



AGENDA

June 17, 2011

Yates Building, McArdle Room (1st floor)
USDA Forest Service Headquarters
1400 Independence Ave. SW
Washington, DC 20250

10:00 – 12:00 AM – Eastern Time

Conference Number: 1-866-675-7534; Passcode: 874608#

Reminder: Agendas, Notes and Handouts are available at myfirecommunity.net – WFEC Neighborhood

| <i>Time</i> | <i>#</i> | | <i>Topic</i> | <i>Presenter</i> |
|-------------|----------|---|---|------------------------|
| 1000 – 1005 | 1 | | Welcome/Introductions | Roy Johnson |
| 1010 – 1030 | 2 | <input checked="" type="checkbox"/> Information <input checked="" type="checkbox"/> Discussion <input type="checkbox"/> Decision | Meeting Objectives & Expectations <u>Description:</u> Outline the objectives and expectations of this meeting <u>Outcome:</u> 1. Understanding what we need to accomplish <u>Reference Material:</u> 1. Final Agenda | Tom Harbour |
| 1010 – 1030 | 3 | <input checked="" type="checkbox"/> Information <input checked="" type="checkbox"/> Discussion <input checked="" type="checkbox"/> Decision | Serious Accident Investigation <u>Description:</u> NWCG FEC Tasking Response – Interagency SAI Guidance document and associated DOI/DOA MOU <u>Outcome:</u> 1. Consensus to move Guidance document to WFLC for approval to release. 2. Consensus to move draft MOU to FFPC for additional follow through. <u>Reference Material:</u> 1. Memorandum Deliverables for the Wildland Fire SAI Standards and Protocols 2. Final Draft 3. Serious Accident Investigation Standards and Protocols Tasking 4. FEC SAI Memo 5. Recommendation to Update the SAI MOU 6. Draft SAI MOU 7. Proposal – NWCG SAI Guidance Package 8. Proposal – NWCG SAI MOU | Bill Kaage |
| 1030 – 1050 | 4 | <input checked="" type="checkbox"/> Information <input checked="" type="checkbox"/> Discussion <input type="checkbox"/> Decision | CS Sub-Committee reports <u>Description:</u> Sub-Committees will report on the following: 1. Identify actions, milestones and deliverables that were to be accomplished between the June 3 WFEC meeting and now. | Kirk Rowdabaugh (CSSC) |

| <i>Time</i> | <i>#</i> | | <i>Topic</i> | <i>Presenter</i> |
|-------------|----------|---|---|--|
| | | | 2. Report on actual accomplishments during that time period. 3. Identify actions, milestones and deliverables planned to be completed between now and the July 1 WFEC meeting. 4. Identify any issues or barriers that need to be resolved. 5. Identify what, if anything, is needed from WFEC. <u>Outcome:</u> 1. Understanding of the activities of each sub-committee. 2. Agreement on any modifications to deliverables or timelines 3. Identify of next steps to resolve any pending issues and/or barriers <u>Reference Material:</u> 1. Sub-Committee Status Reports | Douglas MacDonald (RSC – West) Tom Harbour (RSC – Northeast) Jim Karels (RSC – South) |
| 1050 – 1110 | 5 | <input checked="" type="checkbox"/> Information <input checked="" type="checkbox"/> Discussion <input checked="" type="checkbox"/> Decision | CSSC/NSAT Response to WFEC Tasking – Governance <u>Description:</u> The Cohesive Strategy Subcommittee and the National Science Analysis Team were tasked to develop recommendations on the reporting relationship, and roles and responsibilities of the National Science Analysis Team. <u>Outcome:</u> 1. Understand and approve the recommendations <u>Reference Material:</u> 1. Proposal on CSSC and NSAT Governance | Kirk Rowdabaugh |
| 1110 - 1130 | 6 | <input checked="" type="checkbox"/> Information <input checked="" type="checkbox"/> Discussion <input checked="" type="checkbox"/> Decision | WFEC Website (forestsandrangelands.gov) <u>Description:</u> The forestsandrangelands.gov website has been redesigned. The WFEC information is included on that website and serves as WFEC's public access for agendas, notes, and any other documentation that is available at the meetings. Jenna will review the website and ask for WFEC to decide between some options. We will be setting up a net meeting for this agenda topic so that members that are calling in can see the web pages displayed on their computer. <u>Outcome:</u> 1. Agreement on current and planned website enhancements <u>Reference Material:</u> 1. WFEC Website Proposal | Jenna Sloan |
| 1130 – 1140 | 7 | <input checked="" type="checkbox"/> Information <input type="checkbox"/> Discussion <input type="checkbox"/> Decision | Round Table Discussion <u>Description:</u> WFEC members have the opportunity to share | WFEC Members |

