

Alberta Streetcar Guidelines

Table of Contents

Part		
1	Definitions	P 01
2	Application.....	P 04
3	Operators responsible for work of contractors	P 04
4	Operating Guideline	P 04
5	Inspection and Safety Guideline	P 16
6	Guideline Respecting Track Safety	P 19
7	Brake Guideline	P 29
8	Employee Qualification Standards.....	P 30
9	Safety Critical Positions Guideline	P 34
10	Medical Guideline for Positions Critical to Safe Streetcar Operations	P 34
11	Roadway and Pedestrian Crossings Protective Devices.....	P 35
12	Passenger Handling Safety Guideline	P 36
13	Overhead Wire and Supply Guideline	P 38

Part 1

Definitions

1 In this Guideline

- 1.1 “Act” means the Railway (Alberta) Act;
- 1.2 “AREMA Communications and Signals Manual” means the Communications and Signals Manual of Recommended Practice published by the Communications and Signals Group of the American Railway and Maintenance of Way Association, as amended from time to time;
- 1.3 “brakes” means air pneumatic, electro pneumatic or hydro pneumatic or electric brake systems;
- 1.4 “brake test” means a test made for the purpose of establishing that the brake system functions as intended, as outlined in this Guideline and Streetcar motorman instructions;
- 1.5 “competent” in relation to an employee, means that the employee, in the opinion of the employer
 - (a) is suitably trained to perform their assigned duties, having received a health and safety orientation, specific work-related instructions and on-the-job training, and
 - (b) has sufficient experience, having worked under direct supervision and having demonstrated, through performance, the ability to perform work safely without supervision or with minimal supervision;
- 1.6 “candidate” means an employee who is required to undergo examination and on-job street training in accordance with this Guideline in order to be qualified to work in a Streetcar operation;
- 1.7 “classroom streetcar instructor” means a person qualified by the operator;

- 1.8 “communicating signal system” means a system which enables the streetcar crew to communicate with each other;
- 1.9 “conductor” means a person qualified by an operator to ensure the safety of passengers on board the streetcar and during the loading and unloading of passengers.
- 1.10 “operating bulletin” means instructions regarding track condition restrictions and other information which affect the safety and movement of a streetcar within limits indicated in the timetable or specified in special instructions;
- 1.11 “department” means Alberta Transportation;
- 1.12 “emergency response procedures” means those procedures a streetcar railway has in effect governing the manner in which the operator and its employees respond to emergency situations;
- 1.13 “employee” means a person employed by or acting on behalf of a the operator, and includes an employee of a contractor or a volunteer;
- 1.14 “contractor” means a person or company contracted to carry out one or more of the functions or duties of a streetcar operator under this Guideline;
- 1.15 “equipment” means one or more streetcars that can be handled on their own wheels in a movement;
- 1.16 “examiner” means a person who is qualified under this Guideline(s) to examine employees;
- 1.17 “fixed signal” means a signal or sign at a fixed location indicating a condition affecting the operation of a movement;
- 1.18 “general operating instructions” means a document prepared by an operator containing site-specific descriptive information, approved site-specific procedures and special instructions relating to a streetcar operation;
- 1.19 “Inspector” means a competent person who is trained by the operator to perform inspection on streetcars and track;
- 1.20 “line of track” or “track” means a railway of any length, including yard tracks, sidings, spurs and other tracks auxiliary thereto, and including the right-of-way and the structures supporting or protecting the track or facilitating drainage from the track;
- 1.21 “main track” means a track between stations or platforms, upon which streetcars travel;
- 1.22 “medical practitioner” means a medical doctor or a registered nurse employed by an operator;
- 1.23 “motorman” means a person qualified by an operator to functionally operate a streetcar;
- 1.24 “movement” means the transfer of passengers from one location to another;
- 1.25 “on-job street car training” means instruction provided to an employee by an on-job streetcar instructor in the work environment appropriate to streetcars;

- 1.26 “on-job streetcar instructor” means a person who is qualified by the operator to instruct employees during on-job streetcars;
- 1.27 “operative” means a component or system that is in a safe condition to perform its intended function;
- 1.28 “operator” means a company, organization, society or otherwise responsible for a streetcar operation that is under the jurisdiction of the Railway (Alberta) Act;
- 1.29 “person in charge” means a person responsible for ensuring the safe conduct of the work of employees;
- 1.30 “qualified person” means, in respect of a specified duty, a person who, because of their knowledge, streetcar training and experience, is qualified to perform that duty safely and properly;
- 1.31 “railway safety officer” means an Alberta Transportation officer designated under section 51 of the Railway (Alberta) Act;
- 1.32 “required subject” means a subject listed in Table A that is required in order to qualify for the category;
- 1.33 “safety control” means a device that must cause a brake application to be initiated automatically and tractive force removed if the streetcar motorman becomes incapacitated;
- 1.34 “safety critical position” means a railway position directly involved in the operation of a streetcar;
- 1.35 “safety inspection location” means a location designated by an operator where competent car inspectors perform inspections and testing of streetcar brakes;
- 1.36 “schedule” means information pertaining to the movement and times of a streetcar. A schedule does not convey operating authority;
- 1.37 “signal indication” means the information conveyed by a fixed signal;
- 1.38 “single track” means one main track upon which streetcars are operated in both directions;
- 1.39 “station” means a location identified by a station name sign and designated by that name in the timetable;
- 1.40 “streetcar” means a self-propelled vehicle on rails, used primarily for transporting passengers, typically on city streets;
- 1.41 “streetcar motorman” or “conductor” means a person who is deemed to be competent by the operator to fulfill the functions of the position;
- 1.42 “timetable” means the document which contains route information, footnotes and special instructions relating to the movement of streetcars;
- 1.43 “track inspector” means an employee of the operator appointed in this capacity;

- 1.44 “track supervisor” means an employee of the operator appointed in this capacity;
- 1.45 “yard” means a system of tracks, other than main tracks, provided for storing of streetcars and for other purposes, over which movements may be made, subject to prescribed signals, Guideline and special instructions.

Part 2

Application

1 Scope

- 1.1 This Guideline applies to streetcars operated wholly or in part within the confines of an historical park or similar park or site.

Part 3

Operators responsible for work of contractors

1 Responsibility

- 1.1 If an operator contracts with a person or company to carry out one or more of the functions or duties of the operator under this Guideline, the operator shall ensure that the contractor complies with this Guideline as if the contractor were the operator.

Part 4

Operating Guideline and Standards

1 General Notice

- 1.1 Safety and a willingness to obey these Guidelines are of the utmost importance in the performance of duty. If in doubt, the safe course must be taken.
- 1.2 An operator shall develop and maintain general operating instructions in respect of its streetcar operations using the Streetcar Guideline as a guide. General operating instructions must not contain instructions for anything other than streetcar operations.

2 General Guideline

- 2.1 Every employee in any service connected with the movement of streetcars shall
 - (a) be subject to and conversant with these Guidelines, special instructions and general operating instructions,
 - (b) have a copy of these Guidelines and the general operating instructions accessible while on duty,
 - (c) provide every possible assistance to ensure that every rule, special instruction and general operating instruction is complied with and shall report promptly to the person in charge of streetcar operations any violation of this Guideline(s),

- (d) communicate by the quickest available means to the person in charge of streetcar operations any condition that may affect the safe movement of a streetcar and be alert to the operator's interest, and join forces to protect it,
- (e) obtain assistance promptly when required to control a harmful or dangerous condition,
- (f) be conversant with and governed by every safety rule and instruction of the operator pertaining to the employee's occupation,
- (g) recertify based on job classification at prescribed intervals, not to exceed 3 years,
- (h) seek clarification from the person in charge of streetcar operations if in doubt as to the meaning of any rule or instruction, and
- (i) conduct themselves in a courteous and orderly manner.

