed that:

(a) permits a track unit to stop within one-half the range of vision of equipment or a track unit;
(b) permits a track unit to stop short of a switch not properly lined or any obstruction or track defect that may prevent safe passage; and
(c) does not exceed maximum authorized speed for that track unit.
TRACK WORK
Any work on or near the track that may render the track unsafe for movements at normal speed or where protection against movements may be required for employees and machines involved in track construction and repairs.

TRAILING END
The tail end of the last piece of equipment in a movement in the direction of travel.

UNATTENDED
When an employee is not in close enough proximity to take effective action.

YARD
A system of non-main tracks, utilized to switch equipment and for other purposes over which movements may operate subject to prescribed signals, rules and special instructions.

GENERAL RULES
A Every employee in any service connected with movements shall;

(i) be subject to and conversant with applicable CROR rules, special instructions and general operating instructions;

(ii) have a copy of this rule book, the general operating instructions and other documents specified by the company accessible while on duty;

(iii) provide every possible assistance to ensure every rule, special instruction and general operating instruction is complied with and shall report promptly to the proper authority any violations thereof;

(iv) communicate by the quickest available means to the proper authority any condition which may affect the safe operation of a movement and be alert to the company’s interest and join forces to protect it;

(v) obtain assistance promptly when it is required to control a harmful or dangerous condition;

(vi) be conversant with and governed by every safety rule and instruction of the company pertaining to their occupation;

(vii) pass the required examination at prescribed intervals, not to exceed three years, and carry while on duty, a valid certificate of rules qualification;

(viii) seek clarification from the proper authority if in doubt as to the meaning of any rule or instruction;

(ix) conduct themselves in a courteous and orderly manner;

(x) when reporting for duty, be fit, rested and familiar with their duties and the territory over which they operate;

(xi) while on duty, not engage in non-railway activities which may in any way distract their attention from the full performance of their duties. Except as provided for in company policies, sleeping or assuming the position of sleeping is
prohibited. The use of personal entertainment devices is prohibited. Printed material not connected with the operation of movements or required in the performance of duty, must not be openly displayed or left in the operating cab of a locomotive or track unit or at any work place location utilized in train, transfer or engine control; and

(xii) restrict the use of communication devices to matters pertaining to railway operations. Cellular telephones must not be used when normal railway radio communications are available. When cellular telephones are used in lieu of radio all applicable radio rules must be complied with.

B Special Instructions will be found in general operating instructions, or operating bulletins. They may be appended to or included within copies of the Canadian Rail Operating Rules but do not diminish the intent of the rule unless official exemption has been granted.

C Employees must:

(i) be vigilant to avoid the risk of injury to themselves or others;

(ii) expect a movement, track unit or equipment to move at any time, on any track, in either direction;

(iii) not stand in front of approaching equipment for the purpose of entraining;

(iv) not ride the side or above the roof of moving equipment when passing side and/or overhead restrictions;

(v) not be on the roof of moving equipment, or on the lading of a moving open top car;

(vi) not be on the end of a car while in motion except for the purpose of operating a hand brake; and

(vii) not ride on any car known or suspected to contain a shifted load or damaged such that its structure or components may not be secure, or any car trailing such car.

D Each employee must be acquainted with, and be on the lookout for, restricted side and overhead clearances. Where standard restricted clearance signs are used, no other advice of restricted clearance will elsewhere or otherwise be given. If such signs are not provided in a yard or terminal, the location of the restricted clearance will be shown in special instructions.

E Overhead and side clearance may be restricted on a track at a main shop, diesel shop or car shop. Where restricted clearance exists on such track, it will not be marked by a standard restricted clearance sign nor will its location be elsewhere or otherwise given.
F Employees must not ride on top or side of equipment when on any main shop, diesel shop or car shop track, whether or not the overhead and side clearance is restricted.

G  
(i) The use of intoxicants or narcotics by employees subject to duty, or their possession or use while on duty, is prohibited.

(ii) The use of mood altering agents by employees subject to duty, or their possession or use while on duty, is prohibited except as prescribed by a doctor.

(iii) The use of drugs, medication or mood altering agents, including those prescribed by a doctor, which, in any way, will adversely affect their ability to work safely, by employees subject to duty, or on duty, is prohibited.

(iv) Employees must know and understand the possible effects of drugs, medication or mood altering agents, including those prescribed by a doctor, which, in any way, will adversely affect their ability to work safely.