| <i>Time</i> | <i>#</i> | | <i>Topic</i> | <i>Presenter</i> |
|-------------|----------|--|---|------------------|
| | | | information with the committee and identify issues that may result in potential future agenda items. <u>Outcome:</u> 1. Understanding of activities within the members' organizations. <u>Reference Material:</u> 1. Each member prepare a paragraph or two to addressing their organization's relevant activities, issues, etc | |
| 1140 – 1155 | 8 | <input checked="" type="checkbox"/> Information <input type="checkbox"/> Discussion <input type="checkbox"/> Decision | Public Comments <u>Description:</u> Time for WFEC to hear from the public. Specific topics to be determined <u>Outcome:</u> 1. Awareness of public opinions related to WFEC activities <u>Reference Material:</u> 1. TBD | Public |
| 1155 – 1200 | 9 | <input type="checkbox"/> Information <input checked="" type="checkbox"/> Discussion <input checked="" type="checkbox"/> Decision | Closeout <u>Description:</u> 1. Review the outcomes of this meeting 2. Review decision and actions 3. Identify potential agenda items for July 1 <u>Outcome:</u> 1. Agreement on decisions and actions 2. Agreement on focus for next meeting | Tom Harbour |
| 1200 | 10 | | ADJOURN | |



NATIONAL WILDFIRE COORDINATING GROUP

National Interagency Fire Center
3833 S. Development Avenue
Boise, Idaho 83705

MEMORANDUM

Reference: NWCG#I-507-2011

To: Wildland Fire Executive Council (WFEC)

From: NWCG Chair *William Raage*

Date: June 13, 2011

Subject: Deliverables for the Wildland Fire Serious Accident Investigation (SAI)
Standards and Protocols Tasking From Fire Executive Council (FEC)

In response to the Fire Executive Council's (FEC) Serious Accident Investigation (SAI) Standards and Protocols Tasking, NWCG is submitting the following deliverables for approval and subsequent use for future interagency wildland fire serious accident investigations. With the replacement of FEC by the newly created Wildland Fire Executive Council (WFEC), NWCG believes these deliverables should be presented and discussed at a future Wildland Fire Leadership Council (WFLC) meeting to achieve their acceptance of this package as the deciding body to replace FEC per the required tasking response.

Described below are the individual components of the Tasking, and a summary of the actions taken to complete them:

Task 1. Provide consistent standards and protocols for conducting Wildland Fire Serious Accident Investigations.

The SAI Task Team collaborated to develop interagency standards and protocols and compiled them in the *Interagency Serious Accident Investigation Guide*.

SAI Task Team make-up included wildland fire safety and operations experts, cross-agency safety and occupational health experts, and a law enforcement representative. This team also collaborated with records managers and human resource specialists.

Task 2. Provide a NWCG Serious Accident Investigation Guidance Document.

The *Interagency Serious Accident Investigation Guide* is in final draft. The content is finalized and upon acceptance, the publication process can be initiated.

NWCG Executive Board approved the Guide at their March 16, 2011 Meeting and is submitting it to you for consideration of our proposal that it be reviewed and approved by WFLC so that the NWCG tasking (see attached) can be closed.

This Guide is the agreed upon core guidance for all interagency wildland fire SAIs. The templates, forms, and outlines should be used by all interagency wildland fire SAI Teams when conducting investigations. In addition, it is the expectation of NWCG that NWCG's participating agencies will consider adopting this Guide into their accident investigation policy for all serious accident investigations; an additional need for presenting this package to WFLC.

Task 3. Provide expectations for employees, supervisors, managers, and state and local partners regarding Serious Accident Investigations.

The SAI Task Team reviewed various agencies and departmental policies and struggled to create expectations that would cover the differentiating policies and union agreements.

Due to the wide variations in these existing policies and union agreements, we recommend that each agency provide agency specific expectations and guidance when they adopt the Guide into their respective agency's policy. The SAI Task Team indicated that there is potential to create such guidance for the DOI agencies since they are covered under one departmental manual, but this task was not achievable via the NWCG tasking.

Task 4. Provide a recommendation for publication and maintenance of the guidance document.

NWCG's Risk Management Committee has agreed to be the custodian of the Guide, maintaining the document by establishing a Change Management Board of subject matter experts. Members of the Change Board will consist of most of the members of the SAI Task Team.

Next Steps:

The attached final draft of the *Interagency Serious Accident Investigation Guide* is ready for your concurrence to elevate the package to WFLC for their review and acceptance. NWCG is ready to present the Guidance document and answer any questions at the next scheduled WFLC Meeting. Please advise when this meeting will occur. Once approved, the publication process can be initiated.

Any questions concerning this memorandum or the attached package can be directed to William Kaage, Chair of the NWCG Executive Board, at (208) 387-5225.

