FACILITATED LEARNING ANALYSIS
IMPLEMENTATION GUIDE

Prepared by

U. S. FOREST SERVICE

RISK MANAGEMENT AND HUMAN PERFORMANCE

April 2011

The Fire Operations Risk Management Council

The U.S. Forest Service's **Fire Operations Risk Management Council** is the sponsor of this guide.

The Council's Mission:

To promote a comprehensive, proactive, and recognizable program that significantly advances the safety and effectiveness of Forest Service employees.

The Council's Vision:

Regardless of the mission, the challenge, or the environment, U.S. Forest Service employees engaged in fire management and all-risk incident response activities are safe, effective, and error resilient.

The Council's Goal:

To improve employee performance through information transfer and education with an emphasis on Strong Leadership, a Comprehensive Operational Approach, and Focused Action.

While the Facilitated Learning Analysis process was born from a yearning to approach wildland fire related accidents and close calls as learning opportunities, the process has been used successfully in a variety of non-fire related activities both within and outside of the Forest Service.

The Facilitated Learning Analysis process helps us to maximize learning opportunities presented by unintended outcomes or "near miss" events. The intent is to improve performance by generating individual, unit, and organizational learning that capitalizes on shared experience—blaming is replaced by learning.

The Facilitated Learning Analysis exercise and report—discussed and explained in this guide—is more structured than an After Action Review but also less intense and less formal than an Accident Prevention Analysis or a Serious Accident Investigation.

Most importantly, this new information-sharing analysis tool is filling a significant knowledge gap. It is capturing lessons learned from the field without having to go through a more formal, elaborate, and costly process.

Contents

I. Introduction…….…….. 4

'Facilitated Learning Analysis' Background and History…….. 4
Expanding Our Collective Learning Opportunities…….…….. 5
Facilitated Learning Analysis Results in Organizational Learning…... 6

II. The Decision to Use the Facilitated Learning Analysis Process…… 7

'Decision Aid' Flowchart…….…….. 9

III. How to Convene a Facilitated Learning Analysis Team……..10

IV. How to Conduct a Facilitated Learning Analysis……..……11

Principles……..11
Participants…….. 11
Agenda..…….. 12
Suggestions to FLA Facilitator - Initiating the Dialogue……. 13
Discussion Focus Questions…..…….. 14
Sand Tables…….…….. 14

V How to Write the Facilitated Learning Analysis Report……. 15

Report Format…….…….. 16

VI. Facilitated Learning Analysis Report Publication……. 17

VII. Examples of Facilitated Learning Analysis Reports……. 19

VIII. Appendix A FLA–Agency Administrator Tickler List for In-briefing Discussion Items……. 20
Appendix B – Example Delegation of Authority…….. 24

By conducting a Facilitated Learning Analysis, we can help our organization learn from the missed "weak signals" that lead to errors that any one of us could have made. Then, by sharing this information and follow-up insights, the Facilitated Learning Analysis—or "FLA"—can prevent the eventual serious accident or tragedy. In this way, the FLA helps us revisit our *recent* performance to improve our *future* performance.

I. Introduction

Industrial safety studies repeatedly show that people of all organizations will "get away" with an unsafe act more than 300 times—before a serious accident or true tragedy occurs. In all workplaces, as many as 30 "near miss" events can happen, or even 10 minor accidents, before this eventual much more serious incident eventually occurs.

Consider a recent tragedy fire in which firefighters did not have adequate lookouts nor adequately ground-proofed escape routes and safety zones. On their previous fires, did these same firefighters also perform without ensuring that these basic mitigations were in place? Were any of these firefighters troubled by this? Did they have an opportunity to speak up to address solutions—without any concern about repercussions or blame?

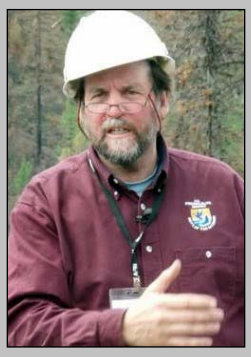
The Facilitated Learning Analysis—FLA—process realizes that none of us are immune from making errors. The intent is to create a culture in which errors are openly identified

'Facilitated Learning Analysis' Background and History

To prevent the eventual serious accident from occurring, Paul Chamberlin knew that there must be a better way for firefighters to learn from their near misses. He realized that the wildland fire community needed an easy-to-adopt vehicle for sharing such vital "learning" information.

This veteran smoke jumper who became Fire Operations Safety Specialist for the Northern Rockies Fire Operations Safety Aerial Fire Depot in Missoula, Montana did his homework.

Blending his longtime, hands-on background in wildland fire operations with his "High Reliability Organizing" savvy, Chamberlin perfected the "Facilitated Learning Analysis." With assistance from the U.S. Forest Service Fire Operations Risk Management Council, Wildland Fire Lessons Learned Center, Dr. Karl E. Weick, Dr. Kathleen M. Sutcliffe, and Dr. Gary Klein, Chamberlin launched his idea in 2007.



Paul Chamberlin

"I like to think of the FLA (Facilitated Learning Analysis) as an AAR on steroids," Chamberlin, who retired in 2008, explains. He envisioned this process being simple and expedient—to be performed by wildland fire units across the country literally hundreds of times each year.

This Facilitated Learning Analysis Guide incorporates Chamberlin's FLA goals and objectives. It provides all the information you need to conduct your own FLA. Wildland fire near misses are never the same. Therefore, as you will see in this guide report, this is an adaptable process.

"Learning" is this guide's primary objective. Sharing these subsequent FLA lessons in a timely manner will be the hallmark of our success.

Jed Conklin

and discussed. Without placing blame on anyone, the FLA provides employees—and, in turn, the entire organization—the necessary vehicle to perform this proactive learning process.

