

October 17, 2023

To Members of the Vermont Passenger Tramway Board;

I have attached proposed changes to the version of the Tramway Rules filed with the Secretary of State on September 11, 2023. I am the newest member of the Tramway Board, which has given me the advantage of looking at the existing and proposed rules with fresh eyes. I have based my recommended changes on more than 20 years as a fulltime snowboard and ski instructor who uses tramways and interacts with riders every day of the ski season. Due to time and administrative constraints, the Board was unable to consider my proposed changes to the Draft Rules until the document was released for public comment.

The attached compilation of proposed changes is listed chronologically using the numbering system in the proposed rules. There are both policy changes and administrative/technical changes. Each section includes an overview of the proposed changes in italic. The proposed changes are then listed in a conventional strikeout/underscore style. Proposed substantial policy changes are highlighted in yellow. Administrative/technical changes are highlighted in gray so staff can review each and provide the Board with their own recommendations for action.

The proposed changes have the following objectives:

1. Improve public access to the ANSI B77.1 standard.
2. Improve ski area employee awareness of, and access to, Vermont Passenger Tramway Rules.
3. Improve the definition of Tramway Board authority by explicitly including associated structures and load/unload ramps.
4. Improve guest and staff safety by explicitly listing snow removal standards on decking alongside conveyors.
5. Improve work carrier safety by requiring a formal work carrier evacuation plan.
6. Improve injury reporting to provide better metrics and accountability.
7. Establish a sunset date for standard variances, while still allowing the Board to issue variances without a sunset.
8. Clarify the need for a variance by allowing devices other than skis to be transported on tramways if approved by Vermont Tramway Technicians, rather than through a variance issued by the Board or with simple notification of intent by the operator.
9. Clarify a proposed restriction on drone use so that it is easier for the public and pilots to understand, and so that it better aligns with FAA control of public airspace.
10. Generally clarify language, standardize text, clarify adopted third party standards, and correct typos throughout the document.

-Tom Buchanan, Member of the Vermont Passenger Tramway Board

3  
4 October 17, 2023

5  
6 **Section 1.04 Adoption of Standards Applicable to Passenger Tramways**

7 *The initial filing of the draft rules with ICAR listed the cost of the ANSI B77.1-2022 standard as*  
8 *\$400. The ICAR review instructed the Department to “include less expensive/free ways to view*  
9 *the information, and a phone number.” Vermont law already requires that an agency*  
10 *incorporating a rule by reference must, at the very least, make that standard available for public*  
11 *inspection at its principal office (3 V.S.A. § 838(d)).*

12 *The ANSI B77.1 is a proprietary standard that is maintained and sold by the [National Ski Areas](#)*  
13 *Association (NSAA), a ski industry trade organization. The NSAA offers the B77.1 standard for*  
14 *sale to the public as a paper only document for \$200 (member price \$55), or as a combined*  
15 *paper document and single license pdf for \$400 (member price \$90). Vermont libraries do not*  
16 *have recent versions of this standard, and it is not available as a publicly accessible document to*  
17 *view on line.*

18 *Employees of ski areas and the general public should have easy access to this 200 page*  
19 *standard, which forms the bedrock of the Vermont Tramway rules and is directly referenced*  
20 *more than 25 times. Every ski area with an aerial lift open to the public should already have the*  
21 *B77.1, and should make it available for inspection by the public upon reasonable request, and*  
22 *the Tramway Department should make it available at the state office in Montpelier. Limiting*  
23 *public availability to ski areas that have aerial lifts will minimize the financial burden on small*  
24 *surface-lift-only ski businesses, while still providing the public with distributed access. This*  
25 *serves the public interest and is consistent with Vermont’s approach to open and accessible*  
26 *government. It is rare for members of the public to request a ski area show them a copy of the*  
27 *B77.1 standard, and since that is unlikely to change, requiring ski areas to provide access will*  
28 *not add a significant burden.*

29 *Section 1.04(b)(ii) should also describe what the ACI-318 standard is (spell it out), and identify*  
30 *which version/date is applicable (probably use “current edition”).*

31 *Section 1.04 should include all other standards that are required or referenced in these rules.*

32 **Add:**

33 **(c)(i) The Owner/Authorized Operator of an aerial passenger tramway open to the public shall**  
34 **maintain on the premises a physical or electronic copy of each ANSI B77.1 standard applicable**  
35 **to their licensed tramways. The standard(s) shall be made available for review by the public upon**  
36 **reasonable request.**

37 (c)(ii) The Department shall maintain a physical or electronic copy of each ANSI B77.1 standard  
38 applicable to tramways operating within the State of Vermont, and shall make the standard(s)  
39 available for review by the public upon request.

