

(d) The above records shall be produced on request to any statutory inspecting authority, to the qualified engineer conducting annual inspections and to the Chief Ranger.

**22. Inspection and Machinery**—(1) *Inspection*—(a) The licensee shall, each winter, prior to the use of a surface lift or rope tow by the public, obtain a report from a qualified engineer as to the mechanical and/or structural integrity of all machinery, wire or fibre rope, pylons, sheaves, safety devices, foundations, and any other matter which, in the inspector's opinion, may affect the safety of the public while using the lift or tow.

(b) The licensee shall ensure that the tow is in full operational condition for the inspection as aforesaid.

(c) A copy of the inspector's report shall be deposited with the Board immediately on receipt by the licensee.

(d) The licensee shall comply immediately with any requisitions of the Board arising from the inspector's report conveyed to him in writing.

(e) A chairlift shall not carry a fare-paying passenger or passengers unless it is operated pursuant to a valid inspection certificate issued by the Ministry of Transport.

(2) *Machinery*—(a) All ski lift and tow-driving machinery accessible to the public shall be housed, guarded, or screened in a manner that will prevent the public coming into contact with the machinery.

(b) Except in the case of guide sheaves installed for the haul rope of a rope tow, all moving machinery including sheaves and rope-return wheels shall be screened in a manner to prevent any person or his equipment coming into contact therewith unless the machinery is erected at least 2.2 metres above the snow surface.

(c) When an internal combustion engine is used as a prime mover and is housed in a building accessible to the public the building shall be ventilated to prevent the products of combustion or fuel fumes from contaminating the atmosphere in the engine room.

(d) Engine exhaust pipes shall discharge to the atmosphere and shall not pass within 5 centimetres of any wooden member or flammable material.

(e) Fire extinguishers shall be installed in every engine room.

(f) An exit shall be provided in every engine room to permit a person to leave rapidly in case of flash fire.

(g) Guy wires or struts supporting any pylons, towers, or machinery which are likely to be struck by skiers and which are not in themselves obvious in adverse weather conditions shall be adequately marked and protected.

**23. Counterweights and tensioning devices**—(1) Counterweights or other suitable devices shall be provided to determine and regulate the tension of all haul ropes.

(2) Counterweights, if used, shall be arranged to move freely up and down.

(3) Enclosures for counterweights shall be provided where necessary to prevent snow or ice from accumulating under and around counterweights or otherwise interfering with their free movement.

(4) Where enclosures are not provided, guardrails or screens shall be provided to prevent any person from coming into contact with or passing under counterweights.

(5) A wire rope holding the counterweight shall not contain a splice.

(6) End connections on counterweight ropes shall be such as to prevent failure or slippage under a tension equal to 80 percent of the strength of the rope and such end connections shall comply with the recommendations of the manufacturers of the wire rope and end fittings respectively.

(7) Sections of wire rope permanently deformed or damaged shall not be used in any load bearing capacity.

(8) Limit switches shall be installed to stop the lift or tow before any counterweight or tension carriage reaches either end of its travel.

(9) If a counterweight is not used to tension a rope tow, an effective mechanical or hydraulic tensioning system shall be provided and the licensee shall ensure that the haul-rope tension does not exceed a value of one-fifth of the design strength of the rope under the most unfavourable accumulation of stress due to loading and operating conditions.

(10) Tension on the haul rope or rope tows shall be maintained at the minimum required to keep the haul rope above the snow surface but not exceeding the maximum tension provided in the preceding bylaw.

**24. Brakes**—(1) Chairlifts in addition to service and emergency brakes shall be fitted with an automatic overspeed control which shall interrupt the power to the prime mover and actuate the service brake or similar independent brake.

(2) A backstop brake to prevent an unintended reverse rotation shall be fitted to all lifts and tows.

(3) The service brake, emergency brake, and backstop brake shall be independent systems such that the failure of one system will not impair the function of the other systems.

(4) Unless otherwise specified herein, braking systems actuated by emergency-stop devices shall be capable of stopping the rope within a distance of 1 metre under no-load conditions.

**25. Electrical**—(1) All high voltage electrical installations shall comply with the standard set by the local territorial power supply authority whether that authority supplies the power or not.

(2) All high- and low-voltage cable shall be buried underground in a line approved by the Board and for which a site plan has been deposited with the Board.

(3) All electrical stop-control circuits including emergency or safety-stop systems shall be energised circuits, so that, in the event of malfunction of a switch or of electrical power failure, the lift or tow shall be inoperative.

(4) Terminal machinery, towers, and wire rope shall be effectively grounded.

**26. Communications**—(1) A chairlift shall be provided with an effective means of communication between both terminals and with any intermediate station.

(2) Communication and control cables may be supported by the towers supporting the lift or tow but low-voltage circuits only shall be installed.

**27. Loading and unloading areas**—(1) *Chairlifts*—(a) A loading ramp shall be level, in the same plane as the wire rope, and so constructed that a passenger can stand comfortably on skis without sliding forwards or backwards.

(b) If any side of a loading or unloading ramp or platform has a steep drop, a guard rail shall be provided for the protection of passengers, lift attendants, and bystanders.

(c) If the chair exit end of a loading ramp or platform has a steep drop-off exceeding 2 metres from the chair seat a safety net shall be erected and maintained in a safe condition, extending a distance of at least 5 metres from the end of the loading area, and those portions of the supporting structure likely to be struck by a falling passenger shall be effectively protected to prevent injury to the passenger.

(d) The entry to an unloading ramp shall be so constructed that skis worn by passengers cannot be caught under the edge of the ramp or platform and will be guided upwards towards the unloading point.

(e) An unloading place shall be level to enable foot passengers to disembark and shall be followed where possible by an inclined ramp sloping sufficiently downwards from the exit of the unloading area to enable passengers to ski away from the chair clear of any machinery.

(f) A tower adjacent to a loading point shall be guarded in such a manner to prevent skis worn by passengers becoming caught in the tower when they are becoming settled in the chair.

(g) Where passengers on double chairlifts are required to embark from and disembark to the same side of the chair, the loading and unloading areas shall be the subject of special design and shall be approved by the Board before used.

(2) *Surface lifts*—(a) Unless the terrain at the loading point is naturally suitable, the licensee shall construct and maintain easy access to the lift.

(b) The loading area shall be as nearly flat as is possible and of sufficient length to permit the passenger to embark safely.

(c) Unless the terrain is naturally suitable, the licensee shall construct and maintain a flat or downward disengaging area for the passenger to disembark safely from the towing device.

(d) The distance between the end of the unloading area and the upper terminal machinery shall be sufficient to allow the towing devices to become fully retracted and to permit their oscillations to diminish adequately before they enter the terminal.

(3) *Rope tows*—(a) The loading area shall be level, free of obstructions, and fenced in a manner to guide passengers to the loading point.

(b) The unloading area shall be either flat or graded downwards and outwards from the line of the uphill track to provide movement away from the tow.

(c) In the case of a rope tow using intermediate guide sheaves requiring the use of a rope-gripping device, the loading area shall extend at least 9 metres before the first pylon is reached.

**28. Lift and tow lines (surface lifts and rope tows)**—(1) With the prior approval of the Board, a track width along the lift or tow line shall be cleared and maintained in such a manner that no rocks or other obstructions project above the snow surface for the full usable length of the lift or tow