

**Tuesday - May 3, 2016 • 9:10 a.m. • Colorado River Ballroom**

**General Session: Ropeways Through the Lens of the Media and the Law**

**Dave Byrd • Director of Risk & Regulatory Affairs • National Ski Areas Association**

Ski areas – especially chairlift operations – are under the increasingly harsh glare of the media spotlight, which has only gotten worse with the explosion of social media, GoPros, smart phones, and surveillance. The miscues in our lift operations and maintenance are magnified and sensationalized beyond their true impact, but the damage to our industry and the sport is often disproportionate to the actual incident. Whether it's the focus on aging chairlifts, self-induced mechanical malfunctions, or kids repeatedly falling from lifts, our industry needs to do a far better job of preventing these events from happening, and managing the fallout when they do, because the media's initial reaction only leads to eventual legal and regulatory headaches. This keynote places all of these challenges into proper context, with the call to action for new approaches and changes that can put the sport and our industry in a more positive light.

- *Dave is an attorney, a journalist, and the NSAA's director of risk and regulatory affairs. Prior to joining NSAA, he worked for two national law firms defending clients such as Phillip Morris, and managed AT&T's land use issues in the Pacific Northwest. Dave also served as a law clerk to the Honorable John Bates of the US District Court in Washington, DC, and was a legal affairs reporter for National Journal magazine. He began his skiing career in junior high school and remains an avid skier.*

**Wednesday - May 4, 2016 • 8:30 a.m. • Colorado River Ballroom**

**General Session: Little Shop**

**Sid Roslund • National Ski Areas Association**

Sid will lead this session, with help from other insurance and authorities personnel. The year in review! What went "right and wrong, trends that have been noticed concerning Ropeways, and the people who maintain and operate them.

- *Sid has been involved with the ropeway industry for over 45 years. He started at Steamboat Resort, and then worked for three years in Indonesia at the Freeport Mine that used Cableways to haul ore from the mine down to the mill. Sid was then involved with the opening of VonRoll Tramway offices in the USA, as the manager of Service and After Sales Engineering. He is now the Director of Technical Services for National Ski Areas Association. The administration of the ANSI ASC B77 Committee and the ANSI B77.1 Standard are his main duties.*

**Wednesday – May 4, 2016 • 10:15 a.m. • Colorado State Employees Credit Union – 2<sup>nd</sup> Floor**

**CPTSB – Colorado Passenger Tramway Safety Board – Rulemaking Hearing**

This is an official meeting of the CPTSB.

The agenda for this meeting will depend on rule making, disciplinary actions and any other official business that may come before the board. Go to the following link and select Calendar and Agenda for additional information.

<https://www.colorado.gov/apps/calendar/html/event/?eventCollectionCode=DORAPTSB>

Meeting will be held at Colorado State Employees Credit Union, 202 Main Street, Grand Junction, Colorado second floor across the street from the Two Rivers Convention Center.

*The Colorado Passenger Tramway Safety Board was established in 1965 to inspect and register ski lift devices. The Board was originally composed of six members who were defined by the statute. In 2001, the structure of the Board underwent some minor changes. The Board composition was redefined to include a representative from the U.S. Forest Service, two members representing the industry, two members representing the public at large, one member who is a licensed professional engineer not employed by a ski area or related industry, and one member familiar with or experienced in the tramway industry who may represent the passenger tramway manufacturing or design industry*

# Class Descriptions

45<sup>th</sup> RMLA Conference — May 2-5, 2016

## ELECTRICAL CLASSES:

### E-1 Introduction to Basic Electricity

Mike Taylor • Keystone Resort

Tuesday - May 3, 2016 • 10:30 a.m. • Kannah Creek

*This course will cover the basics of electricity and will expand upon various electrical components typically found on ski lifts. Bring a calculator.*

### E-2 Introduction to the Usage of Digital Multi-Meter

Mike Taylor • Keystone Resort

Tuesday - May 3, 2016 • 1:00 p.m. • Kannah Creek

*You must bring a multi-meter to this class.*

*This course will cover the workings and usage of digital multi-meters.*

### E-3 Intro to Electrical Schematics/Drawings/Symbols

Bruce Wyman • S-K-I Electric

Tuesday - May 3, 2016 • 1:00 p.m. • Plateau Creek

*We will start with the symbols of the different electrical components and start to add the lines (wires) that connect them together. As more components are added the basic circuits will come to light. The protocols for the layout of circuit diagrams will be explained and how to start to trace a circuit through a drawing.*

### E-4 Overhead Comm-Line Installation

Mike McMahon • Breckenridge Ski Resort

Tuesday - May 3, 2016 • 10:30 a.m. • Parking Classroom

*The presentation will be a hands on introduction to installing a comm-line. The presentation will show the steps needed to pull in a new comline, how to tension, and then how to "cut-in" a boot.*