40 (c)(iv) The Department shall maintain a physical copy of all other applicable standards  
41 referenced in these rules, or shall maintain electronic access to those standards. The standards  
42 shall be made available for review by the public upon request.

43 Modify:

44 (b)(ii) ~~ACI 318~~ The American Concrete Institute ACI-318 (current edition) may be used as a  
45 reference for structural concrete design.

46 (b)(iv) Nondestructive testing as defined by American Society for Nondestructive Testing  
47 ~~(ASNT), current edition~~ ASNT TC-1A (current edition) and ASNTCP 189 (current edition).

48 *[Editing Note: Section 3.02(a)(i) references the ASNT TC-1A and also includes ASNTCP 189-*  
49 *2001. It is not clear if one or both of these standards are being adopted under Section*  
50 *1.04(b)(iv). The listed version of ASNTCP189 appears to be dated 2001, but the current version*  
51 *of the ASNTCP 189 appears to be 2020, with a 2024 version soon to be released. The listings for*  
52 *these documents under both 1.04(b)(iv) and 3.02(a)(i) should be checked for consistency and*  
53 *then clarified.*

54 *All references to “nondestructive” testing throughout the rules should be checked for*  
55 *consistency regarding hyphenation and capitalization. ASNT appears to treat it as one word with*  
56 *no hyphenation or special capitalization.]*

57 (b)(v) The Fall Protection Code as defined by the American National Standards Institute-  
58 American Society of Safety Professionals ANSI/ASSP Z359.1 (current edition).

59 *[Editing note: Section 3.03(a)(i) identifies this standard as ANSI/ASSE Z359. It is my*  
60 *understanding the American Society of Safety Engineers (ASSE) changed its name to the*  
61 *American Society of Safety Professionals (ASSP) and recent editions of this standard reflect that*  
62 *name change. If that is the case, the text in this section and Section 3.03 should be reviewed and*  
63 *adjusted.]*

## 64 **Section 1.05 Definitions**

65 *Loading and unloading ramps are integrally related to the operation of all lifts (B77.1 Section*  
66 *4.1.1.9), and when not properly designed and maintained can cause serious injuries. The Board*  
67 *already requires reports of injuries from “falling on ramps” as described in the [Tramway](#)*  
68 *[Forms Manual](#), and should maintain clear jurisdiction over this component of tramways.*

69 *Some lifts have control buildings and other structures such as counter weights and storage*  
70 *structures that extend outside the ANSI B77.1 defined “line” or beyond the bull wheels. These*

71 *rules already assert control over structures within 100 feet of a tramway and connected*  
72 *buildings by requiring fire notification to the lift operator (3.05(d)(ii) and 3.05(d)(v)), but the*  
73 *Board does not assert original jurisdiction over this area. These structures and spaces should be*  
74 *explicitly under the jurisdiction of the Department. Additionally, the current limits of tramways*  
75 *are based on a bull wheels, but conveyor lifts do not have bull wheels, so an alternative*  
76 *jurisdictional limit should be established for conveyors.*

77 *The existing definition of “Limits of Tramway” is cited to simply “ANSI,” but that should be*  
78 *listed here so readers of the rules do not need to obtain a copy of the B77.1 to learn what the*  
79 *jurisdiction of the Tramway Board is.*

80 **Modify:**

81 **“Limits of tramway”** An area defined by the outward swing clearance of the carriers or tow  
82 handles as they move around the bull wheel and along the “line” as defined by ANSI B77.1 as  
83 “the path of the wire rope on the up-going or return side of a ropeway,” and all associated  
84 structures. The limits of a conveyor lift shall be defined by the path of the conveyer, and all  
85 associated structures. The limits of each tramway shall include load and unload ramps extending  
86 20 feet outward. This defines the jurisdiction of the Passenger Tramway Board.

87 **Section 2.02(c)(iii) Tramway Inspections**

88 *The inspection criteria assume a tramway has two terminals with operating buttons at each.*  
89 *Some tramways may have a mid-station with associated controls. Inspection criteria should*  
90 *cover all stations and terminals.*

91 **Modify:**

92 (iii) Proper function of all stop and slow buttons at ~~both~~ all terminals.