2.2 Special instructions will be found in general operating instructions and operating bulletins.

They may be appended to or included within copies of this Guideline but do not diminish the intent of the Guideline unless the Railway Administrator has granted an exemption.

2.3 Employees must

- (a) be vigilant to avoid the risk of injury to themselves or others,
- (b) expect the movement of a streetcar at any time, on any track, in either direction,
- (c) not stand in front of an approaching streetcar for the purpose of boarding such equipment, and
- (d) not ride the side or above the roof of a moving streetcar when passing side or overhead restrictions.

2.4 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.

2.5 Side and overhead clearance may be restricted on a track at a streetcar shop track. Employees must not ride on top or on the side of equipment when on any shop track, whether or not the side or overhead clearance is restricted.

2.6 The use or possession of intoxicants or narcotics by employees on duty or subject to duty is prohibited.

2.7 The use or possession of mood altering agents by employees on duty or subject to duty is prohibited except as prescribed by a doctor.

2.8 The use of drugs, medication or mood altering agents, including those prescribed by a doctor, that in any way will adversely affect an employee's ability to work safely is prohibited.

- 2.9 Employees must know and understand the possible effects of drugs, medication or mood altering agents, including those prescribed by a doctor that in any way will adversely affect the employee's ability to work safely.

3 Operating Guideline

- 3.1 Unless otherwise specified, this Guideline is applicable without respect to the number of tracks.
- 3.2 The Guideline pertaining to the main track also applies to tracks specified and other signalled tracks.
- 3.3 Radio may be used to communicate information or instructions except when its use is restricted by this Guideline, special instructions or general operating instructions.
- 3.4 Wherever the following occupational names or titles appear in this Guideline, special instructions or general operating instructions, they apply to the employee who is qualified and responsible for performing the duties of
- (a) a motorman,
 - (b) a conductor, or
 - (c) a foreman or supervisor.
- 3.5 In this Guideline, special instructions and general operating instructions
- (a) the term "streetcar" also applies to a streetcar with cars,
 - (b) the term "conductor" also applies to a yard foreman, and
 - (c) the term "motorman" also applies to a yard foreman.
- 3.6 In this Guideline, when the distance prescribed for the placement of signals, signs or flags are not possible due to track configuration, the maximum distance available applies.
- 3.7 In this Guideline, a streetcar must be operated at a reduced speed that will permit safe stopping
- (a) short of any equipment within 1/2 the range of vision of equipment,
 - (b) short of a switch not properly lined,
 - (c) in response to a hand signal,
 - (d) in response to a red signal,
 - (e) in response to a derail set in the derail position, and
 - (f) in response to an unsafe condition, but
 - (g) in no case in excess of 10 mph.






Signals - General

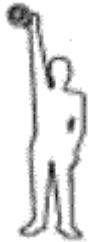
4 Hand signals

4.1 Employees whose duties may require them to give hand signals must have the proper appliances and 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. Signals must only be given by one designated person.

Method of Display and Indication

- (a)  Swung from side to side at a right angle to the track:
STOP
- (b)  Swung in a circle at a right angle to the track at a speed in proportion to the speed required:
MOVE BACKWARD
- (c)  Raised and lowered at a speed in proportion to the speed required:
MOVE FORWARD
- (d)  Held horizontally at arm's length:
REDUCE SPEED
- (e)  Raised and swung horizontally above the head, at right angle to the track when standing:
APPLY AIR BRAKES

- (f)  Raised and held at arm's length above the head when standing:
RELEASE AIR BRAKES

- (g) Any object waved violently by anyone on or near the track:
EMERGENCY STOP

- 4.2 A signal given to move forward or move backward must be given in relation to the controlling end of the streetcar.
- 4.3 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.
- 4.4 When switching is being performed, signals shall be given directly to the street car whenever practicable. The conductor is responsible for seeing that they are in the proper position to give or relay signals to the streetcar motorman.
- 4.5 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.
- 4.6 A crew member, whose streetcar is clear of the main track, must not give an approaching streetcar a hand signal to move forward.

5 Radio or hand signals

- 5.1 Radio will be used to communicate signals or instructions, but, if conditions require, hand signals may be used in lieu of radio. Before changing from radio to hand signals or from hand signals to radio, a definite understanding as to the method of control 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.

6 Switching by radio

- 6.1 When radio is used to control a switching movement, and after positive identification has been established, the following procedures are required:
- (a) direction in relation to the front of the controlling streetcar must be given in the initial instruction and from then on whenever the direction of movement is to change,
 - (b) distance to travel must be given with each communication, and

- (c) when the movement has travelled one-half the distance required by the last instruction and no further communication is received the movement must be stopped at once.

Note: Doubt as to the meaning of an instruction or for whom it is intended must be regarded as a stop signal.

7 Streetcar gong

- 7.1 The streetcar gong must be rung when
 - (a) a streetcar is about to move, or
 - (b) passing a streetcar standing on an adjacent track,

8 Streetcar gong failure

- 8.1 If the streetcar gong fails, repairs must be made as quickly as possible.

9 Headlight

- 9.1 The full power of the headlight in the direction of movement must be illuminated during hours of darkness.

10 Headlight failure

- 10.1 If the headlight on a streetcar fails during hours of darkness, the streetcar must be operated a reduced speed and the headlight repaired as soon as possible.

11 Markers

- 11.1 Markers when so equipped, lighted or reflectorized, will display to the rear of every streetcar by day and by night.

12 Blue signal protection

- 12.1 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 that permits entry of a streetcar 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 blue flag signals from the equipment indicates that no workmen are in the vicinity of the equipment and such equipment may be coupled to or moved.
- 12.2 Other equipment must not be placed on the same track that will block a clear view of the blue signals without first notifying the workmen. When equipment is placed on the same track, the streetcar placing such equipment must remain on that track until the workmen have relocated the blue signals to include the additional equipment.
- 12.3 Each class of workmen must display the blue signals and only that same class of workmen is authorized to remove them.

- 12.4 Special instructions must govern the use of other approved methods of protecting workmen performing equipment repairs or inspections.

13 Fixed signal recognition and compliance

- 13.1 The crew on a streetcar must know the indication of each fixed signal, including switches where practicable, before passing it.

14 Emergency protection

- 14.1 Any employee discovering a hazardous condition which may affect the safe passage of a streetcar must, by the use of flags, lights, radio, telephone or other means, make every possible effort to stop or provide necessary instructions to any streetcar that may be affected. Flag protection must be provided on the main track unless or until otherwise relieved of the requirement.
- 14.2 A flagman must go the required distance from the hazardous condition, and in each direction when possible, to ensure that an approaching streetcar will have sufficient time and distance to be able to stop before the condition. Unless otherwise provided, a flagman must go at least 100 feet from the condition to a location where there will be a clear view of the flagman from an approaching streetcar.
- 14.3 When a streetcar is observed approaching, the flagman must display a stop signal using a red flag by day or a light by night, or when day signals cannot be plainly seen. The streetcar flagman must continue to display the stop signal until the streetcar being flagged has
- (a) come to a stop, or
 - (b) reached the location of the flagman.
- 14.4 A streetcar stopped by a flagman must not proceed until so instructed by the flagman.