Attachments:

A – Interagency Serious Accident Investigation Guide (draft)

B – TM-2010-004 – Wildland Fire Serious Accident Investigation Standards and Protocols

Tasking

C – TM-2010-004 – Attachment A – FEC SAI Memorandum of 2/03/10

cc: NWCG Executive Board



INTERAGENCY SERIOUS ACCIDENT INVESTIGATION GUIDE

May 2011

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Chapter 1 - Serious Accident Investigations

1.1 Introduction

Every day countless operations are conducted safely throughout the United States. Occasionally accidents and incidents happen which involve agency employees, contractors, volunteers or agency property. An accident investigation collects evidence and interprets information to assist the agency in understanding how and why an accident or incident occurred. Recommendations can then be developed for corrective actions intended to eliminate or mitigate hazards to prevent future injuries, occupational illnesses, and property damage.

An accident investigation must be done promptly to ensure that important information is not lost, misplaced, or contaminated. The agency's first priority however is to aid the injured and to ensure prompt emergency medical attention. As soon as the emergency situation is over the accident investigation begins.

Interagency activities often have increased complexity at all operational levels that may not be identified during single agency accident investigations. Serious Accident Investigations (SAI) must consider these interagency complexities in order to be successful. When the causal factors of a serious accident are identified, effective corrective actions to prevent a recurrence can be taken. Interagency investigations add perspective and enhance the mix of skills and knowledge on the investigation team. Interagency investigations are especially important for identifying and correcting common management and operational issues that cross agency lines. This will also help ensure that lessons learned are shared across agencies.

1.2 Policy

The objective of accident investigation is accident prevention! Information derived from Serious Accident Investigations should only be used by the agency(ies) for accident prevention purposes. They are not used to place blame or be the basis for disciplinary action against employees. This is also in accordance with Executive Order 12196 paragraph 1-201[f] and CFR 1904.36 and CFR 1960. These laws apply specifically to Federal employees; however, states should refer to respective state regulations.

Investigations related to the serious accident conducted for administrative, disciplinary, legal, or liability purposes must be separate and independent of the Serious Accident Investigation (SAI).

Jurisdictional and the other affected agencies policies, in accordance with laws and agreements, will determine the types of investigations to be conducted. The level of accident investigation is determined by the complexity and severity of the event.

Users of this Guide should obtain jurisdictional agency procedures or policies for conducting investigations. Federal Wildland Fire Agency policy references can be found in the Interagency Standards for Fire and Aviation Operations (Red Book). Bureau of Indian Affairs (BIA) Wildland Fire Accidents are defined in the BIA Wildland Fire and Aviation Program Management and Operations Guide (Blue Book).

1.3 Purpose

This Guide is designed for Serious Accident Investigations and is the agreed upon core guidance for all interagency SAIs. However, the guide can be used entirely or in part for other less than serious investigations. This Guide outlines the standards and tools for SAI Teams and provides a comprehensive process to conduct SAIs. The templates, forms, and outlines should be used by interagency SAI Teams when conducting investigations.

This Guide details information on the investigative process and associated tasks, such as gathering and maintaining custody of physical and photographic evidence, documenting witness statements, interviewing witnesses, and preparing investigation reports (factual and management evaluation).

1.4 Definitions

Safety Investigations: any investigation or review to determine causal factors involved for the purpose of accident prevention. This includes, but is not limited to, Non-serious and Serious accident investigations, Near-miss reviews, and Entrapment or Shelter Deployment investigations.

Serious Accident: An unplanned event or series of events that resulted in death; injury, occupational illness, or damage to or loss of equipment or property. For operations, a serious accident involves any of the following:

- One or more fatalities
- Three or more personnel who are inpatient hospitalized, for other than observation, as a direct result of or in support of operations.
- Property or equipment damage of \$250,000 or more.
- Consequences that the Designated Agency Safety and Health Official (DASHO), or Designated Agency Official, judges to warrant Serious Accident Investigation.

Non-Serious Accident: An unplanned event or series of events that resulted in injury, occupational illness, or damage to or loss of equipment or property to a lesser degree than defined as a serious accident.

Near-miss: An unplanned event or series of events that could have resulted in death; injury; occupational illness; or damage to or loss of equipment or property but did not.

Entrapment: A situation where personnel are unexpectedly caught in a fire behavior-related, life threatening position where planned escape routes or safety zones are absent, inadequate, or compromised. Entrapment may or may not include deployment of a fire shelter for its intended purpose (NWCG Glossary of Fire Terminology). Entrapment may result in a serious wildland fire accident, non-serious Wildland fire accident, or a near-miss.

Fire Shelter Deployment: The removing of a fire shelter from its case and using it as protection against fire (NWCG Glossary of Fire Terminology). Fire shelter deployment may or may not be associated with entrapment. Fire shelter deployment may result in a serious Wildland fire accident, a non-serious Wildland fire accident, or a near-miss. Anytime a fire shelter is deployed (other than for training purposes), regardless of

circumstance, notification to the National Fire and Aviation Safety Office of the jurisdictional agency is required.