Expanding Our Collective Learning Opportunities

When we consider and discuss our "small" errors—these "weak signals" of more severe outcomes that could potentially occur—we successfully engage in a vital function of a learning organization. We, collectively, learn from our mistakes.

At the same time, when we are guided by *learning* rather than *blame*, the opportunities for learning expand. Examples of positive behaviors, experiences, and outcomes can also emerge from FLAs—demonstrating, reinforcing, and promoting outstanding performance.

Through the FLA process, all of us can better see what a learning organization looks like.

Dialogue is Key to Identifying Risk and Sharing Lessons Learned

When a crew meets as a group to discuss an accident using the Facilitated Learning Analysis approach, dialogue is the key component. Through employee participant interaction and dialogue, the Facilitated Learning Analysis helps to target how we can avoid unmitigated risk. While it is most likely impossible to completely eliminate risk—especially within the wildland environment—risks must still be identified, assessed, and mitigated to facilitate learning.

Unlike an "investigation" during the FLA process a facilitator creates a "discussion space" in which participants can talk openly—in a non-defensive way—not only about the more obvious perspectives on how and why the accident occurred, but also about the underlying factors that could have contributed to this event. For instance, what clues could the larger organization have seen and anticipated that might have prevented this accident? Through open-ended non-threatening dialogue, the crew's actions can be discussed and better understood, as well as the actions of the entire system—up and down the chain of command.

The overall intent of the FLA is to improve performance by generating individual, unit, and organizational learning through this constructive, facilitated dialogue process.

Facilitated Learning Analysis Results in Organizational Learning

The Facilitated Learning Analysis process promotes more effective dialogue through the disciplined practice of respectful interaction, in a group problem solving exercise.

Another important FLA spin-off is the creation of more experienced facilitators—at all levels of the organization, for all disciplines.

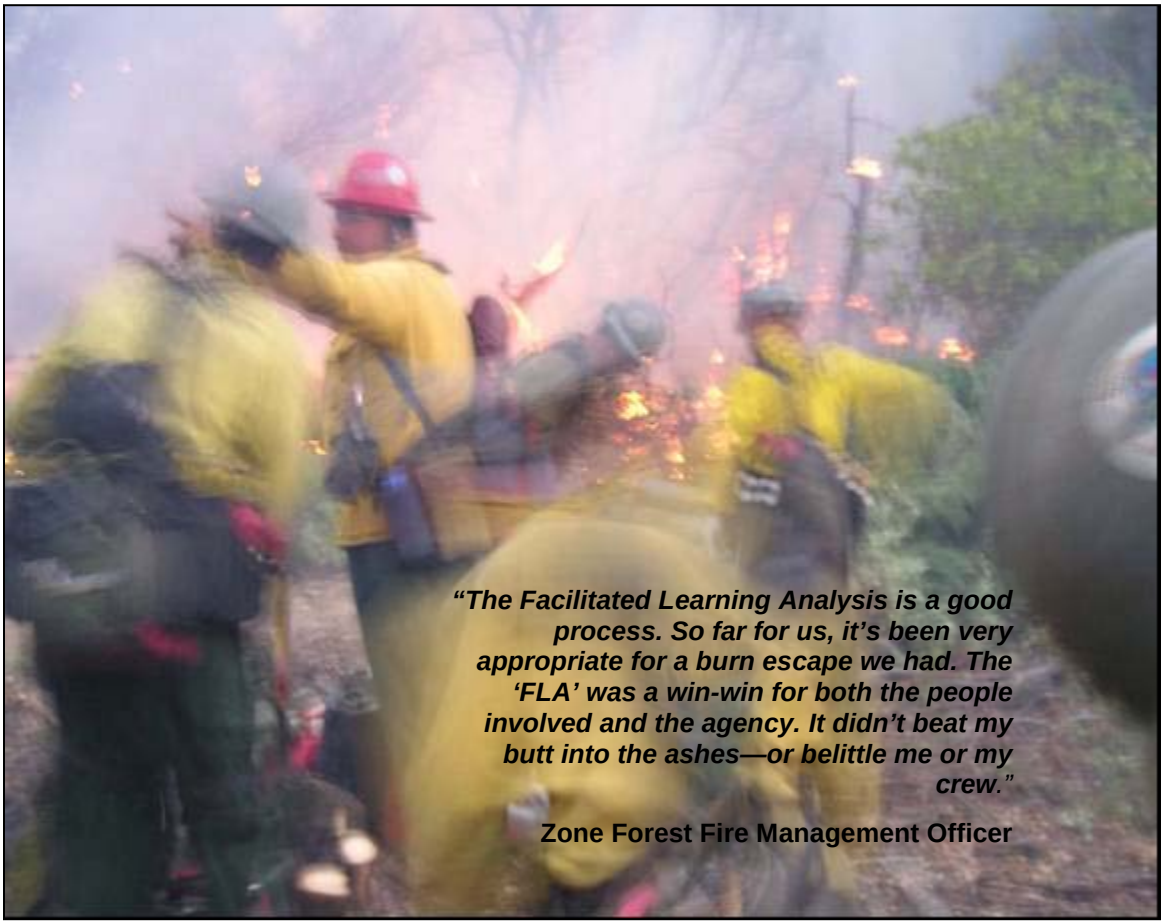
Perhaps most importantly, engaging in this process in a group dialogue can focus the conversation on how risks are seen differently between supervisors and employees. This helps daylight the gap between the hazards planned for and hazards actually encountered and can be a foundation for organizational learning.

One Key Tool in Lessons Learned Toolbox

The overall effort to develop a progressive organizational "Learning Culture" is encouraged by the U.S. Forest Service Fire Operations Risk Management Council as part of its continuous mission for developing risk management and human performance awareness.

The Facilitative Learning Analysis is just one key "tool" in the lessons learned and analysis toolbox.

