ORGANIZATIONAL LEARNING
"LESSONS LEARNED" ANALYSIS OPTIONS

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Background:
When there is an accident, near miss or close call, we want a safety investigation to tell us what happened and why it happened so that we can use this knowledge to prevent a future accident. There are two basic, but somewhat mutually incompatible, ways to approach the safety investigation process. The first and most common way is to approach the accident from the perspective that someone failed to perform as they should have. That is, our work or organization are presumed to be safe, therefore a human must have been unreliable for the accident to have happened. Or simply - someone erred; and that error *caused* the accident.

The alternative way to approach an accident (or near-miss or unintended outcome) is to view the event as a signal or a warning that there are risks involved in our work that we (*we* as an organization and perhaps as individual practitioners) have not correctly understood or are not managing the way we imagine. This approach changes the nature and the goal of the accident analysis process. Accidents, and especially close calls, become essential organizational learning opportunities. It is no longer about finding human error to correct (or employees to correct) but about identifying conditions that make our employees vulnerable to the risks of the workplace. This approach is predicated on the recognition that a learning culture is a necessary component of a true safety culture.

In 2006, in an effort to bring about a learning culture and a safety culture within the wildland fire community, the Forest Service Risk Management Council introduced *Just Culture* and a *learning focused* approach into the accident investigation process. In 2007 the Council formalized this concept with two new safety analysis processes termed, "Facilitated Learning Analyses" (FLA) and "Accident Prevention Analyses" (APA). Since then, numerous FLAs and APAs have been conducted throughout the country on incidents such as; a smokejumper mishap, vehicle burnovers, equipment burnovers, entrapments, shelter deployments, escaped prescribed burns, and even vehicle accidents.

In a sense, the APA and FLA processes are grass roots attempts at cultural reengineering. Accidents and near misses get our attention and represent a teachable moment. We want to exploit these opportunities to learn, individually and organizationally, where we have failed to perceive, understand and react to risks appropriately. This *preoccupation with failure* is one of the tenets of a highly reliable organization.

Doctrine calls for employees at all levels to own their decisions and be able to account for their actions. But it is not possible to learn how our employee made sense of the risks and the production pressures they faced leading up to an accident unless we assure them that sharing this understanding is highly valued and will be rewarded with respect, learning, and at times, tangible actions to make their organization more resilient and safer for all employees. Therefore APAs and FLA are predicated on a Just Culture.

Attached to this brief are two decision-aid documents to help managers better understand APA and FLA processes. These aids will help managers select an appropriate option for analyzing unintended outcomes.

Both the APA and the FLA guides are continuously revised as a direct result of implementation experiences. Enhancements are made as a result of our increased learning about: a just culture; a learning culture; resilience engineering; and high reliability organizing.

Although written to fill the gap between an informal After Action Review (AAR) and formal Serious Accident Investigation (SAI), both the FLA and APA processes and their respective implementation guides **do not** override or supersede existing policy for conducting serious accident investigations. The FLA and APA may be used in lieu of the SAI process for most accidents but there are many situations where the SAI process or other investigative process is preferable or mandated. See the attached decision aid documents for further information.

When used as intended, the APA and FLA will promote a learning culture and support organizational and individual, performance, leadership, accountability and responsibility. Concurrently, the FLA and APA analyses also serve to support program goals for developing a fundamentally sound and doctrine-based organizational safety culture.

Benefits of APA / FLA:

- Fundamentally demonstrates the soundness of principle centered leadership (doctrine).
- Effectively promotes the organizational values of trust, integrity, open dialogue and mutual respect.
- Provides for "ownership" of the lessons learned and fills the gaps for accessing knowledge of system and workplace risks.
- Remains adaptable for on-site changes, adjustments and future refinement.
- Fosters an open, reporting culture.
- Fosters a risk management approach to safety as opposed to a compliance approach.
- Focus on human factors and a human approach to managing employee performance.
- Shares knowledge from lessons learned *quickly* to promote organizational, cultural and system design changes to predict and/or prevent the next accident.

