**CERTIFIED Module**

**Outdoor Risk Management (ORM)**

**Concluding Objective:**

Upon successful completion of this module the candidate will demonstrate an extensive knowledge of local area management policies, procedures, and general daily operations with an **emphasis on practical on-hill industry best practices including general Patrol administration, and the intersection of pre- and post-loss risk management.** Upon completion of this module the candidate will demonstrate the ability to show leadership, decision making and problem management and an understanding how to effectively manage on- and off-hill operations and procedures as it pertains to the Patrol as an integral member of the ski area operations departments.

**Suggested Resources:**

* Americans With Disabilities (ADA)
* State & Local Regulators/Regulations
* National Forest Service where applicable
* National Ski Areas Association – [www.nsaa.org](http://www.nsaa.org)
  + 1. i. Park Smart/Freestyle Terrain and Terrain Park Safety – [www.terrainparksafety.org](http://www.terrainparksafety.org).
    2. ii. Jump Feature Design Considerations
    3. iii. Glossary of Terrain Park Terms
    4. iv. Jump Feature Measurement Procedures
    5. v. Snow Immersion Suffocation – SIS see [www.deepsnowsafety.org](http://www.deepsnowsafety.org)

vi. Snowmobile Operations

* + 1. vii. Snowmaking Operations
    2. viii. Incident Investigation Resource Guide
    3. ix. Kids on Lifts – [www.kidsonlifts.org](http://www.kidsonlifts.org)
    4. x. Lids on Kids – [www.lidsonkids.org](http://www.lidsonkids.org)
* Employee/Occupational Safety and Health – [www.osha.gov](http://www.osha.gov)
* ASTM International – [www.astm.org](http://www.astm.org) Search “snow skiing”
* American National Standards Institute (ANSI) [www.ansi.org](http://www.ansi.org) Search “passenger ropeways and/or aerial tramways”
* National Fire Protection Association (NFPA) – [www.nfpa.org](http://www.nfpa.org)

i. Life Safety Code – go to [www.nfpa.org](http://www.nfpa.org), Search “NFPA 101”

* Federal Emergency Management Agency (FEMA) – see [www.fema.org/plan](http://www.fema.org/plan) for Emergency Planning and Preparedness

Essential Knowledge:

1. General Concepts: Possess an understanding of and be able to define the following:
   1. Define “risk management”. Risk management is the process of identifying potential risks (in advance of their occurrence), analyzing them and identifying and applying precautionary steps to reduce, eliminate or transfer the risk.
      1. 1. Understand the concepts of:
         * 1. Pre-Loss goals, objectives and activities – BEFORE the loss occurs
           2. Post-Loss goals, objectives and activities – AFTER the loss occurs
   2. Define “inherent risk(s)” with respect to skiing/snowboarding. Inherent risks are those that due to the nature of the activity and the environment in which it is performed cannot be eliminated. Should also understand the inherent risks involved in boarding, riding and unloading lifts.
   3. Define the concept of the assumption/acceptance of inherent risk: May be statutory and/or common law (in various states it differs), and is the concept that a person’s voluntary participation in an activity that contains inherent risks, does so under the premise that by that voluntary participation, those risks which inhere to (are an integral part of) that activity are and must be assumed/accepted by the participant.
   4. Define “safe”: The (complete) absence of, being protected from, or not exposed to danger or risk.
   5. Define “reasonably safe”: Given the inherent risks involved in participating in the sport of skiing/snowboarding (nature of the activity and environment in which it is performed), some level of exposure to danger or risk is and must remain a component of participation.
   6. Understand the concept of “reasonably safe”, as opposed to (simply) safe, as it applies to the sport of skiing/snowboarding: As a ski area operator, the legal duty placed upon it is to provide a reasonably safe operation and premises.
2. NSP/NSAA Joint Statement of Understanding (Current Rev. 2016)
   1. What is the NSP and the NSAA and how do they relate to each other?
   2. What are the basic concepts the document describes and the two organizations commit to?
      1. 1. The patrol and patrollers are under the supervision and control of local ski area management and must abide by and operate under its policies and procedures.
      2. 2. The patrol and it patrollers serve at the “pleasure” of area management (hire/fire authority, etc. rests with area management)
      3. 3. Lift evacuation, incident investigation and documentation of incidents, as well as the clear non-employee status of volunteer patrollers (in most states) are also enumerated.
3. Legal and Regulatory
   1. State Ski Statutes and/or County Ordinances
      1. 1. Does the state in which your resort is located have a State “Ski Statute” or “Ski Safety Act”?
         * 1. If so, what does it include?

i. Acceptance of inherent risks

ii. Legal obligations of the ski area operator

iii. Legal obligations of the skier

iv. Other?

