

# Leaders

## We Would Like to Meet

Wildland Fire Leadership Development Program



## Interview with Ted Putnam

by Bill Miller



Ted Putnam at Mann Gulch in 1996

July 6, 2004 marked the 10th anniversary of the tragic South Canyon Fire, an incident that perhaps more than any other in recent history has been seen as a catalyst for change in the world of wildland fire. Ted Putnam demonstrated remarkable insight and leadership while serving a vital role in the investigation of the South Canyon Fire and, more importantly, in the events that have shaped our culture since.

Ted was born and raised in Spokane and worked summers on farms in Eastern Washington. After graduating from high school in 1962, he found work in a fruit cannery and then joined the U.S. Army Reserves, assigned as a cook and later as a structural firefighter.

While serving in the military, and in his early days of firefighting, Ted was able to make time for school as well, ultimately achieving an advanced degree. Ted holds a Ph.D. in Experimental Psychology from the University of Montana. He majored in Learning Psychology, and minored in Decision Theory, Mathematics and Statistics.

Ted started his Forest Service career in 1963, and spent his first 3 years on the Kooskia Ranger District of the Clearwater National Forest. Ted went on to become a Smokejumper for 11 years, three of those years as a Supervisory Smokejumper. In 1976, Ted combined his education and his fire experience as he began working for the fire technology and development wing of the U.S. Forest Service at the Missoula Technology and Development Center (MTDC).

As a Fire Equipment Specialist at MTDC, Ted developed firefighter's protective clothing, fire shelters, and training materials. While at MTDC, Ted served as a subject matter expert concurrently for two standards-setting committees of the National Fire Protection Associations regarding protective clothing and equipment. Ted applied his technical knowledge of fire operations and equipment and his extensive understanding of psychology and behavior resulting in training materials such as Your Fire Shelter.



Ted Putnam, smokejumper 1972

**“I feel the single best way to improve firefighting awareness, thinking and decision making is for firefighters to learn mindfulness meditation.”**

During his career, Ted had developed and shared a wealth of knowledge and expertise that made significant



Ted Putnam, rookie firefighter 1963

impacts both in the field and in our classrooms. Through his district and smokejumper years, Ted served on countless initial and extended attack operations throughout the west. During his time as a smokejumper, Ted tallied 148 parachute jumps and mentored numerous younger jumpers as a Squad Leader at the Missoula Base. He served in several overhead positions on larger fires, including an assignment as Sector Boss on the Colorado, where 3 fatalities occurred.

Prior to his retirement in 1998, Ted served as an investigator on several fires, which include monumental fires such as the 1990 Dude Fire in Arizona, and the 1994 South Canyon Fire in Colorado. Ted's official position with these investigation teams was based upon his technical expertise in the areas of fire clothing and equipment and how they interact with fire behavior to influence human behavior. As an expert in the fields of psychology and behavior, Ted brought with him a remarkably broad range of experiences and knowledge, which enabled him to offer insight into elements well beyond the scope of technical capacities. Ted was considered one of the leading expert in the United States regarding wildland fire entrapments and has been cited by many as "the pioneer in advancing scientific knowledge in this area."

Despite having such an extraordinary impact during his years with the U.S. Forest Service, it is perhaps what Ted did not do that marked a turning point in the culture of wildland fire. Although Ted was an official member of the investigative team looking into the causal factors of the South Canyon Fire, his signature will not be found among the other investigators signatures. Ted refused to sign the final report. Ted declared that the report, in its final form, failed to adequately and honestly address the role that human factors played in the fatalities.

Ted had, for many years, asserted that there was a need to address human factors in the risk management and decision-making processes of firefighters. Despite

having minimal references to psychological aspects of firefighting and supervision of firefighters in some fire training courses, the culture of wildland firefighting, to include fire management, was nearly void of an understanding of human factors. Ted believed that our training, our studies and our investigations of past near miss and tragedy fires lacked the incentive and the willingness to look inward at the psychological aspects of 'how and why' firefighters make choices and manage risks. The events of South Canyon, and the investigation that followed, solidified Ted's resolve to make a difference.

