Central Gulley Avalanche, a Case Study: How Good Intentions Slide You Straight To Hell

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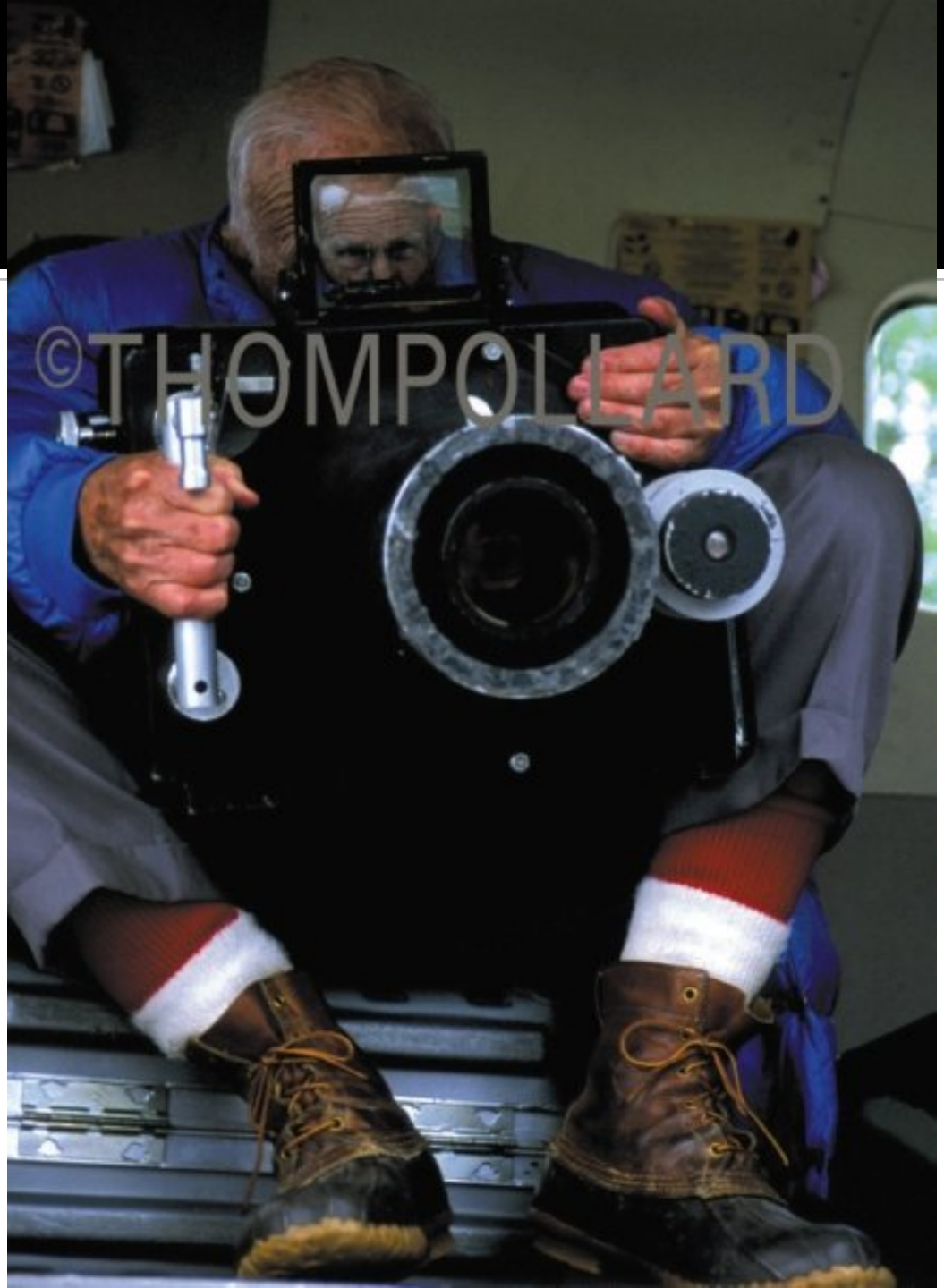
SUMMIT ACHIEVEMENT

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Case Study

- This is a multidisciplinary case study.
- It will also be informed by you and your own lenses in which you view the world.

Ian MacCammon (2004)
SEX, DRUGS AND THE WHITE DEATH: LESSONS FOR AVALANCHE EDUCATORS FROM HEALTH AND SAFETY CAMPAIGNS

- The vast majority of our thinking related to decisions making risk management takes place below the conscious level.

- When rational processes fail to provide quick and easy risk management, unconscious processes are ready to take over.

In other words--

- Don't believe everything you think.

- From your groups-come up with the two most dangerous mountains to climb in the US and why?

Most Dangerous Mountains in the World to Climb- Various websites

- 1. Annapurna, Nepal (26,545 feet)
- 2. Nanga Parbat, Kashmir, India (26,657)
- 3. Siula Grande, Peru (20,814)
- 4. K2, Pakistan/China (28,251)
- 5. Kangchenjunga, India/Nepal (28,169)
- 6. The Matterhorn, Switzerland/Italy (14,691)
- 7. Everest, Nepal/China (29,029)
- **8. Washington, N.H. (6,288)**
- 9. Denali, Alaska (20,320)
- 10. Fuji, Japan (12,388)

Photo from Mount Washington Observatory website.

Mount Washington

- There have been over 135 deaths on Mount Washington since they have been recording such information.
- Mount Washington has the highest percentage of avalanche fatalities due to trauma as opposed to asphyxiation due to being buried.