For additional information contact:
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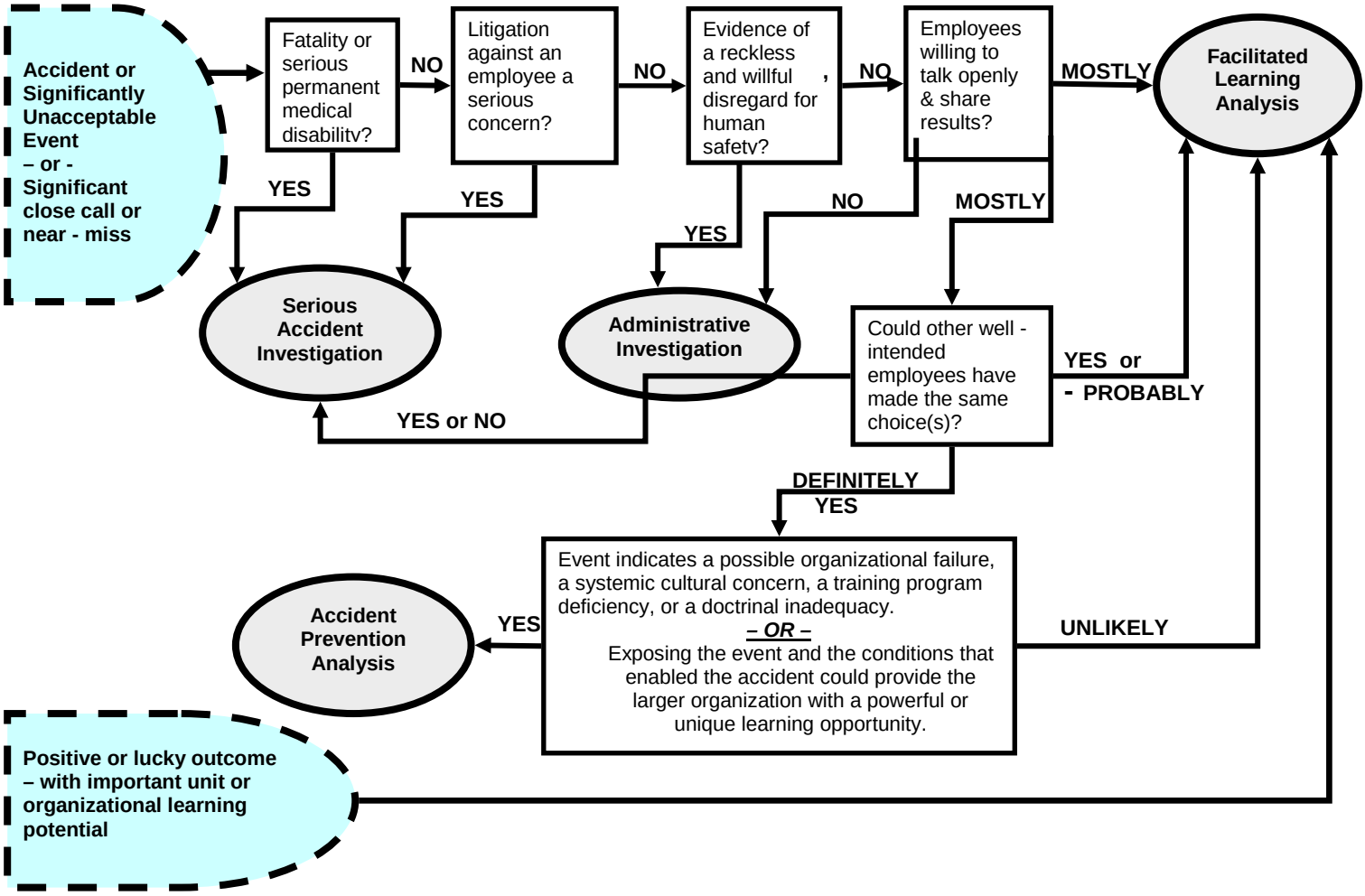
DECISION AID FOR AGENCY ADMINISTRATORS FOR CHOOSING A POST EVENT INVESTIGATIVE / ANALYSIS PROCESS

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



Comparison of Analysis Tool Methodologies

To Help Choose the Appropriate Analysis Tool to Promote Learning from Our Successes and Our Failures