93 **Section 2.04 Incident Reporting Requirements**

94 *Oftentimes a person who is injured getting on or off a lift or while riding a lift will make their*  
95 *way to the ski area first aid station under their own power. The current regulation may not*  
96 *require reporting of these injuries because the injured person reached rescue staff, and staff was*  
97 *not “called to assess.” The language should be modified to be inclusive of injured riders who*  
98 *are seen by the ski areas rescue or medical team at any location, and then referred to higher*  
99 *levels of care.*

100 *Injury reporting to the Department should also explicitly include employees who are injured*  
101 *while working or riding on a lift regardless of the cause or operating status of the lift.*

102 **Modify**

103 2.04(b)(i) Tramway-related serious injury or death (a serious injury is defined as one where  
104 rescue staff is called to assess assesses the injured person and that person is referred to a higher  
105 level of care.

106 2.04(b)(iv) An employee has been assessed by rescue staff and referred to a higher level of care  
107 following an injury that occurred while using, operating, or maintaining a tramway.

108 2.04(c)(iii) The web address listed for the “Vermont Tramway Incident Form” only links to the  
109 main DOL webpage and has a typo (<http://www.labor.verm,ont.gov>). The typo should be  
110 corrected, or preferably a more specific/complete link should be used if possible.

## 111 **Section 2.05 Variances**

112 *A variance should be valid for a specific default period and then sunset, with reconsideration by*  
113 *the Board if the Owner/Authorized Operator wishes the variance to continue. Establishing a*  
114 *sunset for future variances will allow the Board to reconsider each variance based on an*  
115 *updated risk analysis, practical experience, and changing industry standards. The Board should*  
116 *be authorized to issue a variance valid for non-standard lengths of time or without a sunset, but*  
117 *should specify the non-standard time period when the variance is issued.*

118 **Add:**

119 **(c) A variance issued after [DATE] shall be valid for three years, unless the Board specifies**  
120 **otherwise when the variance is issued.**

## 121 **Section 3.01 General**

122 *It is my understanding that the Board currently issues variances for transport of devices other*  
123 *than those used by skiers, such as ski-bikes and snow skates, and is contemplating shifting this*  
124 *approval process to Tramway Technicians. Authorization to transport devices generally requires*  
125 *an application, review, and then written approval. The proposed rule (3.01(a)) would ease the*  
126 *process through “notification” alone, and appears to all but eliminate the review and approval*  
127 *components. The way the proposed rule is written an Owner/Authorized Operator will be able to*  
128 *simply notify the Department, and is then by default authorized to carry whatever devices it has*  
129 *specified in the notification without any other limitation or time limit. The rule should clarify the*  
130 *roles of Tramway Technicians and the Board, and at least require review and written*  
131 *authorization by a Tramway Technician. Written authorization assures the proposal has been*  
132 *properly reviewed, and will assist the Department with tracking approvals.*

133 *The rule should not cite to the definition of a “skier” in the ANSI B77.1 when a more accessible*  
134 *definition is available. The definition of “skier” listed in Section 1.05 of these rules is copied*  
135 *from the ANSI B77.1. Citing to the definition of a “skier” in section 1.05 of these rules, rather*  
136 *than to the ANSI B77.1, will make it easier for users to find the definition.*

137 *Skiers and snowboarders use standard skies and snowboards that do not require additional*  
138 *approval. This should be more clearly defined with regard to the requirement for a “safety*  
139 *leash,” which is new language that has been added to this revision of the Vermont Passenger*  
140 *Tramway Rules. Until recently so-called “leashes” for snowboards and similar equipment had*  
141 *been required under the nationally recognized “Your Responsibility Code,” which stated*  
142 *“Always use devices to prevent runaway equipment.” The current “Your Responsibility Code”*  
143 *adopted in 2022 does not require leashes or devices, but instead states “You must prevent*  
144 *runaway equipment.” The Vermont Tramway rules should avoid using the word “leash” which*  
145 *has a negative connotation and has long been associated with snowboarding equipment, and*  
146 *should clarify that a safety tether is only required for devices other than those used by “skiers”*  
147 *as defined in Section 1.05.*

148 **Modify:**

149 (a)(i) Owner/Authorized Operator may permit the use of hang-gliders, ski bobs, tubes, sleds,  
150 bicycles or other devices to be transported on their passenger ropeway by providing safeguards  
151 for public and lift equipment, if the Department is notified and provides written authorization.

