2007 Accidents & Recommendations



Club-Wide Safety Committee

Dan Lauren (Chair). Steven Glenn, Kenneth Small (Bellingham). Brian Hench, Lisa Loper (Everett). Robert Barnoski, Thomas Pearson, Henry Romer (Olympia). N. Michael Hansen, Jim Nelson, John Ohlson, Don Schaechtel, Max Sevareid (Seattle). Jayson Kastens, Chuck Neudorf, Mindy Roberts (Tacoma)

The Mountaineers

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2007 Accident SUMMARY



- One <u>Major Incident</u> Fatality on hike
 - Definition: SAR* and/or hospitalization
 - Down from nine in 2006 (page 23)
- 13 Significant Incidents
 - Definition: Injury & Dr. visit, but no SAR*
 - Not reported for 2006
- 37 Minor Incidents
 - <u>Definition</u>: Injury but no Dr. visit
 - Not reported for 2006

*SAR = Search and Rescue

Request of Trip Leaders



- Please use "Incident Reporting" section in <u>Activity Report</u> to document <u>all</u> incidents
 - As soon as possible after trip
 - Also include no-injury "near-misses"
- Any information is better than nothing
- This is principal source of information for our reports
- We will follow up if we need more

Major Incident



- Hike on Mt. Jupiter July 14, 2007
- Fatality
- Cause: "Congenital Coronary Artery Hypoplasia"

Significant Incidents



- Injury and Dr. visit, but no SAR
- 13 incidents reported
 - 8 Slips/Falls on non technical terrain
 - 4 Falls on technical terrain
 - 1 Hit by falling rock/ice
- First year to report these

Significant Incidents (Cont.)



Serious injuries

- Tendon rupture
- Broken ankle (2)
- Broken thumb, concussion
- Broken wrist
- Cracked ribs
- Fractured shoulder
- Torn knee ligament

Significant Incidents (Cont.)



Four <u>Significant Incidents</u> occurred on Field Trips

- Basic Rock One
- Cragging Class
- Intermediate Ice One (2)

Significant Incidents Detail



1. Chair Peak/NE Buttress (winter)

- Leader fall on ice pitch
- Lip laceration, bruised & sprained ankle

2. Spire Rock - Basic Field Trip Rock 1

- Flipped upside down while on rappel
- Distal bicep tendon rupture, quadriceps strain, hyper-extended knee

3. Ingalls Peak/S Ridge

- Fall in dark parking lot
- Gash on forehead



4. <u>Icicle Canyon – Crag Class</u>

- Leader fall on rock
- Broken ankle

5. Concord Tower

- Leader fall on rock, pro pulled out
- Broken thumb, numerous bruises, minor concussion

6. Mt Stuart/N Ridge

- Tripped while navigating boulders
- Broken wrist



7. Vesper

- Slipped on a rock
- Gash on leg

8. Mt Rainier/Emmons Glacier

- Fall on scree
- Bruised or cracked ribs, scraped arm/back/leg

9. Mt Maude/Entiat Icefall

- Hit by falling rock
- Bruised shoulder, maybe hairline fracture



- 10. Mount Rainier/Nisqually Glacier Intermediate Ice 1 Field Trip
 - Tripped & fell on low-angle glacier ice
 - Torn ligaments in knee
- 11. Mt. Baker/Coleman Glacier Intermediate Ice 1 Field Trip
 - Caught crampon on sling while downclimbing
 - Broken ankle



12. Sourdough Mtn

- Tripped while hiking
- Sprained ankle

13. Stevens Pass Backcountry

- Fall while skiing
- Dislocated Shoulder

Minor Incidents



- Injury but no Dr. visit
- 37 incidents reported
 - 16 falls (10 on non-technical terrain)
 - 17 illness, hypothermia, conditioning
 - 2 hit by falling rock/ice
 - 2 warnings for route were reported
- Likely under-reported
- First time to report these

Recommendations SUMMARY



These areas need continued focus

- Group Dynamics
- Snow Travel
- Slips and Falls
- Technical ability
- Leader Expectations & Ongoing Training

