



33rd SAVMI Conference and Trade Show
Two Rivers Convention Center
Grand Junction, Colorado
May 14-17, 2018

Session Descriptions (as of 3/9/18)

Monday, May 14

9:00 am – 3:00 pm

Prinoth Advanced Winch

Prinoth Shop

This will be an advanced, hands-on class covering the theory, set-up, maintenance and troubleshooting of the Prinoth winch vehicles. This year this class will emphasize more on the new generation of automatic winches.

Class limited to 15 attendees total (2 per ski area.)

TBD Representative(s), Prinoth, LLC

9:00 am – 4:00 pm

General Welding Workshop

Western Colorado Community College

Learn the essentials of all welding and cutting procedures including MIG, TIG, arc welding, plasma cutting and oxy-acetylene welding and cutting. Kyle will conduct this workshop in both a classroom and hands-on setting.

Participants must provide their own helmet, jacket, gloves, eye protection, coveralls and leather shoes. You must sign-up in advance. **Class limited to 10 attendees total** (2 per ski area.) **A no-show fee of \$125/per person will be assessed to those who neglect to attend or who show up without the proper protective gear listed.**

Kyle Carhart, Carhart Customs

12:45 – 4:00 pm

PistenBully 400 & 600 Auxiliary Hydraulics

Two Rivers Convention Center

Rod will cover theory, maintenance and troubleshooting techniques for the auxiliary hydraulics on the PB400 and PB600 models.

Rod Elwell, Kassbohrer All Terrain Vehicles, Inc.

Delta Rigging & Tools Field Trip

Delta Shop

Take a trip to Delta Rigging & Tools and learn about what they do & how they do it. Watch one of their riggers flemish eyes in wire rope. See how their test bed works.

The Delta crew will demonstrate how to splice synthetic rope and show how to take apart, inspect and put back together a chain lever hoist.

Todd Smith, Delta Rigging & Tools

12:45 – 2:15 pm

Integrating Wellness into Your Safety Plan

Two Rivers Convention Center

Steve will discuss the role employee well-being plays in their on-the-job safety. He will lead discussions on how to implement practical and cost effective wellness initiatives at your ski area to promote employee well-being and improve their overall safety performance. The discussion will also show how these programs tie into the Total Worker Health model.

Steve Howard, Aspen Skiing Company

Worker's Comp: Identifying Hazardous Energy Sources

Two Rivers Convention Center

We all know Lockout/Tagout, right? Share your thoughts and ideas in this session on how to recognize and identify the many sources of hazardous energy that we need to control. Learn how to expand your thinking in protecting yourself and others.

Wally Shank, Safehold Special Risk, Inc.

Snowplows: Maximize Your Guest's Experience; Minimize Your Expense!

Two Rivers Convention Center

Greg will discuss how to get the most out of your fleets' capital investment. This presentation will cover the importance of pre-season, in season and post-season maintenance of snow and ice control equipment to keep the pavement clear and safe. Learn how to maintain your equipment with best practices and how to keep it ready and running to minimize "slip and fall" injuries and lawsuits.

Greg Blankenheim, Meyer Products, LLC & Tornyce Heinz, Mastercraft Truck Equipment, Inc.

Monday, May 14

2:30 – 4:00 pm

Electrical 101: Back to Basics

Two Rivers Convention Center

Mike will cover basic electrical theory in DC systems used in heavy equipment. He will demonstrate Ohm's law, how to troubleshoot using schematics, and will cover voltmeter basics to diagnose faults in electrical systems from high resistance, shorts, and faulty grounds. Additionally, he will cover inspection and maintenance of starting and charging systems, and maintenance of your vehicles batteries.

Mike Taft, Kassbohrer All Terrain Vehicles, Inc.

Federal Regulations Affecting Your Shop & Fleet

Two Rivers Convention Center

Learn what state and federal regulations affect you, your shop and your fleet. Brad will cover Federal Safety DOT regulations and answer your questions on the DOT laws.

Brad Latchaw, Colorado State Patrol

Why We Rebuild Groomer Tracks the Way We Do

Escalante

Andy will openly discuss the track rebuilding process and the methods behind their madness.

