

3-1-2016 MEETING OF THE NEW HAMPSHIRE PASSENGER TRAMWAY SAFETY BOARD

MINUTES

Present:

Members

Selden Hannah

Stanley Judge

Bob Hoyt

Industry

John Ginter

Wildcat

Brian Heon

Wildcat/Attitash

Doug Holler

Dartmouth Skiway

Ivan Stanhope

Dartmouth Skiway

Chris Hanrahan

US Forest Service

Stephanie Phillips

Louis Karno & Co

Jessyca Keeler

Ski NH

NH DOS

David Hilts

Nancy Ettelson

Briggs Lockwood

Selden called the meeting to order at 9:12; Bob Hoyt was not present at the time so the Board members conducted discussions only. The Board members discussed the items on the agenda as follows:

Discussion: Cannon Tramway Evacuation. The Board members examined the bearings taken from the electric drive motor that drives the tramway. There was some discussion; the bearings did not fail, at least not catastrophically in any way, and rudimentary measurements taken by State inspectors did not indicate excessive wear. The problem was that the motor shaft welded itself to the motor housing as it exits the motor housing. The clearance between the shaft and the housing is only a few thousandths of an inch at this location. There was some interference here, causing heat, which welded the shaft to the housing. The Board members were in agreement that the incident was handled in a satisfactory manner regarding the time frame, and the decision making that took place. There was some discussion regarding the procedure if the tram car(s) happened to be in a more remote location on the lift line. Briggs indicated that in that event, the decision making would include taking more time to work on the mechanical problem, so that the cars can be brought into the stations. In this case, the location of the cars was a consideration in making the decision to evacuate.

Nancy pointed out that Cannon Mt. is considering night-time operations. The Board members indicated that Cannon Mt. is responsible for developing an evacuation procedure, and that the inspectors can approve that procedure. If a variance or exception from the requirements is requested, then that exception would need to be approved by the Board. There was no action taken.

Discussion: Granite Gorge Grip Slip Incident: Briggs explained what was found. The Board asked about maintenance records. Briggs indicated that the maintenance, such as re-locating each chair and re-tightening and slip-testing each grip was completed and recorded. Selden suggested that the maintenance procedure be upgraded to minimize the risk of an oversight in the future. There was no action taken.

Black Mt. Chair Replacement: The Board members reviewed documents related to the replacement of chairs on the double chairlift at Black Mt. There was some discussion. Selden questioned whether the chairs, as modified, have undergone required fatigue testing as provided in the B.77.1 Standard in section 4.1.4.4. Briggs agreed to follow up on this with Black Mt. There was no action taken.

At this point, Briggs took the time to pass on a question that had been posed by a journalist: “Why does the State of New Hampshire require liability insurance” to operate a tramway? The response from the Board members is that the insurance is for public safety; the requirement is established by the Legislature, in RSA 225-A, not by the Tramway Board.

Discussion: Storrs Hill. Briggs explained that there was a deropement of the Storrs Hill platter lift. It occurred on a Saturday evening, and Briggs received a telephone call from them. They worked on the lift, and Briggs visited the area the next day to review. It was evidently caused by a towing unit getting caught behind guidage at the top terminal. Briggs explained that his message to the area is that the terminal area needs close supervision to preclude this from happening. Selden asked if the rope came to the ground. Briggs explained that the lift deroped from several towers, including the drive bullwheel, so it did come to the ground, though it was not being driven, nor was it under tension at that point. Selden pointed out that a detailed description of the incident would be helpful in the effective prevention of a re-occurrence. There was no action by the Board.

Discussion: Mt. Sunapee Duckling Chairlift. Briggs passed along the latest developments regarding the grips on the Duckling chairlift at Mt. Sunapee, which was manufactured by Roebling. These are becoming uncommon grips in the industry because of their manufacturer, age, and size. Sunapee sent the grips to Skytrans for testing/inspections this year, and they effectively were removed from service. In a development that is somewhat unique, Sunapee then ‘rented’ grips from Skytrans. These will be sent back in the off-season to be used on lifts owned by Skytrans. Next fall, they will be tested and return to Sunapee to operate on the Duckling chairlift again. There was some discussion. Selden indicated that Sunapee should be in possession of the testing procedure that is used on the grips, as it is different than the procedure that had been used in recent years. There was no action by the Board.

Discussion: Waterville Valley Stadeli Chairlift Backstop Modifications. Briggs explained that the backstop modifications on the chairlifts at Waterville Valley have been completed and tested. There was some discussion. No action taken by the Board.