L Wherever the following occupational names or titles appear in these rules, special instructions, or general operating instructions, they apply to the employee, who is qualified and is responsible for performing the duties of:

   conductor,
   assistant conductor,
   flagman,
   foreman,
   locomotive engineer,
   pilot,
   sub-foreman,
   switchtender.

M Wherever the following: engine, train, transfer or movement appear in these rules, special instructions or general operating instructions, the necessary action will be carried out by a crew member or crew members of the movement. In addition:

   (i) Where only one crew member is employed, operating rules and instructions requiring joint compliance may be carried out by either the locomotive engineer or conductor, and

   (ii) In the absence of a locomotive engineer on a crew consisting of at least two members, the conductor will designate another qualified employee to perform the rules required duties of the locomotive engineer.

N The following abbreviations and acronyms as well as those authorized by special instructions may be used:

   ack - Acknowledgement
In these rules when the distance prescribed for the placement of signals, signs or flags is not possible due to track configuration, the maximum distance available applies. If the maximum distance available will place an advance flag at the same location as the flag it governs the approach to, such advance flag need not be placed but such must be indicated in the GBO.

**TIME AND TIME TABLES**

**SIGNALS - GENERAL**

**11. Fusees**

(a) A movement approaching a red fusee burning on or near its track, or beyond the nearest rail of an adjacent track, must proceed at REDUCED speed.

(b) A fusee should not be placed on a public crossing at grade or where it may cause fire.

(c) **OPTIONAL**

When the fusee is located on the track occupied by an approaching movement operating at REDUCED or RESTRICTED speed as required by other than Rule 11, a stop must be made before passing the location of the fusee.

**12. Hand Signals**
(a) Employees whose duties may require them to give hand signals must have the proper appliances, keep them in good order and ready for immediate use. Night signals must be used from sunset to sunrise and when day signals cannot be plainly seen.

Note: The hand or a flag displayed in the same manner as the lantern, which is illustrated in the following diagrams, gives the same indication.

**Method of Display and Indication**

(i) Swung from side to side at right angle to the track.

![Diagram](image)

STOP

(ii) Swung in a circle at right angle to the track at a speed in proportion to the speed required.

![Diagram](image)

MOVE BACKWARD

(iii) Raised and lowered at a speed in proportion to the speed required.

![Diagram](image)

MOVE FORWARD

(iv) Raised and swung horizontally above the head, at right angle to the track when standing.
APPLY AIR BRAKES

(v) Raised and held at arm's length above the head when standing.

RELEASE AIR BRAKES

(vi) Held horizontally at arm's length.

REDUCE SPEED

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

(b) A signal given to move forward or move backward must be given in relation to the front of the controlling locomotive.

(c) A signal must be given in sufficient time before the required action to permit compliance. It must be given from a point where it can be plainly seen, and in such a manner that it cannot be misunderstood. If there is doubt as to the meaning of a signal, or for whom it is intended, it must be regarded as a stop signal.

(d) Whenever practicable, when switching is being performed, required signals shall be given directly to the locomotive engineer.

(e) When moving under the control of hand signals, the disappearance from view of either the crew member or lights by which signals controlling the movement are being given, must be regarded as a stop signal.
(f) A crew member, whose movement is clear of the main track, must not give an approaching movement a hand signal to move forward.

(g) Where radio is used in lieu of hand signals, employees will be governed by Rule 123.1.

13. Engine Bell

(a) The engine bell must be rung when:
   (i) an engine is about to move, except when switching requires frequent stopping and starting after the initial move;
   (ii) passing any movement standing on an adjacent track;
   (iii) approaching, passing or moving about station facilities or shop track areas; and
   (iv) one-quarter of a mile from every public crossing at grade (except within limits as may be prescribed in special instructions) until the crossing is fully occupied by the engine or cars. At crossings where engine whistle signal 14(1) is applicable the engine bell need not be rung.

14. Engine Whistle Signals

Note:

(i) Wherever the words “engine whistle” appear in these rules they also refer to “engine horn”. Signals prescribed by this rule are illustrated by “o” for short sounds; “___” for longer sounds.

(ii) Engine whistle signals must be sounded as prescribed by this rule, and should be distinct, with intensity and duration proportionate to the distance the signal is to be conveyed. Unnecessary use of the whistle is prohibited.

(iii) Radio must not be used in lieu of engine whistle signals for indications prefixed by the symbol (#).

(a) o
   When standing - braking system is equalized; angle cock may be closed.

(b) o o
   Note: Not applicable when switching.
   (i) Answer to a “stop” signal (except a fixed signal).
   (ii) Answer to any signal not otherwise provided for.

(f) Succession of short sounds
(#) Alarm for persons or animals on or near the track.