15 Protection of track work

- 15.1 Before any track work is started that may make the track unsafe for a streetcar movement, employees will provide protection as follows:
- (a) each switch must be locked with a special lock in the position which will prevent a streetcar from operating on the portion of track where work is to be performed, and
 - (b) a red flag must be placed by day and, in addition, a red light must be used by night, or when day signals cannot be plainly seen, between the rails in each direction from the working point. Such signals must be placed at least 100 feet from the working point. When there is equipment on the track that prevents a clear view from an approaching streetcar, the red signals must be placed to include such equipment.
- 15.2 A streetcar must be stopped before passing it and must not proceed beyond such signal until it has been removed. An employee of the same class who placed the red signal may alone remove it, but only when authorized by the foreman of the conducting the work.

- 15.3 Equipment must not be placed on the track being protected that will block a clear view of the red signals.

Movement of Streetcars

16 Operating bulletins

- 16.1 Operating bulletins must be issued by the proper authority and in the format of the railway. They will be posted in a book provided for that purpose at stations or other locations designated in the timetable or operating bulletins. Operating bulletins must only contain information or instructions pertaining to the movement of streetcars. They will be numbered consecutively, beginning on the first day of each year.
- 16.2 Employees responsible for the placement of operating bulletins must post them in the book provided for that purpose immediately after they are received. They must record on each bulletin the time and date it is posted in the book.
- 16.3 Any bulletin that is voided or cancelled shall be marked as such. Any bulletin that is modified shall be voided and reissued as a new bulletin.
- 16.4 Before commencing work at a station or location where operating bulletins are posted, the conductor and the motorman must have read, understood and signed the operating bulletins.

17 Starting a streetcar

- 17.1 Must only move when it is safe to do so.

18 Protection against extraordinary conditions

- 18.1 A streetcar must be fully protected against any known or suspected condition which may interfere with its safe operations.
- 18.2 A streetcar must stop at once and be fully inspected when it is known or suspected to have struck any object which may interfere with its safe operation and the person in charge of the management of the streetcar operation must be notified immediately.

19 Public crossings at grade

- 19.1 No part of a streetcar 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. When emergency vehicles require passage, employees must cooperate to clear public crossings at grade and private crossings as quickly as possible.
- 19.2 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.
- 19.3 When providing manual protection of a public crossing at grade, a crew member must be on the ground ahead of the street car in a position to stop vehicular and pedestrian traffic before the street car enters the crossing. A hand signal by day, and a red light by night, must be used to give a signal to stop the movement of vehicular and pedestrian traffic over such crossing. The street car must not enter the crossing until a signal to

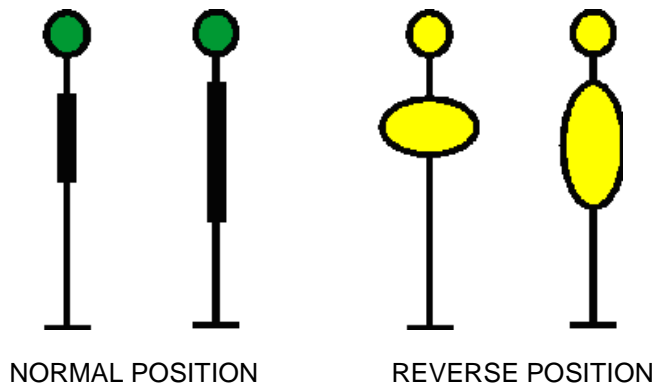
enter the crossing has been received from the crew member providing the manual protection.

20 Public crossings at grade with warning devices

- 20.1 At a public crossing at grade where special instructions require that warning devices be operated by pushbutton, or other appliances, or that streetcar movements stop at stop signs, streetcar movements affected must not obstruct the crossing until the warning devices have been operating for at least 20 seconds or the gate arms are in the horizontal position.
- 20.2 Equipment must not be allowed to stand so as to cause the unnecessary operation of warning devices.

21 Hand-operated switches

- 21.1 Unless otherwise specified by special instructions, the normal position for a main track switch is for main track movement. The main track switches must be lined and secured in normal position.
- 21.2 Unless otherwise specified by special instructions, switches other than main track switches, when equipped with a lock, must be lined in normal position and locked after having been used. When equipped with a target, light or reflector, it will indicate the following:



- 21.3 Except while being turned, each switch must be secured with an approved device.
- 21.4 When a switch has been turned, the points must be examined and the target, light or reflector, if any, observed to ensure that the switch is properly lined.
- 21.5 A switch must not be turned while any part of a streetcar is between the switch points and the fouling point of the track to be used.
- 21.6 On single track, a crew member of a street car stopped on the main track to meet or to be passed by another street car will, when practicable, reverse the switch for the approaching street car and protect it unless relieved by a crew member of the other street car.
- 21.7 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. A report must be made to the person in charge of the track as quickly as possible.

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

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

- (a) neither the track occupied nor the track to be fouled are main tracks,
 - (b) the conflicting route is seen or known to be clear, and
 - (c) the switch is properly lined before the movement passes over it.
- 21.9 Unless otherwise directed by special instructions, the normal position for a main track switch at the end of 2 tracks is when such switch is set for a streetcar leaving a single track for 2 tracks to operate to the right.
- 21.10 When a streetcar diverges from a main track, the switch used must not be restored to its normal position until the movement has cleared the fouling point.
- 21.11 When a crossover is to be used, the switch in the track on which the streetcar is standing must be reversed first. Both switches must be reversed before a crossover movement is commenced and the movement must be completed before either switch is restored to normal position.
- 21.12 Unless or until the switch is seen to be in normal position, streetcars approaching a main track hand-operated switch in a facing point direction, unless otherwise governed by signal indication, must not exceed 10 mph from 50 feet of the switch.

22 Derails

- 22.1 The location of each derail must be marked by a sign, unless otherwise directed by special instructions. Employees must be familiar with the location of each derail.
- 22.2 A streetcar must stop short of a derail set in the derailing position.
- 22.3 Each derail must be left in the derailing position. When so authorized by special instructions, a derail on a main track, siding or spur may be left in the non-derailing position only when stored equipment is not present.
- 22.4 Derails must be left secured with a locking device.

23 Crew responsibilities

- 23.1 A streetcar must run under the direction of either the conductor or the motorman.
- 23.2 The motorman of a streetcar is in charge of and responsible for the operation of the streetcar.
- 23.3 When a streetcar is operated without a conductor, the streetcar motorman will perform the duties of the conductor.
- 23.4 The conductor and street car motorman are responsible for the safe operation of the streetcar or equipment in their charge and for the observance of the Guideline. Under conditions not provided for by the Guideline, they must take every precaution for

protection. Other crew members are not relieved of their responsibility under the Guideline.

24 Restrictions at passenger streetcar stops

- 24.1 Unless otherwise directed by special instructions, a streetcar must move with extreme care when moving alongside a streetcar platform meant for the discharging or receiving passengers.

25 Streetcar inspection

- 25.1 The streetcar crew must know that equipment in their streetcar is in good order before starting and inspect it whenever they have an opportunity to do so. Streetcars added or exchanged during the route must be examined with extra care to ensure it is in good order.
- 25.2 When crew members are on the rear of a moving streetcar, they must inspect, at every opportunity, the track to the rear for evidence of dragging equipment or track damage.
- 25.3 All crew members on a streetcar must make frequent inspections of both sides of their streetcar to ensure that it is in good order.
- 25.4 On completion of crew-planned streetcar inspections and at locations where inspection is required by special instructions, crew members must, when possible, voice communicate to each other the results of such inspections.

26 Securing equipment

- 26.1 Unless otherwise directed by special instructions, a handbrake or other device must be applied on equipment left at any point to prevent it from moving.

27 Coupling to equipment

- 27.1 Before coupling to equipment at any point, care must be taken to ensure that the equipment is properly secured.
- 27.2 Before coupling to or moving equipment being loaded or unloaded, all persons in or about the equipment must be notified. Vehicles and loading or unloading devices must be clear.
- 27.3 Before coupling to or moving service equipment, employees occupying the equipment must be notified and attachments secured.