*Hands-On Lab – E-12 Comm-line Installation class is a prerequisite.*

*Each lab will be a hands-on session with 4-6 people. You will install a section of comm-line, tension it up and then cut in boot. 2-3 lab sessions will be offered.*

*Sign up during E-12 class.*

### E-5 Lift Electric Roundtable

Bob McDonnell • Vail Mountain

Tuesday - May 3, 2016 • 3:00 p.m. • Kannah Creek

*Panel with Todd Rouff*

*This is an open forum for all those who practice the Dark Art of Lift Electronics. All skill levels are welcome. We will discuss all flavors of Lifts, Snowmaking, and other electrical challenges. Please bring your questions, ideas, and anything else you would like to talk about. Panel with*

### E-6 DC Motor Maintenance

George Finley • Morgan Advanced Materials

Tuesday - May 3, 2016 • 3:00 p.m. • Fairfield - La Court

*-Greasing schedules*

*-Commutator inspections/cleaning*

*-Bearing noises*

*-Tach/Encoder issues*

*-Brush tension*

*-Properly installing new brushes*

*-Other preventative maintenance tips and tricks for motors*

### E-7 Introduction to HMI and Data Collection

Matt Smolskis • TMMI

Tuesday - May 3, 2016 • 3:00 p.m. • Fairfield - Mesa

*Panel with Ryan Hendrichs*

*Review of how HMI works and the data you can get from it.*

### E-8 Troubleshooting Comm-Lines and Mechanical Deropement Switches

Mike Taylor • Keystone Resort

Wednesday - May 4, 2016 • 10:30 a.m. • Plateau Creek

*The following part of the course will utilize a mock comm-line boot to demonstrate what type of faults can occur and how a digital multi-meter can be used to diagnose electrical problems. Prerequisite for this course is E-1 Introduction to Basic Electricity if one is not familiar with electrical power flow.*

### E-9 Battery Maintenance: Or How I Learned to Stop Hating and Love the Battery

Todd Ruoff • Vail Mountain

Wednesday - May 4, 2016 • 10:30 a.m. • Fairfield - Mesa

*Panel with Bob McDonnell*

*We cover maintenance, safety and inspection of this often overlooked, and critical part of your lift system.*

### E-10 Lightning Surge Protection: A 2016 Power Quality Review For The Ski Industry

William (Bill) Percell • Meter-Treater, Inc.

Wednesday - May 4, 2016 • 10:30 a.m. • Fairfield - La Court

*This session reviews the 2016 ANSI/UL1449 4th Edition (Surge Protection Device) Standard and its impact on the application and protection of electrical/electronic operating systems used within the Ski Industry. Material will also cover the selection, application and coordination of surge protectors to provide optimum cost-effective solutions. Grounding and bonding practices will also be covered because of their critical relation with system performance and personnel safety.*

### E-11 Fuseology: Overview, Application, and Selection

Bruce Dube • Intermountain Fuse Supply

Wednesday - May 4, 2016 • 1:15 p.m. • Escalante Creek

*Attendees will be given a working knowledge of fuses and the proper selection and sizing for various applications and situations. The presentation will include a brief open book quiz and several fuse selection and sizing problems for common applications. Class Limited to 25 participants. Sign up during conference check-in.*

### E-12 Rope Position Detection (RPD) - Doppelmayer Systems

Mike Taylor • Keystone Resort

Wednesday - May 4, 2016 • 1:15 p.m. • Plateau Creek

*This class will explain how proximity switches produced by Efactor are utilized for haul rope location by Doppelmayer. The two methods of deropement detection (Matrix and Individual tower) will be explained along with the trouble-shooting of each system. There will be a demo of the Efactor switch showing the functionality of the sensor.*

### E-13 Auxiliary Diesel Engine Control Systems

Tom Hassell • Winn-Marion, Inc

Wednesday - May 4, 2016 • 3:00 p.m. • Plateau Creek

*Safe, cost-effective, and reliable replacement options for obsolete ramp generators and speed governors.*

*Many ski lift auxiliary diesel engines have legacy control systems with obsolete parts and inherent safety risks. The old Barber-Coleman ramp generators and speed governors are no longer available, and there are safety risks associated with the Normally Open fuel actuators used on many of these engines. Operational flexibility is limited, and maintenance and troubleshooting of the system is often a troublesome effort. We will discuss these current problems along with solutions, how speed governing systems work and how to select the right control, and the benefits of upgrading to a modern control system.*