* + - 1. If your State does not, is there a county ordinance that applies (California), or does your State have a statutory assumption of inherent risks when participating in sports (Minnesota)?
  1. General Legal:
     1. 1. Statutes of Limitation/Notice of Claim – Found in many State Ski Statutes
     2. 2. Releases/Waivers and enforceability in your state
     3. 3. Theories of Liability/Allegations – failure to warn/mark, negligent design, construction, maintenance and/or operation, etc.
  2. Good Samaritan Law – Apply to patrollers in your state? Volunteer only?
  3. Health Insurance Portability and Accountability Act (HIPAA) – Confidentiality and obligation of “health care provider”
  4. American’s with Disabilities Act (ADA)
  5. Occupational Safety and Health Administration (OSHA) – Resort employee safety and health
  6. Bureau of Alcohol, Tobacco, Firearms and Explosives (BATF&E) - With respect to the possession of, handling, storage and security of explosives at ski areas
  7. National Fire Protection Association (NFPA) with respect to Life Safety Code – NFPA 101: Ingresses, egresses, fire suppression and annunciation, emergency lighting, etc.,

1. Standards
   1. ANSI B77.1 – Pertains to the design, construction, maintenance and operation of various uphill conveyances (aerial lifts and surface lifts)
   2. ASTM F27 – Pertains to the design and manufacture of various types of ski and snowboard equipment (skis, snowboards, boots, bindings), as well as shop practices (binding adjustment, inspection/testing, etc.) for retail and rental shops. Also, currently exploring the development of design standards for terrain park jump features (Under F27.70 - in process, no standard yet)
   3. Understand that standards do NOT exist for virtually every other aspect of ski area operations including the identification and marking of hazards, padding, fencing, signage, rope lines, snowmobile operations, etc. and that a reasonable approach to these activities is generally determined by prevailing industry practice (see GAIPP following)
2. Generally Accepted Industry Practices and Principles (GAIPP)
   1. What knowledgeable, experienced ski area operators do under similar circumstances/situations – Examples: How resorts approach padding, fencing, signage, rope lines, boundaries, etc.
3. United States Forest Service (USFS)
   1. If your resort is on federal land administered by the USFS
   2. USFS Operating Plan for your ski area
4. Internal/Company Operations
   1. Development
      1. 1. Plans, Policies, Guidelines, Procedures and Best Demonstrated Practices
   2. Application and Implementation
      1. 1. Develop an objective and consistent process to implement the above by developing objective criteria and applying them consistently;
      2. Develop Objective Criteria, Apply Them Consistently (DOCATC)
5. Consistency/Compliance
   1. With the Law, Standards, GAIPP, USFS, Internal/Company Operations
      1. 1. Knowing these and being consistent/compliant with, or if inconsistent (with non-legal, non-regulatory), having valid reason to do so.
6. Ski Area “Safety” Education Programs:
   1. Guest Facing Programs
      1. 1. General Skier Safety – addressing speed, space, conduct and decision-making
         * 1. Your Responsibility Code/Alpine Responsibility Code – know 7 basic rules of the code
           2. NSAA programs - #RideAnotherDay, Objects are Closer, etc. (or your own internal program)
      2. 2. Kids on Lifts (or your own internal lift safety education and operations program)
      3. 3. Lids on Kids (or your own internal helmet program/policy)
      4. 4. Park Smart – Freestyle Terrain/Terrain Park education program(s)
      5. 5. Deep Snow/Tree Well Education program
   2. Employee Facing Programs
      1. 1. General Employee Loss Control programs
      2. 2. OSHA Standards (Applicable) – BBP, Fall Protection, LOTO, HazCom, etc.
      3. 2. On-snow Specific Employee Programs
         * 1. ACL Awareness Program
           2. Knee Bindings
           3. Helmet Policy/Program for skiing employees
7. Patrol Operations
   1. Staff Management
      1. 1. Hiring/Qualifications
      2. 2. HR Policies and Procedures
      3. 3. Staffing Levels/Scheduling
      4. 4. Training – New and Returning Staff
   2. Patrol Departmental Manual (developed, updated regularly and trained)
   3. Pre-Loss Risk Identification and Mitigation Activities/Programs (written plans/procedures and/or written criteria?)
      1. 1. Hazard identification, hazard mitigation and hazard marking
      2. 2. Padding/Shielding (lift towers, snowmaking hydrants, guns, towers and components, electrical boxes, posts, portal areas/lift corrals, light poles, etc.)
      3. 3. Fencing – Types, purposes (restraint, visual/directional)
      4. 4. Rope Lines – flagged, bamboo, posts, etc.
      5. 4. Signage (trail signage – names, symbols, arrows, Caution, Slow Skiing Areas, etc. signage, closures, etc.)
   4. Logs/Records/Forms Used
      1. 1. Pre-Loss (opening, closing, daily operational logs, training, other)
      2. 2. Post-Loss – Incident Report Form (IRF) and Incident Investigation (see Incident Investigation Section)
   5. Post-Loss Risk Management Plans, Procedures and Activities
      1. 1. Injury Notification and Response Procedures
         * 1. General
           2. On-hill CPR
           3. On-hill Fatality
      2. 2. Communications and Dispatch Procedures
         * 1. Internal (involving other departments)
           2. External (interagency relationships/involvement – USFS, Sheriff, Police, Fire, EMS, Tramway Board, Coroner, etc.)
8. Incident Investigation (I/I)
   1. Procedures – Criteria to investigate, levels of investigation, etc. (new NSAA I/I Resource Guide available)
   2. Components of an Investigation
      1. i. Forms/Documents
      2. ii. Statements
      3. iii. Photos
      4. iv. Diagrams
   3. Emergency Response and Preparedness
      1. 1. Emergency Response and Preparedness Plan (Overall)
      2. 2. Crisis Communications Plan
      3. 3. Fire Evacuation Plans/Routes
      4. 4. Lift Evacuation Plan
   4. Missing Persons/Search and Rescue Procedures
   5. Boundary Management Plan/Procedures
   6. Snow Safety and Avalanche Mitigation Activities
9. Snowmobile Operations
   1. On-hill use allowed? Who rides, when and for what use(s). Under what conditions/circumstances? Necessity v. convenience.
   2. Snowmobile Operations Manual – training, certification, etc.
   3. Guest emergency transport? Who, when, how?
10. Other Over-the-Snow Vehicles
    1. Grooming Machines
       1. 1. Allow on open slopes during operating hours?
       2. 2. Allow to cross base areas? If so, any area procedures apply (escort, etc.).
11. Other Departments