28 Fouling other tracks

- 28.1 Equipment must not be moved foul of another track unless the movement is properly protected.
- 28.2 Equipment must not be left foul of a connecting track unless the switch is left lined for the track upon which the equipment is standing.

29 Pushing equipment

- 29.1 When equipment is pushed by a streetcar, a crew member must be on the leading rail car or on the ground in a position to observe the track to be used and to give signals or instructions necessary to control the movement unless the motor man has a clear view over the equipment being pushed.
- 29.2 When equipment is pushed by a streetcar on a main track, the movement must not exceed 5 mph.

Radio

30 Reliability tests

- 30.1 The crew of a streetcar 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 streetcar is equipped with a single radio, it must be voice tested as soon as practicable after the crew commences duty.

31 Replacement of defective radios

- 31.1 A portable radio that is defective must be turned in for repairs as soon as practicable and exchanged for a working radio as soon as practicable.
- 31.2 The employee discovering a radio that is defective must attach a tag to it indicating the apparent nature of the defect.

32 Radio terms

- 32.1 In radio communication, the following terms, when used, will denote the corresponding meaning:
- (a) “STAND BY” - Monitor this channel for my next transmission,
 - (b) “OVER” - Transmission is ended and a response is expected,
 - (c) “OUT” - Transmission is ended and no response is expected, or
 - (d) the operator’s radio protocol.

33 Positive identification

- 33.1 The person initiating a radio communication and the responding party must establish positive identification.
- 33.2 The person initiating the radio communication must end the initial call with the spoken word “OVER”.
- 33.3 Each party to a radio communication must end their final transmission with the spoken word “OUT”.

34 Content of radio communications

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

35 Avoiding distraction

- 35.1 Operating bulletins, authorities or instructions must not be copied by the employee operating moving equipment if it will interfere with the safe operation of the equipment.

36 Emergency communication procedures

- 36.1 An employee will transmit the word “EMERGENCY” 3 times at the beginning of the transmission to indicate the report of
- (a) an accident involving injury to employees or others,
 - (b) a condition which may constitute a hazard to employees or others,
 - (c) a condition which may endanger the passage of streetcars, or
 - (d) a derailment which has occurred on, or is fouling, a main track.
- 36.2 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.
- 36.3 An emergency communication has absolute priority over other transmissions.

37 Radio special instructions

- 37.1 Special instructions necessary to govern the use of radios will be issued by the operator if required.

Part 5

Inspection and Safety Guideline

1 Scope

- 1.1 This Guideline prescribes the minimum safety standards for streetcars.

2 Operator responsibility

- 2.1 The operator is responsible for the inspection and repair of all streetcars to ensure safe operation. All components, appurtenances and control devices of all streetcars must be designed and maintained to perform their intended function.
- 2.2 An operator must reply in writing or by acceptable electronic means, within 30 days, to the Railway Administrator on the corrective action taken to correct a violation or defect reported by a railway safety officer. The reply, from an appropriate railway officer, shall also include the unit initials and number and the date and location of the corrective action taken.

3 Application of safety inspections and movement restrictions

- 3.1 An operator must ensure that streetcars placed or continued in service are free from all safety defects described in this Guideline.

- 3.2 A streetcar identified with safety defects may be moved to a designated location for repair when authorized by a person in charge.

4 Competent streetcar inspector

- 4.1 An operator must ensure that streetcar inspectors are competent to perform safety inspections of streetcars in compliance with this Guideline. Streetcar inspectors must demonstrate to an operator, by means of oral or written examinations and on-the-job performance, a knowledge and ability concerning safety inspection of streetcars.
- 4.2 An operator must maintain a record of competent streetcar inspectors who perform safety inspections. This record shall be made available to a railway safety officer on request.
- 4.3 Streetcar inspectors must be re-examined if they have not been performing the duties prescribed in these Guideline for a period of 3 years or more.

5 Safety inspection locations

- 5.1 A streetcar site is a safety inspection site for the purposes of this Guideline.
- 5.2 All streetcars placed into service shall receive a safety inspection at a minimum at the start of the season and again midterm of the season.
- 5.3 An operator must maintain a record of all streetcars that receive a safety inspection. This information must be retained for a minimum of 92 days and must be made available to a railway safety officer on request.

6 Pre-departure inspection

- 6.1 Where a streetcar is placed in service, or where a streetcar layover of more than 8 hours has occurred, the streetcar must, as a minimum requirement, be given a pre-departure inspection by either the motorman or other qualified person for those conditions listed in Appendix 1.
- 6.2 The motorman is responsible for determining that the prescribed inspection has been completed prior to departure.

7 Brake system

- 7.1 The brake system and all related components, including the handbrake, must be
- (a) in a safe operative condition, and
 - (b) where possible maintained in accordance with the brake manufacturer's requirements.
- 7.2 The operator shall have a streetcar brake maintenance plan in place. This plan must be made available to a railway safety officer on request.

8 Trucks

- 8.1 An operator shall not place or continue in service a streetcar with any of the following truck related defects:

- (a) cracked or broken truck frames, swing hangers, swing hanger pins or equalizers, and
- (b) suspension components, such as coil or rubber springs, elliptic springs, snubbers and dampers, must not be missing, cracked, broken or out of place and must be properly secured.

8.2 All components attached to the truck frames must be properly secured and maintained.

8.3 The truck frame, brake rigging and associated components of streetcar must be kept free from accumulation of oil, grease and other combustible materials.

9 Wheels and axles

9.1 An operator shall not place or continue in service a streetcar with any wheel or axle defect.

9.2 Wheels and axles are to be maintained in accordance with the manufacture's specifications when available and or safe streetcar operating practises reference to wheels.

10 Internal systems / areas of streetcars

10.1 The interior of a streetcar must be kept free from tripping hazards, sharp appliances, accumulation of oil, grease, fuel oil and other combustible materials.

11 Rail clearance

11.1 No part or appliance of a streetcar, except wheels and flexible non-metallic sand pipe extension tips, must be less than 2.5 inches (63.5 mm) above the top of the rail.

12 Windows

12.1 Windows on streetcars must be kept clean and free from cracks or obstructions. All related components such as wipers, sun visors and defrosters must be kept in operative condition.

12.2 Windows on streetcars must be equipped with safety glass by December 31, 2018.

13 Safety control equipment

13.1 Streetcars originally equipped with a safety control device must have an operative reset safety control.

14 Safety appliances

14.1 All safety appliances must be kept in a safe and operative condition.

15 Speed indicator

15.1 Streetcars originally equipped with a speed indicator shall not be placed in service without operative speed indicators.

16 Audible signals

16.1 All audible signal equipment must be in operative condition.

17 Illuminating devices

17.1 All illuminating devices must be secured and be in operative condition.

Streetcar Filing Requirements

18 Filing requirements with the Department

18.1 An operator, if requested, must file with the Railway Administrator a full description of the streetcar training program and criteria used

- (a) to perform safety inspections, and
- (b) to perform pre-departure inspections in accordance with Appendix 1.

Appendix 1

Pre-departure Inspection by a Streetcar Motorman or Other Qualified Person

1 Responsibility

1.1 A pre-departure inspection of a streetcar must be performed by the streetcar motorman or other qualified person for the following:

- (a) brake test, including the operation of the safety control system,
- (b) handbrake,
- (c) headlights,
- (d) trucks and running gear, and
- (e) any other apparent safety hazard likely to cause an accident or casualty.