Discussion: Trash Cans Under Chairlifts. Briggs explained that an operator has asked that a rule change be considered that would allow areas to locate trash cans under chairlifts and allow

passengers to then throw trash from the lift at designated points. There was some discussion. Selden suggested that the B.77.1 committee could look at that as a possibility for a future edition of the Standard. Nancy pointed out that RSA 225-A prohibits passengers from throwing anything from a lift also; in order to change this, an amendment to the law would need to be passed by the NH Legislature. No action taken by the Board.

Wildcat: Interpretation of the Standard as it applies to automatic application of bullwheel brakes and rollback devices while operating in evacuation mode. The Board members discussed this issue with Brian Heon and John Ginter. The lift in question was installed in 1997, so for some design purposes, the 1992 Standard would apply. The situation that exists is that when the lift in question, the Wildcat Express, is switched to evacuation mode, the bullwheel brakes, including the emergency brake, and the rollback brake, are locked open manually, and can only be set by opening a valve on the control console. There is no automatic application of either brake in the case of either a rollback or an overspeed, both conditions which are arguably possible. This procedure relies on a person to physically open a valve to set the brake. As the lift exists, the emergency stop circuit will stop the lift and apply the service brake, so it thereby technically satisfies the requirement that the evacuation drive be shut down by the emergency stop circuit. There was some more discussion. The Board members were in agreement that this protection is important.

At this point, Bob Hoyt joined the meeting, at 10:53, so a quorum of the Board was now present. Selden reviewed the discussions that had taken place up to that time with Bob. There was more discussion; Brian Heon provided an opinion from Doppelmayr suggesting that the lift is compliant with the Standard the way it is. John Ginter provided a copy of the Evacuation Drive Operating Procedure from the lift's manual.

Briggs also pointed out that this same phenomenon was observed on one other lift, a Doppelmayr Eco-Drive model lift. That lift does not represent a significant risk as its vertical rise is insufficient to create a significant rollback risk. However, there are other Eco-Drive lifts that do have a rollback risk, and the systems are likely to be similar.

After discussing the issue further, the Board agreed to pose the question to the B.77.1 Committee for an interpretation. Selden drafted the following, which was agreed upon by the Board for submittal:

Interpretation Request:

1. 3.1.2.6 Do all brakes require all automatic functions of engagement under all operating modes of different prime movers as well as evacuation engines?

2. 3.1.2.6.3 Is the rollback device required to automatically apply whenever the haul rope travels in reverse rotation in excess of 36 inches (with exception when the lift is being driven in reverse) using any drive system?
3. 3.1.2.6.2 Is the emergency brake required to automatically apply on overspeed or excess reverse travel under all drives including the auxiliary drive?
4. Do the interpretations above apply to the 1992 Standard?

The Board reviewed the minutes from the 10-23-2015 Meeting.

Motion to accept: Bob Hoyt

Second: Stan Judge

Approved unanimously.

Chris Hanrahan from the US Forest Service wished to discuss some topics that are currently being discussed in Vermont, as well as elsewhere in the industry.

Chris indicated that there have been several 'falls from chairs' in Vermont, and that authorities throughout the industry are searching for ways to minimize the risk of this from happening. One of the methods being discussed is additional signage, with particular attention being paid to the location. Chris had some photos of a large sign reading 'Raise Bar Here', colored in bright orange, and located right at the terminal of a detachable lift. There was more discussion. Briggs passed on the observation that, of the incidents that he's seen, a larger percent of incidents occur near the loading terminal. Selden pointed out that he believes the Canadian Standard uses a 'time' function for sign location... a sign might be required to be located so many seconds from a terminal.

There was more discussion regarding the Doppelmayr bulletin requiring the inspection of tower crossarms, and the Borvig crossarm issue. Chris indicated that several cracks were found on a Borvig chairlift at Suicide Six in Vermont; it was further pointed out that this lift does not share the same design as the lift in West Virginia that had a crossarm connection failure recently.

Briggs indicated that all Borvig equipment in New Hampshire has been inspected by the respective areas, and that no problems were found. There are two lifts in New Hampshire that have tower crossarms with similar design to the lift in West Virginia; those lifts have been fitted with the u-bolt upgrade.

Selden ended the public hearing for the proposed rule change at 11:17 AM.

The Board set the date for the next meeting for Tuesday, April 12, 2016, at 9:00 AM, at the Division of Fire Safety, 110 Smokey Bear Boulevard, 1st floor conference room.

Motion to adjourn: Bob Hoyt

Second: Stan Judge

Approved unanimously.

Respectfully Submitted,

W. Briggs Lockwood