It is commonly accepted that the role of management is not a role of change. Generally speaking, management tends to implement current policy and to maintain the status quo. To the contrary, one of the key roles of leadership is to look ahead, to ascertain a big picture understanding as things are changing and to develop and share a vision for the future. There are times when management and leadership conflict, and the choice to follow ones vision can be difficult, and at times costly. In regards to the South Canyon Fire, Ted could not bring himself to fully support the investigative findings and took a stand, which differed from that of management.

Despite pressure to conform, Ted refused to sign the official investigative report without a concentrated and honest assessment of the human factors involved on the incident. Ted held to his vision of what he believed the 'right' choice to be. The statement made with a single blank space on an official report, the space where Ted's signature was supposed to be, is perhaps one of the most resounding statements of leadership found in the history of wildland fire.

Following the South Canyon incident, Ted requested and was given authority to organize the first Human Factors Workshop in Missoula, Montana in June 1995. The purpose of this workshop was to critically view what was lacking in the area of human factors training and development for our firefighters. Historic fatality fires such as Mann Gulch and South Canyon were compared and contrasted in an effort to determine where change was needed. The workshop participants took an essential look at our history, and made an effort to develop a vision for our future. As a result of the Human Factors Workshop, the participants developed a series of recommendations to improve the fire organization and firefighter safety. These recommendations were published as Findings from the Human Factors Workshop, and became part of the foundation for today's leadership, risk management, and decision-making training.

Ten years later, it is fair to look back at the journey and to see where it is that we have traveled. It is appropriate to look at the recommendations set out during the

original Human Factors Workshop and to recognize the efforts made to improve situational awareness and fireline leadership. Equally important is the determination of what has yet to be accomplished, and where attention should be focused in order to enhance firefighter safety.

One of the more significant results of the investigation process that followed the South Canyon Fire has been an increased study of human factors in our decision-making processes, and in our leadership methods. Young firefighters today may not recall a time when the study of human factors was not a significant part of their training. However, experienced veterans reflecting on the events of South Canyon may admit that the changes that has accompanied the decision to study human factors has been difficult and have not always been popular. At times, the demands of change have been contentious, confusing and for some, very painful. As with any growth process, it is more comfortable to confront external factors than to look inward for answers to difficult questions that might challenge our integrity or push us towards change.

Ted Putnam is retired and currently resides in Missoula, Montana where he enjoys the company of his wife Gay, and his son Derek.

### **What makes you want to follow someone?**

They either demonstrate traits I admire such as wisdom or they are showing the way to new skills, insights and higher levels of achievement.

### **Who do you think is a leadership role model and why?**

My role model would have to be the historical Buddha. Not in a religious sense but rather for his penetrating psychological analysis of how each person can choose to improve their minds and become their own leader.

### **If you were to pick the most important character trait for an effective leader, what would that be?**

Wisdom would be at the top of my list. Wisdom arises as a direct result of becoming more mindful of mental and physical objects as they actually exist in the present moment. Mindfulness is a learnable meditation skill and the resulting wisdom is a leader's greatest asset for seeing clearly what needs to be done, how to do it then leading the way to get it.

### **Are leaders born or made...explain?**

Both are needed. It is necessary to have a minimal level of intelligence, health, strength, and emotional control to

be able to advance and inspire confidence. You must also be born and raised in an environment that allows personal growth. Given a favorable mind, body and environment then learning and role models are necessary for leadership skills to fully develop.

### **Regarding leadership, what quote comes to mind?**

"The only true miracle is that change is possible." Our minds automatically cling to our concepts, bodies, loved ones and paradoxically to our minds. This is the habitual basis on which we make our decisions and run our lives accepting and even fiercely defending our position in life. That is why firefighters and others instinctively resist meditation... to resist change. When you have some insight into this quote you see it is time to loosen up, embrace change, see what change is needed and lead yourself and others to it. Through mindfulness you accept the miracle.

### **Thinking back to your youth, what influences helped you become a leader?**

Growing up in a stable environment and asking elders in the neighborhood to share their wisdom. At first these elders discussed the usual topics: money, love and good health. But with persistence these elders began to share psychological insights into what had gone right in their lives and what they would do over again if they had the chance. As the deeper explanations unfolded I found better life goals and an understanding of how to achieve them. I carried forward a habit of looking beneath surface events towards the underlying causes.