2 Exceptions

2.1 Exceptions are to be reported for correction.

Part 6

Guideline Respecting Track Safety

1 Scope

1.1 This Part prescribes initial minimum safety requirements for streetcar track that is part of the streetcar system. The requirements prescribed in this Part apply to specific track conditions existing in isolation. Therefore, a combination of track conditions, none of which individually amounts to a deviation from the requirements in this Part, may require remedial action to provide for safe operations over that track. Nothing in this Guideline prevents an operator from prescribing a higher level of maintenance.

2 Application

- 2.1 This Guideline applies to all streetcars operated wholly or in part within the confines of an historical park or similar park or site in the province of Alberta.
- 2.2 The purpose of this Guideline is to ensure the safe operation of streetcars owned by, operated on or used by an operator.

3 Responsibility of an operator

- 3.1 Where a line of track is not in compliance with the requirements of these Guideline, the operator must immediately
 - (a) bring the line of track into compliance, or
 - (b) halt operations over that line of track.
- 3.2 Notwithstanding Rule 4.1, in the case of a line of track that is not in compliance with this Guideline, the operator may operate on that line of track for not more than 30 days if the operator considers it safe to do so.

4 Restoration or renewal of track under traffic conditions

- 4.1 If, during a period of restoration or renewal, a track is under traffic conditions and does not meet all of the requirements prescribed in this Part, the work on the track must be under the continuous supervision of a person designated under Rule 7. The term “continuous supervision” as used in this section means the physical presence of that person at a job site. However, since the work may be performed over a large area, it is not necessary that each phase of the work be done under the visual supervision of that person.

5 Track supervisors

- 5.1 Each operator must utilize competent persons or competent companies to supervise restorations and renewals of track under traffic conditions. These supervisors must also be qualified to inspect track for defects.

6 Track inspectors

- 6.1 Each operator must use competent persons or utilize a competent company to inspect track for defects.

7 Competency

- 7.1 No operator shall allow an employee of the operator to perform the duties of a track inspector or track supervisor unless the employee has, to the satisfaction of the operator, met the criteria established by the operator.
- 7.2 An operator must maintain a record of all competent employees.

8 Track inspection

8.1 A track inspector or track supervisor shall undertake track inspection at such frequency and by such a method as to ensure that a line of track is safe for operation of a streetcar at the authorized speed.

9 Operating speed limits

9.1 The following maximum allowable operating speed is 10 mph.

10 Drainage

10.1 Each drainage or other water-carrying facility under or immediately adjacent to the roadbed must be maintained and kept free of obstruction to accommodate expected water flow for the area concerned.

11 Vegetation

11.1 Vegetation on operator property that is on or immediately adjacent to the roadbed must be controlled so that it does not

- (a) become a fire hazard to track-carrying structures,
- (b) obstruct visibility of railway signs and signals,
- (c) interfere with railway employees performing normal track side duties,
- (d) prevent proper functioning of signal and communication lines, or
- (e) prevent railway employees from visually inspecting moving equipment from their normal duty stations.

Track Geometry

12 Scope

12.1 This Division prescribes requirements for the gauge, alignment and surface of track, and the elevation of outer rails and speed limitations for curved track.

13 Gauge

13.1 Gauge is measured between the heads of the rails at right angles to the rails in a plane 5/8 of an inch below the top of the rail head.

13.2 Gauge must be within the limits prescribed by the operator:

Change in gauge over 20 feet either side of site of narrow gauge	Maximum permissible speed
More than 1 1/8 inches	10 miles per hour

14 Alignment

- 14.1 Alignment may not deviate from uniformity more than the amount prescribed in the following table:

Class of Track	Tangent track - the deviation of the mid-offset from 62-foot line¹ may not be more than	Curved track - the deviation of the mid-offset from 62-foot chord² may not be more than
Streetcar track	1 3/4 inches	1 3/4 inches

¹ The ends of the line must be at points on the gauge side of the line rail, 5/8 of an inch below the top of the rail head. Either rail may be used as the line rail; however, the same rail must be used for the full length of that tangential segment of track.

² The ends of the chord must be at points on the gauge side of the outer rail, 5/8 of an inch below the top of the rail head.

15 Track surface

- 15.1 Streetcar track to which this Part applies must maintain the surface of its track within the limits prescribed in the following table:

Track Surface	Maximum Allowable
The runoff in any 31 feet of rail at the end of a raise may not be more than	2 inches
The deviation from uniform profile on rail at the mid-ordinate of a 62-foot chord may not be more than	2 1/4 inches
Deviation from designated elevation on spirals may not be more than	1 1/4 inches
Variation in cross level on spirals in any 31 feet may not be more than	1 1/4 inches
Deviation from zero cross level at any point on tangent or from designated elevation on curves between spirals may not be more than	1 3/4 inches
The difference in cross level between any 2 points less than 62 feet apart on tangents and curves between spirals may not be more than	1 3/4 inches

Track Structure

16 Scope

- 16.1 This Division prescribes minimum requirements for ballast, crosstie, track assembly fittings and the physical condition of rails.

17 Ballast: general

- 17.1 Unless it is otherwise structurally supported, all track must be supported by material which will
- (a) transmit and distribute the load of the track and railroad rolling equipment to the subgrade,
 - (b) restraint the track laterally, longitudinally and vertically under dynamic loads imposed by railway rolling equipment and thermal stress exerted by the rails,
 - (c) provide adequate drainage for the track, and
 - (d) maintain proper track cross level, surface and alignment.

18 Crossties

- 18.1 Crossties must be made of a material to which rail can be securely fastened.
- 18.2 Each 39-foot segment of track must have
- (a) a sufficient number of crossties which in combination provide effective support that will
 - (i) hold gauge within the limits prescribed in Rule 13.2,
 - (ii) maintain alignment within the limits prescribed in Rule 14.1, and
 - (iii) maintain surface within the limits prescribed in Rule 15,
 - (b) the minimum number and type of crossties specified in Rule 18.3 effectively distributed to support the entire segment, and
 - (c) at least one crosstie of the type specified in Rule 18.3 that is located at a joint location as specified in Rule 18.4.
- 18.3 Each 39-foot segment of main streetcar track must have a minimum of 14 crossties and yard track a minimum of 8 cross ties which are not:
- (a) broken through,
 - (b) split or otherwise impaired to the extent the crossties will allow the ballast to work through, or will not hold spikes or rail fasteners,
 - (c) so deteriorated that the tie plate or base of rail can move laterally more than 1/2 inch relative to the crossties, or
 - (d) cut by the tie plate through more than 40% of a tie's thickness.
- 18.4 Streetcar track must have one crosstie whose centre line is within 24 inches of the rail joint location.

19 Defective rails

- 19.1 When a sub-surface track defect is identified during a rail flaw inspection a plan for remedial action should be completed to address the severity of each flaw. The sub inspection must be conducted by a by a competent rail defect company,
- 19.2 In this Rule
- (a) “broken base” means any break in the base of a rail,
 - (b) “compound fissure” means a progressive fracture originating in a horizontal split head which turns up or down in the head of the rail as a smooth, bright or dark surface progressing until substantially at a right angle to the length of the rail. Compound fissures require examination of both faces of the fracture to locate the horizontal split head from which they originate,
 - (c) “damaged rail” means any rail broken or injured by wrecks, broken, flat or unbalanced wheels, slipping or similar causes that affect safe operations,
 - (d) “detail fracture” means a progressive fracture originating at or near the surface of the rail head. These fractures should not be confused with transverse fissures, compound fissures or other defects which have internal origins. Detail fractures may arise from shell spots, head checks or flaking,
 - (e) “horizontal split head” means a horizontal progressive defect originating inside of the rail head, usually one-quarter inch or more below the running surface and progressing horizontally in all directions, and generally accompanied by a flat spot on the running surface. The defect appears as a crack lengthwise of the rail when it reaches the side of the rail head,
 - (f) “ordinary break” means a partial or complete break in which there is no sign of a fissure and in which none of the other defects described in this Rule are found,
 - (g) “piped rail” means a vertical split in a rail, usually in the web, due to failure of the shrinkage cavity in the ingot to unite in rolling,
 - (h) “split web” means a lengthwise crack along the side of the web and extending into or through it,
 - (i) “transverse fissure” means a progressive crosswise fracture starting from a crystalline centre or nucleus inside the head from which it spreads outward as a smooth, bright or dark, round or oval surface substantially at a right angle to the length of the rail. The distinguishing features of a transverse fissure from other types of fractures or defects are the crystalline centre or nucleus and the nearly smooth surface of the development which surrounds it, and
 - (j) “vertical split head” means a vertical split through or near the middle of the head and extending into or through it. A crack or rust streak may show under the head close to the web or pieces may be split off the side of the head.