(l) ___ ___ o ___
   (i) (#) At public crossings at grade:
   A whistle post will be located 1/4 mile before each public crossing where required. Whistle signal must be sounded by movements:
   o exceeding 44 MPH, at the whistle post
operating at 44 MPH or less, in order to provide 20 seconds warning prior to entering the crossing.

Whistle signal must be prolonged or repeated until the crossing is fully occupied.

**EXCEPTION:** Not applicable when manual protection is to be provided or when shoving equipment other than a snow plow over a crossing protected by automatic warning devices.

(ii) (#) At other whistle posts indicated in special instructions.

(iii) (#) At frequent intervals when view is restricted by weather, curvature or other conditions.

(iv) Special instructions will govern when such signal is prohibited in whole or in part.

(r) In case of engine whistle failure the engine bell must be rung continuously;

17. Headlight

Movements headed by equipment equipped with a headlight must display the headlight:

(a) at full power in the direction of travel approaching all public crossings at grade until such crossings are fully occupied;

(c) on both ends of the engine while moving on non-main track but may be extinguished on the end coupled to cars.

**EXCEPTIONS:** When not approaching a public crossing at grade the headlight may be extinguished or dimmed:

(i) approaching or being approached by an opposing movement;

(ii) on a passenger carrying train, approaching a location where passengers will entrain or detrain;

(iii) facing oncoming vehicles at night which may be affected on adjacent roadways; or

(iv) when weather conditions cause the vision of the operating crew to be impaired.

18. Headlight Failure

(a) If the headlight on a movement fails and repairs cannot be made, ditch lights will be used in lieu of the headlight and the movement may proceed.

(b) If all headlights and ditch lights have failed, such lights as are available must be used proceeding to the first point where repairs can be made. At public and private crossings at grade not protected by automatic warning devices, movements must not exceed 10 MPH entering the crossing unless it is known to be clear of traffic and will remain clear until occupied.

19. Ditch Lights

A train must have ditch lights displayed continuously in the direction of travel when the headlight is required to be displayed full power.

If ditch light(s) fail enroute, the movement may proceed to the next point where repairs can be made.

26. Blue Signal Protection
(a) A blue flag by day, and in addition a blue light by night or when day signals cannot be plainly seen, displayed at one or both ends of equipment indicates that workmen are in the vicinity of such equipment. On a track which permits entry of a movement from one end only, a blue signal displayed between the equipment and the switch permitting entry indicates that workmen are in the vicinity of such equipment. When such signals are displayed the equipment must not be coupled to or moved. The removal of the signal from one or both ends of equipment indicates that no workmen are in the vicinity of the equipment and such equipment may be coupled to or moved.

**EXCEPTION:** When repairs must be undertaken on a manned movement, the locomotive engineer must be notified before repair work is commenced. When so notified, the movement must not be moved nor the brakes applied or released until the workmen have advised that they are in the clear.

(b) Other equipment must not be placed on the same track which will block a clear view of the blue signal(s) without first notifying the workmen. When equipment is placed on the same track, the movement placing such equipment must remain on that track until the workmen have relocated the blue signal(s) to include the additional equipment.

(c) Each class of workmen will display the blue signal(s) and the same class of workmen only are authorized to remove them.

(d) Special instructions will govern the use of other approved methods of protecting workmen performing equipment repairs or inspections.

### 27. Signal Imperfectly Displayed

(a) A fixed signal which is imperfectly displayed, or the absence of a fixed signal where one is usually displayed, must be regarded as the most restrictive indication that such signal is capable of displaying. An imperfectly displayed signal must be communicated to the proper authority as soon as possible.

(c) When a signal is known or suspected of being damaged, it must be regarded as displaying the most restrictive indication that can be given by that signal.

(e) Repairs to damaged signals must not be made by other than qualified employees. Signals that have been knocked over must not be re-erected by other than an authorized employee.

### 33. Speed Compliance

If speed requirements for their movement are exceeded, crew members must remind one another of such requirements. If no action is then taken, or if the locomotive engineer is observed to be non-responsive or incapacitated, other crew members must take immediate action to ensure the safety of the movement, including stopping it in emergency if required.

### 34. Fixed Signal Recognition and Compliance

(a) The crew on the controlling engine of any movement and snow plow foremen must know the indication of each fixed signal (including switches where practicable) before passing it.

(b) Crew members within physical hearing range must communicate to each other, in a clear and audible manner, the indication by name, of each fixed signal they are required to identify. Each
signal affecting their movement must be called out as soon as it is positively identified, but crew members must watch for and promptly communicate and act on any change of indication which may occur.

