

## **REALITY STRIKES** **Michael S. Williams**

*“Wildland firefighters today are spending more hours fighting fires than ever before, and they are engaging fires of historic magnitude. The risk environment associated with wildland fire is being redefined, and firefighters too have begun to redefine their own culture as a professional endeavor. This exercise of redefinition is not new.*

*With the upcoming 10-year anniversary of South Canyon Fire and the impacts from the Thirty Mile and Cramer Fires still fresh, the interest in lessons learned from the past will be intense, and scrutiny of the safety and effectiveness of wildland firefighting agencies will continue to increase. Part of this process requires we examine our hard won lessons in a different light.”*

- James R. Cook  
National Interagency Fire Center  
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Springfield, Lewis and Clark, Griffith Park, Chatsworth, Black Water, Pepper Run, Rock Creek, Hauser Creek, Mann Gulch, Pelitor, Rattlesnake, Gap Creek, Tunnel, Hacienda, Inaja, Decker, Timber Lodge, Fairview Hollow, Northfield, Rainbow Springs, Dude, Point, South Canyon, Thirty – Mile, Cramer, Esperanza and Blue Ribbon are fires that every wildland firefighter learns about.

Since 1926, 392 wildland firefighters have been killed in action on wildfires. The United States Fire Administration reports 62 fatalities this year within the national firefighting ranks, including wildland firefighters.

In 2012, 82 firefighters were killed in the line of duty: 39 volunteer and 32 careers. Firefighting is one of the very few volunteer activities that can be fatal. Nonetheless, over 75 percent of the country’s firefighters are volunteers.

These figures do not take into account the near misses and injuries that have occurred. The bottom line is that firefighting is dangerous and not for the meek of heart. Wildland firefighting is profoundly demanding, fatiguing, and requires constant awareness of one’s surrounding.

The recent death of 19 members of the Granite Mountain Hotshots at the Yarnell Hill Fire follows the deaths of 11 firefighters in West, Texas by an explosion in April. Unfortunately, the reality is that sudden and unpredictable events occur in firefighting - sometimes with tragic results.

It will take time for investigators to conduct interviews, review reports, listen to radio traffic recordings, evaluate photographic evidence, training records, Incident Action Plans and weather reports before a determination can be made as to what really happened. Speculation, rumors,

hearsay and innuendo are a disservice to the memories of the fallen firefighters and shows a total lack of respect towards them and their families.

For us, the question is why are firefighters killed? After all, they train, train and train some more.

There is no shortage of experts (friends and foe to the fire service) asking these questions. But the questions are not new. They have been asked for decades with no shortage of research to back up the answers. Yet, fatalities continue.

The four common denominators of most all fatal wildfires are:

1. Most incidents happen on small fires or in isolated sections of large fires.
2. Flare-ups generally occur in deceptively light fuels, such as grass and light brush.
3. Most fires are innocent in appearance before unexpected shifts in wind direction and/or speed result in flare-ups. Sometimes tragedies occur in the mop-up stage.
4. Fire responds to large and small scale topographic conditions, running uphill surprisingly fast in chimneys, gullies and on steep slopes.

Until you have witnessed it yourself, it is difficult to understand how fast fire can move. Keep in mind that in front of a fire is tremendous heat and gas. A large fire is also eating all the available oxygen. Spontaneous ignition of vegetation is not unlike the flashover conditions found in structural firefighting. Get air hot enough and everything ignites.

“With rare exceptions, most tragedy fires are innocent appearing - burning in light fuels just before the flare-ups.” according to a National Wildfire Coordination Center’s Common Denominators of Fire Behavior on Tragedy and Near Miss Wildland Fires training video. This is understandable because there is no perception of danger to the untrained eye and ear. Yet, potential danger lurks everywhere.

While fuel characteristics, slope, aspect, time of day and topography are all important components of wildland fire behavior, it is wind that is the most significant factor contributing to erratic and dangerous conditions that can be fatal. Cold fronts, Foehn down-slope winds and thunderstorms are also serious conditions that impact fire behavior.

The human condition also plays a factor in public safety that can become dangerous. I was recently asked about my article Normalcy Bias and how this mental state may impact professionals. It’s not uncommon for professionals to underestimate a situation or potential impacts. Perhaps this is driven by the fact that day in and day out, 99.9 percent of the time, everything works out, everyone goes home and no one gets hurt.

Public safety can be boring and tedious. In many cases it is the same thing every day often with the same people under many of the same conditions. This causes complacency because one becomes comfortable in the work environment regardless of the potential dangers. “Cheated death again” is a common attitude.

But the truth is that near misses and close calls are much more common than anyone may want to admit. These stressful and adrenalin-pumping situations become the stories that fill fire and police stations across the globe. Awards, medals and proclamations often follow such events. Yet, how close did the participants come to not going home?

This is not unique to public safety. I think of a commercial pilot who has thousands of hours of flight time with no significant events. Sure, there may have been some in-flight issues and potential emergencies, but 99.9 percent of the time, everyone one gets to the terminal without incident.

On January 15<sup>th</sup>, 2009, US Airways A320-214 airbus, flight 1549, under the command of Captain Chesley B. “Sully” Sullenberger took off from LaGuardia Airport. Within minutes of takeoff the aircraft hit a flock of geese. The aircraft lost engine power and ultimately ditched in the Hudson River. NTSB board member Kitty Higgins described it as “the most successful ditching in aviation history.”

Training, experience, planning and profound discipline were factors in this successful emergency landing. The same holds true in public safety. We learn from our close calls and share them with everyone in the hope that fatalities and injuries can be avoided. Regrettably however, the “It can’t happen to me,” “It’s no big deal,” “It’s just another routine call,” “Oh, it’s just a false alarm again” attitude has taken the life of many a good police officer and firefighter.

The safety factors confronting public safety officials apply to civilians too. A wind driven wildfire knows no boundaries and will take what’s in its path at will. Assuming that a fire is no threat to you is unwise. Within seconds a seemingly innocent column of smoke can become a conflagration. With rare exception, you cannot outrun a wind-driven wildfire.

Emergency managers have learned the lessons of others and respond accordingly. Danger comes in many forms and often is not immediately visible until it is too late. Why press your luck? If you are advised to evacuate, do so. Remember: Ready, Set, Go.

San Marcos, Refugio, Coyote, Polo, Romero Canyon, Sycamore Canyon, Hondo Canyon, Painted Cave, Marre, Sudden, Gaviota, Zaca, Tea, Gap and Jesusita are our fires. The recent Lookout and White fires could easily have been fatal fires.

As a community, let’s not let the death of 19 firefighters go for naught. Respect “the beast” and be prepared. That next wildfire on the ridge that looks like nothing can quickly be in your yard leaving you with no escape. Let’s not become complacent because the reality is that bad things can and do happen.