20 Rail end mismatch

20.1 Any mismatch of rails at joints may not be more than that prescribed by the following table:

Class of Track	On top of the rail ends	On the gauge side of the rail ends
Streetcar Track	3/16 inches	3/16 inches

21 Rail joints

- 21.1 Each rail joint, insulated joint and compromise joint must be of the proper design and dimensions for the rail on which it is applied.
- 21.2 If a joint bar is cracked, broken or because of wear allows vertical movement of either rail when all bolts are tight, it must be replaced.
- 21.3 If a joint bar is cracked or broken between the middle 2 bolt holes, it must be replaced.
- 21.4 In the case of jointed track, each rail must be bolted with at least one bolt on each side of the joint bar and repaired as soon as possible.
- 21.5 Each joint bar must be held in position by track bolts tightened to allow the joint bar to firmly support the abutting rail ends and to allow longitudinal movement of the rail in the joint to accommodate expansion and contraction due to temperature variations.
- 21.6 No rail or joint bar having a torch cut or burned bolt hole may be used.

22 Tie plates

- 22.1 In Streetcar track where timber crossties are in use, there must be tie plates under the running rails on at least 8 of any 10 consecutive ties.

23 Rail anchoring

- 23.1 When required a sufficient number of anchoring devices must be applied to provide adequate longitudinal restraint. The devices may vary by locations and may not be required on track where there are minimal longitudinal stresses or where there is no historical evidence of pull-a-parts or sun kinks.

24 Rail fastenings

- 24.1 Each 39-foot segment of rail must have a sufficient number of fastenings to effectively maintain gauge within the limits prescribed in Rule 13.2.

25 Turnouts and track crossings generally

- 25.1 In turnouts and track crossings, the fastenings must be intact and maintained so as to keep the components securely in place. Also, each switch, frog and guard rail must be kept free of obstructions that may interfere with the passage of wheels.

25.2 Streetcar track must be equipped with rail anchors through and on each side of track crossings and turnouts to restrain rail movements affecting the position of switch points and frogs.

25.3 Each flange way at turnouts and track crossings must be at least 1.5 inches wide.

26 Switches

26.1 Each stock rail must be securely seated in switch plates, but care must be used to avoid canting the rail by over tightening the rail braces.

26.2 Each switch point must fit its stock rail properly with the switch stand in either of its closed positions to allow wheels to pass the switch point. Lateral and vertical movement of a stock rail in the switch plates or of a switch plate on a tie must not adversely affect the fit of the switch point to the stock rail.

26.3 Each switch must be maintained so that the outer edge of the wheel tread cannot contact the gauge side of the stock rail.

26.4 The heel of each switch rail must be secure and the bolts in each heel must be kept tight.

26.5 Each switch stand and connecting rod must be securely fastened and operable without excessive lost motion.

26.6 When equipped, each throw lever must be maintained so that it cannot be operated with the lock or keeper in place.

26.7 Each switch position indicator must be clearly visible at all times.

26.8 Unusually chipped or worn switch points must be repaired or replaced. Metal flow must be removed to ensure proper closure.

27 Frogs

27.1 The flange way depth measured from a plane across the wheel bearing area of a frog may not be less than 1.5 inches.

27.2 If a frog point is chipped, broken or worn more than 5/8 inch down and 6 inches back, operating speed over the frog may not be more than 10 miles per hour.

27.3 If the tread portion of a frog casting is worn down more than 3/8 inch below the original contour, operating speed over that frog may not be more than 10 miles per hour.

28 Self-guarded frogs

28.1 The raised guard on a self-guarded frog may not be worn more than 3/8 inch.

28.2 If repairs are made to a self-guarded frog without removing it from service, the guarding face must be restored before rebuilding the point.

29 Frog guard rails

29.1 The guard check in frogs must be within the limits prescribed by the operator.

Track Appliances and Track-related Devices

30 Scope

- 30.1 This Division prescribes minimum requirements for certain track appliances and track-related devices.

31 Derails

- 31.1 Each derail must be clearly visible and painted yellow. When in a locked position, a derail must be free of any lost motion that would allow it to be operated without removing the lock.
- 31.2 Derails or other securement device must be installed when there is any possibility of equipment that has been left standing on tracks, other than main tracks or sidings, being moved by gravity so as to obstruct a main track or siding.
- 31.3 The location of each derail must be marked with a rectangular sign that has a yellow background with the letter "D" or "Derail" printed in black. The sign must be mounted on a post that is adjacent to the derail. The bottom of the sign must be not less than 1.5 metres or more than 2 metres above the ground.

Inspection

32 Scope

- 32.1 This Division prescribes requirements for the frequency and manner of inspecting track to detect deviations from the standards prescribed in this Part.

33 Track inspections

- 33.1 All tracks must be inspected in accordance with the table prescribed in Rule 33.3 (e).
- 33.2 Each inspection must be made on foot or by riding over the track in a vehicle at a speed that allows the person making the inspection to visually inspect the track structure for compliance with this Part. However, mechanical, electrical and other track inspection devices may be used to supplement visual inspection. If a vehicle is used for visual inspection, the speed of the vehicle may not be more than 5 miles per hour when passing over track crossings, highway crossings or switches. The streetcar can be utilized to conduct the 7th day inspection.
- 33.3 When riding over the track in a vehicle, the track inspectors may inspect up to 2 tracks at one time provided that
- (a) each main track is actually traversed by the vehicle or inspected on foot on alternate inspections at least once every 7 days, and yard / siding track is actually traversed by the vehicle or inspected on foot at least once every month,
 - (b) one track inspector cannot inspect more than 2 tracks at one time and cannot inspect any track centred more than 30 feet from the track on which the inspector is riding,

- (c) track inspection records indicate all track included in the inspection and indicate which track was traversed by the vehicle or inspected on foot,
- (d) the track inspector's view of the tracks is to be unobstructed by tunnels, bridges, differences in ground level or any other circumstances or conditions that would interfere with a clear view of all the tracks being inspected, and
- (e) each track inspection is made in accordance with the following table:

Track Type	Required Frequency
Main Track 7 Day	Inspected with a maximum interval of 7 calendar days between inspections.
Main Track Monthly	When the track is inspected exclusively utilizing a vehicle, a monthly inspection must be conducted on foot with a minimum of 20 calendar days between inspections.
Yard/Sidings	Monthly with a minimum of 20 calendar days between inspections or before use if the track is used less than once per month.
All Tracks	All tracks must be inspected prior to seasonal start up if the track has not been used on a monthly basis.

- 33.4 If the person making the inspection finds a deviation from the requirements of this Part, that person shall immediately initiate remedial action.
- 33.5 In addition to track inspections, an operator shall develop a plan to identify internal track defects.