152 (a)(ii) The Department shall be notified in writing of devices to be transported on passenger  
153 ropeways beyond what is described in ANSI B77.4 Section 1.05 of these rules as meeting the  
154 definition of “skier.” Notification shall include passenger ropeways permitting additional  
155 devices, operating procedures, staff training, and evacuation plan for guests/devices.  
156 Additionally, Owner/Authorized Operator shall be prepared to perform a demonstration of  
157 evacuation during inspection of the passenger ropeway. Devices shall not be transported without  
158 written authorization from the Department. Authorization will be valid for up to one year and  
159 may be renewed, or a longer term variance may be requested from the Board.

160 (a)(iv) Devices to be transported on passenger ropeways, other than those used by a “skier” as  
161 defined in Section 1.05 of these rules, must have an adequate safety ~~leash~~ tether.

### 162 **Section 3.01 General**

163 *The initial proposed drone rule was not workable, and ICAR requested that it be modified with*  
164 *the assistance of the Vermont Agency of Transportation (AOT). AOT has in turn requested the*  
165 *Department contact FAA. The intent of the rule is apparently to protect lifts from drone*  
166 *collisions, but drone flight is regulated by the FAA and the draft rule may be preempted as*  
167 *written. I have proposed modified language to limit preemption, based on my experience as a*  
168 *commercial pilot and my understanding of Federal Aviation Regulations.*

169 *The description of drones as “Unmanned Aerial Aircraft” should be changed to “Unmanned*  
170 *Aircraft Systems (UAS)” to be consistent with Vermont AOT and the FAA.*

171 *The term “directly over” should be deleted because it is ambiguous and would likely cover all*  
172 *the regulated airspace from the surface to 60,000 feet, and is superseded by the specific distance*  
173 *in the B77.1, Section 2.1.1.4.*

174 *The “clearing envelope” should be described within the rule so a drone pilot does not need to*  
175 *access the B77.1.*

176 Modify:

177 (c) Drones (~~Unmanned Aerial Aircraft~~)(Unmanned Aircraft Systems)

178 (c)(i) Drones may not be operated ~~directly over any tramway, or within the clearing envelope of~~  
179 ~~a tramway, defined as “within five feet (1.53 meters) of ropes, track cables, and carriers under~~  
180 ~~design operating conditions,”~~ during public operation of the tramway (reference ANSI B77.1  
181 Section 2-2.1.1.4)

### 182 **Section 3.01 General**

183 *There is a new rule listed for “Summer Operations under Section 3.10(d) that requires tramway*  
184 *“Loading and unloading areas shall be constructed in compliance with American Disability Act*  
185 *(ADA) guidelines” [sic]. If we choose to add that provision to the rules, it should apply to all*  
186 *seasons, all lifts, all equipment, and all loading and unloading areas. If that is our intent, new*  
187 *broader language should be added to Section 3.01, which would make listing the ADA*  
188 *requirement under 3.10(d) unnecessary/redundant. If there is a relevant publication or standard*  
189 *for tramways under the ADA it should be added here too.*

190 Add:

191 (e)(i) All Tramways, including loading and unloading areas, shall be constructed and operated in  
192 compliance with the Americans with Disabilities Act.

### 193 **Section 3.02(a)(i) Certification, Calibration and Testing**

194 *The standard for nondestructive testing is listed as “Reference document ASNTCP 189-2001”*  
195 *which appears to reference a 2001 version of this standard. The current version appears to be*  
196 *dated 2020, with a 2024 version soon to be released. The nondestructive testing standard listed*  
197 *under Section 1.04(b)(iv) is identified as the “(ASNT), current edition” but the specific document*  
198 *is not listed. The listings for these documents under both 1.04(b)(iv) and 3.02(a)(i) should be*  
199 *checked for consistency and clarified.*

200 *All references to “nondestructive” testing throughout the rules should be checked for*  
201 *consistency regarding hyphenation and capitalization. ASNT appears to treat it as one word with*  
202 *no hyphenation or special capitalization.*

203 Review/Modify:



204 Two references should be made compatible, probably by removing the 2001 reference in  
205 3.02(a)(i) and being more specific about the standard in 1.04(b)(iv). Specific language should be  
206 developed.

