



# Technical Standards and Safety Authority

Minutes of the Ski Lift Advisory Council

Meeting on April 11<sup>th</sup>, 2023

## **Minutes of the Ski Lift Advisory Council meeting of the Technical Standards and Safety Authority (TSSA) held by teleconference at 2 p.m. on the 11<sup>th</sup> day of April, 2023.**

**Present:** John Ball, Canadian Ski Instructor Alliance; Ward Bond, Ski Lift Installation; Tom Cavers, Beaver Valley Ski Club; Brian Edwards, Edwards Insurance Brokers; Murray Frankcom, Leitner Canada; Sarah Kenney, Kenney Engineering Inc; Dave Mathewson, Mount Pakenham Ski Area; Candice Micucci, Canadian Ski Patrol System; Kevin Nichol (Chair), Ontario Ski Resorts Association (OSRA); Mark Rutherford, Brimacombe; Robert Sheridan, Blue Mountain Resorts LP; Christine Simpson, TSSA's, Consumer Advisory Council.

Alexandra Campbell, VP Communications & Stakeholder Relations; Olga Sousa-Dias, Executive Assistant; Ammara Khan, Manager, Stakeholder Relations; Rob Kremer, Manager, Engineering, Elevating Devices Safety Program; Roger Neate, Director, Elevating Devices Safety Program

### **1. Welcome & Constitution of Meeting**

The Chair, K. Nichol, called the meeting to order at 2 p.m.

#### **a) Safety Moment**

For the safety moment, a video was shown about the importance of a good night's sleep.

### **2. Adoption of April 11 2023 agenda**

Council adopted the agenda as presented.

### **3. Approval of November 22, 2022 minutes**

Council approved the minutes as presented.

### **4. Review action items from last meeting**

R. Neate said the action to communicate with industry regarding labour disruption was completed.

### **5. Chair's Update**

The Chair treated his annual report as read.

## 6. Council Administration

A. Campbell told council that the Terms of Reference will be circulated. The terms will be limited to three years, effective January 2022. J. Ball asked if the five members whose memberships will soon expire (October 23) would be addressed at the next meeting. A. Campbell said they would, and that emails would be sent to the members in advance.

### A) Membership renewals

Tom Cavers, Kevin Nichol, Robert Sheridan (March 23) will renew for another three years.

**Action:** Candice Micucci (March 24) will be contacted by email regarding her renewal.

## 7. Issue Prioritization Discussion

### a) CAD changes

R. Kremer addressed the following three concerns raised at the last plenary meeting regarding CAD 295/22 versus Z98:19.

Concern #1: TSSA is requiring additional Safety Integrity Level (SIL) components to increase redundancy and safety. In response, D. Kremer said TSSA is not requiring SIL design. If it is used, TSSA is looking for compliance to the Z98 code and validation of the SIL selection level (1-4) per the IEC-61508. The Z98 code speaks to the importance of having a design that is redundant and checked. When choosing a software system it is important that it has a good reliability rating. The overall design must be done correctly in order to benefit from the safety ratings of individual components. If TSSA can see that a design has been redundant and checked, no risk assessment is required. In other words, make it SIL-3 or make it redundant and checked.

Concern #2: In adding these additional requirements, TSSA is decreasing the reliability of the devices. In response, R. Kremer said if the SIL selection cannot be justified, then design changes are required. For example, a SIL level 2 could be bumped up to a SIL level 3 to improve reliability.

Concern #3: TSSA is adding requirements that go well beyond the code and go beyond most other jurisdictions in North America. In response, R. Kremer said that TSSA is enforcing the code as written. Nothing is being added.

J. Ball asked why the code adoption document is necessary. R. Kremer said the CAD adds clarity to the requirements. If nothing was stated in the CAD, risk assessments would be required for all Z98 designs. The Code clarifies that if a designer chooses to do a traditional redundant and check or a SIL-3, no risk assessment is required.

M. Frankcom proposed that R. Kremer present this information to the engineers and designers from each manufacturing organization. R. Kremer said this could be done. One of the major manufacturers wrote Annex L for guidance. The Chair added that it would be helpful to provide the manufacturers with background by showing the rationale around changes that come to the code.

M. Frankcom said discussions typically relate to items within Annex L. The safety system is comprised of components and software. Thus, a forum for designers and electrical engineers is needed. He encouraged more active participation in the Z98 committee, which has an electrical subcommittee. For example, the need for a code adoption document could be argued at such meetings. R. Kremer re-stated that nothing is being added to Z98. Rather, allowances are being made for the designers to relieve burden. M. Frankcom said he will prepare an invitation list. Anyone on council who wants to join in can contact him.