1.5 Authority

Each Agency (Federal, State, and Local) will have a jurisdictional representative that is the responsible official for ensuring that serious accidents are fully investigated for the Agency. Some agencies title these representatives Designated Safety and Health Official (DASHO) or these duties are contained within their agency responsibilities.

Following initial notification of a Serious Accident the DASHO or designee(s) will designate a Serious Accident Investigation Team Lead(s) and provide that person(s) with a written delegation of authority to conduct the investigation and the means to form and deploy an investigation team.

1.6 Multi Agency Investigations

The Memorandum of Understanding between the U.S. Department of Interior and the U.S. Department of Agriculture states that interagency serious accidents will be investigated by interagency investigation teams. Refer to respective agency policy (see Appendix).

Serious accidents involving more than one agency will require the DASHO(s) or designee(s) to collaboratively develop a delegation of authority that is signed by each of the respective agencies.

- **Agency Lead Investigations** will be conducted whenever only one agency is responsible for managing operations and a serious accident occurs affecting only personnel and equipment of that same agency. The agency responsible for managing operations will lead the investigation.
- **Co-Lead Investigations** will be conducted whenever a Serious Accident occurs involving multiple agencies. Team Leaders from the jurisdictional and affected agencies will be assigned (e.g., accident occurred on state lands and US Forest Service employee is a victim). No more than two Team Leaders will be assigned to any SAI regardless of numbers of agencies involved. However, additional agency representatives may be assigned other roles as needed.

1.7 Collateral Investigations

Other Agencies may have a jurisdictional responsibility to conduct their own investigation (i.e. Law enforcement, Federal OSHA, State OSHA, NIOSH, and OIG). These investigations are independent and can run concurrently while Serious Accident Investigations are being conducted. Team Leaders should continue their inquiries and establish a cooperative relationship with these other agencies.

Specific examples of other Agency Investigations:

Occupational Safety and Health Administration (OSHA) determines whether an employer violated occupational safety and health standards leading to a death or hospitalization of five or more employees.

Federal OSHA:

Federal OSHA offices have jurisdiction over Federal employees and will have been notified by the agency safety manager prior to SAIT arrival.

State OSHA:

State OSHA offices do not generally have jurisdiction over Federal employees, Federal volunteers or Federal agencies. The local OSHA Area Director will have knowledge of any local jurisdictional issues. State OSHA offices may get involved if there are victims that are not Federal employee's e.g. state personnel, contractors, municipal employees. They may also be involved if the accident is on state land.

When an OSHA Compliance Officer responds to conduct an investigation of an accident, the result may be that OSHA issues the responsible unit one or more "Notices of Violation". Factual information shared in the course of a SAI may be used to issue these notices.

The National Transportation Safety Board (NTSB) is an independent agency charged with determining the probable cause of transportation accidents and promoting transportation safety. The Board investigates accidents, conducts safety studies, evaluates the effectiveness of other government agencies programs for preventing transportation accidents, and reviews appeals of enforcement actions involving airmen and seamen certificates issued by the Federal Aviation Administration (FAA) and the U.S. Coast Guard and civilian penalties actions taken by the FAA.

- Aviation and Ground Accident – should aviation or a combined aviation and ground accident occur, the NTSB will have overall authority of the accident scene and investigation. Close coordination and collaboration with the NTSB will be critical to the SAI's mission.
 - The delegation of authority will include the Team Leader's responsibility to request *party status* to the NTSB investigation.
 - The SAI Teams Leader must ensure that the completed Final Report has been approved by the NTSB prior to submittal to the agency.

National Institute for Occupational Safety and Health (NIOSH) In 1998, Congress allocated funds to the National Institute for Occupational Safety and Health (NIOSH) to address the continuing national problem of occupational fire fighter fatalities and injuries.

NIOSH has the authority to conduct independent investigations of all on-duty fire fighter fatalities. Agencies must notify NIOSH for these types of accidents. This notification is done by the respective agencies wildland fire safety managers.

Based upon their investigations, NIOSH will develop narrative reports of events surrounding firefighter deaths. These reports are distributed throughout the United States fire community.

United States Department of Agriculture Office of Inspector General (OIG) has been authorized by Congress (Public Law 107-203) to conduct independent investigations of all fire related entrapments or burn overs that result in a fatality involving USDA Forest Service personnel.

The purpose of the OIG investigation is to provide a report to Congress. Upon completing the investigation, the Inspector General of the Department of Agriculture shall submit to Congress and the Secretary of Agriculture a report containing the results of the OIG investigation.