207 The term “nondestructive testing” should be reviewed for consistency throughout the rules. In  
208 3.02(a)(i) and (b)(i) it is hyphenated and randomly single or double capitalized, but the standards  
209 agency we cite to is the American Society for Nondestructive Testing, which apparently does not  
210 hyphenate or capitalize the term in general use. Also see 3.06(a)(ix) and 3.10(e).

### 211 **Section 3.03(a)(i) Lift Evacuation Plan**

212 *The ANSI-ASSE Z359 standard is referenced here but not defined, nor is it listed as an adopted*  
213 *standard under Section 1.04 of these rules.*

214 Review/Modify:

215 The ANSI-ASSE Z359 should probably be added to Section 1.04 and ANSI-ASSE should be  
216 spelled out. If this document is available in multiple editions, then the adopted standard should  
217 probably be identified as “current edition.” It is my understanding the American Society of  
218 Safety Engineers (ASSE) changed its name to the American Society of Safety Professionals  
219 (ASSP) and recent editions of this standard reflect that name change as ANSI/ASSP Z359.1.  
220 Check for consistency.

### 221 **Section 3.05 Personnel and Safety**

222 *A requirement should be added that all lift attendants be provided with Vermont Tramway Rules*  
223 *through display or posting/availability at each work station or in shared workspace. It is*  
224 *troubling that the people who operate this equipment are not even required to know the*  
225 *Tramway Department exists or regulates their operation.*

226 *Many lift attendants are young seasonal workers, often visiting from abroad on H-2B or J-1*  
227 *visas, and are not aware of how regulations work in Vermont, or how to access regulations. We*  
228 *should make that easier for them. Additionally, many lift attendants are entry level workers who*  
229 *would gain a sense of professionalism if they were introduced to the oversight process early in*  
230 *their careers, which could enhance staff retention and career development.*

231 *Most lift attendants have down time during a work shift when they sit in their booth/shack. The*  
232 *public would be better served if during down time the attendants had easy access to the rules*  
233 *that govern operations. Most lift facilities already include printed material such as operating*  
234 *instructions, checklists, logbooks, emergency procedures, guest service guidelines, and phone*  
235 *lists. Most ski areas already post required legal notices from the Department of Labor in*  
236 *employee locker rooms, break spaces or time clock areas, along with other company and*  
237 *employee provided informational postings. Tramway rules could be easily added to these areas.*



238 *Managing the distribution of printed Tramway Rules would occur alongside existing document*  
239 *distribution and would not add a significant cost burden.*

240 *The location and use of stop buttons should be reviewed to require stop buttons at all load and*  
241 *unload stations in all operating seasons, which seems to be the overall intent and consistent with*  
242 *the B77.1 (example 3.1.5 and 4.1.5). Section 3.10(c) of these rules covering only summer*  
243 *operations requires “All loading and unloading areas shall be equipped with a means of*  
244 *stopping the lift,” while stop button requirements in Section 3.05(f)(ii) covering all seasons*  
245 *pertain only to foot passengers as follows: “The load and unload stations shall be equipped with*  
246 *a means of stopping the lift at any point along the load/unload platform when operating*  
247 *primarily for foot passengers.”*

248 *The text describing where a stop line is to be placed for downhill loading (Section 3.05(f)(iii)) is*  
249 *confusing and should be reviewed.*

250 **Add:**

251 (a)(v) Attendants assigned to operate a tramway shall be provided with a printed copy of  
252 Vermont Passenger Tramway Safety Rules at their work station; alternatively a printed copy of  
253 the rules may be prominently posted in employee common area(s) where they are available to all  
254 lift attendants each work day.”

255 Review:

256 Section 3.05(a)(iv) covers age requirements for lift attendants and maintenance personal, and  
257 references an apprenticeship program administered by the “Vermont Ski Areas Association.”  
258 Should this reference be to “Ski Vermont” instead?

259 3.05(f)(iii) It is required that a permanent red “stop line” be provided on the ramp where  
260 downhill loading occurs. The location of the stop line is to be determined taking into account the  
261 length of the ramp and the speed of the lift, making certain the chair stops on the ~~ramp~~ line once  
262 the stop occurs.