Andy Baillargeon, Hans Hall

Tuesday, May 15

8:30 am – 5:15 pm

Advanced Welding Workshop

Western Colorado Community College

Advanced welding procedures focusing on TIG welding and Aluminum welding/cutting. This full-day class is geared towards individuals with at least several years of welding experience and will be conducted in both a classroom and hands-on setting. Bring your helmet, jacket, gloves, eye protection, coveralls and leather shoes. You must sign-up in advance. **Class limited to 10 attendees total (2 per ski area.) A no-show fee of \$125/per person will be assessed to those who neglect to attend or who show up without the proper protective gear listed.**

Kyle Carhart, Carhart Customs

8:30 – 11:45 am

Prinoth Tier IV Troubleshooting: Drive Electronics & Faults

Two Rivers Convention Center

This session will cover the use of your display to help you troubleshoot faults. Learn what causes the faults, why they are there and how to deal with them.

TBD Representative(s), Prinoth, LLC

8:30 – 11:45 am (continued)

PistenBully 400 & 600 CAN, Drive, Tiller Electronics, Screen & Diagnostics

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This class will cover the theory and maintenance for CAN, drive and tiller electronics, screens and diagnostics on the PB400 and PB600 models.

Rod Elwell, Kassbohrer All Terrain Vehicles, Inc.

Prinoth Hydraulics, Hydrostatics & Schematics

Prinoth Shop

This class will cover the Prinoth Bison hydrostatic & hydraulic systems and schematics.

TBD Representative(s), Prinoth, LLC

PistenBully New Generation: Hydraulics & Electronics

Kassbohrer Shop

This session will be broken into two-parts. The first part of class will cover the auxiliary hydraulic system in the next generation PistenBully's, including all new CAN valves and functions, new generation load sensing pump and positioning sensors. We will focus on theory of operation, trouble shooting and adjusting all pressures and settings. During the second part of the class, will cover the electrical system of the next generation PistenBully's including layout of CAN systems, intelligent fuse devices, input output devices and touch screen menus and diagnostics. **Class limited to 20 attendees total (2 per ski area.)** Session repeated Tuesday @ 2:30 pm

Francisco Gallegos & Others, Kassbohrer All Terrain Vehicles, Inc.

8:30 – 10:00 am

Regulatory Updates for Underground & Aboveground Fuel Tanks

Two Rivers Convention Center

The EPA updated the underground storage tank regulations in 2015. Deadlines for complying with the new requirements vary from state to state. Additionally, some states – notably Colorado – have incentives to encourage compliance before the deadlines. Bring your questions and learn what you need to know before it's too late.

Tim Goodrich, CGRS, Inc.

Tuesday, May 15

8:30 – 10:00 am (continued)

Ski Industry Workplace Fatalities: OSHA, Safety, Workers Comp, and the Growing Human Toll

Two Rivers Convention Center

This session will examine some common threads related to a number of recent workplace fatalities occurring across the ski industry, in a variety of mountain operations departments. We'll explore some of the recent fatalities, specific policy and procedure changes that can be made, and examine what supervisors and managers need to do to ensure compliance with procedures. We'll also discuss how these incidents are impacting workers compensation premiums, and OSHA fines and citations—not to mention that undiscussed impact on families when these tragedies happen. As an industry, there is a *lot more* ski areas can do to prevent these incidents from happening, and improving overall workplace safety.

Dave Byrd, NSAA

Abrasives Technology & Safety

Two Rivers Convention Center

This seminar will cover workplace and general abrasives safety, including top safety related mistakes often made when using these products. Additionally, we'll review various types of abrasives discs, their differences, and making the right product selection for various situations. Attendees will receive a participant guide which includes details from the seminar, as well as a glossary of terms.

Tom Sweeney, Kimball Midwest

Beyond Synthetics Vs. Mineral Basestock

Two Rivers Convention Center

Have you ever asked...What are basestocks for lubricants? What are the primary types of basestocks used in formulating lubricants and how are they defined by the American Petroleum Institute API? What are the four types of lubricants in regards to basestock type? What are the basic components of a well formulated lubricant? What is an enhanced lubricant? How should the intended application for the lubrication requirement be viewed as when choosing between a synthetic or mineral base stock formulated lubricant? How are oil specifications derived i.e., API, SAE & OEM's? What tests go into the latest API Heavy Duty Diesel Engine Oil Specification API Cf-4? This session will help provide answers to these questions and more. Do you have an used oil analysis program? If so, how is it used in your fleet operation? Your oil is talking to you...are you listening? What does this all mean for a machine asset's total cost of operation (TCO)? What does TCO mean for the owner of the machine asset? What does this all have to do with a ski area profit & loss? An open discussion with plenty of time for Q & A.