The following signals/operating signs must be communicated:

(v) Stop sign;

(vii) Red signal between the rails;

(viii) Stop signal displayed by a flagman;

(ix) A switch not properly lined for the movement affected;

(c) If prompt action is not taken to comply with the requirements of each signal indication affecting their movement, crew members must remind one another of such requirements. If no action is then taken, or if the locomotive engineer is observed to be incapacitated, other crew members must take immediate action to ensure the safety of the movement, including stopping it in emergency if required.

35. Emergency Protection

This rule does not authorize track work.

(a) Any employee discovering a hazardous condition, which may affect the safe passage of a movement, must by the use of flags, lights, fuses, radio, telephone, or other means, make every possible effort to stop and/or provide necessary instructions to any movement that may be affected.

PROTECTION OF TRACK WORK AND TRACK CONDITIONS

41. Protection of Track Work on Non-Main Track and in Cautionary Limits

This rule is not applicable on main tracks outside of cautionary limits, signalled sidings and other signalled tracks, or on other tracks specified in special instructions.

(i) A movement required to operate on a track protected by a red signal between the rails or a switch locked with a special lock must be stopped before passing it and be governed by any instructions from the foreman.

(ii) Only the foreman or an employee authorized by the foreman may remove the red signal and/or special lock.

(iii) Equipment must not be left on the same track that will block a clear view of any red signal.
OPERATION OF MOVEMENTS

62. Unattended Engines

When an engine is left unattended outside of an attended yard or terminal:

(a) the cab of the engine must be secured to prevent unauthorized entry; and
(b) subject to (c), the reverser must be removed from the engine;
(c) during subzero temperatures, an engine that does not have a high idle feature is exempt from (b).

80. Main Track Authorization

(a) A movement must not foul or enter a main track without authority.

101. Protection Against Extraordinary Conditions

(a) A movement must be fully protected against any known or suspected condition that may interfere with its safe passage.
(b) A movement must stop at once and be fully inspected when it is known or suspected to have struck any object that may interfere with its safe operation.
103. Public Crossings at Grade

(a) Where a railway track and a public road share the same roadbed and there is no fence or other barrier between them, moving rail cars not headed by an engine or when headed by a remotely controlled engine must be protected by a crew member on the leading car or on the ground, in a position to warn persons standing on, or crossing, or about to cross the track.

(b) When required by special instruction or when cars not headed by an engine, snow plow or other equipment equipped with a whistle and headlight, are moving over a public crossing at grade, a crew member must provide manual protection of the crossing until the crossing is fully occupied.

EXCEPTION: Manual protection of the crossing is not required provided the crossing is equipped with automatic warning devices and a crew member is on the leading car to warn persons standing on, or crossing, or about to cross the track. This exception does not modify the application of Rule 103.1 (a).

(c) Crew members must not give vehicular traffic a hand signal to proceed over a crossing.

(d) No part of a movement may be allowed to stand on any part of a public crossing at grade, for a longer period than 5 minutes, when vehicular or pedestrian traffic requires passage. Switching operations at such crossing must not obstruct vehicular or pedestrian traffic for a longer period than 5 minutes at a time. When emergency vehicles require passage, employees must cooperate to quickly clear the involved crossings.

(e) Equipment must not be left standing within 100 feet of the travelled portion of a public or private crossing at grade, except where it is necessary to leave such equipment for loading or unloading.

(f) Before switching or operating a remote control locomotive over an unprotected public crossing at grade where the view of the crossing by the locomotive engineer is obscured, arrangements must be made for a crew member or other employee to be in position to observe the crossing and give signals and instructions to the locomotive engineer as necessary.

(g) When providing manual protection of a crossing, a crew member or other qualified employee must be on the ground ahead of the movement, in a position to stop vehicular and pedestrian traffic before entering the crossing. A hand signal by day and a light or a lighted fusee by night will be used to give a signal to stop vehicular and pedestrian traffic over such crossing. The movement must not enter the crossing until a signal to enter the crossing has been received from the employee providing the manual protection.

When the crossing is known to be clear of traffic, and will remain clear until occupied, manual protection need not be provided.

103.1 Public Crossings at Grade with warning devices

(a) When a movement passes over any public crossing at grade equipped with automatic warning devices, it will be necessary, before reversing over the crossing, for a crew member to provide manual protection of the crossing.
(c) A movement on non-main track over a public crossing at grade, equipped with automatic warning devices, must not exceed 10 miles per hour from a distance of 300 feet until the crossing is fully occupied.