Law Enforcement assumes control of accident scenes until the nature of the accident is determined. The jurisdictional law enforcement agency will release the accident scene to local agency administrator once the incident is determined to be a work place accident with no criminal activity suspected. There are two situations where collateral law enforcement investigation could occur:

- If there is confirmed criminal activity (e.g., arson started wildfire)
- Potential tort claims investigations (e.g., USDA Forest Service law enforcement have authority to conduct tort claims investigations)

Other Potential Collateral Investigations:

- Federal Aviation Administration
- United States Coast Guard
- Department of Defense
- Local Fire Marshals

Fire Marshals become involved when land or facilities under their jurisdiction are involved in the accident.

Assess their involvement and need to be a part of the accident investigation process.

Coordination with these organizations usually occurs when they have resources that are involved in the accident or have jurisdictional responsibilities. This can happen during serious wildland fire accidents and would constitute a multi-agency investigation.

1.8 Investigation Process

The Serious Accident Investigation process is best described chronologically and takes you from start to finish in a sequential manner. The process (Exhibit 1-1) is as follows:

- Team selection and activation.
- Initial team briefing.
- In briefing with Agency Administrator.
- Site visit
- Evidence gathering
- Evidence analysis and deliberations
- Final report preparation
- Closeout briefings
- Accident review processes

Exhibit 1 - 1

Serious Accident Investigation Process

[The following information is to be developed into a flow chart describing the Serious Accident Investigation Process.]

- Team Selection and activation
- Initial team briefing
- In briefing with Agency Administrator
- Site Visit
- Evidence gathering
- Evidence analysis and deliberations
- Final report preparation
- Closeout briefings
- Accident Review Process

Chapter 2 - Initial Actions to be taken by Unit

2.1 General

The Agency Administrators are responsible to immediately initiate actions which provide effective, efficient, and timely leadership in critical incidents within their jurisdiction. Exhibit 2-1, Initial Actions to be taken by Unit, serves as a general guide for actions to be initiated by the Agency Administrator. Additional actions may also be found in the Unit Emergency Response Plan.

Exhibit 2-1 should be faxed or emailed to the local unit, who experienced the accident, upon notification of the accident to the respective agencies reporting office.

2.2 Initiate Unit Emergency Response Procedures

The Agency Administrator should determine the scope of the accident; the jurisdictions involved and other affected agencies and implement the unit's Emergency Response Plan.

The National Wildfire Coordinating Group publication *PMS 926 Agency Administrator's Guide to Critical Incident Management* is an excellent resource that is available to Agency Administrators for the overall management of critical incidents within their jurisdictions. This publication is available for download at <http://www.nwcg.gov/pms/pubs/pubs.htm> (This is a preplanning document and should be completed as part of the local unit's emergency response planning.)

As soon as a Serious Accident is verified, and after the initial response, notification of the accident/incident should proceed to the following groups or individuals:

- Agency Headquarters
- County Sheriff or local law enforcement as appropriate to jurisdiction.
- Agency Law Enforcement
- Responsible Safety Manager
 - Occupational Safety and Health Administration (OSHA) (within 8 hours if the accident resulted in one or more fatalities or if five or more personnel are inpatient hospitalized). Call 1-800-321-OSHA.
- For Wildland Fire accidents, National Interagency Coordination Center (NICC). Call NICC at (208)387-5400
- Public Affairs

Agency specific reporting requirements shall be followed and notification made through the chain of command. The Agency Administrator shall prepare and issue the 24 hour Preliminary Report to the appropriate officials.

More information on the 24 hour Preliminary Report, including a template, can be found in Chapter 7 of this Guide.

2.3 Medical Response

Treatment, transport, and follow-up care must immediately be arranged for injured and involved personnel.

Burn Treatment Protocol for Firefighters:

The July 10, 2008 National Wildfire Coordinating Group (NWCG) Memorandum, Reference: NWCG#012-2008, Standards for Burn Injuries is available at:
www.nwcg.gov/general/memos-2008.html

The standards established by the NWCG Memorandum will be used when any firefighter sustains burn injuries, regardless of agency jurisdiction.

2.4 Secure Accident Scene

The site of the incident should be secured immediately by agency personnel and/or law enforcement and nothing moved or disturbed until the area is photographed and visually reviewed.

If the accident occurred on a wildland fire, there may be a standard temporary flight restriction (TFR) (reference: FAA-TFR 91.137a[2]) in place, but verification of such restriction should occur.

Note: A TFR cannot be established to prevent media access. Should multiple aircraft be in the area, aerial supervision should be ordered to facilitate air space congestion.

2.5 Accounting of Incident Personnel

The responsible agency administrator will account for all injured or missing personnel. For wildland fire incidents, this responsibility is delegated to the Incident Commander.

2.6 Notification of Serious Injury or Fatalities

When a serious accident occurs, the responsible manager (agency administrator) will ensure that local notifications are made (e.g., dispatch, front office, law enforcement, etc.) Names of the involved personnel are not communicated over the radio.