### E-14 Relay Logic/Circuits?

Bruce Wyman • S-K-I Electric

Thursday - May 5, 2016 • 8:30 a.m. • Escalante Creek

*This class will start out looking at the different types, sizes, and nomenclature of relays. We will then move on to the different ways of using relays as related to lift controls. The session will finish up by looking at reduced starting voltages via auto transformers or wound-rotors and how relays fit in.*

### E-15 CPS's - Troubling Shooting Tower Faults

Mark Thorpe • Snowmass Ski Area

Thursday - May 5, 2016 • 8:30 a.m. • Spring Hill - Monument

*This session will address Poma style C.P.S. faults including;*

*- Introduction to Trouble shooting*

*- 3-wire switches - 4-wire old style switches;*

*- 4-wire new style switches - 5-wire newest switches.*

### E-16 Ground Fault Protection / Ground Fault Circuit Interrupters?

Bruce Wyman • S-K-I Electric

Thursday - May 5, 2016 • 10:30 a.m. • Escalante Creek

*Ground Fault protection has been required on ropeway systems by the B77.1 Standard (X.2.1.5.4) for many years. GFCI (Ground Fault Circuit Interruption) was added to B77.1 in 2006 for new installations. This class will look at the differences between Ground Fault protection for equipment and GFCI for personnel protection. The differences in the two types of protection and their applications / functioning will be outlined. The differences of Ground Fault protection as applied to the different types of power distribution circuits (Delta & Wye) will also be outlined.*

### E-17 Variable Frequency Drives - 101

Matt Robinson • ABB

Thursday - May 5 2016 • 10:30 a.m. • Springhill - Main St

*Panel with Michael Savoie - Rocky Mountain Baldor*

*We will review VFD basic principles and how they work with electric motors.*

# Class Descriptions

45<sup>th</sup> RMLA Conference — May 2-5, 2016

## MAINTENANCE CLASSES:

### M-1 Introduction to Wire Rope

RJ Knight • Knight Equipment Co.

Tuesday - May 3, 2016 • 10:30 a.m. • Hampton - Grand Room

Panel with Justin & Jason

Terminology, constructions, use; How wire rope is made;

Basic inspection & Math (Broken Wires, etc) MRT; ANSI B77 Requirements.

### M-2 Go Lighter & Stronger - Wire Ropes to Fiber Ropes Synthetic Rope: Technology, Usage, and Inspection

Todd Smith • Delta Rigging

Tuesday - May 3, 2016 • 1:00 p.m. • Parking Classroom

Panel with Isaac Rosenberg - Presentation will focus on building a understanding of synthetic fiber ropes and how it is used in the field. From the basics about rope, type of fibers and constructions, to hands on-rope inspection.

### M-3 Lever Hoists and Chain Fall Inspections

Todd Smith • Delta Rigging

Tuesday - May 3, 2016 • 3:00 p.m. • Parking Classroom

Panel with Clayton Quillin - What you need to know and do for the in-service and annual ANSI/ASME B30.201 inspections on lever hoists and chain falls.

### M-4 Enerpac Systems

Bill Golgosky • Enerpac

Tuesday - May 3, 2016 • 10:30 a.m. • Springhill - Main St

A Safety Seminar is a 1-1/2-hour semi-hands on high-pressure hydraulic safety training class designed to bring awareness to common safety hazards of both reportable/non-reportable (OSHA & MSHA) conditions and product seen in the high force tools industry. The seminar discusses safety concerns when using 10,000psi equipment. Class participation is required in identifying and determining common misuse and proper set up. We also conduct a brief question & answer session at the end providing feedback to participants on current issues they may be experiencing. Maintenance, welding, electrical, metal working personnel will use our products. No tools are required to attend.

### M-5 Ball and Roller Bearings – Design and Operation

Neville Sachs, PE, PLLC • Sachs PLLC

Tuesday - May 3, 2016 • 1:00 p.m. • Spring Hill - Main Street

- Historical background information about ball and roller bearings;
- Different types of bearings and where they are used;
- Design lives and how the lives are calculated;
- How bearings fail and descriptions of Hertzian and surface fatigue;
- L10 lives and the effects of loads;
- Lubricants and film thickness;
- The effects of water, dirt, and temperature.

### M-6 Servicing of Lift Gearboxes: Bearing and Gear Failures

Bruno Pfister • Kissling AG

Tuesday - May 3, 2016 • 10:30 a.m. • Plateau Creek

What can lift maintenance do to prevent from Gearbox failures. What to look for when doing a visual inspection. Practical tips of how to inspect gearboxes.

### M-8 Gates Safe Hydraulics

Steve Gulick • Gates Corporation

Wednesday - May 4, 2016 • 10:30 a.m. • Parking Garage

This course will highlight hydraulic safety practices, preventative maintenance, troubleshooting applications, proper assembly and installation examples.