Recommendations Discussion



- Recommendations are based on 2006 and 2007 accidents
- Too many to discuss in detail here
 - The important ones are given with the Crucial Ones highlighted
 - The Recommendations documents (see page 22) have more details on these plus numerous other Recommendations

Recommendations – Group Dynamics



- Party Separation is almost always risky
 - Keep party together
- Communicate expectations of leader/participants, esp. conditioning
- Leader must deal with unsafe party behavior
- Party Self-Evacuation should not risk further injury – patient is sometimes too eager to not be a burden

Recommendations – Snow Travel



- Give Self-Belay more emphasis
 - Self-Arrest gets almost all instruction time
 - It is desperate & unreliable
- Emphasize Footwork, Self-Belay & Self-Arrest (in that order!)
 - The best way to stop a fall is to have no fall at all!
- Students learn techniques in soft-snow, but don't know hard-snow technique
 - Add hard-snow instruction

Recommendations – Slips & Falls



- Be aware that non-technical terrain produces many accidents
- Low-angle hard-snow/ice is treacherous – slippery, can't stop
 - Ax or anchor is essential
- Loose rock is an ever-present danger
 - Falling rock, kicking rock, pulling rock

Recommendations – Technical Ability



- Do not allow anyone to walk off a rappel whose anchor is at foot level
- Learning to place pro
 - Lots of practice & use much pro
 - Cannot overemphasize this point
- Ice top-ropers should have at least one screw in case belayer is incapacitated

Recommendations – Leader Expectations & Ongoing Training



- Provide continued education for leaders
- Request leaders document all incidents, even if minor – for Club learning

More Information



Detailed <u>Accident Reports</u> & <u>Recommendations</u> for 2006 & 2007 are

online: **Board of Trustees/Archive/Safety**

Committee (right-click if in edit mode)

Contacts

For corrections, questions or comments on this document, contact

<u>Dan.Lauren@weyerhaeuser.com</u> (Chair) <u>John-Ohlson@comcast.net</u> (Editor)

Appendix 1 -- 2006 Major Incidents Snow Travel



- Fall on snow w/ice ax failure to arrest
 - 1. Cracked pelvis & vertebrae Crosby Mtn
 - 2. Lacerated knee, bruised ribs The Brothers
- Steep snow travel w/o ice ax
 - 3. Broken leg McClellan Butte
 - 4. Lacerated head High Priest
- Other snow Uncontrolled Glissade
 - 5. Lacer. face, abdominal puncture Red Mtn

Appendix 1-- 2006 Major Incidents Rock Climbing



- Leader Fall
 - 6. Bruising, chipped vertebrae Chair Peak
- Unroped Fall
 - 7. Possibly caused by stroke broken leg, back, neck, fatality by blood clot 3 weeks later Yellowjacket Tower
 - 8. Concussion, ankle and wrist injury Lundin Peak

Appendix 1 -- 2006 Major Incidents Other



- Party separation
 - 9. Solo unplanned bivy (2 nights)
 - -- Hypothermia, dehydration and frostbite
 - -- Muncaster Mountain

Appendix 2 Club Wide Safety Committee



- Reports to Board of Trustees
- Established after Sharkfin Tower Accident
- Fully active 2006 and 2007

Appendix 2 - Committee Purpose



- Promote a culture of safety among the Mountaineers:
 - Collect/report accidents and near-misses
 - Educate our leaders and instructors
- Ensure The Mountaineers are recognized as industry leaders in safety for outdoor activities.

Appendix 2 - Committee Charter



- Distribute safety knowledge
- Benchmark other safety programs
- Stimulate creation of Safety committees in all Branches
- Collect/distribute data on all risk activities

Appendix 2 - Committee Charter (Cont.)



- Standardize trip reporting
- Professionally investigate Major Incidents
- Assist in standards for leader qualification and continuing education

Appendix 2 - 2007 Committee Actions



- Systematically documented accidents
- Communicated accident facts to club members
- Facilitated discussion of accidents/safety
- Increased reporting of all incidents
- Met 12/1/07 to review incidents and develop recommendations