This FLA Guide is a tool for those units trying to implement the principles and values representative of 21st century Wildland Fire Management, Doctrine, and organizational Guiding Principles.



Keith Redington

II. Deciding to Use the Facilitated Learning Analysis Process

Several Lessons Learned Analysis Tools are Available

The Facilitated Learning Analysis is one of three follow-up, post-event "learning analysis tools" available to units seeking to develop a learning culture – an essential foundation of a safety culture:

- After Action Review (AAR)
- Facilitated Learning Analysis (FLA)
- Accident Prevention Analysis (APA)

For accidents involving fatalities or litigation, a Serious Accident Investigation (SAI) or Administrative Investigation (AI) is usually conducted.

A "Decision Aid" flowchart (highlighted on page 9) helps to illustrate how to determine the correct analysis tool process by targeting the following three types of accidents:

- A positive or lucky event with important organizational learning potential.
- A significant "close call" or "near miss" event, or;
- An accident or other event in which outcomes were unacceptable to participants and management.

The Facilitated Analysis Decision and Questions to be Addressed

Before the FLA team is formed the administrator should consider how thorough and detailed the analysis and the report should be. Administrators should look through example reports (see page 18 to get a sense of the expandability of the process). Expanding a team with additional specialists adds days to the analysis - it's always better to guess right if you can. Nevertheless it is not uncommon to start an FLA and find a rich vein of learning opportunities that will require more analysis and people. A recent FLA was began with a 3 person team and eventually evolved into an outstanding APA that took almost two months and several additional people.

User Questions

Typical Questions Concerning The Facilitated Learning Analysis Process

Why should we complete an FLA rather than an AAR?

Much of the information gathered through an AAR stays with the crew, unit, or organization. Unlike most AARs, the FLA has an outside facilitator and is also a "peer review" process in which an outside party looks at the event. Information and lessons learned gathered through an FLA—via a report—is quickly shared across the community.

Are we only documenting the major events or do we want a more thorough understanding of the incident?

The philosophy that surrounds the FLA is encouraging individual and organizational learning. In doing so, the FLA attempts to discover the features and conditions that enabled the event to occur. This discussion might include "at risk" behaviors or how our personal histories influence our behaviors.

"When we had a recent Facilitated Learning Analysis on a prescribed burn escape, I felt one of its key benefits was its facilitated 'peer review' aspect. To have someone come in from outside our forest to review our event as a peer was extremely helpful and non-threatening."

Forest Fire Management Officer

Another FLA Benefit

By engaging in this learning process, individuals often experience a positive emotional catharsis.

Discussing and expressing their thoughts can help people reduce and eliminate lingering negative emotion.

Important! ☞ **FLAs are very flexible. FLA teams can add supplemental analysis as deemed important (if funding is available) such as an engineering report or a Fire Behavior Analyst's summary. In can also be very beneficial to include a factual story of the incident. For more on non-fiction storytelling see the APA guide. FLAs that are used to review any prescribed fire that was declared a wildfire *must* address the escaped fire review elements contained within the Interagency prescribed Fire Planning & Implementation Procedures Reference Guide.**

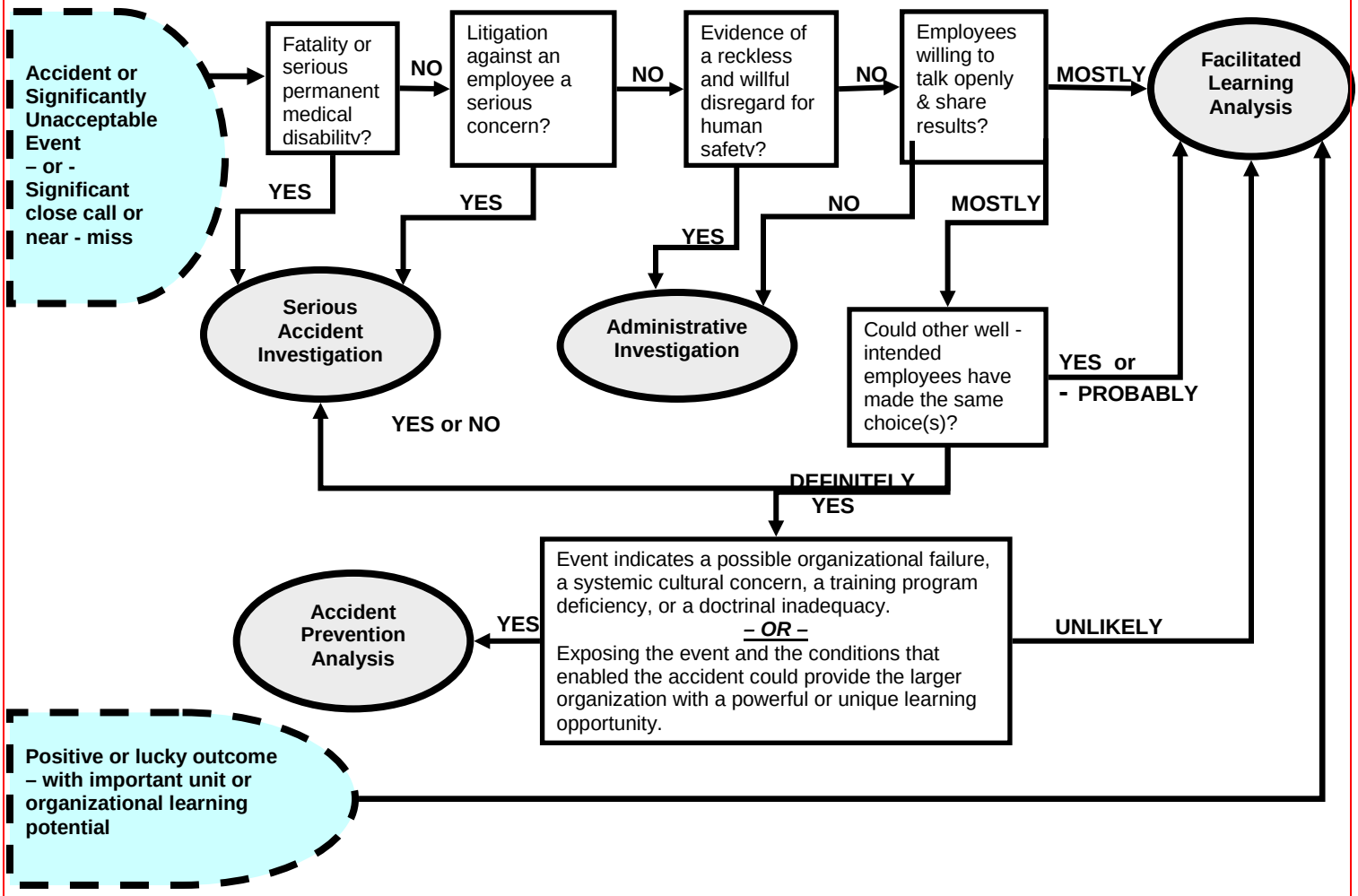
Who Conducts the Facilitated Learning Analysis?