### M-9 Old School Machinery Alignment

3-Hour Class

Brian Reihel and Troy Frutiger • Vail Mountain

Wednesday - May 4, 2016 • 1:15 p.m. • Parking Classroom

This class is by Mechanics for Mechanics, this is a hands-on open discussion class, Topics include; Types and causes of misalignment, Alignment methods, Alignment preparation, Soft foot, Moving the machine, Simple alignment techniques, Precision alignment. Please bring a simple calculator or phone with a calculator. Limited to 15 participants. Sign up during check-in.

### M-10 Fastener Safety Seminar

Chris Palazzolo • Lawson Products, Inc

Wednesday - May 4, 2016 • 1:15 p.m. • Fairfield - La Court

Panel with Mike Mason

We will teach the importance of using a matched fastener system for different applications. There will be a demonstration of the strength and function of different grade cap screws and their limitations. We want to create awareness of improper use and to reinforce the likelihood of failure when reuse occurs. We will identify different types of fastener failures and provide examples. Our audience is anyone doing maintenance. There are no specific tools required to attend.

### M-11 Belt Drive Maintenance & Optimization

Ben Huntoon • Gates Corporation

Wednesday - May 4, 2016 • 3:00 p.m. • Fairfield - La Court

This class will cover belt drive installation, preventative maintenance, troubleshooting, and proper application-based belt selection to optimize drive performance and belt life.

### M-12 Lift Gear Basics, Field Service Inspections and Overhaul Procedures

Nick Chieppo • Artec Machine Systems

Wednesday - May 4, 2016 • 3:00 p.m. • Escalante Creek

General gearbox maintenance practices, Analysis and understanding of the information you receive from diagnostic evaluations,

### M-13 Introduction to Brakes - 101

Mike Lane • USDA Forest Service

Thursday - May 5, 2016 • 8:30 a.m. • Springhill - Main St

This class will look at the different types of brakes, their physical characteristics, components, nuances, and adjustments. The session then applies the different brake types as they are used on ropeways and attempts to give an overview to help you understand their operation and how they relate to the requirements of the B77.1 Standard.

### M-14 Failure Analysis of Mechanical Components and Failed Lift Component Segment.

3-Hour Class

Neville Sachs, PE, PLLC • Sachs PLLC

Wednesday - May 4, 2016 • 1:15 p.m. • Spring Hill - Monument

1. The multiple causes of mechanical failures.
2. A brief review of the physical properties of materials.
3. Comparing the features of overload vs. fatigue failures
4. Looking at a series of failed components, with the students diagnosing the causes for the failure.

### M-15 Hydraulics Fundamentals

3-Hour Class

Mike Murphy • Hydraulic Controls

Thursday - May 5 2016 • 8:30 a.m. • Hampton - Grand Room

Hydraulics Basic Training, pumps, motors, valves and all components needed in a system. Physical laws of fluid power, reading symbols, indentifying components, manifolds, troubleshooting and electrical control of valves and pumps.

### M-16 Visual Inspection:

Are We Seeing What We Are Looking For?

Greg Floor • Wasatch NDT LLC

Wednesday - May 4, 2016 • 1:15 p.m. • Fairfield - Mesa

Visual Inspection (VT) is the most widely used method of NDT for ski lift component inspections. It is important for the inspector to have a basic knowledge of how the eye works and how to effectively use it in conjunction with available visual aids and tools in order to perform the best possible visual inspection. This presentation will address the eye, visual aids, tools, inspection criteria and documentation. It is intended for all mechanics who look at critical components of a chairlift and report their observations.

### M-17 Magnetic Particle Testing: What It Takes

Greg Floor • Wasatch NDT LLC

Wednesday - May 4, 2016 • 3:00 p.m. • Fairfield - Mesa

This presentation addresses what it takes to perform Magnetic Particle Testing starting with personnel training, qualification and certification requirements. Theory, tools, codes and criteria as they apply to the MT inspection of chair lift parts will be covered in a general overview supported with parts, equipment, handouts and open discussion. This session is intended for future MT Trainees, Lift Maintenance Supervisors, Area Managers as well as current Level I & II MT inspectors looking to review and reflect upon what it takes.

### M-18 What's My Tension?

Don't Have Line Calcs? We Can Help!

Grant Ellis • Keystone Resort

Thursday - May 5, 2016 • 10:00 a.m. • Spring Hill - Monument

This presentation addresses what it takes to perform Magnetic Particle Testing starting with personnel training, qualification and certification requirements. Theory, tools, codes and criteria as they apply to the MT inspection of chair lift parts will be covered in a general overview supported with parts, equipment, handouts and open discussion. This session is intended for future MT Trainees, Lift Maintenance Supervisors, Area Managers as well as current Level I & II MT inspectors looking to review and reflect upon what it takes.

