

Fire Management Professional Reading List

This reading list is meant to provide a starting point for firefighters and leaders who seek to improve their own knowledge and performance.

Readings outside of our standard training curriculum can add depth and breadth to fire leaders' development at almost any stage of their career. This professional reading list is meant to act as a starting point for readings and studies that may aid in the development of fire leaders at all levels within our fire and aviation organization. The readings are meant to provoke reflection, discussion, and debate. Many can be downloaded and printed. Others are available at libraries or purchased through online booksellers.

Ideas for use of this reading list include:

- Assign a member of your crew or staff to read one of the books and report on its salient points at a crew meeting, training day, or safety session.
- Buy enough copies of one of the books for your whole crew or fire organization to read.
- Start a professional library in your break or training rooms.
- Inform inexperienced firefighters about what happened at South Canyon.
- Study and discuss how human performance and decision making deteriorate with fatigue and stress.
- Read books that discuss the attributes of sound leadership.
- Read stories from other disciplines or endeavors that describe leaders in action.

HISTORY – “Where We Come From”

Pyne, Stephen J. **Fire in America, A Cultural History of Wildland and Rural Fire**. 1982. Princeton University Press.

From prehistory to the present day, Pyne explores the history of fire on the American landscape and the efforts of successive cultures to master fire and use it to shape the landscape.

Pyne, Stephen. **The Year of the Fires**. 2001. Viking Penguin.

An account of the dramatic and overwhelming fire season of 1910, in which two million acres burned and hundreds of lives were lost in the Northern Rockies and Great Lake states. This fire season set the stage for establishing large, expensive, and ultimately, extremely efficient federal and state wildland fire suppression organizations.

Maclean, Norman. **Young Men and Fire**. 1992. University of Chicago Press. An account of the 1949 Mann Gulch fire in Montana. Thirteen firefighters lost their lives on this fire in a blowup. Almost 50 years later, Maclean attempts to piece together what happened and why. Twelve of the 13 fatalities on this fire were smokejumpers, the first fatalities this new program had experienced. The Mann Gulch fire, among others, led to the initial development of the Ten Standard Fire Orders.

Maclean, John N. **Fire on the Mountain**. 1999. William Morrow and Co. An account of the 1994 South Canyon fire in Colorado. Again, 14 firefighters were killed, among them hotshots, helitack, and smokejumpers. Like his father before him, John Maclean attempts to tell what happened and why. This fire and its aftermath had a huge impact on fire management and fire safety.

Rothermel, Richard C. **The Mann Gulch Fire: A Race That Couldn't Be Won**. 1979. On the web at: http://www.fs.fed.us/rm/pubs/int_gtr299/ This short research paper examines the probable fire behavior and movements of the crew during the 20 minutes leading up to the fatalities at Mann Gulch. Rothermel originally undertook these reconstructions at the request of Norman Maclean while he was writing *Young Men and Fire*. Ironically, Rothermel was working at the Fire Lab in Missoula, originally conceived and established in the aftermath of Mann Gulch.

Butler, Bret W. et al. **Fire Behavior Associated with the 1994 South Canyon Fire on Storm King Mountain, Colorado**. 1998. On the web at <http://www.fs.fed.us/rm/pubs/SouthCanyon/> Similar to the previous research paper, but examines the fire behavior at South Canyon.

FIRE CULTURE – “Who We Are”

Thoele, Michael. **Fireline: Summer Battles of the West**. 1995. Fulcrum Publishing. This large size, coffee-table book provides an excellent overview of firefighters in the west and their unique culture. From groundpounders to Type I Teams, Thoele explains how western fire is fought and describes well the different types of firefighters who do it.

Pyne, Stephen J. **Fire On The Rim: A Firefighter's Season at the Grand Canyon**. 1989. Weidenfeld & Nicolson. Pyne's story of a fire season on the North Rim of the Grand Canyon. Based on his 15 seasons as a firefighter with the National Park Service, this book is a good introduction to the insular culture of western firefighters.

Leschak, Peter M. **Hellroaring: The Life and Times of a Fire Bum**. 1994. North Star Press. Leschak's experiences with Minnesota DNR and the US Forest Service, on Type II fire crews and helitack crews. This book is another good view of firefighter culture from the ground level.

Taylor, Murry. **Jumping Fire**. 2000. Harcourt, Inc.

Taylor was a USFS and BLM smokejumper for over a quarter of a century. This memoir follows one fire season from Alaska to the Lower 48. Taylor captures the atmosphere and attitude of smokejumping and initial attack firefighting.

HUMAN FACTORS – “How We Think and Act”

Putnam, Ted et al. **Findings From the Wildland Firefighters Human Factors Workshop**.

1995. USFS Technology and Development Program.

Subtitled “Improving Wildland Firefighter Performance Under Stressful, Risky Conditions: Toward Better Decisions on the Fireline and More Resilient Organizations.” This booklet contains a number of excellent articles on the human factors that impact how firefighters perform on the fireline when fatigued and under stress.

Weick, Karl E. **The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster**.