**ACTION:** K. Nichol and M. Frankcom will organize the meeting, to include TSSA members and participants from other jurisdictions.

The Chair asked for clarification that there needs to be variance in order for designs to be accepted. R. Kremer said the variance was a permission to operate in this coming season. TSSA did not know if the SIL level being offered was sufficient with no risk assessment to defend it. Rather than not permit the device to operate, it was allowed to operate for a season under a variance permission with the assurance that a risk assessment would be coming.

A member asked if ski lifts, which have trained personnel in attendance, provide a higher level of redundancy and a safer component compared with elevators. R. Kremer said SIL determines the level of failure that one is willing to accept. In the case of an electronic sensor, how reliable must it be? One failure in 1000 hours, one in 10,000 hours? The designer decides the level of failure that is acceptable, whether the device is manned or not.

R. Sheridan said lifts are getting older and electrical systems are expensive to update. It is important that upgrade requirements not be too complex. R. Kremer said redundant and checked is the basic premise of a safety circuit. With those two components a system can be upgraded.

## **b) Accessibility of departments by phone, increased fees, decreased service**

R. Neate spoke to this item. Stakeholders say they are having trouble corresponding with TSSA as it relates to licensing applications, bill paying, registering ski lift mechanics in training, and bringing ski lift mechanics in training that have met their requirements to become fully licensed. Renewal forms sent out were missing the Ski Lift checkbox, for example. Calls made to TSSA sometimes go unanswered.

M. Rutherford echoed the concern. He said he was told to fill out a particular form, although ski lifts were not listed on the form, then he was told it was the wrong form. After filling out the second form, which had ski lifts on it but no conveyor lifts, he was told information was missing. However, what was missing was not specified. A. Campbell asked if this is a new problem. M. Rutherford said it began this year. He got in touch to ask what was missing and submitted the form for a third time. After submitting these forms for 20 years with no difficulty, he expressed frustration in what he has encountered this year. A. Campbell acknowledged that other stakeholders have expressed their frustration as well, and addressing this will be a priority within the New Strategic Plan.

A. Ravel asked if M. Rutherford would share all the documents with him, as it might be a training issue relating to the new CRM system. M. Rutherford agreed to do so.

J. Ball said he recently went through almost the same process as described by M. Rutherford. He suggested that with the new CRM it may be possible to identify the Ski Lift operators and contractors and send them only forms that pertain to them. J. Ball said he recently found a contractor's renewal form that included Ski Lifts, and his operations manager filled it out. However, the prepayment in the portal for someone who doesn't have a company credit card is not going to be paid for by an employee on his own card. It was decided a cheque would be mailed, however, this would require that he submit separately to licensing at TSSA a list of installations contracted for. When he clicked on the link he got an Excel spreadsheet created in 2008, updated in 2014, with three separate cells filled out: contractor number, installation number, and contract expiry date. This process is not in line with the new CRM ease of service. He asked if anyone at TSSA has tried to fill out a form.

R. Sheridan noted that the payment portal was down last week.

D. Mathewson agreed with all the comments. He added that northern resorts are having difficulty registering new apprentices on the TSSA website. They could not find the form. He told them the form was the same as applying for an exam. This causes confusion. Secondly, a resort operator spent 2.5 months trying

to change his address on his license. He could not get anyone on the phone at TSSA. When D. Mathewson tried to assist, he also could not get an answer at TSSA Training and Certifications, and there was no answering machine. He left a message with R. Neate, and the next morning the problem was solved. Thirdly, D. Mathewson commented that operators were told they would be saving money, however there is less accessibility, less help, fewer inspections, and the fees are going up.

A. Campbell said the new portal will solve some, but not all of these problems.

A. Campbell announced that A. Raval will be the new VP, Operations at TSSA, effective May 1, and will take over the AD/SKI program which he has a lot of experience with.

R. Neate will take over the new customer service section.

M. Frankcom echoed the difficulty he has had with forms. He stressed that someone needs to answer the phone at TSSA. It would be helpful to identify a mailbox or a name where stakeholders can address their issues.

**ACTION:** A. Campbell said TSSA does not have a way to triage complaints. There is an ombudsman, but that path does not feed into the root causes of problems. Solving this will become a priority.

## **8. Adjournment**

The meeting was adjourned at 3:20 p.m.