# Class Descriptions

45<sup>th</sup> RMLA Conference — May 2-5, 2016

## GENERAL CLASSES:

### G-1 Man Down!

#### 3-Hour Class

Michael Twede • Steamboat Ski and Resort

Wednesday - May 4, 2016 • 1:15 p.m. • Outside Parking Lot

What do you do when your partner takes a fall from the work chair? A demonstration of work chair evacuation techniques put on by various members of the Steamboat Lift Maintenance Department. - 3 Hour Class

If you have a rescue method and want to demonstrate it's use, Please contact Michael Twede, Steamboat - (970) 879-6111 x 5621 or michael.twede@yahoo.com.

### G-2 The Bridge Between Finance and Lift Maintenance

Rich Burkley • Aspen Skiing Company

Tuesday - May 3, 2016 • 3:00 p.m. • Hampton - Grand Room

I hope to outline a structure for lift maintenance managers that conveys the requirements of keeping the lifts running, is understood and accepted by a finance team, and provides for the long term safety and reliability of operating lifts. Roughly at this time:

1. Outline the challenges and requirements of lift maintenance.
2. Outline the challenges and requirements of finance, cash flow and NOI
3. Articulate the common ground
4. How to develop a multi-year plan financially and operationally
5. Educating a finance group.
6. Capitalize on operational efficiencies in lift maintenance.
7. Strive for "no surprises" within the framework of the reality we always have surprises.

### G-3 Basic Ski Lift Math and Physics

Erik Shellam • Breckenridge

Tuesday - May 3, 2016 • 10:30 a.m. • Fairfield - Mesa

Bring a simple calculator +/- SQ Root (Check your cell phone)

Introduction and practice in basic math used in maintenance including: Speed, Spacing, Capacity, Volume, Hydraulic Force, Rigging, & Tension. Intended for entry level mechanics & electricians. Students will gain a deeper understanding into the calculations that go into ski lifts, and into the forces involved with hydraulics and rigging.

### G-4 Advanced Ski Lift Math and Physics

Mike Lane • USDA Forest Service

Tuesday - May 3, 2016 • 1:00 p.m. • Fairfield - Mesa

Bring a simple calculator +/- SQ Root (Check your cell phone)

This class will move beyond basics and will start with fundamental tensions, tower/sheave loading, rope angles, radial acceleration, grip slip forces, torque and horsepower requirements as a few examples. From these aspects the class then can expand on drive terminal locations, loss of tension issues, simple rigging and lift inertia.

### G-5 Detachables Mechanical Roundtable

#### What We Are Seeing?

Blaine Faulkner • Ski Granby Ranch

Thursday - May 5 2016 • 10:30 a.m. • Fairfield - Mesa

This class will be an open discussion on what issues we are seeing on our detachables, and what tools, practices, and changes are we seeing/doing. There are some older detachables out there lets talk about the challenges everyone is dealing with to keep them going and what mechanics/management are doing to deal with the issues. What behind the scenes challenges are you seeing with all the new bells and whistles? No topic is off limits!! Be ready to bring your problems/comments to the class to help exchange ideas or problems for some good discussions.

### G-6 Does This Happen At Your Area?

#### Older Fixed Grip Mechanical Roundtable

Scott Uren • Keystone

Thursday - May 5 2016 • 8:30 a.m. • Fairfield - Mesa

This session will initially look at the following issues, but will branch out as questions are raised.

- Spacing of chairs and removal of chairs on older lifts;
- Reduce Gauge bullwheel to tower alignments;
- Slip Testing of grips.

### G-7 CPTSB Updates

Larry Smith • CPTSB

Wednesday - May 4, 2016 • 3:00 p.m. • Springhill - Main St

Panel with Nicki Cochrell - Program Assistant

This class will bring you up to date on the latest rules and regulations of the CPTSB, as well as policy changes the CPTSB Board has made over the last year. Included will be the results of Board discussions of a new proposed rule - pre-operational rider requirements and subcommittee work on revising the Rule 23 Incident reporting form.

### G-8 Doppelmayer Manufacturers Session

Gary Mayo • Doppelmayer USA, Inc.

Wednesday - May 4, 2016 • 10:30 a.m. • Springhill - Main St

Introduction and training on Doppelmayer new Customer Support Portal including Services, Parts, Training, and complete Service Bulletin access

### G-9 Historical Accident Review and the Impact On Ropeways

Sid Roslund • National Ski Areas Association

Tuesday - May 3 2016 • 3:30 p.m. • Springhill - Monument

Discussion of past ropeway accidents and how they impacted the ski industry and the B77.1 Standard. This is a must class for new technicians to understand how ropeway standards and equipment has evolved to today's equipment.