Mark Nickel & Jeff Dean, Lubrication Engineers, Inc.

10:15 – 11:45 am

Performance & Efficiency Benefits of Synthetics in Cold Temperatures

Two Rivers Convention Center

While advances in new equipment and technology are often taken advantage of immediately, advances in lubrication technology are often overlooked. In recent years, lubricants have been required to meet lower viscosities, provide more wear protection, and perform at higher and lower temperature extremes all while meeting the longer drain intervals required by equipment manufacturers. This class will give a brief overview of lubrication fundamentals and discuss the advantages of using the best synthetic oils available. The latest motor oil specifications along with specific cold weather product applications will be covered during this class. The information presented will hopefully allow those attending to make sure that they are utilizing the best lubrication technology available for their current applications. The intended audience is maintenance personnel and managers who want to learn more about lubrication, specific products that will perform better in colder temperatures, and benefits of using synthetic oils.

Christopher White, Manny Campo, Altman Tsang & Kurt Thomson, ExxonMobil Lubricants & Specialties

The Graveyard Shift: New Best Practices for Ensuring Overnight Employee Safety

Two Rivers Convention Center

The industry's practices for insuring the safety of our overnight crews are constantly under scrutiny. After an analysis of several incidents, we will unveil some new best practices for resorts, designed to minimize risk and improve injury response times for our graveyard shift employees – addressing innovative practices, PPE, and operational considerations that will, in time, reduce workers' comp costs for this critical segment of our workforce.

Dave Byrd, NSAA

Fastener Safety

Two Rivers Convention Center

This course will cover common causes and correction of fastener failures, the importance of matching the strength of fastener components, and recognized fastener standards. Mike and Todd will also review recommended torque settings, concerns with socket head cap screws and identifying counterfeit fasteners.

Michael Burgin & Todd Nelson, Lawson Products, Inc.

Tuesday, May 15

10:15 – 11:45 am (continued)

Proactive Maintenance for a Better Environment While Saving \$

Two Rivers Convention Center

In today's world of technology learn how to reduce fuel emissions, reduce oil consumption, reduce hydraulic fluid consumption and clean-up costs. Brent & Brett will discuss how to interpret oil analysis to reduce fluid consumption. They'll also cover fuel tank health. What does a healthy fuel tank look like? What are fuel tank PM's? Learn what they do and when to do them. This session is intended for fleet maintenance personnel at every level, environmental officers and mountain operations.

Brett Winberg & Brent Krick; Combustion Technologies USA

2:00 – 5:15 pm

Prinoth Electrical Class

Prinoth Shop

During this session, the Prinoth crew will cover the electrical systems, schematics and CAN Bus system used on the Bison, Leitwolf and Husky models. Learn about the different styles of schematics used on these machines.

TBD Representative(s), Prinoth, LLC

PistenBully New Generation: Hydraulics & Electronics

Kassbohrer Shop

This session will be broken into two-parts. The first part of class will cover the auxiliary hydraulic system in the next generation PistenBully's, including all new CAN valves and functions, new generation load sensing pump and positioning sensors. We will focus on theory of operation, trouble shooting and adjusting all pressures and settings. During the second part of the class, will cover the electrical system of the next generation PistenBully's including layout of CAN systems, intelligent fuse devices, input output devices and touch screen menus and diagnostics. **Class limited to 20 attendees total** (2 per ski area.) Session repeated Tuesday @ 8:30 am

Francisco Gallegos & Others, Kassbohrer All Terrain Vehicles, Inc.

2:00 – 3:30 pm

Driveline Service, Angle & Vibration Seminar

Two Rivers Convention Center

Topics of discussion for this presentation include failure analysis, lubrication, operating angles and vibrations, non-uniform velocity, safe operating speed and safety.

Allen Sarkozy, Dana Corporation

2:00 – 3:30 pm (continued)

Safe Hydraulics 101

Two Rivers Convention Center

Learn the basics of your fluid power systems, how they function and how to operate and repair safely. From hose routing, hose failure diagnosis, and proper selections of replacement hose and fittings, we will cover it so you can make the right choices. Wade will walk you through an overview of how to safely diagnose and repair your hydraulics hose and fittings so your technician understand the importance of making the right choices when it comes time to repair a system.