Possess a general understanding of the operations of other resort departments and how they operate and interact with patrol; address interdepartmental communications

* 1. Ski and Snowboard School – injury in a lesson, etc.
  2. Terrain Parks – Freestyle Terrain Operations – inspection, testing, opening, closing of features, presence in the park, for what purpose(s), signs and gated entrance(s), etc.
  3. Lift Operations – injury while loading, unloading or on lift, etc.
  4. Lift Maintenance – Observation of lifts, mechanical issues
  5. Grooming – What, where, when
  6. Snowmaking – What, where, when
  7. Ski and Snowboard Rentals – Post Incident Inspection of rental equipment, etc.
  8. Tubing Operations – injury while tubing, etc.
  9. Security – Responsibilities for response and investigation of premises (inside and outside) injuries, etc.

**Examination Criteria**This module is intended to last up to two hours\* and will be a combination of indoor interview and outdoor/on-hill “eye of the Certified Patroller” evaluation. Candidates will demonstrate a working knowledge of ski area operations from a macro down to a micro level and be evaluated across a number of operational metrics. Successful candidates will score equal to or greater than an average 8 on a scale of 1-10 among at least 2 examiner, preferably 3 examines. The candidate must demonstrate extensive depth of knowledge, critical thinking and creative problem solving across various topics outlined in the Essential Knowledge section above.

**Examiners for this module will be certified members who hold the following:**

* Certified members who have participated in an Outdoor Risk Management examining capacity within the past 3 years (Previously Management & On Hill Safety)
* Certified member who have not examined in a 3 year period must participate a Certified ORM training module for standards calibration
* As approved by the Division Certified Chair: Professional Ski Area Risk Managers, Industry related insurance representatives, Patrol Directors, and other Subject Matter Experts.
* All examiners to attend a calibration clinic once every three years.

New evaluators will serve in a Provisional status until successfully completing an evaluation at a Certified exam and receiving feedback as to the accuracy of their assessment

* \*Historically the information covered in the Outdoor Risk Module (ORM) at a Certified Exam was broken into two pieces: 1) Indoor Management Interview, and 2) Outdoor On Hill Safety “Ski Around” Interview. The intent of this new pilot ORM module is intended to achieve a number of strategic objectives:Help streamline what is currently a sometimes unwieldy examination process by combining two modules with significant overlap.
* From a strategic perspective, create curriculum more aligned to the needs of NSAA Members as it pertains to their Patrols and effective management of ski areas, especially with a focus toward pre- and post-lost risk.
* Act as a pilot for future development of ORM skills for all members of the NSP.