It is important to find the optimum team for the moment. At least one person on the team must be a skilled facilitator. The Team Leader or the FLA Facilitator should have a good understanding of human factors and he or she should also be knowledgeable of the tasks and skills represented in the event. The FLA Facilitator (who may or may not also be the Team Leader) is not a job for a trainee! Dozens of trained facilitators are available across the country to lead or coach a FLA team through the process.

For assistance in finding a skilled FLA facilitator or FLA coaches - *please* contact the Forest Service Risk Management & Human Performance program manager at (208) 387.5970.

DECISION AID FOR AGENCY ADMINISTRATORS FOR CHOOSING A POST EVENT INVESTIGATIVE / ANALYSIS PROCESS

The following 'Decision Aid', provided by the USFS Risk Management Council, is designed to assist Agency Administrators when choosing a post event investigation / learning analysis option.



Note: an internal Law Enforcement investigation may occur after any accident

III. How to Convene a Facilitated Learning Analysis Team

The size and structure of a Facilitated Learning Analysis team are flexible and usually depend on the nature of the accident or event that is being reviewed.

Simple Facilitated Learning Analyses can be done with a couple of people. The facilitator should be chosen for subject matter expertise as well as the ability to lead a "learning" discussion in a non-defensive manner. He/she should have the respect of their peers.

More complicated accidents could require more FLA team personnel than the facilitator. For instance, a writer-editor for preparing the report and other specialists (such as fire behavior analysts, equipment operators, or other subject matter experts) may be necessary.

FLA Team Logistics

Logistics for the Facilitated Learning Analysis team need to be planned in advance (such as lodging, office work room, necessary computers, etc.).

While a visit to the site of the event is preferred, this is sometimes impossible. Therefore, sand table or Google Earth recreations can serve as acceptable alternatives.

The key personnel involved with the event should always be invited to participate in the Facilitated Learning Analysis. If some of these key people aren't available in person, they need to be included in the FLA via telephone conferencing or other means.

User Questions

Typical Questions Concerning The Facilitated Learning Analysis Team

How many people should be assigned to our FLA team?
The number of participants on an FLA team depends on the complexity of the event. A more complex event will probably require more members, including writer/editor and subject matter experts. Use the same concept that the Incident Command System uses—staff up depending on need and complexity of the event being analyzed.

What if we can't find an experienced "facilitator"?
FLA coaches and facilitators are available! Call Forest Service Risk Management & Human Performance Specialist at: 208.387.5970.

Can the facilitator be someone from our own unit?
NO. To ensure a fresh, unbiased perspective, it's best if your facilitator is from outside your unit..

What if a key member of our organization doesn't want to participate in our FLA?
It is important not to force anyone to attend an FLA session. Hopefully, the unit's safety culture is such that all employees understand the importance of organizational learning and the need to participate in an FLA.

How much time should be spent on our FLA?
As much time that is necessary. Simple FLAs can be facilitated and written/documented in a day or two. Complex and in-depth FLAs may take weeks.

As the dialogue goes on, is someone taking notes?
Assigning an "official" note taker is up to the FLA team. Remember, an FLA is a group dialogue in which a team is collectively discussing why a certain event occurred. Detailed notes may not be necessary.

Won't it be difficult to determine the exact reason for an error? Aren't errors always complicated, not easy to clarify—even in hindsight?
Yes. So don't worry about it! In fact we shouldn't even prejudge the situation and presume an error was involved. The object of the FLA is to understand the nature of the accident (or unintended outcome) not to find the cause.

Won't it be difficult to set the tone for a discussion that doesn't blame anyone?
Setting the correct, productive tone for an FLA dialogue is extremely important. This is not necessarily difficult to accomplish. To successfully do so, it is absolutely necessary that the FLA team exhibit a non-blaming posture that attempts to always seek the "what" of what happened and not the "who".

What if a member of the discussion group becomes angry or defensive?
Strong emotions such as anger and shame should be expected. It is important for the FLA team to view these strong emotions as part of the process.

The Facilitated Learning Analysis process is a very efficient tool for "mining" learning opportunities from close-call or non-serious accidents that are currently "under the radar" or not yet being discussed.

Conducting Interviews

An FLA can be a very effective incident review or accident investigation tool - even for moderately complex events. If the delegating authority expects the FLA team to provide a thorough analysis of the event, it will likely be necessary to have individual discussions (interviews) with the key players in the event as soon as possible. It is very important that these interviews be conducted in a manner that focuses on *learning - not blaming*. The most successful approach to these types of interviews is the process outlined in chapter IV of the APA guide. This approach is a deliberate tactic to overcome hindsight bias. The conversational process seeks to understand how employees understood their situation at the time of the incident and how the employee made sense of their situation within the context of the event. Understanding how employees made sense of their situation, within the context of their situation illuminates a variety of conditions that explains the nature of the event and why the outcome was a surprise. This is where learning begins.