From Mount Washington Observatory Website

- At 6,288 feet, Mount Washington claims the title of the Northeast's highest peak. While its height may not be especially impressive by global standards, Mount Washington rates as anything but an ordinary mountain. For one, its climate is similar to that of Northern Labrador, hundreds of miles further north. Three major storm tracks converge over the mountain, forming harsh and turbulent weather conditions. The combination of the extreme wind, fog, wet and cold have dubbed Mount Washington "Home of World's Worst Weather".

Ascents of Honor (click to see video)

- http://www.youtube.com/watch?v=BxB9HsHtKSk

Harvard Cabin

Ratings the day of the climb

North American Public Avalanche Danger Scale

Avalanche danger is determined by the likelihood, size and distribution of avalanches.

Danger Level		Travel Advice	Likelihood of Avalanches	Avalanche Size and Distribution
5 Extreme		Avoid all avalanche terrain.	Natural and human-triggered avalanches certain.	Large to very large avalanches in many areas.
4 High		Very dangerous avalanche conditions. Travel in avalanche terrain not recommended.	Natural avalanches likely; human-triggered avalanches very likely.	Large avalanches in many areas; or very large avalanches in specific areas.
3 Considerable		Dangerous avalanche conditions. Careful snowpack evaluation, cautious route-finding and conservative decision-making essential.	Natural avalanches possible; human-triggered avalanches likely.	Small avalanches in many areas; or large avalanches in specific areas; or very large avalanches in isolated areas.
2 Moderate		Heightened avalanche conditions on specific terrain features. Evaluate snow and terrain carefully; identify features of concern.	Natural avalanches unlikely; human-triggered avalanches possible.	Small avalanches in specific areas; or large avalanches in isolated areas.
1 Low		Generally safe avalanche conditions. Watch for unstable snow on isolated terrain features.	Natural and human-triggered avalanches unlikely.	Small avalanches in isolated areas or extreme terrain.

Safe backcountry travel requires training and experience. You control your own risk by choosing where, when and how you travel.


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The Event (click to see video)

- http://www.youtube.com/watch?v=4bHoeTIEMPo

Media (click to see video)

- http://www.youtube.com/watch?v=U93Ow3G1eIA

Analysis from Mount Washington Avalanche Center.

- We believe that the overall confidence in the leader's ability and experience may have led to some group members withholding from the entire group avalanche concerns they may have had. This confidence was stated by one group member as a reason for not carrying avalanche rescue gear (i.e. beacons, shovels, and probes). While we don't condone the practice, it is not uncommon for climbers in Huntington to travel without avalanche rescue gear. We understand that there are times when the risk of being buried in an avalanche in Huntington is much less than the risk of being severely injured or killed by the fall itself. However, leaving this equipment behind significantly reduces your safety margin should an avalanche occur.

Leadership Decisions

- Group decisions far outweigh individual decisions.
- Did emotional attachment to the cause impact decisions?
- Was there a plan for different scenarios?
- Was there an agreed to singular press contact?

Leadership decisions

- Was there command and control environment based on roles?
- Why was there not questioning of other team members? Inexperience? Family?
- Reservations at a hotel on top of the mountain?

Heuristic Trap-Mount Washington Avalanche Center

- Once a group invests themselves into an objective, it becomes more difficult for the group to retreat from the objective or alter their plan. This is a heuristic trap that is commonly taught in basic avalanche classes. No person, from the novice to the avalanche professional, is immune from it entirely. The trick is to know how to recognize its influence on one's decision making and try hard to minimize the effect.

From Mount Washington Avalanche Center. Halo Effect?

- With this group, one climber was using a prosthetic device that had a smaller footprint than a standard boot. This slowed the climbing greatly, as he would break through the crust where others would not. There is no doubt about this climber's physical fitness and endurance, it is simply more difficult for anyone to move fast when he or she is breaking through an established boot pack.

Are good intentions dangerous?

- Do fundraisers/events impact decision making in wilderness settings?
- Does the command and control military model of leadership impact decision making?
- Is Mount Washington really that dangerous?
- Is it Mother Natures trap?

- Although exact accident rates for these recreationists are unknown, we do know that between one-third and one-half of all avalanche victims had formal avalanche training prior to their accident (McCammon, 2000: 2004).

- Most recreational avalanche victims choose to enter avalanche terrain, and in fact usually trigger the avalanche that buries them or members of their party (Tremper, 2001; McCammon 2004). In other words, exposure to avalanche risk is largely voluntary, even for recreationists with a rudimentary understanding of where avalanches occur.

- An important characteristic of avalanche risk is that it is typically associated with exhilarating forms of recreation: climbing a steep slope, skiing or riding in deep powder, climbing a snow gully. When no avalanche occurs (the most probable outcome), the experience is intensely positive, perhaps even further amplified by the rush of cheating fate or the forces of nature.
- (Lupton and Tullock, 2002).

Four Heuristic Traps related to Central Gulley Slide

1. The familiarity trap appeared to be triggered by previous experience with the avalanche slope, and was most likely to affect those with significant avalanche training.
2. The social proof trap was triggered by the presence of other people. Its influence is strongest in groups of three to four and in victims with formal avalanche training.
3. The commitment trap was triggered by commitment to a specific goal.
4. The scarcity trap was triggered by a combination of other people nearby and an untracked slope, and was most likely to influence groups of two through four people.

- -(McCammon, I. 2004)

Questions

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