A second event occurred at the age of ten in the fourth grade. My grades were sagging and my teacher told me I needed better concentration skills. My dad said he wasn't sure how to do that except to pick something to keep my attention on. I spontaneously picked visualizing a red disc in my "minds eye" and thus taught myself to meditate although I didn't even know that term at the time. After months of struggling and not seeing much clearly, suddenly a red disc of pure light appeared that would remain in my mind's eye with almost no effort. Afterwards my grades began to increase from mostly C's and B's to B's and A's. This event always kept me open to future mental development. Years later as a beginning student at Washington State University I was failing calculus and struggling in all my courses. Remembering grade school, I began the red disc meditation and again achieved the stable image. My grades improved to mostly A's which continued up through graduate school. It wasn't until 30-40 years later in an eastern meditation book that I read a very detailed account of how that very meditation leads to the stable image and improved mental skills. Until then I had thought that experience was unique to me. Those early events led to skills which

enabled me to see possibilities later in life that I would not have even been aware of otherwise. Those possibilities are the seeds for leadership.

### **What do you consider your strengths to be?**

Analytical reasoning and a determination to look for subtle physical, mental and cultural causes of events are my strengths. More than anyone I know personally I work both on improving my mind and watch carefully what I fill it up with. I am good at piecing small details together to see larger interactions. Through years of studying both eastern and western psychology I have a very good understanding of how my mind works through direct observations and can now use this knowledge to seek more wisdom through daily training. And, yes this is easier said than done and progress is slow.

### **How about your weaknesses?**

I need better interpersonal communication skills. I am more of a researcher than a teacher or politician. From high school until after the South Canyon Fire I was terrified to talk in front of people. The sheer need to talk about the South Canyon Fire forced me to ignore those fears and speak out; and I still lack skills as a lecturer.

Too often I say first what is negative in a situation rather than what is positive and that can turn people off to my ideas. Those old habits come out in person to person talking compared to writing where you can go back and say something in a better way.

### **Since you started in 1963, what are the biggest improvements you have witnessed in the wildland fire service?**

The biggest improvement is the willingness for firefighters to consider psychological and cultural processes affecting them and to use that knowledge to improve themselves and the fire organization. Some firefighters are now willing to look at mental errors and look within their own minds for causes and how to avoid similar future errors rather than seeing the blame outside their self. A second major improvement is in the amount, quality and range of courses now being taught.

### **What do you consider the worst changes you have seen in the wildland fire service?**

We seem to be the best in the world at getting people to base camps then fail in getting them fed and transported to the fireline in a timely manner. We have institutionalized sitting around waiting. It was a bad decision to all but eliminate nighttime firefighting. We seem to have over emphasized snag and rock hazards and underestimated daytime hazards such as worse fire

behavior and physiological conditions. Another is the loss of the Sector Boss from the previous large fire organization. Too often Division Supervisors cause problems since they aren't on a familiar basis with either the crews or the IC team. Last is the failure to be honest about fire accidents and fatalities and become mindful, learning fire organizations. We continue to blame people for organizational and training failures.

### **Describe a few of the toughest decisions or dilemmas you have faced?**

My toughest decisions were what to do about the failure of the South Canyon Fire Investigation Team to tell the whole truth about the deeper underlying causes. Up front, with my knowledge, it was unethical to sign a faulty report. Since there were hints of punishment if I failed to sign it, which later occurred, was I willing to end my career with such an act? Should I sign a sanitized report to stay a management "team player" so I could later try to implement solutions to fix underlying problems? In the end I chose not to sign in order to tell the truth to firefighters.

### **What helped to guide you in that decision?**

Firefighter safety was more important than me finishing my career in good standing among fire managers. In almost twenty years of being involved in many fire investigations the promised improvements were rarely implemented, human factors were largely ignored and the whole truth seldom told. As a result, management provided incomplete explanations of fatalities as evident in the Standards for Survival account of the Battlement Creek Fire where I was an eye-witness. So my gamble was that, in refusing to sign, firefighters would benefit more in the longer run. Someone seeing investigations from the inside needed to speak up.