IV. How to Conduct a Facilitated Learning Analysis

The heart of the Facilitated Learning Analysis process is a dialogue session involving those directly related to the incident. This generally includes one facilitator helping a group of employees think together about the incident and talk their way through to the learning needed to improve future performance. The following general outline provides a flexible structure for adapting to audience, event, organization, and facilitator.

Principles

1. There must be a clear agreement with the agency administrator that no administrative actions, (that is, *disciplinary actions* such letters of caution, stand-downs, forced re-trainings, etc) may result from anything learned through the FLA process. If there is any question about this, ensure there is an letter of delegation (see appendix)
2. *Respectful* discussion is paramount.
3. Active listening promotes respectful discussion.
4. Learning for future events is more important than assessing past blame.
5. Participants should be conscientious and well-meaning.
6. Remember: We all make mistakes—it's inevitable. It's OK to openly discuss these occurrences.
7. Almost all our decisions are learned behaviors based on based on past experiences. It is extremely rare that employees are actually careless.

8. Overwhelmingly, accidents are the result of rare combinations of normal performance variability.
9. Safety is never an absolute; within the FLA dialogue safety should be thought of, and referred to, as the reasonableness of risk. .

Wade Clack

Participants

The nature of the Facilitated Learning Analysis often depends on who is participating. For instance, each of the following people could be involved, and benefit from, an FLA:

- People involved in the event
- Supporting team members (such as specialists)
- Supervisors
- The FLA facilitator and the FLA facilitator-in-training

Of course, you can have a very successful discussion when you involve only those people who were on-site at the event. During these FLAs, the participant discussions tend to be hands-on and tactical.

When specialists, support staff, and supervisors are involved in the FLA, successful discussions also result—often broader in scope with organizational and interdepartmental topics included in the lessons learned discussions. However, in some cases, it may be more productive to conduct the discussion without supervisors being present. The FLA's dialogue will focus on topics and issues based largely on who attends. Factors that lead

up to the actual event are rarely limited to the people on site. The broader organization is often deeply involved.

Agenda

Develop an agenda for the Facilitated Learning Analysis dialogue session. A typical FLA session could include gathering at the incident site or in a meeting room. When not on-site, projected pictures and graphics and a sand table can be helpful.

Make sure to take a few minutes to explain the Facilitated Learning Analysis process.

Introductions allow everyone to share who they are and what their involvement is. Throughout the process, the facilitator must ensure that everyone has the opportunity to speak. The facilitator should also be encouraged to ask probing questions—that more fully explore "what" occurred without pointing blame at individuals.

Briefly discuss the FLA process and seek suggestions for improvement next time. Also, discuss the nature of the report that will document the learning analysis discussion's lessons learned.

A Dose of Humor and Humility

The master facilitator Paul Chamberlin would sometimes "accidently" spill water on the front of his pants just prior to beginning a facilitated dialogue. He would use this embarrassing moment to disarm the participants and introduce stories about how unexpected things happen despite the best of intentions.

Suggestions to FLA Facilitator for Initiating the Dialogue

- ✓ **Location –Location – Location.** The setting is very important. It is like the stage for the FLA performance. The best location is almost always the field where the incident occurred. If going to the field is not an option, don't just accept the "available conference room." Get a location where the workers directly involved in the incident feel most comfortable. If the FLA involves a fire engine accident for example, the best location might be their engine bay, using their sand table. If the FLA involved a wilderness crew, the best location might the horse stable with a projector and screen set up to show "Google earth" images.

- ✓ **Willing to be Vulnerable.** Give strong assurance of two things: 1st is that we are not here to find who "caused" the accident; we are here to only to share what each individual has learned from the incident and then see if we can turn that into collective learning. The FLA team is not here to "fix" a problem. This is only about *exploiting* an opportunity to learn. 2nd is that nobody will be disciplined or "stood down" because the incident or anything learned here. We have the agency administrator's assurance of that. Moreover, this dialogue will be respectful. If anyone would rather to use this session to prove someone else was wrong - they are invited to leave.

- ✓ **You are not your point of view!** Give the participants an introductory story or an example of a situation where a smart person was absolutely convinced things were one way, when in fact the person turned out to be completely wrong (a personal story from your past is often the best type of story). The goal here is get people to feel that don't have to defend their perspective. *There will be* (there always is) differences of opinions on history and people have the right to change their opinions through the course of this dialogue. Get agreement with your audience that *nobody's credibility is on the line*.

- ✓ **Incite uncertainty.** Our work place culture has trained us to be very careful what we say in meetings. Consequently when others are talking we tend to be 'barely listening' and instead, 'actively reloading' or thinking about what we are going to say next. Dare people to suspend any certainty they have in what happened and challenge them to anticipate (and even *imagine*) that over the next hour or two, they will be surprised by what they didn't know! They need to listen deeply to each person seeking for clues and insights into this new understanding.