(d) At a public crossing at grade where special instructions require that warning devices be operated by pushbutton, or other appliances, or that movements stop at stop signs, movements affected must not occupy the crossing until the warning devices have been operating for at least 20 seconds. Pushbutton boxes must be closed and locked when not in use.

(e) Equipment must not be allowed to stand so as to cause the unnecessary operation of warning devices.

(f) When advised by special instructions that rusty rail or other conditions may exist, occupancy of crossings with automatic warning devices must be manually protected unless it is known that warning devices have been operating for at least 20 seconds.

(g) At crossings equipped with automatic warning devices indicated in special instructions, movements must not accelerate by more than 5 MPH unless automatic warning devices are known to have been operating for at least 20 seconds.

(h) Employees observing the improper operation of any automatic warning device must notify the person responsible for the territory by the quickest available means. The person notified must immediately notify those charged with repair and/or responsibility.

(i) The person responsible for the territory must instruct all affected movements to apply Rule 103(g).

104. Hand Operated Switches

General

(a) Operation of Switches - semi-automatic, spring, dual control or auto-normal switches operated by hand are considered hand operated switches, and all rules governing hand operated switches apply.

(b) Except while being turned, each switch must be secured with an approved device. When a switch has been turned, the points must be examined and the target, reflector or light, if any, observed to ensure that the switch is properly lined for the route to be used.

(c) A switch must not be turned while any part of a car or engine is between the switch points and the fouling point of the track to be used, except when making a running switch or in the application of the exception to Rule 114.

(e) If it is known or suspected that either of the points or any part of a switch is damaged or broken, the switch must be protected until it can be made safe for use.

(f) When a switch point lock is provided, it must be locked when the switch is left in normal position. Employees must familiarize themselves with the location of switch point locks.

Hand Operated Non-Main Track Switches

(o) Non-main track switches, when equipped with a lock, must be lined in normal position and locked after having been used.
104.1 Spring Switches

(a) A spring switch will be identified by a spring switch sign bearing the letters “SS”.

(b) Employees must keep clear of the switch handle while it is being lifted or released.

(c) When trailing through a spring switch, a movement that stops must not be reversed, nor slack taken, until the switch has been properly set by hand.

(d) When ice or snow conditions warrant, all movements must stop before trailing through a spring switch and examine the switch points, cleaning them if necessary.

(e) When a movement is required to operate over a spring switch in the facing point direction at RESTRICTED speed, a stop must be made before the leading wheels are on the switch points, and the switch points must be examined from a position on the ground.

   • (i) If the points are found to be properly closed the movement will be governed by the indication of the signal, if any.

   • (ii) If the switch points are not properly closed and cannot be closed by use of the switch handle, the points must be spiked in the proper position and the movement will be governed by the indication of the signal, if any.

After operating over a spiked spring switch, the spike must be removed and the employee in charge notified as quickly as possible.

104.4 Semi-automatic switches

(a) A semi-automatic switch will be equipped with reflectorized targets.

(b) When ice or snow may affect the ability of the switch points on a semi-automatic switch to close properly when operated by wheel flange, a member of the crew must manually line the switch and ensure the points are properly lined before a trailing move is commenced over the switch. Movements operating in a facing point direction must observe the position of the points in addition to the target indication before proceeding over a semi-automatic switch.

(c) After coupling to equipment at a semi-automatic switch, or when reversing direction through such switch, a facing point move must not be made, unless one unit of equipment has trailed entirely through the switch, or it is known that the points are properly lined for the movement.

104.5 Derails

(a) The location of each derail will be marked by a sign, unless otherwise directed by special instructions. Employees must be familiar with the location of each derail.

(b) A movement or track unit must stop short of a derail set in the derailing position.

(c) Each derail, other than a Special Derail or a Blue Flag Derail, must be left in the derailing position.

(d) The location of SPECIAL DERAIRS will be indicated in the time table or special instructions, will be switch stand operated and identified in the field with a reflective red
letter “D” on a reflective yellow target, or a sign indicating “Special Derail” which will be visible when in the derailing position.

The following requirements govern their use:

- they will only be in the derailing position when unattended equipment is present;
- equipment to be left must be coupled together except when required to clear a crossing or on account of a mechanical defect; and
- movements required to move at RESTRICTED speed on a track where a SPECIAL DERAIL is located must, in addition to the requirements of RESTRICTED speed, approach such derail prepared to find it in the derailing position.

(e) All derails must be left secured with a locking device.

