



**Cougar Fire
Practical Application of Human/Organization
Performance Improvement Principles**



**By Human Performance Group:
WO FAM Risk Management & RMRS Risk Management and Human Factors
Research, Development and Application**

SUBJECT

The Cougar Fire, ignited on 6/8/11, presented a fantastic opportunity for the Human Performance Group to apply the fundamentals we teach during an active incident. The incident was managed by an ad-hoc type 3 organization consisting of an Incident Commander Type 3 (ICT3), an ICT3(T), a Safety Officer (SOFR), 3 Division Supervisors (DIVS), and other assorted overhead. Ben Iverson was assigned to the fire as the SOFR. At it's height over 200 people were assigned to the fire.

Background

Think about the game of checkers. It's a simple game we all begin playing at a young age. Its simplicity is deceptive. There are over 500 billion billion moves possible in a single game. The game of checkers illustrates the levels of complexity we face during normal work. Life isn't as simple as the incredibly complex game of checkers. Establishing shared context is how we deal with complexity.

“Developing the situation is the common-sense approach to dealing with complexity. Both a method and a mind-set, it uses time and our minds to actively build context, so that we can recognize patterns, discover options, and master the future as it unfolds in front of us.”

Pete Blaber
The Mission, The Men, and Me

Traditionally safety has attempted to reduce the complexities of fire line operations to a set of simple rules. Admonitions to “follow the 10s & 18s and you’ll be safe”, “drive safely and always use a backer”, and “always where your PPE” are so common that they have begun to have adverse impacts on safety. These statements are oversimplifications that do not accurately reflect the complexities of the fire ground. As soon as a safety officer, incident commander, or line officer utters one of these statements attention is lost, this effect is clearly observable during safety briefings. When this happens important messages are missed and opportunities for learning are lost. Instead, by striving to understand the complex nature of normal work and recognizing the individual’s role in that complex system can we begin to harness the opportunities to create a safer fire ground.

Emphasis Points

The foundational theory and research that guides The Human/Organization Performance Improvement program also guided each safety briefing and field interaction during the Cougar Fire. Incident leadership, specifically ICT3 Steve Murphy and ICT3(T) Joe Johnston should be commended for supporting this effort. Without them this departure from the “normal” would not have been possible. This was an opportunity to put theory into practice.

Some of the topics emphasized during the incident were:

-Trusting field leadership with Safe Mission Accomplishment: When safety and mission accomplishment are separated the meaning of each becomes fundamentally changed. When taken as separate priorities then they will always compete for supremacy. Walking into a burning forest is UNSAFE. Safety at the expense of mission accomplishment leads to paralyzing risk aversion and a failure of the expectations of the organization and its constituents. When mission accomplishment overrides safety then people will go to extreme lengths to accomplish that mission. Both are problematic in different ways. When safety becomes unmoored from mission accomplishment we threaten the integrity of the organization. Taken as inextricably linked we can strike a balance; no longer considering either as a competing priority or as a cost of doing business.

-Training IS Safety: Every operation is an opportunity for coaching and mentoring of our firefighters. No matter how important or valid a rule or policy it will not be followed unless people WANT to follow it, unless it makes sense to them. Simple compliance doesn't work because it doesn't involve a personal commitment. By coaching and mentoring we can instill this personal commitment in lasting meaningful ways that punishments will always fail to do. Doing something, not because a rule says you have to, but because it makes sense and moves the mission forward becomes the emphasis of this coaching and mentoring. Through mentoring we can pass on effective intuitive risk management processes in context to our fledgling leaders preparing them to face risk when they are themselves the leader. We are all one accident away from being the leader. Prepare your firefighters for this unpredictable and inevitable eventuality.

-Context is Everything: The fire ground is a constantly changing environment. What was known at one point needs to be constantly challenged to determine its continued validity. What worked yesterday might not work today since EVERYTHING has changed. These changes may not be readily apparent. The human brain is trained to recognize similarities (recognition primed decision making); we have to work hard to recognize the differences in our environment. By recognizing that it is up to everyone, from the newest firefighter to the most experienced captain, to continually develop the situation, build context, update your risk understanding, and share this understanding with each other that people actively create safety.

-People Create Safety: The human mind is incredibly adept at intuitively evaluating risk in context and adapting to the changing conditions found during normal work. No set of rules or regulations can ever deal with the unpredictability of complex work environments. By discussing how effective our risk assessments were in context during the After Action Review we can better prepare for the next operational period.

-Surprise is a Risk Management Tool: We often respond to surprise, to events that are outside of our experience, by mentally compartmentalizing them. In other words we often ignore these surprises. These surprises are actually valuable tools for risk assessment and management. When we recognize things that are “Dumb, Dangerous, or Different” or when we say to ourselves “huh, I didn’t expect that” we need to take time for further evaluation of our level of engagement. It is critical to communicate this to our crews, our peers, and our supervisors so that we are better able to handle events when we are faced with them. We cannot assume that our understanding of a situation is shared with those around us. Only through dialog can we build a shared understanding of risk. We all have a responsibility in this dialog.

Conclusion

During this incident we worked hard to redefine the role of a safety officer. First, we purposefully avoided the clichés and by avoiding these expected admonitions firefighters remained engaged. Second, by recognizing the strengths in our firefighters (their ability to adapt and handle complex situations) we were able to develop a rapport and build trust between the command team and the field. Finally, by being a respectful yet questioning voice we were able to ensure mission accomplishment didn’t become unmoored from safety.

Every hazard noted in the incident action plan or during the safety briefings were brought to us by firefighters. They talked to us, brought us their concerns. Not because they had to, but because they knew we would do everything we could about them.

"The day soldiers stop bringing you their problems is the day you have stopped leading them. They have either lost confidence that you can help them or concluded that you do not care. Either case is a failure of leadership."

Colin Powel

Comments received validated the effectiveness of this redefined role. The following is a sampling of these: “we look forward to hearing what you have to say today”, “you don’t say the same old stuff, thanks”, “can you come out to the line and talk more about what you said during briefing with my crew”, and “you made us think”. The actual topics discussed are important but beside the point. The primary goal was to encourage and develop mental agility and resilience in fireline leadership. It

is exactly this ability to THINK, to adapt to complex, interactive, and dynamic environments that makes us successful. Encouraging this mental fitness will allow our employees, people we trust with incredible responsibility, to evaluate their risk in context and do what makes sense to achieve safe mission accomplishment. Efforts to improve safety have to recognize that the only way to deal with the complexities we face is for the human brain to not just follow the rules but to adapt them when the situation requires.

Point of contact:

Ben Iverson, Human Performance Specialist, biverson@fs.fed.us