

Presenter Bio:

Tom attended the University of Washington and earned four bachelor's degrees (Geology, Biochemistry, Cell Biology, and Evolutionary Biology), then attended Washington University and earned an M.A. in Geology. He spent two years teaching and tutoring in the Seattle area before going back to graduate school to earn a Ph.D. in Earth Sciences and a Certificate in College Teaching at Montana State University. Throughout this process, he realized how his cognitive skills could be utilized to benefit those working at height (fire/rescue personnel, rope access technicians, etc.) to improve their safety. So, he started a research program to generate data that could be utilized by the professional rope user. His results have been presented at ITRS, MRA/NASAR, and state SAR conferences, where he champions the use of data and critical thinking to determine the safest methods to use. In addition, Tom is a champion of data-driven teaching and learning techniques, and seeks to help others use these methods to improve their professional practice. Tom started a nonprofit, SAR³, to further rigging research and teaching.

Abstract:

There are many ways to solve most rigging problems, which raises the valid question of: Which way do you rig a pitch when confronted with each real unique rigging challenge? How each rigger answers this question is individualistic and is based on their rigging philosophy; a system of thought that a rigger uses to organize, prioritize, and act on the information presented to them about each rigging challenge. All riggers have some kind of personal philosophy about how to rig, though often it is subconscious, unconsciously applied, or poorly thought through. Having an incomplete, illogical, or incoherent personal rigging philosophy can slow the decision making process when faced with real rescues, or during training when deciding what to practice and how. As a result, it is practically useful to consciously think through what our personal and agency rigging philosophies are so that rescuers know what variables to consider and in what priority order. Having thought through some of these variables in advance should speed up rescue responses and minimize the appearance of the "Good Idea Fairy". In fact, it is often a mark of a seasoned rigger that they can articulate their philosophy, and back it up with sound reasoning, so it is useful to consider ways of helping new riggers develop their own rigging thinking to more quickly move them to more advanced stages of rigging thought. This presentation systematizes a way of thinking through your personal and agency rigging philosophies meant to aid riggers in developing their own mindset related to what variables matter and in what order. The author's personal rigging philosophy will be used as an example philosophy, not of what others should do, but of the kind of logic that can be applied to developing a rigging philosophy.

The presentation will start with a discussion of most of the important variables that determine the kind of rigging a person or agency chooses to employ, which includes, but is not limited to: Safety, SOP's/SOG's, Equipment Cost, Patient Care, Personal or Organizational History, Speed, Equipment Mass, Equipment Volume, Equipment Versatility, and Rigger's Knowledge. With a common vocabulary we will move on to interactive exercises where attendees will ponder each variable and their relative importance for each rigger's "normal" mission profile (e.g., industrial settings, glaciers, backcountry cliffs, caves, etc.). Attendees will be prompted to start developing an explicit rigging philosophy, which will then be challenged with hypothetical rigging scenarios, which will be used to hone their thinking. Attendees will leave with a thought through philosophy that will likely change over time.

In addition to a cost/benefit analysis of each variable, some habits of mind will be explicitly

advocated, and illustrated with new and old data sets. Evidence based decision making will be illustrated with hypothetical rigging scenarios and presenting data sets that could be used, in conjunction with a rigging philosophy, to make an informed rigging decision. Additionally, a growth mindset will be advocated and illustrated by showing how I have changed my philosophy based on evidence, thus providing an example of how you expect rigging philosophies to change over time.

Finally, we can improve our student's rigging by explicitly teaching them how to think through their rigging. The presentation will provide trainers with strategies for introducing the concept of rigging philosophies and how to walk students through a series of exercises that will move them to more advanced cognitive processes faster. Ultimately, the goal is to speed up the development of faster, more versatile, and cognitively more advanced riggers in a shorter time.