263 **Modify:**

264 3.05(f)(ii) The load and unload stations shall be equipped with a means of stopping the lift at any  
265 point along the load/unload platform ~~when operating primarily for foot passengers.~~

266 *[Edit note: consider moving number ii and v to the top of the stack and renumbering such that*  
267 *the first two elements under “Loading and Unloading” pertain to all lift operations, and*  
268 *subsequent elements under this heading pertain to foot passengers. If all load and unload*  
269 *stations are required to have a means of stopping the lift for all riders, and that is specified here,*  
270 *then 3.10(c) becomes redundant and could be removed.]*

271 **Section 3.06 Surface Lift & Tows**

272 *The requirement for rollback devices on surface lifts is written to cover only tubing operations,*  
273 *but might better cover all “recreational devices” as described in Section 1.05 (Definitions). I*  
274 *have suggested additional language below to be used if that is the original intent, plus identified*  
275 *a small typo.*

276 *There appears to be a misdirect to the ANSI B77.1 covering stop gates.*

277 *There is a requirement for NDT that refers back to “Article 3 Section 3.02,” which should*  
278 *probably be listed simply as Section 3.02 for document consistency. Take note that this*  
279 *requirement for NDT is listed under Section 3.06(a)(ix) Surface Lifts & Tows, but not listed*  
280 *under Section 3.08 Chair Lifts. That raises the question whether a reference in 3.06 and/or 3.08*  
281 *is necessary given that it is spelled out in 3.02.*

282 Review:

283 3.06(a)(ii) All tows used for “recreational devices” as described in Section 1.05, including those  
284 used for tubing operations, must have a rollback device installed that acts directly on the drive  
285 train sheave assembly.

286 3.06(a)(iv) The correct reference appears to be Section 6.2.3.2.

287 3.06(a)(ix) NDT (~~non-destructive testing~~) (nondestructive testing) is required on all grips, and  
288 hangers as spelled out in ~~Article 3 Section 3.02~~ Section 3.02.

### 289 **Section 3.07 Conveyors**

290 *Snow removal issues should be clarified to explicitly require clearing snow from integrated*  
291 *decking/walkways adjacent to conveyors. The single rule covering snow removal (Section*  
292 *3.07(d)) appears to refer to clearing snow from the pit (lockout procedures,) and otherwise*  
293 *refers to manufacturer’s recommendations which are not readily available to lift attendants.*

294 *The requirements for nighttime operations should be specifically listed so Owner/Authorized*  
295 *Operators and the public do not need to reference the B77.1.*

296 Modify:

297 (f) COPY THE VERY LIMITED NIGHT OPERATIONS TEXT FROM THE ANSI B77.1  
298 SECTION 7.2.12 AND LIST THEM HERE, RATHER THAN BY REFERENCE ALONE.

299 Add:

300 ( ) The Owner/Authorized Operator shall assure required decking alongside conveyors is clear of  
301 snow and ice at the beginning of each operating day, and that decking remains reasonably clear  
302 of snow and ice accumulation while the conveyor is open to the public.

### 303 **Section 3.08(m) Work Carriers**

304 *The B77.1 Work Carrier standard is new, as is the Vermont rule for annual demonstration of*  
305 *work carrier evacuation. There have been several trial demonstrations of work carrier*  
306 *evacuations in Vermont since the proposed rules were first drafted. If there are any lessons*  
307 *learned I'd like to see them incorporated into the rules.*

308 *General lift evacuation rules proposed under Vermont Tramway Rule Section 3.03 require a*  
309 *“comprehensive plan” which must include a list of required equipment along with its storage*  
310 *location, and considerations for night or other special conditions. A similar written plan should*  
311 *be required specifically for work carrier evacuations, and should include the minimum number*  
312 *of rescuers needed based on where an evacuation occurs. For example, a simple evacuation of a*  
313 *work carrier located over flat ground near a base station during regular operating hours would*  
314 *be different than for a nighttime high angle evacuation involving an injury or medical*  
315 *emergency, and the number of needed rescue/responders would likely be different. If work*  
316 *carriers are used in the off-season, overnight, or during other non-business hours, traditional Ski*  
317 *Patrol resources might not be available. The plan should identify a local staffing level required*  
318 *to meet anticipated work carrier evacuation scenarios, and procedures for activating additional*  
319 *off site emergency services if needed, and then transporting responders to the evacuation site.*  
320 *For efficiency it might be easier for an Owner/Authorized Operator to incorporate the specifics*  
321 *of work carrier evacuation planning within the general Lift Evacuation Plan required by Section*  
322 *3.03.*

323 *There are several places where the terms “work carrier” and “lift carrier” appear to be used*  
324 *interchangeably. If there is no intended difference, the language should be standardized within*  
325 *the rules. If there is an intended difference both terms should be listed in Section 1.05*  
326 *(Definitions).*