	After Action Review – "AAR"	Facilitated Learning Analysis – "FLA"	Accident Prevention Analysis – "APA"	Serious Accident Investigation – "SAI"
Focus of process:	**Continuous Improvement** This process promotes continuous improvement at the single-unit level—both informal and self-directed—initiated by crew or Incident Management Team.	**Employee Learning** This process dissects an event and demonstrates to employees—through their own words—both what they should learn from the event and how they should similarly learn from subsequent events.	**Organizational Learning and Forward Looking Accountability** This process seeks to describe the nature of the accident by understanding how the perceptions and expectations of those involved made sense at the time and in the context of accident setting. The process identifies the conditions wherein this sensemaking occurred and can be expected in the future.	**Managerial Understanding and Awareness** This process identifies causal and contributing factors (rules that were broken and procedures that were inadequate) that can be corrected to prevent future similar accidents.
Human error and at-risk behavior:	Is viewed as normal and correctable through feedback provided by members of the unit.	Is viewed as normal and inherent in any human endeavor. Errors and their consequences are viewed as opportunities to gain insights into improving individual and group performance.	Is viewed as inevitable and inherent to the human condition. Both are viewed as conditions that must be managed as a component of system safety. Accidents that result from human error are typically predictable and therefore an indication of an un-resilient system. Accidents resulting from human error and at-risk behaviors are viewed as consequences of cultural and organizational conditions. Significant attention is directed human factors.	Is viewed as either a causal or contributing factor to the accident.

	After Action Review – "AAR"	Facilitated Learning Analysis – "FLA"	Accident Prevention Analysis – "APA"	Serious Accident Investigation – "SAI"
Intent of report:	Reinforce success or correct deficiencies in performance. However, an AAR written report is not required. Feedback is verbal and changes can be implemented immediately.	Report is optional but highly recommended to track learning. If a report is written and distributed, its intent is to show how employees can *and should* continuously learn from similar events.	Promote a learning culture, enhance operational resilience and meet policy requirements on accident investigation. 1. Identify latent conditions within organizations that increase the risks of unintended outcomes. 2. Display achievable recommendations to address latent organizational conditions. 3. Chronicle the accident using non-fiction storytelling techniques to facilitate widespread learning for employees engaged in similar work.	Prevent similar accidents and meet policy requirements on accident investigation. 1. Determine causal and contributing factors. 2. Provide foundation for accident prevention action plan to address, mitigate or eliminate the identified causal factors.
Report format:	[Not applicable.]	If documented, the report is generally a brief description of the event and a summary of what the people involved learned from the accident. Report is intended to share the lessons learned. Reports describes event, tiers to intent, and can offer recommendations.	1. Report displays what those involved learned for themselves and shares their recommendations of what the organization can learn from this accident. 2. The accident narrative is a factual account of the event as told from the perspective of those directly involved. To facilitate widespread organizational learning, the accident is described using professional storytelling techniques. 3. The *Lessons Learned Analysis* is an expert analysis of the accident the conditions and human factors that enabled the outcome. 4. The recommendations address changes needed in training, controls, organizational structure and culture, supervision and accountability.	1. A factual and chronological display of the events, decisions and errors that caused the accident. 2. Includes factual section and management evaluation section.

	After Action Review – "AAR"	Facilitated Learning Analysis – "FLA"	Accident Prevention Analysis – "APA"	Serious Accident Investigation – "SAI"
Witness statements:	[Not applicable.]	Statements are given in a group debriefing atmosphere. Employees talk based on their willingness to share their perspectives and lessons learned. The FLA—employee statements—should *not* be tape recorded.	Witnesses are assured that their statements are administratively confidential. They are also advised that if anyone volunteers information that indicates there was a reckless and willful disregard for human safety (see definition in the APA guide) the Agency Administrator will be advised that there is cause for an independent administrative review. Witnesses are interviewed generally individually but are never requested to sign statements or have their statements recorded. Key witnesses proofread the narrative for accuracy prior to publication.	Witnesses could be asked to provide signed, written statements to investigation team. These statements may also be recorded. If anyone volunteers information indicating a reckless and willful disregard for human safety, such information may be passed on to the appropriate Agency Administrator.
Policy Requirement:	AARs are a "best practice" for small group continuous improvement.	FLAs are a "best practice" for local unit cohesion and continuous learning.	Meets the requirements of an accident investigation. APAs are a "best practice" for developing a resilient and learning organization.	Meets the requirements of an accident investigation and may best protect the agency from subsequent litigation.

It should be noted that many similarities exist between SAIs and APAs—for example the Team size and composition may be quite large and complex. But while their shared intent is to prevent future accidents, their analysis of causal factors is very different. APAs seek to display how or why key decisions of employees involved in an accident made sense to those employees in the context of their training, experience, organizational pressures and workplace culture. Causal factors in APAs are the conditions of the workplace that combine with human factors to influence, if not determine, human performance. SAIs however, seek to display how the decisions of employees involved in the accident contributed to or caused the accident. Causal factors in SAIs are typically either inadequate precautions or an employee's failure to follow rules, standards or precautions.

Note: An independent Law Enforcement Investigation may occur regardless of which process is chosen.