1993. Administrative Science Quarterly, Volume 38, pp. 628-652.

An analysis of the human factors that contributed to 13 fatalities on the 1949 Mann Gulch fire. Rather than reviewing fire behavior, weather, fuels and equipment, Weick analyzes how the smokejumpers thought, communicated, and acted as they attacked and ultimately fled from the fire.

Putnam, Ted. **The Collapse of Decisionmaking and Organizational Structure on Storm King Mountain**. 1995. Missoula Technology and Development Center.

Following Weick’s lead, Putnam analyzes the human performance at the South Canyon fire and the human and organizational failures that may have contributed to the fatalities.

Vaughan, Diane. **The Challenger Launch Decision: Risky Technology, Culture, and Deviance at NASA**. 1996. The University of Chicago Press.

In this book, Vaughan theorizes that the January 28, 1986, explosion of the Space Shuttle Challenger was brought on by a slow, incremental descent into poor judgement and decision making. NASA managers and engineers, confronted with signals of danger about shuttle technology, proceeded as if nothing was wrong when repeatedly faced with evidence that something was wrong.

Vaughan, Diane. **Targets For Firefighting Safety: Lessons From the Challenger Case**. 1996.

Presented at Interagency Hotshot Crew Workshop.

Based on her extensive research regarding NASA’s culture and the decisions leading up to the launch of the Space Shuttle Challenger, Vaughan discusses the roles decision making, organizational culture, and signals of potential danger can play in affecting firefighter performance and safety.

Tannen, Deborah. **You Just Don't Understand: Men and Women in Conversation**. 1991. Random House, Inc.

Tannen explains that men and women often misunderstand each other because they use language in essentially different ways. Women and men have distinctly different conversational styles based upon gender and cultural conditioning. Understanding and accepting these differences can lead to improved communications between women and men whether on the fireline or in the office.

Tannen, Deborah. **The Argument Culture. Stopping America's War of Words**. 1999. Random House, Inc.

Tannen examines how we communicate publicly and how often we approach issues as a fight between two opposing sides. Tannen shows how strong this cultural tendency for argument and conflict is, and how often it damages our attempts to successfully communicate. Again, understanding how and why we communicate in certain ways can help us improve our attempts to understand others and be understood ourselves.

LESSONS LEARNED – “How We Fail”

Thirtymile Fire Investigation Report. 2001. USDA Forest Service. On the web at: <http://www.nifc.gov/index.html>

Four young firefighters lost their lives on this fire in Washington on July 10, 2001. The investigation report is thorough and blunt.

Bandelier National Monument Cerro Grande Prescribed Fire Investigation Report. 2000. USDOJ National Park Service. On the web at: <http://www.fire.blm.gov/library.htm>

This escaped prescribed fire burned down numerous homes in Los Alamos, NM, and eventually caused more than \$1 billion in damages. The report identifies the decisions and actions that led up to the escape.

Lowden Ranch Prescribed Fire Review. 1999. USDOJ Bureau of Land Management. On the web at: <http://www.fire.blm.gov/library.htm>

This escaped prescribed fire burned down 23 residences in northern California. The report identifies the decisions and actions that led up to the escape.

Sadler Fire Entrapment Investigation. 1999. USDOJ Bureau of Land Management. On the web at: <http://www.fire.blm.gov/library.htm>

Six firefighters on a National Park Service crew were overrun by fire as they conducted a backfiring operation on the Sadler fire in northern Nevada. This report led to penalties against Type I team members.

Point Fire Accident Investigation. 1995. USDOJ Bureau of Land Management.
Two volunteer firefighters were overrun and killed by a rapidly moving range fire in south Idaho. The report identifies the decisions and actions that led up to the fatalities.

South Canyon Fire Investigation. 1994. Interagency Report. Executive Summary available on the web at: <http://www.fire.blm.gov/library.htm>
Two helitack, nine hotshots, and three smokejumpers lost their lives on this fire in western Colorado on July 6, 1994. This report details the decisions and actions leading up to the fatalities.

LEADERSHIP AND MANAGEMENT – “What We Can Strive To Be”

De Pree, Max. **Leadership is an Art.** 1990. Dell Publishing Company.
A thoughtful and idealistic approach to leadership that emphasizes the leader’s responsibilities to the organization and its people.

Smith, Perry M. **Taking Charge: A Practical Guide for Leaders.** 1995. DIANE Publishing.
A practical guide for leaders written in a clear, crisp style. Helps the leader set standards for integrity and excellence through the use of case studies and checklists.

Field Manual 22-100. **Army Leadership: Be, Know, Do.** 2001. Department of the Army.
On the web at: <http://www.adtdl.army.mil/cgi-bin/atdl.dll/fm/22-100/toc.htm>
The US Army’s basic leadership reference. This is an excellent reference for all aspects of leadership training.

Blanchard, Kenneth H. and Spencer Johnson. **The One Minute Manager.** 1985. Morrow, William & Co.
A practical guide for managers wanting to get the most from their employees. Focuses on promoting employee morale and job satisfaction as the pathways to better performance and productivity.