Recommended Reading for all FLA Facilitators: *Dialogue and the Art of Thinking Together* by William Isaacs

"In skillful discussion, we inquire into the reasons behind someone's position and the thinking and the evidence to support it. As this kind of discussion progresses it can lead to a dialectic; the *productive* antagonism of two points of view. A dialectic pits different ideas against one another and then makes space for new views to emerge out of both." - *William Issacs*

Dialogue Focus Questions

Five key question groups have been designed to help the FLA Facilitator evoke discussion guide participants to share their perspectives. By discussing the answers to these questions, a better "picture" of the event can be formed that further explores the decisions and behaviors involved in the event. These key questions will also help the writing of the FLA report:

1. **What was planned? What was your leader's intent?**
2. **What information were you provided? What did you feel was missing? Why couldn't you get this?**
3. **What was the situation? What did you see? What were you aware that you couldn't see?**
4. **What did you do? Why did you do it? What didn't you do? Why didn't you do it?**
5. **What did you learn? What might you do differently next time? What can we learn as an organization? What might we do differently?**

The five key principles of High Reliability Organizations (HRO) can also be used to help structure or outline a Facilitated Learning Analysis process. If you are familiar with these HRO principles it might be helpful to post them. They can help to structure your discussion:

1. **Preoccupation with Failure**
2. **Reluctance to Simplify**
3. **Sensitivity to Operations**
4. **Deference to Expertise**
5. **Commitment to Resilience**

[Editor's Note: *High Reliability Organizations and High Reliability Organizing (HRO) is discussed in Karl Weick and Kathleen Sutcliffe's 2007 book* Managing the Unexpected: Resilient Performance in an Age of Uncertainty – Second Edition. *There are also several videos and reports on HRO available on the Wildland Fire Lessons Learned Center's Web site <www.wildfirelessons.net>.***]**

Sand Tables and Google Earth

If you can't actually go to the site where an event occurred, using computer, projector and Google Earth can also be utilized. People skilled with Google Earth are generally not hard to find and they can set up and animate a display that adds a bird's eye view and a features that often helps participants see a larger perspective.

Using an informal, interactive sand table approach to present what happened during an event can also be particularly helpful. The very act of setting up the sand table using employees involved in the event can reveal different understandings of what employees thought was reality. Either Google Earth or a sand table presentation can illustrate how good, well-intentioned people acted when confronted with difficult situations. Via the recreation of the event, you can share what people were thinking, how they performed, and what they might do differently in the future.

With one eye to the five key question groups (above)—and perhaps also to the five High Reliability Organizing principles—*make sure that everyone's perspectives are shared*.

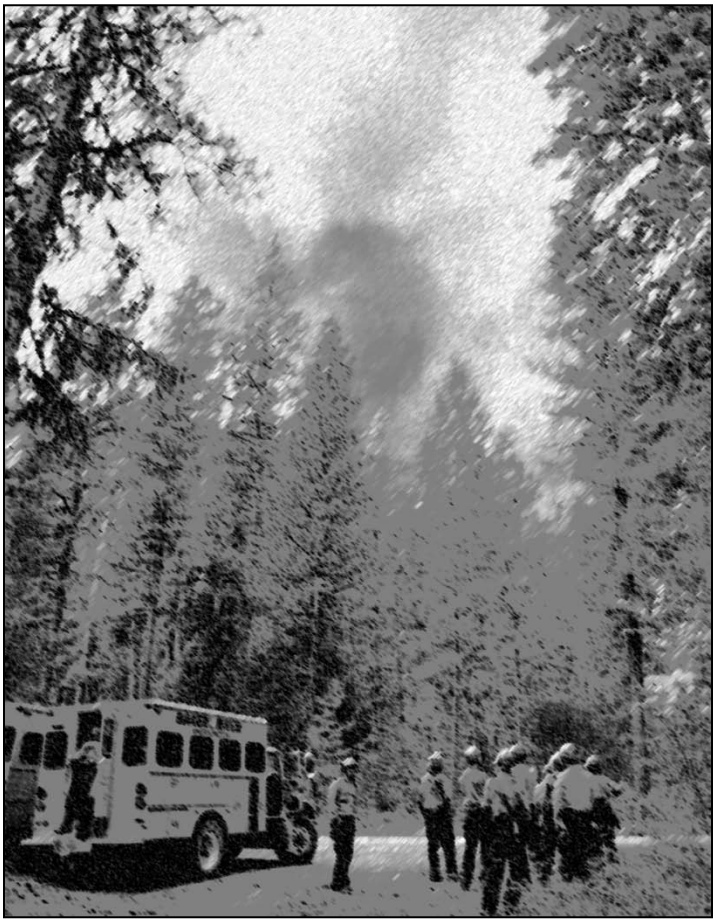
Perhaps the greatest value of the Facilitated Learning Analysis process is the ability to release a written report in a timely manner that enables others to learn from these incidents and immediately apply the lessons learned.

V. How to Write the Facilitated Learning Analysis Report

The written Facilitated Learning Analysis report focuses on the key learning elements associated with an event rather than trying to document and analyze every aspect of an entire event.

As outlined on the next page, documentation should include:

1. A summary.
2. A description of the event.
3. The sequence of events/chronology (include visuals—maps and photos).
4. The conditions.
5. Lessons learned and recommendations by FLA participants.
6. Lessons learned and recommendations by facilitator.



Eli Lehmann

While the true strength of the FLA is expanding the participants' individual knowledge and learning base, if key learning opportunities can also be communicated to others via this written report, this learning can be further underscored and accelerated with a wider audience.

That is why all of the written FLA reports should be completed and posted on the Wildland Fire Lessons Learned Center's Web site (<www.wildfirelessons.net>) as soon as possible after the event. FLA report lengths can vary. A simple event might be just a few pages, while complex events usually require more pages. For all FLA reports, clarity and brevity are always key components.

Important Note

Focus on why actions and decisions made sense at the time—not what people should have done from the perspective and benefit of hindsight.

Facilitated Learning Analysis
Report Format

Include a statement at the beginning of the report identifying who requested the FLA.

Type of Event: [For instance, escaped burn, chainsaw incident, auto accident . . .]

I. Summary

[Follow the structure of the five key question groups on page 14 of the FLA Guide.]

II. Describe the Event and the Outcome

III. Sequence of Events or Chronology

IV. Conditions [If the event pertains to fire and environment-related events, this section could include the subheads: "Fuel:", "Topography", and "Weather".]