Wade Barriger, NAPA Heating & Cooling Group

3D: Discipline, Documentation & Difficult Conversations

Two Rivers Convention Center

As one mountain operations leader put it, "This was the best and most practical class I have ever had as a supervisor." During this hands on and interactive session, we will use a common scenario to walk through how to successfully identify the difference between coaching and discipline, how to make observations instead of inferences and communicate with your teammates, co-workers and staff to build a strong work environment.

Claude Goldberg, Jennifer Law & Karen Palmer, Beaver Creek Resort

Understanding the Function, Objectives and Maintenance of EPA Tier IV Vehicle Platforms

Two Rivers Convention Center

What do Tier IV regulations really accomplish? What benefits and pitfalls come with this EPA regulation and its associated advanced vehicle technology? What influences the durability, cost and operational reliability of Tier IV equipment? Michael will answer these questions plus more.

Michael Belluomo, BG Products, Inc.

Ski Area Roundtable

Two Rivers Convention Center

Looking for a solution to a difficult situation you're having at your shop? Then this session is for you. Donny will lead a positive discussion to address the unique challenges and issues participants are facing at their ski areas.

Facilitator: Donny Mushet, Aspen Skiing Company

PistenBully 100 Overview

Two Rivers Convention Center

Rod will provide a complete review of the PB100 including drive and tiller electronics, auxiliary hydraulics and general electronics.

Rod Elwell, Kassbohrer All Terrain Vehicles, Inc.

Tuesday, May 15

3:45 – 5:15 pm

Hop on the Bus, Gus: Ski Area Shuttle Roundtable

Two Rivers Convention Center

An open discussion on managing & maintaining various modes of public transportation at a ski area. What works, what doesn't work, and how can SAVMI help meet your needs.

Moderator: Jeremy Evans, Mt. Hood Meadows

EESP Standard Battery & Electrical: On-Vehicle Demo

Two Rivers Convention Center

This is a technically oriented classroom and on-vehicle presentation that will focus on effective procedures for diagnosing the causes of battery, charging system and starting system malfunctions. Jim will perform on-vehicle demonstrations of enhanced battery testing procedures and an 11 point battery and charging systems testing process. The demonstration will include voltage drop, AC ripple, key-off battery drain, loaded charging, and other effective testing procedures. Computer controlled charging and system issues will also be discussed.

Equipment demonstrations will include digital multi-meters, current clamps, power probes and electronic testers. This class is designed for technicians of all levels.

Jim Lewis, NAPA Electrical and Engine Systems

Fine Tune Your Communication Engine for Optimal Team Performance!

Two Rivers Convention Center

We work with all different types of people every day. Some challenges may arise stemming from generational differences, but most challenges can be addressed with communication. During this session we will help you fine tune your communication engine by identifying different communications styles among your team and how to help your team perform at their best by communicating in a language that everyone can understand.

Claude Goldberg, Jennifer Law & Karen Palmer, Beaver Creek Resort

Today's Fuels

Two Rivers Convention Center

Carey & Corey will explain how gas and diesel fuels are made. Participants will learn exactly what goes into them, as well as what should – and shouldn't – be in them.

Carey Pinkerton & Corey Spicer, Whitehall's Alpine BG

Inspecting Your LIF-TRACK Machine

Two Rivers Convention Center

While there is currently no OSHA requirement that your lifts be inspected annually, it's undeniably a good idea. In this class you will learn how to self-inspect your LIF-TRACK machines. Keith will follow the guidelines offered by the Automotive Lift Institute (ALI) and provide you with the inspection forms that they publish. Although this is not a certification class, those that attend will be qualified to inspect your equipment, document your findings and be able to save the money it would cost to retain an inspection company.

Keith McPherson, Superior Industrial Supply

3:45 – 5:15 pm (continued)

PistenBully Hydrostatic Drive

Two Rivers Convention Center

This session will cover the basic theory, maintenance and troubleshooting techniques of the drive and tiller hydrostatic drive on all PistenBully machines.

Rod Elwell, Kassbohrer All Terrain Vehicles, Inc.

Wednesday, May 16

8:30 – 11:45 am

Prinoth Summer Maintenance

Two Rivers Convention Center

Participants will learn all the information, tips and tricks needed to ensure your Prinoth machines and fillers are serviced and set-up properly for next season.

TBD Representative(s), Prinoth, LLC

Prinoth Tier IV Aftertreatment Systems

Prinoth Shop

This session will cover the aftertreatment systems used on the Tier IV CAT and Mercedes powered machines. Participants will learn what they need to know to maintain these systems and keep them functioning properly.