327 *Section 1.05 (Definitions) lists only “Carrier, work.” The B77.1 has definition listings for*  
328 *“Carrier,” and “Carrier, work.” If we intend to have only one carrier listing in our definitions it*  
329 *might be clearer to list it as “Work carrier.”*

330 **(m) Lift-Work Carrier Evacuation Demonstration**

331 **(i) A Work Carrier Evacuation Plan shall be filed with the Department each operating season.**  
332 **The plan shall include the number of trained personal required to evacuate a work carrier, a list**  
333 **of available equipment and its storage location(s), and consideration for special circumstances**  
334 **including night evacuations. The plan shall also include procedures for activating off site**  
335 **emergency services, as well as procedures for transporting arriving responders to the evacuation**  
336 **site. The Work Carrier Evacuation Plan may be incorporated into the Lift Evacuation Plan**  
337 **required by Section 3.03, or into an alternative workplace emergency plan maintained by the**  
338 **Owner/Authorized Operator. Reference ANSI B77.1 Section 2: 2.3.2.5.7 and ANSI/ASSP**  
339 **Z359.1.**

340 (ii) Annually a work carrier evacuation demonstration ~~to~~ shall be performed by area maintenance  
341 personnel.

342 (iii) ~~Lift~~ Work carrier to be installed on the line and moved to an area designated by Vermont  
343 Tramway Technician.

### 344 **Section 3.10 Summer Operations**

345 *I assume the lift speed of 250 fpm referenced in 3.10(a) refers to chairlifts, and not conveyors,*  
346 *which have a maximum speed under 3.07(b) of 160 fpm. This should be clarified.*

347 *Typos should be corrected. If a relevant ADA standard is available it should be referenced. This*  
348 *provision could be moved elsewhere in the rules to have greater applicability and effectiveness.*

349 *Requirements for stop buttons in Section 3.10(c) should be reconciled with Section 3.05(f)(ii).*

350 Modify:

351 (a) Aerial ~~Lift~~ loading and unloading speed not to exceed 250 feet/minute.

352 (d) Loading and unloading areas shall be constructed in compliance with Americans with  
353 ~~Disability~~ Disabilities Act (ADA) guidelines.

354 [Editing note: Is there a specific ADA guideline for tramways, or a specific reference to point to?  
355 Is there a reason this rule is listed under Summer Operations, and not more broadly applicable,  
356 for example by inclusion in Section 3.01 (General)? Perhaps a new rule could be added as  
357 3.01(e) All Tramways, including loading and unloading areas, shall be constructed and operated  
358 in compliance with the Americans with Disabilities Act.]

359  
360 (e) Mountain bike racks are to be non-destructive ~~testing~~ tested (NDT) annually.

### 361 **All Sections, General Edit**

362 *There are four places where we refer to a tramway Owner/Authorized Operator as a “resort*  
363 *owner/operator.” These references strike me as limiting and should be reviewed. There is one*  
364 *place where we refer to the Owner/Authorized Operator as “the area.”*

365 *“Owner/Authorized Operator” is defined in Section 1.05 as a fully capitalized proper noun.*  
366 *There are multiple variations of that term throughout these rules, including “owner/authorized*  
367 *representative,” which appear to be treated interchangeable. We should settle on a single*  
368 *treatment for consistency. My preference is “Owner/Authorized Operator,” although the most*  
369 *common usage in these rules is “owner/authorized operator.” Any standard is better than no*  
370 *standard.*

371 Review the use of the word “resort” in Section 3.05(a)(i), 3.05(a)(iii), 3.05(f)(i), and 3.07(c).  
372 Review use of the word “area” to denote a ski area, rather than Owner/Authorized Operator in  
373 Section 3.02(b)(iv) and elsewhere. Review all uses of owner, operator, area, and resort for  
374 consistency.

375 *Review all references to the ANSI standard for consistency. Formatting of numbers/punctuation*  
376 *is inconsistent. Examples:*

377 A.N.S.I B77.1 Section 1-1.4

378 ANSI B77, section 2-2.3.2.5.9

379 ANSI B77.1 Section 2-2.1.1.4

380 ANSI B77.1 Section 2: 2.3.2.5.7

381 ANSI B77.1 Section 7 7.2.9

382 ANSI. B77.1 Section 7 7.2.12