V. Lessons Learned and Recommendations from FLA Participants

[From the voice/perspective of those involved, the most important advice to others that will help ensure that such an event will not happen to them.]

VI. Lessons Learned from the FLA team's perspective.

VII. (optional) Recommendations to the Delegating Official

User Questions

Typical Questions Concerning
The Facilitated Learning Analysis Report

How soon after the incident should the FLA report be posted?

Every attempt should be made to have the FLA report written and approved in the shortest timeframe possible.

Is the final FLA report prepared only by the facilitator?

This depends on the FLA team's agenda/process as discussed with the participating unit. Typically the entire team participates in the report writing. A draft of the report is then read or shown to the participants in the accident/incident for comments, critique and suggestions. After this the second draft is given to the unit manager that requested or authorized the FLA for finalization and publication.

What if we don't have an adequate writer-editor?

The goal of the FLA is organizational learning—not a "perfectly" written report. The overriding intent is to get the appropriate information from the FLA dialogue into the written report—to ensure that others in-the-field don't make the same mistake. Make your best attempt to get the most proficient writer for completing this task. Remember: for all FLA reports, clarity and brevity are always key components. Make sure the employees involved in the accident or incident have a chance to proof the report and correct any thing they feel misrepresents their perspective .

Can we use digital and video materials as part of the report?

Again, this is up to the participating unit and the FLA team. These mediums can greatly enhance the quality (as a learning tool) across the agency.

VI. Facilitated Learning Analysis Report Publication

Whoever provided the initial delegation for the FLA needs to review the report before it is submitted to the Wildland Fire Lessons Learned Center, where it will be reviewed once again before being posted on the Center's Web site (<www.wildfirelessons.net>).

Before the term "Facilitated Learning Analysis" was widely accepted, some of the first "near-miss" type incidents reviewed under this new process were known as "peer reviews" or "lessons learned" analyses (for instance, the 2006 "*Gash Creek Lessons Learned Analysis*").

VII. Examples of Facilitated Learning Analysis Reports

The following are examples of simple and complex FLAs. FLA teams should read through these reports to get an idea of the flexibility of the FLA process. The FLA team leader needs to ensure the Agency Administrator and the FLA team all share the same expectation for the expected report's level of detail and quality.

Brief and focused report examples:

R-6 Snag Felling Incident (2010)
A snag felling operation results in a very damaged truck.
http://www.wildfirelessons.net/documents/Region6_FLA_Snag_Incident.pdf

Firefighter Exposure on Bear Fire Fort Hunter Liggett FLA (2009)
Forest Service employees unexpected are exposed to toxic gas. A very close call.
http://www.wildfirelessons.net/documents/LPF_FHL_Hazmat_FLA_7162010.pdf

Complex and thorough report examples:

Little Grass Valley Tree Falling Accident (2009)
An engineering crew was involved in a tree thinning operation in a developed recreation area. One crewmember was hit by a tree requiring a life-flight rescue. The report details the interesting tension between efficiency and safety in day-to-day operations on a complex work project.
http://www.wildfirelessons.net/documents/LittleGrassValley_FellingAccident_FLA_081709.pdf

Pole Creek Facilitated Learning Analysis (2008)
An escaped prescribed fire involving cooperating fire departments.
http://wildfirelessons.net/documents/Pole_Creek_Rx_Escape_FLA.pdf

Elkhorn II Escaped Fire Facilitated Learning Analysis (2008)
A detailed report of an escaped prescribed fire involving an attempted stand replacing fire in pinyon-juniper. This report contains an extensive fire behavior analysis.
http://www.wildlandfire.com/docs/2008/lessons-learn/elkhorn2-fla/ElkhornII-FLA&EscapeReview.pdf

Trail Peak Firefighter Exhaustion FLA (2010) A Forest Service firefighter goes down, at night, in extremely arduous terrain. The Lessons Learned focuses on turning hindsight into foresight.
http://www.wildfirelessons.net/documents/trail_peak_fla_final.pdf

Carson Hole Smoke Jumper Injury FLA (2010)
A smokejumper breaks his leg and the FLA and is extracted by very well executed rescue operation. The lessons learned focus on the unit's success in modeling an HRO.
http://www.wildfirelessons.net/documents/Carson_Hole_Fire_FLA.pdf

Deer Park Incident (2010)
Firefighters respond resiliently to botched attempts to rescue an injured firefighter. This is a very creative report using imbedded videos to tell the story (must be viewed on-line).
http://www.wildfirelessons.net/documents/Deerpark_FLA.pdf

Bear Meadows Stop Work FLA (2011)
An employee speaks up about safety concerns - this act of results in the suspension of a work project that turned out to be more hazardous than initially assumed.
http://wildfirelessons.net/documents/Tree_cutting_snow_stop_work_FLA.pdf

Appendix A – FLA - Agency Administrator Tickler List for in-briefing discussion items

If the unit is represented by the union, ensure union representation is present at the in-briefing!

1. **Why an FLA?**
    a. This event was unexpected. Unexpected outcomes are disturbing to our organizational and personal security. The suffering caused to our employees and their families from accidents are unacceptable to us. If there is something we can change so that it never happens again, we are ethically and morally compelled to do so.
    b. We've learned the hard way that how we react to any accident will either vector us towards, or away from, a learning culture. The FLA process, as demonstrated and refined by years of implementation experience *will move us towards a learning culture*.
    c. We knew there was always a chance of this type of accident happening. It may have been a surprise but it also probably wasn't totally outside of the range of what we felt could happen. The FLA process focuses on what the people most directly involved in the incident learned; and then facilitates a dialogue among the participants seeking a shared sensemaking and a shared learning experience.
    d. All accident s are required by OSHA and by FS policy to be "investigated" and all escaped Rx burns are to be reviewed as per FS policy. This FLA constitutes an investigation/review and fulfills these requirement.