TBD Representative(s), Prinoth, LLC

PistenBully Tier IV Engine: Theory, Diagnostics & Maintenance

Kassbohrer Shop

This presentation will cover the Cummins Tier IV final technology including system layout and components, maintenance, troubleshooting fault codes and diagnostic tools and practices. **Class limited to 20 attendees total** (2 per ski area.)

Francisco Gallegos & Others, Kassbohrer All Terrain Vehicles, Inc.

Zaugg Half Pipe Groomers: Maintenance & Repair

PBL Shop

This will be a very detailed class. Paul will conduct a hands-on complete teardown and rebuild of a Zaugg pipe machine, including gear boxes and electric troubleshooting. **Class limited to 20 attendees total** (2 per ski area.)

Paul Leck, PBL Enterprises, Inc.

Wednesday, May 16

8:30 – 10:00 am

Keeping You & Your Fleet Team Safe

Two Rivers Convention Center

An in-depth discussion on safety issues in fleet maintenance. Topics to be covered include; hazardous waste cleanup and disposal, hazard communication, lock-out tag-out, eye protection, hand protection and ladder safety. Participants will gain an updated understanding of the hazards in their environment and the tools to reduce workplace injuries. This session is geared towards mechanics, shop foreman and safety managers.

Anthony Rice, Fastenal Company

The Dirt on Oils

Two Rivers Convention Center

The session will provide an overview of oil analysis and testing. It will include an in-depth discussion on particle count testing and particle count requirements of modern hydraulic OEMs and base oils (I, II, III, IV & V). Environmentally friendly hydraulics (ester, mineral oil, vegetable oil) and industrial hydraulic fluids will also be covered. Plenty of time will be given for Q&A.

Matt Hoeffner & Peter Hamalian, Petro Canada Lubricants; and Brian Roderick, Crus Oil

PistenBully 4.0 & 4.5 Ton Winch

Two Rivers Convention Center

This class will cover the basic theory, maintenance and troubleshooting techniques of hydraulic and electrical systems for the 4.0 & 4.5 ton winch.

Rod Elwell, Kassbohrer All Terrain Vehicles, Inc.

10:15 – 11:45 am

Stormwater Management for Ski Area Operations

Two Rivers Convention Center

Kevin will discuss the background, policies and best management practices for stormwater and erosion control at ski areas. This training is applicable for personnel and managers who are responsible for stormwater management, facility management or discharge permit monitoring. The ideas and procedures to be covered will also benefit those responsible for snow control and removal as well as those in charge of construction or the modification of structures.

Kevin Tautkus, Terracon Consultants, Inc.

PistenBully Pro Academy

Two Rivers Convention Center

Pro Academy is a new approach to creating professional grade snow grooming operators. Pro Academy brings forward new ideas and concepts that will improve your snow grooming skills. In this presentation Chris will discuss how to prepare and groom for competition snow. Also included in the presentation will be an overview of the different levels of Pro Academy and how they tie into the competition snow segment of Pro Academy.

Chris Perkins, Kassbohrer All Terrain Vehicles, Inc.

10:15 – 11:45 am (continued)

PistenBully SNOWsat

Two Rivers Convention Center

Learn about a GPS based system for slope and fleet management that also has snow depth measurement. SNOWsat is made up of software and hardware components that are mounted in the snowcat itself. SNOWsat is generic and can be mounted in PistenBully or Prinoth snow groomers. As a result SNOWsat becomes one more system on the snowcat similar in fashion to the electrical or hydraulic circuits that must be maintained and repaired. Participants will become knowledgeable in how SNOWsat works, what components are involved, where they are located and how to troubleshoot the system in the event it does not transmit data or measure snow depth or at least learn who to contact for assistance. Attendees should have a good working knowledge of electrical and be able to work with a laptop.

TBD Representative, Kassbohrer All Terrain Vehicles, Inc.

Thursday, May 17

9:00 – 11:00 am

Prinoth Roundtable

Prinoth Shop

A roundtable discussion with Prinoth representatives to include what's up-and-coming for the 2018/2019 season and future product development.

TBD Representative(s), Prinoth, LLC

PistenBully Roundtable

Kassbohrer Shop

An open discussion with Kassbohrer representatives to include a tour of their new facility, a sneak peek at what's new for the 2018/2019 season, product improvements, spring parts specials and product updates.

Kevin Moudy, Mike Taft, Wayne Morrison & Karen Ruzicka, Kassbohrer All Terrain Vehicles, Inc.