Goleman, Daniel. **Emotional Intelligence.** 1997. Bantam Books.
The author argues that there are an important set of emotional skills that contribute to human intelligence and successful performance in the workplace. These skills include self-awareness and impulse control, persistence, zeal and self-motivation, empathy and social deftness.

Goleman, Daniel. **What Makes A Leader?** 1998. Harvard Business Review: 76(6): 93-102.
In this article, Goleman discusses how the attributes of emotional intelligence contribute to effective leadership.

Peters, Thomas J. and Robert H. Waterman, Jr. **In Search of Excellence: Lesson's From America's Best-Run Companies.** 1982. Harper & Row Publishers, Inc.

The authors studied management techniques in many American companies to look for common threads among the successful companies. They found eight basic practices that are characteristic of successfully managed companies. They examine how and why these eight basic principles lead to successful performance and high morale.

CASE STUDIES – Leadership Examples From Other Fields, Places & Times

Ambrose, Stephen E. **Undaunted Courage: Meriwether Lewis, Thomas Jefferson and the Opening of the American West.** 1996. Simon and Schuster.

This biography of Meriwether Lewis also discusses his strengths and weaknesses as a leader. William Clark and Lewis were resourceful, intelligent leaders; and they maintained a direction and sense of purpose that kept their men healthy and relatively content through more than three years of trials and tribulations. A great study in leadership as well as a great adventure story.

Lansing, Alfred. **Endurance: Shackleton's Incredible Voyage.** 1999. Carroll & Graf Publishers.

The story of Ernest Shackleton's abortive 1914 attempt to reach the South Pole is another great study in leadership. Shackleton's ship, *Endurance*, was trapped and then crushed by pack ice, leaving Shackleton and his 27 men adrift on ice floes. The story of how Shackleton ultimately brings all of his men to safety at South Georgia Island is an epic of survival and a portrait of outstanding leadership in the face of adversity.

Blum, Arlene. **Annapurna: A Woman's Place.** 1980. Sierra Club Books.

Twenty years ago, Blum led the first all-female climbing team to one of the world's highest peaks in the Himalaya mountains of Nepal. Her leadership was instrumental in placing climbers on the summit, but the cost was high. Two climbers died before the expedition was completed.

Shaara, Michael. **The Killer Angels.** 1974. Random House, Inc.

This Pulitzer Prize winning novel tells the story of the Battle of Gettysburg from the point of view of key leaders on both the Union and Confederate sides. In addition to describing the human elements of leadership at all levels in a large organization, this gripping story demonstrates the impact leadership successes and failures can have on history.

Moore, Harold G. and Joseph L. Galloway. **We Were Soldiers Once...And Young.** 1992. Random House, Inc.

An intense and dramatic account of the first large scale battle fought between American and North Vietnamese forces. On November 14, 1965, Moore's 1st Battalion of the 7th Cavalry was attacked and surrounded by a superior force of the North Vietnamese Army. For three days and two nights, the American forces held off repeated attacks. An excellent primer on small unit leadership and leadership under fire.

Collins, Larry and Dominique Lapierre. **Freedom at Midnight.** 1975. Simon and Schuster. This book tells the astonishing story of Mahatma Gandhi's organization and leadership of a massive, non-violent, grassroots campaign in his native India. He ultimately led one of the world's poorest nations to independence from the British Empire.

Krakauer, Jon. **Into Thin Air: A Personal Account of the Mount Everest Disaster.** 1998. Vintage Anchor Publishing.

Six climbers from two expeditions died on the upper reaches of Everest when a storm caught them in the open. The decision making, situational awareness, communications, and risk management of the expedition leaders and other climbers were all links in the chain of disaster that overtook them.

Huntford, Roland. **The Last Place on Earth: Scott and Amundsen's Race to the South Pole.** 1985. Random House, Inc.

Scott and Amundsen led expeditions that raced each other to reach the South Pole for the first time. Amundsen's expedition ended in success, Scott's in death. Their contrasting leadership styles were directly responsible for the outcomes. This exciting book tells the tale.

Pressfield, Steven. **Gates of Fire: An Epic Novel of the Battle of Thermopylae.** 1998. Doubleday & Co., Inc.

For six days in 480 B.C., 300 Spartan warriors held off an invading the Persian Army of more than a million men at the narrow pass of Thermopylae. All of the Spartans were killed, but their delaying action gave Greek armies time to prepare and ultimately save the young democracies from conquest. An incredible story of duty, honor, and selfless service.

Useem, Michael. **The Leadership Moment.** 1998. Three Rivers Press.

This book is subtitled "Nine True Stories of Triumph and Disaster and Their Lessons for All of Us" and authored by the Director of the Wharton School's Center for Leadership and Change Management. The nine stories of leaders in action come from politics, business, war, space and mountaineering and demonstrate the impacts, both positive and negative, the decisions and actions of leaders have during periods of crisis. One of the nine stories explores Wag Dodge's actions on the Mann Gulch fire.