2. **The process the FLA will follow:**
    a. Gather background information on timelines, maps, dispatch records, photographs, etc., and information from conversations to be able to piece together an outline of the accident story. This will take about ____ days to complete.
    b. Gather all those involved in the accident together to conduct a facilitated dialogue session. We want each person to hear from each other what they saw, heard, felt, and believed was going on and what they expected to happen. Especially important at this session is a respectful conversation, avoiding counterfactuals, and day lighting any differences in perceptions and expectations among key personnel.
    c. Collect lessons learned from the dialogues and enough information to complete the accident story. The report will be written featuring and highlighting the lessons learned by those involved. If appropriate the team will comment on these lessons learned and may provide supplemental recommendations. The report will be written with the expectation it will be posted on suitable websites for widespread distribution.
    d. Other steps or items this particular FLA will include: _____

3. **What the FLA team needs from the Agency Administrator:**
    a. Assurance of no administrative actions against any employee involved in this FLA *(Leader: discuss what "administrative actions" means from the employee's perspective).*
    b. A commitment to comment upon or approve the report promptly.
    c. Support for the team with regard to facilities, logistics, making employees available, etc. Immediate logistical needs include: _____

4. **Expectations:**
    a. FLA Team members will be absolutely confidential in all deliberations and conversations.
    b. If the FLA Team discovers a willful disregard for human safety, for example, "the crew was smoking dope", the FLA will be terminated and the team will leave. The background and details of the discovery will remain confidential.
    c. The Team will lead a facilitated dialogue which should lead to improved trust and an enhanced learning culture. The dialogue may be very stressful to some employees some may become quite defensive.
    d. The report should be completed by about __/__/___.

5. **The end state.**
    a. The employees will better understand not only what happened but why the choices made leading up to the event made sense at the time, in the context of the event.
    b. Employees will see that their supervisors can be trusted (at least in this incidence) to react to an accident in a way intended to build trust and a learning culture.
    c. Administrators and employees will have a document that will be helpful for use in future operational training, safety training or risk management. This document may also be useful to other units for these purposes across the country.
    d. After a while, some employees may feel that other employees 'got off' when they should have been punished for violating a rule or causing the accident. Other employees may be resentful because they feel others weren't as forthcoming as they should have been. Administrators should be sensitive to this and may need to follow-up with additional facilitated dialogues or workshops on Just Culture.
    e. The accident investigation responsibility is fulfilled when the FLA report is completed. The Agency Administrator may choose to implement the recommendations; or not.

Summary:

Risk Management and even *Safety* can be somewhat obscure and indefinite goals. A tangible goal however is simply to be better than we were before and specifically to be closer to a Highly Reliable Organization. One the traits of an HRO is - *a preoccupation with failure*. This isn't negative thinking, it is intelligent wariness. As Karl Weick wrote: *"If eternal vigilance is the price of liberty – then, chronic unease is the price of safety."* We know that we cannot make our work place free from all potential or even recognized hazards. But we can exploit the value of incidents and close calls by focusing on learning from our mistakes and continuously improving how we discern, interpret and manage risks. To actualize a HRO requires a commitment to a culture of learning.

(an in-briefing checklist for *team members* follows on the next page)

For Team Member Only FLA *Team In-Briefing:*

A. Everybody - Read the FLA guide!

B. Our Chief Enemy – Hindsight bias.

The best way to overcome it:

- As deeply as possible, try to achieve the same limited perspective that was shared by the employees leading up to the incident. We need to work together on this and help each other on this.

- Team members must avoid using "counterfactual" expressions or even thinking in terms of "counterfactuals" counterfactuals are realities that *did not* happen but—with perfect hindsight—*could have* made a difference).

  This is a very hard mental exercise but it is essential to overcome hindsight bias. When we let ourselves think about what *should have happened* or what they *should have known* we are cheating the process and blinding ourselves with hindsight. Examples of counterfactuals include: *"If only the employee had…" "The crew leader failed to…" "The supervisor should have…".*

- Work to catch each other in using counterfactual expressions. It's okay if the employees involved in the incident use these expressions - but not us.

- When counterfactuals come to mind, team members should try to overcome their effect by telling themselves that even if the counterfactual had happened, the outcome might still have been the same.

- Team members should appreciate that the players in the event are also afflicted by hindsight bias. To a large extent, human memory will connect images and facts to build a coherent mental story that makes sense.

C. Work schedule, charge codes overtime authorization, cell numbers, etc.:

D. Who is the best facilitator to lead the group dialogue session?

F. Coaches and facilitators are available for your assistance!

call the Forest Service Risk Management & Human Performance Specialist at: 208.387.5970.

Appendix B – Delegation of Authority Example

File code: 6730 Date:
Route to:

Subject: Delegation of Authority

To: (Facilitated Learning Analysis Team Leader)

This memorandum formalizes your appointment as team leader of the Facilitative Learning Analysis Team Leader formed to analyze the (incident/accident name, location).
To the extent reasonable, follow the procedures displayed in the 2010 Facilitated Learning Analysis Guide. You are expected to produce the 72-hour briefing report and the final report as soon as practicable.

With this letter, I agree that no punitive actions will be taken against any employee as a result of information provided to the any member of your team.

Please brief me periodically on your progress and if you recognize the need or significantly expand your team or consider engage an APA process, please contact me as soon as possible.

Your authority includes, but is not limited to:

- Controlling, organizing, managing and directing the Facilitated Learning Analysis.
- Controlling, and managing the confidentiality of the process.
- Issuance of Safety Alerts, if warranted, in coordination with _____ the Regional Safety Manager, cell number: _____.

All travel; equipment and salary costs related to this investigation should be charged to ___ (job code) ___ with an override code of _____.

For additional information, please contact me at: _____.

/s/_____
Agency Administrator