(f) Derails used in conjunction with blue flags will be in the derailing position only when protection for personnel is required. When protection is no longer required, they will be locked in a non-derailing position.

(g) Where hand operated switch point derails are in use, the points must be examined and the target observed to ensure that the derail is in the proper position.

105. Operation on Non-Main Track

A movement using non-main track must operate at REDUCED speed and be prepared to stop short of the end of track or the red signal prescribed by Rule 41.

(b) Movements operating on non-main tracks must not exceed fifteen (15) MPH.

(c) In addition to moving at REDUCED speed, a movement using non-main tracks must operate at a speed that will allow it to stop within one-half the range of vision of a track unit.

106. Crew Responsibilities

All crew members are responsible for the safe operation of movements and equipment in their charge and for the observance of the rules. Under conditions not provided for by the rules, they must take every precaution for protection.

A utility employee becomes a crew member when working with any movement.

108. Precautions While Switching

When switching is performed, precautions must be taken by crew members to prevent unintended rollbacks and/or fouling of other tracks and equipment.

112. Leaving Equipment Unattended

In the application of this rule:

(i) Equipment is considered unattended when an employee is not in close enough proximity to take effective action to stop the unintentional moving of equipment.
(ii) Physical securement or mechanical devices are:

- hand brakes;
- air brakes;
- derailed;
- mechanical emergency devices;
- locomotive equipped with a reset safety control (RSC) with roll-away protection where air pressure is maintained by continuous operation or auto start is provided;
- bowled terrain; and
- if in a yard: retarder, stop-block, wheel chocks and skates.

(iii) High risk locations, as determined by a risk assessment, must be identified in company instructions.

(a) When equipment, including a locomotive without an air source, is left unattended on a main track, subdivision track, siding or high risk location, at least the minimum number of hand brakes as indicated in the hand brake chart in (k) must be applied and determined to be sufficient through an effectiveness test described in (e), and at least one additional physical securement or mechanical device must be used. When air brakes are used as an additional means of physical securement:

(i) the air brake system must be charged to ensure proper brake application; and

(ii) the brake pipe must be fully vented at a service rate or have an emergency application and, on freight equipment, the angle cock left open.

(iii) the equipment may only be left unattended for up to a maximum of two hours.

If required to be left longer, an employee must conduct a visual verification to confirm that the equipment remains secure. The verification must confirm the air brake pistons are fully extended and the hand brakes remain applied. This verification must be carried out at consecutive intervals of two hours or less. If any motion is detected during the verification, additional hand brakes must be applied. The results of that verification must be communicated to another employee.

(b) When unattended equipment is left coupled to a locomotive with an air source on a main track, subdivision track, siding or high risk location, at least the minimum number of hand brakes as indicated in the hand brake chart in (k) must be applied and determined to be sufficient through an effectiveness test described in (e), and at least one additional physical securement or mechanical device must be used. When air brakes are used as an additional means of physical securement:

(i) the locomotive controlling the air brake system must maintain pressure;
(ii) the air brake system must be charged to ensure proper brake application and the equipment must be left with air brakes applied; and

(iii) the independent brake must be fully applied.

(c) When equipment is left unattended in a yard, at least one physical securement or mechanical device must be utilized.

(d) When equipment is left unattended on non-main track, at other than a yard, siding, subdivision track, or high risk location, a sufficient number of hand brakes must be applied and determined sufficient through an effectiveness test described in (e). Special instructions must indicate the minimum hand brake requirements for these locations where equipment is left unattended.

(e) When hand brakes are used, an effectiveness test must be performed as follows: release all air brakes and,

(i) allow or cause the slack to adjust. It must be apparent when slack runs in or out, that the hand brakes are sufficient to prevent the equipment from moving; or

(ii) apply sufficient tractive effort to determine that the hand brakes provide sufficient force to prevent the equipment from moving when tractive effort is terminated.

(f) Hand brakes must be applied on all locomotives in the lead consist of an unattended movement.

(g) Application of hand brakes must not be done while equipment is being pulled or shoved.

(h) Before leaving equipment at any location, the employee securing such equipment must confirm with another employee the manner in which the equipment has been secured.

(i) Exceptional weather situations, such as high winds or other unusual conditions, must be considered and factored into securement decisions. When exceptional weather situations emerge, previously secured equipment may require additional means of securement. Special instructions may contain location specific instructions where extreme weather events are prevalent.

(j) When advised that trespasser(s) or emergency responder(s) have been in contact with unattended equipment, the person responsible for the territory must make arrangements to have an employee verify the equipment remains secured without delay.