### G-11 Leitner-Poma of America - Manufacturers Session

Rod Stocking • Leitner-Poma of America, Inc

Tuesday - May 3, 2016 • 1:00 p.m. • Whitewater Creek

Interactive discussion with engineering and service staff regarding the products and services we offer, annual and periodic maintenance procedures, problem resolution. Session intended for current and prospective lift users/operators. Rod Stocking-Service Manager, Jeremiah Frazier-Electrical Service Engineer, Jeff Copeland-Design Engineer, Nelson Tusberg-Design Engineer, Charles Atchison-Electrical Engineer, Wyatt Breed-Sales Representative,

### G-12 Formalized Lift Maintenance Training:

#### Where do YOU Stack Up?

Michael Weise • Leitner Poma of America, Inc.

Tuesday - May 3, 2016 • 1:00 p.m. • Hampton - Grand Room

It's where many ski areas are heading. Come learn how you can train, document and develop your lift maintenance team to the next level. This is an open discussion format. Participants are encouraged to bring information on their training program and to offer suggestions, corrections and changes.

### G-13 Lift Operator Training and Lift Maintenance Interface –

#### Benevolent Coexistence

Michael Weise • Leitner Poma of America, Inc.

Tuesday - May 3, 2016 • 10:30 a.m. • Spring Hill - Monument

This session is for Lift Operations personnel, Managers and Lift Maintenance who deal with the daily operation of ski lifts. We will discuss the integration of Lift Operations and Lift Maintenance to develop an On Mountain Team that works together during the ski season. Topics will include Phases of Operator Training; Lift Maintenance involvement in this training; continuing the relationship during the Season; Record keeping; and a review of various operational logs. Please bring your input.

### G-14 Lift Maintenance Safety 101 ½

Michael Twede • Steamboat Ski and Resort

Tuesday - May 3, 2016 • 10:30 a.m. • Fairfield - La Court

Working safely in a dangerous environment. This session will look at preventative measures and procedures that can potentially reduce the exposure to risk technicians face as they perform maintenance on ropeway equipment. We will touch on the most dangerous aspects of our jobs with a slight emphasis on tower work. It will be a roundtable style session building off of questions and comments.

### G-15 ANSI B77.1

#### What's Coming in the Next Revision

Sid Roslund • National Ski Areas Association

Thursday - May 5 2016 • 10:30 a.m. • Whitewater Creek

With the ANSI B77.1a supplement approved by ANSI in 2012, the next required revision is due in 2017. This session will review proposals that the B77 committee has approved to revise the next standard. This will be your chance to find out what the ASC B77 Committee is discussing, the different points of view, and add comments and opinions.

# Class Descriptions

45<sup>th</sup> RMLA Conference — May 2-5, 2016

## GENERAL CLASSES: *continued*

### G-16 Line Up Your Lousy Lift- Lickity Split

Joe Gmuender • Gmuender Engineering LLC

Wednesday - May 4, 2016 • 1:15 p.m. • Hampton - Grand Room

*What are the different means of doing tower alignment. The pluses and minuses of each method will be reviewed.*

*We will also go over what the 3 planes of adjustment on a sheave battery and how each effects the rope alignment.*

*This class will be followed by a outdoor lab session. Bring your areas "Survey Instruments" to learn how to wiggle it in.*

### G-17 OSHA Update

#### Are Your Procedures up to Date?

Jessica Caskey • Taos Ski Valley

Tuesday - May 3, 2016 • 3:00 p.m. • Spring Hill – Main Street

*Workplace safety is a top priority, yet incidents still happen. Being diligent and understanding the regulations helps areas create a safer workplace and also are invaluable tools in the case of an OSHA inspection. This session will give you insights about what you (or a new supervisor) need to know about the inspection process. Industry experts and area leaders will provide specific strategies to help you ensure compliance, prepare for inspection, and address any issues that may arise.*

### G-18 Work Carrier Safety -

#### It's Just Another Carrier and You Are Along For the Ride

Brook Kasman • Stowe Mountain Resort

Wednesday - May 4, 2016 • 10:30 a.m. • Escalante Creek

*You load them up and climb on, but have you done your homework?*

*How much can they carry, have you done the grip maintenance, communication protocols, lockout-tagout? This open discussion will start with these items and end with a discussion of the proposed changes for Work Carriers that are coming in the next ANSI B77.1 standard.*

### G-19 Skytrac Lift Systems Roundtable

#### New Lifts to Classic Lifts, and Everything In Between

Ross Palmer • Skytrac

Wednesday - May 4, 2016 • 3:00 p.m. • Hampton - Grand Room

*Panel with Andy Pierce - AP Electric Services LLC*

*Learn what can be done for challenges with new & classic lifts including upgrading, modifications and electrical & mechanical retrofitting. Become more knowledgeable about complete drive terminals, low voltage/ drive controls, hydraulic tensioning systems. This class will cover and review diagnostics of electrical systems for any ski lift and also include photos for a Show & Tell. This is an interactive class.*

