



Elevating and Amusement Devices Safety Division	Ref. No.: 185 / 03	Rev. No.:
DIRECTOR'S SAFETY ORDER	Date: September 24, 2003	Date:

IN THE MATTER OF:

**THE *TECHNICAL STANDARDS AND SAFETY ACT* 2000,
S.O. 2000, c. 16**

- and -

**ONTARIO REGULATION 209/01 made under the
Technical Standards and Safety Act 2000
(Elevating Devices)**

Subject: BM Manufactured Chair Lifts With Counterweighted Tensioning Systems
Sent to: ALL Ski Lift Industry Stakeholders - CONTRACTORS IN GROUP 8

1. INTRODUCTION

This Order, which requires immediate implementation, supplements Leitner-Poma Service Bulletin # 2003-004 regarding counterweighted tensioning systems on those chair lifts manufactured by BM Lifts now owned by Leitner-Poma with clarifications and enhancements. The Leitner-Poma Service Bulletin is intended to alert and prevent the occurrence of a serious accident similar to the one that recently occurred on a chair lift in Ontario. In this accident the failure of the counterweight rope caused the catastrophic failure of the chair lift.

2. ORDER REQUIRING IMMEDIATE IMPLEMENTATION OF LEITNER-POMA SERVICE BULLETIN

2.1 General

- (a) The Leitner-Poma Service Bulletin # 2003-004 dated July 30, 2003 attached with this Order applies to those chair lifts manufactured by BM Lifts now owned by Leitner-Poma.
- (b) This Order applies to any chair lift owner whose name is missing from the Leitner-Poma Service Bulletin # 2003-004.
- (c) Any chair lift owner who is not sure of the original manufacturer of chair lift shall contact the TSSA immediately for further direction.
- (d) Any other chair lift that was altered to incorporate BM manufactured counterweighted tensioning terminal shall immediately contact both the TSSA and Leitner-Poma for further direction.
- (e) With the exception of the requirements in the Leitner-Poma Service Bulletin # 2003-004, all other requirements specified in the Director's Safety Order # 184/03 "All Passenger Ropeways with Counterweight Ropes – Inspection and Replacement Criteria for Ropes/Connections & Sheaves" shall be applied to those chair lifts manufactured by BM Lifts now owned by Leitner-Poma.

2.2 Counterweighted Tensioning System

Counterweight tensioning rope shall be inspected and replaced in accordance with the Leitner-Poma Service Bulletin # 2003-004.

2.3 Counterweighted Tensioning Terminal Structure

- (a) The structural integrity of counterweighted tensioning terminal shall be subjected to verification and reinforcing according to the Leitner-Poma Service Bulletin # 2003-004.
- (b) The activities under the subsection (a) shall be considered an alteration under Subsection 26(2) of the Elevating Devices Code Adoption Document adopted by Ontario Regulation 209/01 made under the Technical Standards and Safety Act 2000.
- (c) All documents resulting from the activities under the subsection (a) shall be submitted in accordance with Subsections 15(2) and 15(4) for registration under the Elevating Devices Ontario Regulation 209/01 made under the Technical Standards and Safety Act 2000.

3. INSTRUCTIONS

All documentation generated to prove compliance of this Order shall be included in the Maintenance Log as required by Ontario Regulation 209/01 (Elevating Devices).

This order is being made pursuant to the Technical Standards and Safety Act. Failure to comply with this order is an offence punishable upon conviction, to a fine of not more than \$50,000, or imprisonment for a term of not more than one year or both, or if the person is a body corporate to a fine of not more than \$1,000,000.

Ted Dance, Director, TSS Act 2000, (Elevating Devices)

LEITNER-POMA SERVICE BULLETIN

**Bulletin LPC 2003-004
July 30, 2003**

TO:

**Caledon Ski Club
Dagmar Resort
Devils Elbow Resort
Hidden Valley Highlands
Hidden Valley Resort
Hockley Valley Resort
Horseshoe Resort
Kamiskotia Snow Resort
Loch Lomond
Mansfield Ski Club**

**Marathon , Town of
Mt Dufour Ski Area
Mt Pakenham
Mt St-Louis Moonstone
North York Ski Center
Oshawa Ski Club
Searchmont Ski Resort
Sir Sams Ski Area
Snow Valley Resort
Talisman Mtn Resort**

Re: BM Lifts chairlifts with counterweight systems for tensioning

As you may be aware, last winter one of the BM Lifts quads experienced failure of the tension rope. The lift was built in 1992 .

It was determined that the rope failure was caused by accumulated fatigue in the rope, as well as an unnoticed progressive mechanical wear of the rope due to rough surfaces of counterweight sheaves and their misalignment.

Due to occurrence of this failure, and the design of the tension system, which makes access to some parts of the cwt rope difficult, we feel it necessary to revise the inspection requirements for these ropes:

- 1. Each year the entire length of the tension rope must be inspected by magnetic testing (and NOT visual inspection - as presently required by the CSA-Z98). The test results must be properly documented and certified.**
- 2. Regardless of the rope condition tension ropes on these lifts must be replaced every five (5) years or 7500 hours of operation.**

In addition, prior to the next ski season all listed above lifts must be subjected to verification (and eventual reinforcing) of the connection between carriage runways and the supporting structure. During last winter's incident the tension rope break led to a considerable impact of the carriage against the stoppers, and consequential failure of this connection. Due to a variation in the designs, and differences in terminal configurations (drive/tension; return/tension) contact Leitner-Poma for specific recommendations and requirements.

**Radu Petrut , P.Eng.
Leitner-Poma Canada**