(k) In the application of this chart, the number of hand brakes on locomotives in the lead consist shall not to be included in the number of hand brakes required by the chart.
Minimum Required Number of Hand Brakes for Securing Equipment or Movements Left Unattended

<table>
<thead>
<tr>
<th>Total Tons:</th>
<th>Average Grade is Equal To or Less Than</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>0.2%  0.4%  0.6%  0.8%  1.0%  1.2%  1.4%  1.6%  1.8%  2.0%  2.2%  2.4%  &gt; 2.4%</td>
</tr>
<tr>
<td>0 - 2000</td>
<td>2  2  2  4  6  6  8  10  10  12  12  14</td>
</tr>
<tr>
<td>&gt; 2000 - 4000</td>
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<td>&gt; 10000 - 12000</td>
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</tr>
<tr>
<td>&gt; 12000 - 14000</td>
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</tr>
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<td>&gt; 14000 - 16000</td>
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</tr>
<tr>
<td>&gt; 16000 - 18000</td>
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<td>&gt; 18000 - 20000</td>
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</tr>
<tr>
<td>&gt; 20000 - 22000</td>
<td>8  12  22  36  50  64  78  94  110</td>
</tr>
<tr>
<td>&gt; 22000 - 24000</td>
<td>8  12  24  38  54  70  86  104  122</td>
</tr>
<tr>
<td>&gt; 24000 - 26000</td>
<td>10  14  26  42  58  76  94  112  134</td>
</tr>
<tr>
<td>&gt; 26000 - 28000</td>
<td>10  14  28  46  64  82  104  124  148</td>
</tr>
</tbody>
</table>

100% Hand Brakes
Minimum Required Number of Hand Brakes for Securing Equipment or Movements Left Unattended

<table>
<thead>
<tr>
<th>Average Grade is Equal To or Less Than</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2% 0.4% 0.6% 0.8% 1.0% 1.2% 1.4% 1.6% 1.8% 2.0% 2.2% 2.4% &gt; 2.4%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Tons:</th>
<th>12</th>
<th>16</th>
<th>30</th>
<th>50</th>
<th>68</th>
<th>90</th>
<th>110</th>
<th>136</th>
<th>162</th>
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<tbody>
<tr>
<td>&gt; 28000 - 30000</td>
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<td>16</td>
<td>34</td>
<td>52</td>
<td>74</td>
<td>96</td>
<td>120</td>
<td>148</td>
<td>172</td>
</tr>
<tr>
<td>&gt; 30000</td>
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<td>16</td>
<td>34</td>
<td>52</td>
<td>74</td>
<td>96</td>
<td>120</td>
<td>148</td>
<td>172</td>
</tr>
</tbody>
</table>

113. Coupling to Equipment

(a) Before coupling to equipment at any point, care must be taken to ensure that such equipment is properly secured.

(b) Unless otherwise specified in special instructions, before coupling to or moving equipment being loaded or unloaded, all persons in or about such equipment must be notified. Vehicles and loading or unloading devices must be clear.

(d) When coupling to equipment for any purpose except when humping or flat switching where cars are intentionally let run free, the coupling must be stretched to ensure it is secure.

(e) To prevent by-pass couplers when coupling to equipment on other than tangent track, a stop must be made not less than 6 nor greater than 12 feet from the coupling and extreme caution must then be used, ensuring couplers are properly aligned prior to coupling being made.

(f) After coupling, the equipment must be checked for applied hand brakes as may normally be expected to be present.

114. Fouling Other Tracks

(a) Equipment must not be allowed to move foul of another track unless properly protected.

(b) A movement must not foul a track until the switches connected with the move are properly lined, or in the case of semi-automatic or spring switches, the conflicting route is known to be clear.

EXCEPTION: A movement may foul a track connected by a hand operated switch provided that:

(i) neither the track occupied nor the track to be fouled are main tracks;

(ii) the conflicting route is known to be clear; and

(iii) the switch is properly lined before the movement passes over it.
(c) Equipment must not be left foul of a connecting track unless the switch is left lined for the track upon which such equipment is standing.

115. Shoving Equipment

(a) When equipment is shoved by an engine or is headed by an unmanned remotely controlled engine, a crew member must be on the leading piece of equipment or on the ground, in a position to observe the track to be used and to give signals or instructions necessary to control the move.

**EXCEPTION:** A crew member need not be so positioned when the portion of the track to be used is known to be clear. However, equipment not headed by an engine must not approach to within 100 feet of any public, private or farm crossing unless such crossings are protected as described in Rule 103 paragraph (b) or (g).