## OPERATIONS CLASSES:

### OP-1 Hiring & Interviewing 101

Jessica Caskey • Taos Ski Valley

Tuesday - May 3, 2016 • 10:30 a.m. • Whitewater Creek

*Pick up great tips and information on interviewing and hiring. This workshop will help ensure you are setting yourself up for a successful season and keeping yourself out of trouble!*

### OP-2 B77.1 - Operational Responsibilities

#### Alignment of Your Documents with the Standard

Paul Rauschke • Colorado Mountain College

Thursday - May 5, 2016 • 18:30 a.m. • Whitewater Creek

*We will focus on the standard as it applies to operational responsibilities of your supervisors, operators and attendants. You and your staff need to learn, comprehend and speak the fundamental language of the standard for operations and record keeping. Alignment of the language of your ski areas documents incl. titles, job descriptions and responsibilities will be addressed. Participants are encouraged to submit "blind" copies of their documentation for use in class*

### OP-3 Ticket Checking: RFID vs. Barcode Scanners

Kyle Gornell • Steamboat Ski & Resort Corporation

Tuesday - May 3, 2016 • 3:00 p.m. • Whitewater Creek

*This class will compare and contrast between RFID gates and hand held barcode scanners for ticket checking operations. Topics discussed will include gate installation, staffing requirements, and maze design*

### OP-4 Surveillance Cameras and Lift Operations

Mary Bozack • MountainGuard Insurance

Tuesday - May 3, 2016 • 3:00 p.m. • Plateau Creek

*Review of current uses of surveillance cameras at lift stations. Discussion about how video helps with training staff; show what happened during a lift incident involving skiers; records employee's response to emergency situation and when he hits stop/slow; and more. Bring your questions for an interactive discussion.*

### OP-5 Becoming a Great Communicator

Jessica Caskey • Taos Ski Valley

Wednesday - May 4, 2016 • 10:30 a.m. • Whitewater Creek

*Learn what it takes to become a great communicator in this interactive workshop!*

### OP-6 Situational Awareness

#### Decision Making and Lift Safety

David Light • Sunlight Mountain Resort

Wednesday - May 4, 2016 • 1:15 p.m. • Springhill - Main St

*How to use observation skills to act to head off potential problems loading and unloading lifts. Awareness of who is coming into a lift station and their skill level can reduce incidents and increase guest and operator safety.*

### OP-7 Internal and External Guest Service 101

Kyle Gornell • Steamboat Ski & Resort Corporation

Thursday - May 5 2016 • 8:30 a.m. • Plateau Creek

*This class will talk about the importance of providing excellent guest service. Topics will cover different ways to measure the level of internal and external guest service, including Net Promoter Scores. Discussion will include some techniques and programs that individuals or teams can use to increase their level of guest service.*

# Class Descriptions

45<sup>th</sup> RMLA Conference — May 2-5, 2016

## OP-8 Lift Operations Roundtable

Jeff Marzka • Park City Mountain Resort  
Mike Gierach • Crested Butte Mountain Resort  
Thursday - May 5 2016 • 10:30 a.m. • Kannah Creek

Wrap up the RMLA Conference by attending this class ! This session will serve as a sounding board for Lift Operations Supervisors and Managers to get answers to those troubling questions that have arisen over the past season. Bring your questions and problems and we can discuss potential solutions that other areas have tried. Have an idea for a class that you would like to see at a future Conference? This is a great opportunity to present your idea and get input from others in the Industry. Everyone is encouraged to attend.

## OP-9 Lift Operations - After Shutdown Get Together

Jeff Marzka • Park City Mountain Resort  
Mike Gierach • Crested Butte Mountain Resort  
Tuesday - May 3, 2016 • 4:30pm - After Class • Kannah Creek

Come join us at the end of the day. Grab a beer and come to Whitewater Creek for an informal discussion.

This session will serve as an introduction for Lift Operations Supervisors and Managers. It will be a great way to meet the Operations personnel who are at Conference this year ! Jeff & Mike will have a short list of topics to start the session. Everyone is encouraged to attend.

## SUPERVISOR CLASSES:

### SV-1 TWH – Total Worker Health

Steve Howard • Aspen Skiing Company  
Tuesday - May 3, 2016 • 10:30 a.m. • Escalante Creek

What is TWH and it's Objectives.