The Agency Administrator/Incident Commander shall prepare and submit Exhibit 2-2 NWCG Wildland Fire Fatality and Entrapment Initial Report Form PMS 405-1, download from: http://www.nwcg.gov/pms/forms_otr/pms405-1.pdf

2.7 Notification to Law Enforcement of Fatalities

Agency specific reporting requirements will be followed. Normally the agency dispatch organization will contact the Sheriff's Department and Agency Law Enforcement to provide information on the accident, location and on site contact information.

2.8 Public Safety Officer Benefits Program/Firefighter Autopsy Protocol

This protocol is critical in helping determine the eligibility under the Federal Government's Public Safety Officer Benefits (PSOB) Program, as well as state and local programs.

Family members are entitled to benefits under the U.S. Department of Justice, Public Safety Officer Benefits Program when “Public Safety Officers are found to have died as a direct and proximate result of a personal injury sustained in the line of duty” (28 CFR 32.1). To acquire these benefits, claimants are required to demonstrate that the injury resulting in death was a direct result of activities performed in the line of duty.

The Firefighter Autopsy Protocol was developed by the U.S. Fire Administration for the purpose of providing medical examiners, coroners, and pathologists a uniform recommended procedure for investigating the causes and contributing factors related to firefighter deaths. The Firefighter Autopsy Protocol is available on the following website:

www.usfa.dhs.gov/downloads/pdf/publications/firefighter_autopsy_protocol.pdf

Every attempt should be made to provide this protocol to the medical examiner/coroner. The Serious Accident Investigation Team Leader should follow up with the medical examiner/coroner to ensure it was provided.

2.9 Review of Incident Management Complexity Post Accident

For wildland fire incidents, the Agency Administrator should review the complexity of the incident and order the appropriate Incident Management Team (IMT) as needed to ensure continued operations.

2.10 Collect Documentation for Incoming SAI Team

Refer to Exhibit 2-1 for types of information that should be collected for investigations. Local agency administrator is responsible for ensuring this information is collected and transferred to the SAI Team.

2.11 Assign Unit Point of Contact to SAI Team

The Agency Administrator shall assign a local unit Point of Contact for the SAI Team.

This individual can be very helpful in assisting the team with logistical and administrative needs of the investigation. Two stipulations apply:

- The individual assigned cannot have been directly involved in the accident.
- This individual is not considered part of the SAI team and shall not be involved in any team discussions regarding the accident.

2.12 Information and Media Releases

Release of information to the news media (e.g., news releases, talking points, etc.) will be coordinated with involved agencies national Public Affairs Officer (PAO).

For Wildland Fire related Serious Accidents Investigations the National Interagency Fire Center's (NIFC) External Affairs Office will coordinate release of information outside of the agency(s).

Information can include:

- Number of victims
- Name of fatality victim(s) if next of kin has been notified

- Severity of injuries or property damages (Do not release names of injured employees)
- Synopsis of known facts only

DRAFT

Exhibit 2 - 1

Initial Actions to be taken by the Local Unit

The Agency Administrator is responsible to immediately initiate actions which provide effective, efficient and timely leadership in critical incidents within their jurisdiction.

The Agency Administrator should determine the scope of the accident; the jurisdictions involved and other affected agencies and implement the unit's Emergency Response Plan.

Implementing Local Emergency Response Plan:

| | |
|--|--|
| | Ensure all victims receive emergency medical treatment. |
| | Follow established NWCG Firefighter Burn Injury Protocol for wildland fire burn victims. |
| | Ensure that rescue operations can be conducted safely and do not further endanger emergency responders. |
| | Account for all injured or missing personnel. |
| | Secure and document the accident site to preserve evidence and protect personal and government property. |
| | Ensure that communications are controlled to guarantee privacy until next of kin are notified. |
| | For Wildland Fire events the local Agency Administrator shall review the complexity of the incident and order the appropriate incident management team level needed. |

Gather, verify and record initial accident information:

| | | |
|--------------|---|--|
| Who | Full name of victims, including nicknames. | |
| When | Approximate time and date of Accident | |
| Where | Location of accident (closest town, jurisdiction, or other geographic information). | |
| What | Caused the damage or injuries. | |
| Why | Actual or suspected cause of injury, death. | |

As soon as a Serious Accident is verified, and after the initial response, notification of the accident/incident should proceed to the following groups or individuals:

| | |
|--|--|
| | Agency Headquarters |
| | County Sheriff or local law enforcement as appropriate to jurisdiction. Coordinate with Law Enforcement to ensure autopsies are requested for all fatalities. |
| | Agency Law Enforcement |
| | Responsible Safety Manager |
| | Public Affairs |
| | For Wildland Fire accidents, National Interagency Coordination Center (NICC). |
| | The Agency Administrator/Incident Commander shall prepare and submit NWCG Wildland Fire Fatality and Entrapment Initial Report Form PMS 405-1, downloadable from: http://www.nwcg.gov/pms/forms_otr/pms405-1.pdf |
| | In case of a fire-related fatality, immediately provide the county medical examiner or coroner with a copy of the FA-156 Firefighter Autopsy Protocol. www.usfa.dhs.gov/downloads/pdf/publications/firefighter_autopsy_protocol.pdf |