34 Switch and track crossing inspections

- 34.1 Except as provided in Rule 34.2, each switch and track crossing must be inspected on foot at least monthly.
- 34.2 In the case of track that is used less than once a month, each switch and track crossing must be inspected on foot before it is used.

35 Special inspections

- 35.1 In the event of fire, flood, severe storm or other occurrences which might have damaged the track structure, a special inspection must be made of the track involved as soon as possible after the occurrence.

36 Inspection records

- 36.1 Each operator shall keep a record of each inspection required to be performed on that track under this Division.
- 36.2 Each record of an inspection under Guideline 33 and 34 must be prepared on the day the inspection is made and signed by the person making the inspection. Records must specify the track inspected, date of inspection, location and nature of any deviation from the requirements of this Part, and the remedial action taken by the person making the inspection. Operators shall retain each record at its division headquarters for at least one year after the inspection covered by the record.
- 36.3 Rail inspection records must specify the date of inspection, the location and nature of any internal rail defects found, and the remedial action taken and the date thereof. Operator must retain a rail inspection record for at least 2 years after the inspection and for one year after remedial action is taken.
- 36.4 All records must be made available on request by a railway safety officer.

Part 7

Brake Guideline

1 Scope

- 1.1 This Guideline applies to an operator and is intended to ensure the safe operation of brakes on streetcars operated wholly or in part within the confines of an historical park or similar park or site.

2 Qualification and compliance of Streetcar Employees

- 2.1 An operator must ensure that all employees engaged in the operation or inspection of streetcars
 - (a) are fully conversant with the requirements of these Guideline and the operator instructions, and
 - (b) comply with these Guideline and the operator instructions when operating streetcars or when engaged in the inspection and testing of brakes, associated control devices, safety controls and communicating signal systems.

3 Pre-departure requirements for streetcars

- 3.1 At a location where a streetcar has been laid over, altered or repaired, a competent person must test brakes, associated radio or safety controls and communicating signal systems to determine that these systems are functioning properly.
- 3.2 If the testing is performed by a competent person other than the operator, the results of the tests must be made available to the operator.

4 Pre-departure requirements for streetcars

- 4.1 A streetcar shall not depart from a safety inspection location until brake tests have been completed.
- 4.2 The tests will be performed by competent person and any brake system defect discovered during the brake test and not repaired prior to departure must be reported to the operator.

5 Operating requirements

- 5.1 A streetcar shall not be operated unless all service brakes are properly functioning unless appropriate reduction in streetcar speed, as determined by the operator is made.
- 5.2 When a streetcar experiences a brake system or a safety control malfunction en route which cannot be readily corrected, the street car motorman must report the malfunction to the person in charge of the operation. Appropriate action, as prescribed by the operator, must be taken by the streetcar motorman.
- 5.3 If equipped with a safety control device the safety control device must be operative.
- 5.4 A brake test of streetcar brakes must be made before leaving any location where the crew is changed.

Equipment Requirements

6 Maintenance

- 6.1 All brake equipment must be maintained in a safe and serviceable condition and streetcar brakes shall be maintained according to procedures issued by the operator and the brake manufacturer.
- 6.2 An operator shall maintain records for each streetcar noting the date of testing or cleaning of brake. Records must be made available to a railway safety officer on request.

7 Brake cylinder piston travel

- 7.1 Brake cylinder piston travel must be with-in manufacturer's specifications and are not to be exceeded.

Part 8

Employee Qualification Standards

1 Training programs must be established

- 1.1 An operator shall establish employee streetcar training programs for employees directly involved in Streetcar operations.

2 Person must be qualified to work in a Streetcar yard

- 2.1 Subject to Rule 2.2, no operator shall permit an employee to work in a streetcar operation unless the employee is competent to work in a streetcar operation in accordance with Rule 6.1.
- 2.2 An employee undergoing on-job street training may perform the duties for which the employee is a candidate under the direction of an on-job streetcar instructor for the duration of the employee's training period.

3 Extent of on-job streetcar training

- 3.1 An operator shall provide its streetcar employees with on-job streetcar training in respect of the required subjects to enable them to demonstrate to on-job streetcar instructors and examiners that they are competent to perform their required duties.

4 Passing mark for on-job training

- 4.1 No examiner shall issue a passing mark for on-job street training unless the examiner
- (a) is satisfied that the candidate is competent to perform the required duties by assessing the candidate's competency in actual streetcar operations, and
 - (b) has completed, signed and placed on the candidate's personnel file a document indicating that the candidate has received a passing mark for the on-job training.

5 Examinations

- 5.1 An examiner shall determine the overall mark for a candidate based on written or oral examinations, or both, dealing with the required subjects.

6 Qualification standards for candidates

- 6.1 The subjects required for an employee to qualify to work in a streetcar operation are the subjects listed in Table A.
- 6.2 No operator shall qualify an employee to work in a streetcar operation unless the person obtains a mark of at least 80% in each required subject.

7 Qualification standards for on-job streetcar instructors

- 7.1 No operator shall qualify a person as an on-job streetcar instructor unless the person meets the qualification requirements with a mark of at least 80% in each required subject and demonstrates that the person is competent in the function being instructed.

8 Qualification standards for classroom streetcar instructors

- 8.1 No operator shall qualify a person as a classroom streetcar training instructor for a required subject unless the person has
- (a) obtained a mark of at least 90% in a written examination on that subject, and
 - (b) designated by the operator to be competent to instruct.

9 Qualification standards for examiners

9.1 A person who is a classroom streetcar instructor is qualified to act as an examiner on the subjects on which the person is qualified to give instruction.

10 Re-examination

10.1 An operator shall, at intervals of not more than 3 years, have each employee that is qualified to work in a Streetcar operation re-examined on the required subjects.

10.2 A re-examination must consist of

- (a) a review or test, or both, of an employee's knowledge of required subjects, and
- (b) a hands-on competency evaluation of actual job tasks measured against a defined level of performance.

10.3 The passing mark for re-examination is 80% for each subject.

11 Copies of examinations must be kept on file

11.1 An operator shall retain on file a copy of each type of classroom examination and a copy of a detailed description of each method of assessing on-job competence used by the operator.

12 Examination records must be kept on file

12.1 During the period of employment of each employee examined in accordance with this Guideline, an operator shall maintain an examination record for the employee.

13 Record of streetcar training programs must be kept on file

13.1 An operator must retain on file a full description of its employee streetcar training programs related to streetcar operations.

13.2 An operator must maintain for each calendar year a comprehensive record of its employee streetcar training programs, including recurrent streetcar training.

13.3 A record must be kept to specify

- (a) the total number of motormen and conductors involved with streetcar operations,
- (b) motormen names and last date of training or re-examination was undertaken, and
- (c) conductor names and last date of training or re-examination was undertaken.

Table A

Training Requirements

The following tables outline the subject-matter that must be included as a minimum in streetcar training programs for employees directly involved in streetcar operations. It is the responsibility of the operator to identify the specific content that is applicable to their respective operations.

1. Motorman or conductor

1.1 Persons in a motorman or conductor position require training noted in Items 1, 2, 3, 4, 5, 6, and 7.

2. All others

2.1 Persons not directly involved in the movement of streetcars but who work on or around streetcars require the training noted in Items 1, 3, and 5.

