

Accident Report Analysis Exercise: A Worksheet

Introduction

Begin by browsing through *Accidents in North American Mountaineering* or the American Alpine Club's online accident database. Skim a handful of reports. As you browse, you'll find that many of the accounts are relatively thin on details. These accidents may not repay careful study. The most interesting case studies will be those hinging on errors of judgment, rather than on things like equipment failure or unlikely chance events.

Once you've selected an accident to analyze, read the report carefully and address the following questions.

Knowns and Unknowns

1) Summarize the Known Information

After reading the accident report through, begin your analysis by summarizing the information that is **known** with reasonable certainty. As you write, resist the temptation to put a spin on events. Keep to the facts.

2) Summarize the Unknowns

Of the many **unknowns** in this accident, which seem to be the most significant? Is there enough information to enable you to meaningfully analyze the accident, or do you have to content yourself with superficial observations?

Chance Events vs. Human Error

3) Chance Events

What role might **pure chance** have played in the accident?

Identify actual or speculative causal factors over which the climbers had no direct control. (E.g. unpredictable weather, natural rock-fall, etc.)

4) Human Error

What role might **errors** or **mistakes** have played in the accident?

Here, we're looking at things that would have been within the direct control and responsibility of the climbers, like movement errors (e.g. tripping over the rope); knot failure; or sloppy navigation.

Errors of Judgment

5) What role might **misjudgment** or **miscalculation of risk** have played in the accident? Is it possible to reconstruct stages in the party's decision-making process? (Here we would include cases where a climber took a "calculated risk" or "rolled the dice" – e.g. deciding not to rope up for fifth class terrain, or choosing to climb across a loaded avalanche path.) Be as specific as possible about what risks were underestimated or misrepresented.

Other Factors

6) What **intensifying** and/or **mitigating factors** might have affected the outcome? (E.g. bad weather/good weather; presence/absence of a professional rescue crew and fast response; etc.)

7) What **secondary errors** and **compounding effects** might have played a role after the initial event? (Compounding effects are sometimes called “cascading effects”.)

Speculative Scenario

8) For the final part of this exercise, give your imagination free rein. Speculate about ways in which an accident like this one might have come about. Sketch a **scenario** that describes a similar accident from start to finish in such a way that you can **imagine yourself playing a part in it**. Like a storyteller, “suspend disbelief” and allow yourself to delve into character, social relationships, and other wholly unknown factors. (Use another sheet or the reverse side of this sheet as necessary.)