Follow agency protocol for OSHA notification within 8 hours of the accident and provide them with the following information:

| | |
|--|---|
| | The establishment name; |
| | The location and zip code of the incident; |
| | The time of the incident; |
| | The number of fatalities and/or hospitalized employees; |
| | Your contact person and his or her phone number; and |
| | A brief description of the incident. |

DO NOT collect evidence at the scene unless it is in danger of disappearing. Try to contact the Team Leader or Chief Investigator if you think it is necessary to remove evidence from the scene.

The following are the types of documents that should be collected in preparation for the arrival of the SAI Team:

| | |
|--|---|
| | Radio logs (written and recorded) |
| | Dispatch logs |
| | Occupant emergency plans |
| | Maps |
| | Job Hazard Analyses/Risk Assessment |
| | Safety briefings |
| | Employee training records |
| | Medical examination records |
| | Qualifications/certifications |
| | Work/rest (timesheets) for at least two pay periods (current and before the accident) |
| | Equipment maintenance records |
| | Equipment performance tests |
| | Inspection documents |
| | RAWS (remote automated weather system information) |
| | Weather (forecast/conditions) |
| | Delegation of authority |
| | MOU/agreements |
| | Specs/drawings |
| | Press releases |
| | Autopsy/toxicology report |
| | Death certificate |
| | 911 log |
| | Witness statements |

| | |
|--|---------------------------------------|
| | Photos, videos, recordings |
| | Internal policies/guidelines |
| | Tailgate safety session documentation |
| | Unit's safety plan |

The following is a list of fire related documents that should be collected:

| | |
|--|---|
| | Fire Behavior |
| | Document NWCG Risk Management Process |
| | Recent fire assignments |
| | Fire management plan |
| | Incident Organizer (Type 4 or 3 incidents) |
| | Incident action plans/personnel lists |
| | Fire Qualifications consult with appropriate IQCS Managers on incident card qualifications. |
| | Team briefings |
| | Work capacity test results |
| | Fire Complexity Analysis |
| | Prescribed Fire complexity Analysis |

EMPLOYEE ASSISTANCE PROGRAM

The Agency Administrator should determine need for the level of Critical Incident Stress Management (CISM) and implement.

Additional information can be found in the following:

- NWCG Agency Administrator's Guide to Critical Incident Management (PMS-926)
- BLM Employee Casualty Guide

FAMILY LIAISON

A Family Liaison should be designated by the Agency Administrator to maintain open lines of communication between the agency and the family. The liaison will provide the family support, assistance, and information during the crisis situation.

UNIT POINT OF CONTACT

The Agency Administrator shall assign a Unit Point of Contact for the SAI Team.

It is imperative that the individual assigned is not involved in the accident either directly or indirectly.

They are not considered part of the team and should not be involved in any team discussions regarding the accident.

DRAFT



Wildland Fire Fatality and Entrapment INITIAL REPORT

Complete this report for fire-related entrapment and/or fatalities. Timely reporting of wildland-related entrapments or fatalities is necessary for the rapid dissemination of accurate information to the fire management community. It will also allow fire safety and equipment specialists to quickly respond to these events as appropriate. This initial report does not replace agency reporting or investigative responsibilities, policies, or procedures. Immediately notify the National Interagency Coordination Center (NICC). Submit this written report within 24 hours—even if some data are missing—to the address given below.

NICC—National Interagency Fire Center
3833 South Development Ave.
Boise, ID 83705-5354

Phone: 208-387-5400
Fax: 208-387-5414

NICC Intelligence Section
E-mail: nicc_intell@nifc.blm.gov

Submitted by: _____

Position: _____

Agency: _____

Location: _____

Phone: _____

E-mail: _____

1. General Information

- Date of event _____ Time _____
- Fire name, location, agency, etc. _____
- Number of personnel involved _____
- Number of: Injuries _____ Fatalities _____

2. Fatalities

- Type of accident:
 - ☐ Aircraft ☐ Vehicle
 - ☐ Natural (lightning, drowning, etc.) ☐ Smoke
 - ☐ Medical (heart, stroke, heat, etc.) ☐ Entrapment
 - ☐ Struck by falling object ☐ Other
- Where fatality/entrapment occurred:
 - ☐ Fire site ☐ In transit
 - ☐ Incident base ☐ Other
- Employing agency _____
- Unit name _____
- Address _____
- For further information, contact _____
- Home unit address _____
- Phone _____

Note: In the event of fatality(s), do not release name(s) until next of kin are notified.