### SV-2 Drone On – The Flight Continues

Steve Howard Dave Byrd • Aspen Ski Co. \ NSAA  
Tuesday - May 3, 2016 • 1:00 p.m. • Escalante Creek

With the new federal regulation in place, how can you use drones at your area.

### SV-3 Lift Incident Summary

Wally Shank • Wells Fargo / Safehold Special Risk  
Tuesday - May 3, 2016 • 1:00 p.m. • Springhill - Monument

This interactive session will be an open forum where recent lift incidents will be discussed. Participants can share how their risk management team documents and responds to recent lift related incidents that have occurred with both employees and guests.

### SV-4 Integrating Wellness into your Safety Program

Steve Howard • Aspen Skiing Company  
Tuesday - May 3, 2016 • 3:00 p.m. • Escalante Creek

Practical things you can do to bring health into the workplace.

### SV-5 Employment Law Update

Bethany Spitz • Aspen Skiing Company  
Wednesday - May 4, 2016 • 10:30 a.m. • Kannah Creek

An overview of major laws and regulations affecting employers & employees including employer/employee rights and responsibilities, Equal Opportunity Employment, ADAAA updates, job descriptions and tips to avoid lawsuits and discrimination charges. We will also review new laws & regulations that have recently been enacted or updated.

### SV-6 Using Metrics to Improve Maintenance and Staff Engagement

Bob Ackland • Steep Management, LLC  
Wednesday - May 4, 2016 • 10:30 a.m. • Spring Hill - Monument

Using Metrics to Improve Maintenance and Staff Engagement  
"Can't improve a process without knowing how it is performing"

This session will discuss with significant class participation what simple tools can be used to improve the quality of the department's productivity and bring the crew closer together. We will look at

- Maintenance strategy
- Risk assessments
- A baseline for measuring success
- What KPI's to use for determining success
- How to get crew engagement from using metrics
- Tools for capturing metrics

The session will be relevant to small ski areas as well as large ones, all the ideas shared and developed will look at scalability to have broad appeal.

## SV-7 Summer Activities The Myths, Assumptions and Realities of Your Maintenance and Rescues

### 3-Hour Class

Jamie Barrows • Vail Resorts  
Wednesday - May 4, 2016 • 1:15 p.m. • Kannah Creek

The topics discussed by the panel will be:

- What your vender does not want you to know
  - Training
  - Inspections
  - Maintenance
- What does a maintenance program look like for these devices
  - Do you have sufficient and qualified staff to do the inspections and maintenance
  - Rescue
  - Why is rescue needed?
  - What is your back up?
- Standards what do they mean for me
  - ASTM
  - ACCT
  - OSHA

Please come ready to have some fun spirited debate, learning, sharing and exploring of all the realities of our responsibilities as owners of these new attractions that we are now responsible for.

## SV-8 Hot Topics in Ski Area Liability

Mary Bozack • MountainGuard Insurance  
Wednesday - May 4, 2016 • 1:15 p.m. • Whitewater Creek

This session will focus on a broad overview of current industry risk management and legal considerations that directly impact your departments. Review of cases that highlight industry issues and good investigation and documentation practices.

## SV-9 Get Your Heads in the Cloud

Gerald Lindsay • Eldora Mountain Resort  
Wednesday - May 4, 2016 • 3:00 p.m. • Whitewater Creek

Feeling bogged down with stacks of paper and not sure how to keep it all straight? Focusing on every aspect of maintenance paperwork, this class will look at the easy journey out of the clutter and into the cloud. Everything from daily lift pre-operational checks, monthly maintenance, service calls, etc. will be covered as well as employee safety, training records, certifications, long term archiving and more. Leave with a simple and free way to streamline your paperwork and daily routines all in the cloud. Attendees should bring a laptop / tablet

## SV-10 Small Ski Area Roundtable

Andy Birch • Ski Granby Ranch  
Thursday - May 5 2016 • 8:30 a.m. • Kannah Creek

This will be an open discussion to look at issues and potential answers for personnel involved with small ski areas.

## SV-11 Slope Vehicle Incident Prevention and Discussion for Lift Operators and Mechanics

Mary Bozack • MountainGuard Insurance  
Thursday - May 5 2016 • 10:30 a.m. • Plateau Creek

Review of claims and litigation surrounding snowmobile, grooming machine and maintenance vehicles. This session will focus on a broad overview of current industry risk management and legal considerations that directly impact your lift operations and lift maintenance use of over-the-snow vehicles and heavy equipment. We will discuss area policies and procedures, early morning or after hours work requirements verses safe travel, on-mountain collisions, off-duty employee behavior, how Uphill Travel policies/ moonlight skiers/Frist Track programs effect your work. Vendor and subcontractor travel on ski area property: use of heavy equipment, training and drivers. Come prepared to share best practices and participate in the discussion.