The Dude Fire was pivotal for me. I suggested we consider human factors during that investigation but didn't push it. Some members got irritated and angry for even mentioning human factors. After the Dude Fire I began to read up on the underlying causes of accidents following up on my graduate school decision courses and getting into areas new to me like CRM (Cockpit Resource Management). Every year from 1990 to 1994 I tried to get top fire management leadership to adopt training such as what later became Human Factors on the Fireline. One of those years I even made the same appeal to members of the Safety and Health Working Team. To me training based on Dude Fire lessons should have prevented the South Canyon fatalities. What seemed like strong human factor casual links to accidents and fatalities, to me, were seen as weak links to managers with mostly fire and forestry backgrounds.

So I saw the "team player" mentality as translating into future fatalities. It was time to be both more honest and more forceful. What I needed was a big club. South Canyon gave me that club. I gave my fire management leadership a simple choice: implement human factors through the workshop, training (Human Factors on the Fireline) and the B1 initiative (that later became the Tri-Data Safety Study) or I go public. Going against the grain and encountering resistance, I began to push for changes; thus the dance began.

### **Do you think a legacy is important and if so, what do you want your legacy to be?**

Yes, legacies are important. I am trying to leave one but only individual firefighters can keep a legacy alive in the future. I would want my legacy to be for firefighters to thoroughly understand the widely accepted wisdom that 80 percent of accident and fatality causes are due to mental errors. This implies we need more emphasis on human factors and mental elements in particular. The 1996 National Hotshot Conference focused on "Creating Standards That Insure Safety." A group, composed of Karl Weick, Diane Vaughan, Gary Klein, Dave Thomas, and I were discussing a number of factors to improve firefighter safety. The strongest area of agreement was to promote better thinking. As a psychologist I felt this was the focus area for my future efforts.

In studying thinking since then, I feel the single best way to improve firefighting awareness, thinking and decision making is for firefighters to learn mindfulness meditation. Short courses are available and now being taught throughout all levels of the education system, the business community and our society. So much so, that meditation has been a front-page story for Time and Newsweek magazines. I have personally taken a year-long course and can testify it works as promised. I also considered other forms of meditation such as Transcendental Meditation, visualization, and even red disc concentration. I recommend mindfulness precisely because it focuses on learning to observe your mind under dynamic situations. Meditation means both mind training and mind protection. Mind protection means you can think more clearly under adverse conditions.

Why bother to learn meditation? Without it your mind remains on auto-pilot, trapped in past habitual modes of

awareness and thinking. Both awareness and thinking become more rigid the longer you live. This is an automatic process that you only rarely glimpse. Out of habit our minds go off on more side trips with less and less focus on what we are trying to do. A side effect is that time appears to speed up because we are unconscious of all those side trips. Meditation focuses your mind on one object or process. Successful meditation extinguishes your mind's natural tendency to take those side trips leaving more time for focused awareness and decision-making. Meditation also allows fresh interpretations at all levels of awareness. Such a fully aware, faster mind is often portrayed in martial art films as seeing your adversary in slow motion. A faster, more perceptive mind is essential for leaders operating in risky environments.

Everywhere we go, whatever we are doing, whether asleep or awake, our minds are always aware, processing information. We spend most of our lives filling our minds up with information so now it is time to put some wise effort into training the mind itself. That is exactly what is missing in Human Factors training to date. Mindfulness meditation is also called insight meditation since it is the doorway to wisdom. We are on a cultural bandwagon to keep upgrading our computers to higher speed models with bigger and faster memory to run those amazing new programs. Analogously, each of us should make a similar commitment to upgrade our minds and bring wisdom, change and wonder back into every aspect of our lives. Just as all those pop-up ads and spy programs can bring the fastest computer to a crawl without ridding them with an anti-spy program, we need mindfulness to unclog mental habits so we become more aware, better thinkers.

In short, I would want my final legacy to be someone who convinced individual firefighters get off mental auto-pilot and freely exert real control over their minds. Learn to lead yourself and rest will follow.

This interview with Ted Putnam was conducted by Bill Miller in Missoula, Montana on December 7, 2004.