(b) Known to be clear is defined as seeing the portion of the track to be used as being clear and remaining clear of equipment and as having sufficient room to contain equipment being shoved. This determination must be made by a qualified employee who can observe the track and has radio contact with the employee controlling the movement. Where a track that has been seen to be clear and no access to that track is possible by another movement, the track may be considered as “known to be clear”.

**Note:** When it can be determined that other movements are not on duty or will not be performing work in the track to be used, the requirement of “known to be clear” can be considered to be fulfilled continuously.

(d) Unless the route is known to be clear, when reversing with a locomotive consist and visibility is restricted, a member of the crew must be on the leading end and in position from which signals necessary can be properly given.

116. Running Switch

Before making a running switch, crew members affected must understand the move to be made. It must be known that the switch and hand brakes are in working order before the move is commenced. A running switch must not be made;

(i) with or onto occupied equipment, or equipment placarded to indicate it contains or contained dangerous goods;

(ii) where the switch to be used is a dual control, power-operated or spring switch; or

(iii) within interlocking limits of a drawbridge or railway crossing at grade.

A minimum of 3 qualified employees must be utilized when performing a running switch.

**RADIO**

117. Reliability Tests

The crew of a movement when equipped with radios must carry out an intra-crew test of such radios before leaving their initial terminal, change-off or starting point. When a movement is equipped with a single radio, it must be voice tested as soon as practicable after the crew commences duty.
118. Devices Used in Lieu of Radio

When a communication device is used in lieu of a radio, all radio rules are applicable.

119. Continuous Monitoring

(a) When not being used to transmit or receive a communication, receivers must be set to the appropriate standby channel and at a volume which will ensure continuous monitoring. When required to use another channel to perform other duties, at least one radio, when practicable, should be set to the designated standby channel to receive emergency communications.

120. Radio Terms

(a) In radio communication the following terms when used will denote:

“STAND BY” - Monitor this channel for my next transmission.
“OVER” - Transmission is ended and a response is expected.
“OUT” - Transmission is ended and no response is expected.

(b) OPTIONAL:

Except when radio communication relates to switching operations, when a transmission is complete and a response is expected or required, the transmitting employee must end each transmission with the spoken word “OVER”.

121. Positive Identification

(a) The person initiating a radio communication and the responding party must establish positive identification. The initial call must commence with the railway company initials of the person being called.

In addition, when a non-railway company person is calling on a company’s channels, they must use their company’s name to identify themselves within the initial transmission.

(b) The person initiating the radio communication must end the initial call with the spoken word “OVER.”

(c) Each party to a radio communication must end their final transmission with the spoken word “OUT.”

122. Content of Radio Communications

Radio communications must be brief and to the point and contain only essential instructions or information.

123. Verification Procedures

(c) when verbal instructions or information affecting the safety of a movement are received by radio, such information must be repeated to the sender.

123.1 Radio or Hand Signals

Before changing between radio or hand signals, a definite understanding as to the method of communication must be established between crew members giving or receiving instructions. In case of an emergency, either method may be used in addition to that previously arranged.
123.2 Switching by Radio

When radio is used to control switching, and after positive identification has been established, the following procedures are required:

(i) direction in relation to the front of the controlling locomotive must be given in the initial instruction and from then on whenever the direction is to change;

(ii) distance to travel must be given with each communication and increments of less than two car lengths need not be repeated;

(iii) when the movement has travelled one-half the distance required by the last instruction and no further communication is received, the movement must stop;

(iv) the indication of block and interlocking signals affecting their movement, must be communicated between crew members while switching;

(v) doubt as to the meaning of an instruction or for whom it is intended must be regarded as a stop signal; and

(vi) when car lengths are used to communicate distance, unless otherwise arranged, the distance referred to is 50 feet per car length.

125. Emergency Communication Procedures

(a) An employee will transmit the word “EMERGENCY” three times at the beginning of the transmission to indicate the report of;

(i) an accident involving injury to employees or others;

(ii) a condition which may constitute a hazard to employees or others;

(iii) a condition which may endanger the passage of movements; or

(iv) a derailment which has occurred on, or is fouling, a main track.

(b) When an emergency communication, which is directed to a specific person or movement, has not been acknowledged, any other employee hearing it will, if practicable, relay the communication by any means available. Other employees must not interfere with such communication.

(c) An emergency communication has absolute priority over other transmissions.

126. Restricted Use of Radio

In addition to the restrictions in Rules 14 radio must not be used to;

(ii) give information which may influence a crew to consider that speed restrictions are diminished.