Item		Description
1.	Operating Guideline, including Railway Radio Communication Guideline	Applicable operating Guideline as per Part 4 of this Guideline.
2.	Car Brake Systems	Identify and explain the purpose of each major component of a streetcar brake systems and how they operate.
3.	Car Securement	Identify and apply the general operating instruction for securing equipment.
4.	Streetcar Inspection	See Part 4 of this Guideline.
5.	Core Safety Guideline	Explain and apply basic safety Guideline for working in and around streetcar equipment, including but not limited to the following: <ul style="list-style-type: none"> • on or about tracks • hand-operated switches • operating derails
6.	Streetcar Passenger Handling Safety Guideline	Applicable Guideline as they relate to the person's job functions
7.	Streetcar operation	Identify and apply the Guideline and procedures for: <ul style="list-style-type: none"> • safely starting the equipment • the considerations and steps for initiating movement • the considerations to be made while operating • streetcar brakes • safety control systems

Part 9

Safety Critical Positions Guideline

1 Interpretation

- 1.1 In this Guideline, "safety critical position" means a streetcar motorman directly involved in the operation of a streetcar.
- 1.2 Any person performing any of the duties normally performed by a person holding a safety critical position is deemed to be in a safety critical position while performing those duties.

2 Records to be kept

- 2.1 An operator shall
 - (a) maintain a list of all qualified streetcar motormen in a safety critical position, and
 - (b) make the lists referred to in clause (a) available for inspection by a railway safety officer on request.

Part 10

Medical Guideline for Positions Critical to Safe Streetcar Operations

1 Frequency of medical assessments

- 1.1 An employee must undergo a medical fitness for duty assessment
 - (a) prior to commencement of employment in a safety critical position,
 - (b) On promotion or transfer to a safety critical position, and
 - (c) every 5 years until the age of 40, and every 3 years after that date until the employee retires or no longer occupies a safety critical position.
- 1.2 The medical practitioner may require an employee to undergo additional medical fitness for duty assessments if the employee
 - (a) has or may have a medical condition that requires frequent monitoring, or
 - (b) is returning to work in a safety critical position after a medical leave of absence.

2 Medical fitness for duty assessment

- 2.1 The assessment must be conducted by a medical practitioner using the Alberta Transportation drivers licence medical examination.

3 Medical restrictions

- 3.1 If, in making an individual assessment of an employee's medical fitness for duty, the medical practitioner is of the opinion that there exists a threat to safe streetcar operations, the medical practitioner may
 - (a) prohibit the employee from occupying a safety critical position, or

- (b) otherwise restrict the employee's ability to work or perform certain tasks in a safety critical position.
- 3.2 On completion of a medical fitness for duty assessment, the medical practitioner shall advise the employee who is the subject of the assessment and the employee's supervisor of
- (a) the employee's medical fitness for duty, and
 - (b) any restrictions or requirements imposed by the chief medical examiner under Rule 4.1.

4 Records

- 4.1 The medical practitioner shall maintain a record of each employee's medical fitness for duty assessments and any restrictions imposed under Rule 3.1.
- 4.2 The operator shall maintain copies of all medical policies, guidelines and medical fitness certificates used by the operator in respect of medical fitness for duty assessments.
- 4.3 The operator shall make records, medical certificates of fitness records, policies and guidelines required to be maintained under this Rule available to a railway safety officer on request.

5 Exception

- 5.1 This Guideline does not apply to a safety critical position if that operator establishes appropriate alternative medical requirements suitable to the motorman's particular operation.
- 5.2 The Railway Administrator may reject an operator's alternative medical requirements if, in the Railway Administrator's opinion, an equivalent level of safety is not achieved.

Part 11

Roadway and Pedestrian Crossings Protective Devices

1 Scope

- 1.1 If a protective device is to be installed, the crossing regulations noted herein apply to streetcars. The intent is to ensure that crossing signals are installed, modified and maintained in a safe manner.

2 General Requirements

- 2.1 The design and installation requirements for vehicle and pedestrian level crossings on streetcar track are to be in accordance with the
- (a) Railway Highway Crossing at Grade Regulations and
 - (b) Highway Crossing Protective Devices Regulations.
- 2.2 Railway signals shall be installed, modified and maintained in accordance with the AREMA Communications and Signals Manual.

- 2.3 If an operator wishes to depart from an AREMA Communications and Signals Manual recommended practice, it must request the Railway Administrator for an exemption and must file an alternative practice which must provide an equivalent level of safety.

Part 12

Passenger Handling Safety Guideline

1 Scope

- 1.1 This Guideline prescribes the minimum requirements for the safe handling of passengers by operator.
- 1.2 Passenger operations must comply with the Guideline applicable to the service they provide.

2 Passenger handling safety plans

- 2.1 Each operator that operates or hosts a passenger streetcar service must have a written passenger handling safety plan that, as a minimum, encompasses all of the following measures applicable to the type of equipment and operation:
- (a) medical,
 - (b) on-board fire,
 - (c) derailment or collision,
 - (d) passenger evacuation procedures,
 - (e) incident recording and reporting,
 - (f) passenger safety awareness procedures,
 - (g) training,
 - (h) communications, and
 - (i) safety checks.
- 2.2 Each operator that operates streetcar service must ensure that passenger service providers comply with this Guideline and the operator's safety plan that are applicable to the service being provided.
- 2.3 Each passenger handling safety plan must incorporate, to the extent practicable, those best practices and procedures published in the Railway Association of Canada (RAC) Circular #6.
- 2.4 Each operator's passenger handling safety plan must incorporate, directly or by reference, the railway's emergency response procedures, including periodic exercises.

3 Streetcar onboard personnel

- 3.1 Each operator that operates or hosts passenger streetcar service must ensure that a sufficient number of on-board personnel as defined in the railway's safety plan, including

volunteers and on-board personnel employed by a passenger service provider, are, as a minimum, trained

- (a) with the passenger handling safety plan,
- (b) with the operator's emergency response procedures,
- (c) with the safety features of passenger equipment,
- (d) with normal and emergency communication procedures,
- (e) with the use of on-board emergency tools, and
- (f) to supervise or assist in emergency evacuation procedures.

3.2 Each operator must have sufficient personnel on-board a streetcar or at designated locations within the streetcar site who have been trained to administer first aid or CPR in a timely manner so that passengers and crew are not put at risk.

3.3 Each operator that operates or hosts a passenger streetcar service must ensure all other appropriate railway personnel and on-board personnel who may be required to assist in a passenger streetcar emergency are trained to be familiar

- (a) with the passenger handling safety plan, and
- (b) with the operator's emergency response procedures.

4 Passenger safety inspections

4.1 The person in charge must ensure that a safety check has been made prior to departure at intervals otherwise identified in the passenger safety plan to ensure the following:

- (a) passenger awareness information is available,
- (b) on-board emergency tools are intact and accessible,
- (c) first aid and trauma kits are intact and sealed,
- (d) emergency signage is visible and legible when originally equipped,
- (e) emergency lighting functions as intended when originally equipped,
- (f) emergency communications equipment functions as intended,
- (g) carts, parcels, luggage and oversized articles are properly stowed and secured, and
- (h) any known or recorded defects are reviewed by on-board streetcar personnel.

4.2 Where a passenger safety check reveals a defect, the person in charge must, in accordance with procedures as established in the safety plan

- (a) have the defect immediately corrected,
- (b) permit the streetcar to move to a location where the defect can be corrected and identify any restrictions,
 - (i) to the streetcar movement, or

- (ii) to the occupancy of a passenger car, and
- (c) notify the operator of any such defect being moved and of any restrictions.

Part 13

Overhead Wire and Power Guideline

1 Scope

- 1.1 This Guideline prescribes the requirements for the overhead wires and power supply.

2 Overhead wires and power supply

- 2.1 All overhead wire power systems and associated supply must be maintained in accordance with the current Alberta Electrical Code.

This Guideline comes into effect August 15, 2014 unless otherwise stated in this Guideline.