3. Fire-Related Information

- Fuel model _____
- Temperature _____ RH _____ Wind _____ mph
- Topography _____
Slope _____ %
- Fire size at the time of the incident/accident _____ acres
- Incident management type at the time of the incident/accident (circle one): 1 2 3 4 5
- Urban/wildland intermix? ☐ Yes ☐ No
- Cause of fire: ☐ Natural ☐ Incendiary
☐ Accidental ☐ Unknown

4. Entrapment Information

A situation where personnel are unexpectedly caught in a fire-behavior-related, life-threatening position where escape routes or safety zones are absent, inadequate, or have been compromised. An entrapment may or may not include deployment of a fire shelter. Note: Engine and dozer burnovers also constitute entrapments.

- Brief description of the accident _____

Entrapment Description

- Person trapped ☐ With fire shelter ☐ Without fire shelter
- Burns/smoke injuries incurred while in fire shelter _____ ☐ Yes ☐ No
- Burns/smoke injuries incurred while escaping entrapment _____ ☐ Yes ☐ No
- Burns/smoke injuries incurred while fighting fire _____ ☐ Yes ☐ No
- Fire shelter was available, but not used ☐ Yes ☐ No

Personal Protective Equipment Used

- | | |
|---|---|
| Fire shelter..... <input type="checkbox"/> Yes <input type="checkbox"/> No | Gloves <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Protective pants..... <input type="checkbox"/> Yes <input type="checkbox"/> No | Boots <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Protective shirt..... <input type="checkbox"/> Yes <input type="checkbox"/> No | Goggles... <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Face/neck protection . <input type="checkbox"/> Yes <input type="checkbox"/> No | Hardhat.... <input type="checkbox"/> Yes <input type="checkbox"/> No |

Chapter 3 - Team Membership

3.1 Composition of Investigation Team

The Serious Accident Investigation Team (SAIT) will be comprised of a core team. The core team shall consist of Team Leader, Chief Investigator, and Safety Manager and for fire related accidents an Interagency Representative.

Additional members and Technical Specialists for the team may be requested as determined by the Team Leader and approved by Delegating Official(s)/or their designee.

The following is a list of team positions with general description of duties. Agency specific qualifications for these positions are not contained within this guide. Refer to your agency manuals and handbooks for your agency specific qualifications.

Agencies will accept other agencies qualifications for SAIT members for interagency accident investigations.

Team Leader

- Team Leaders are responsible for all activities to accomplish the objectives of the investigation and serves as the immediate point of contact with the Agency. They are selected based on the severity of the accident/incident and the level of management representation needed. Duties are assigned via a Delegation of Authority Letter.
- In co-lead investigations, Team Leaders from the jurisdictional agencies will be assigned by the agency and receive a joint letter of delegation. They will manage the investigation jointly and serve as the immediate point of contact with their respective agencies.

Chief Investigator

- The Chief Investigator is responsible for the direct management of the technical investigation activities.

Safety Manager

- The Safety Manager is an occupational safety and health professional responsible for advising the Team Leader on occupational safety and health issues pertinent to the investigation.
- Delegating Officials may, at their discretion, fill this position with a trained and qualified NWCG Fire Safety Officer (SOFR) or higher safety position (e.g., SOF1/SOF2).

Technical Specialists/Subject Matter Experts (SMEs)

In most cases, technical specialist/SMEs will be needed to assist with the accident investigation. It is important to have these team members selected from outside the unit where the accident occurred and who do not have a conflict of interest.

- Experienced personnel to address technical/subject matter issues such as weather, fire behavior, aviation, and equipment. They can be ordered and used for very short periods of time. Examples of technical specialists unique to Wildland Fire Investigations are:
 - ◆ Fire Management Officer
 - ◆ Fire Operations Expert
 - ◆ Fire Behavior Analyst
 - ◆ Fire Weather Meteorologist from the National Oceanic and Atmospheric Administration's Fire Weather Service
 - ◆ Fire Safety Officer
 - ◆ Fire Equipment Specialist
 - ◆ Technical Professional Photographer/videographer
 - ◆ GIS Specialist

Contractors may be used for specific technical specialist needs.

Documentation Specialist

- Maintains and manages the original accident investigation case file and supporting documentation.

Public Affairs Officer PAO

- A Public Affairs Officer (PAO) should be considered as part of the investigation team when an investigation has high public visibility and significant news media interest.
- All media related documents (news releases, talking points, etc.) will be approved through the Delegating Official(s) or their designee prior to external release.
- The PAO should not be affiliated with the unit experiencing the accident. The PAO should develop a communications plan for the team, be a designated point of contact for the news media, and oversee all aspects of internal and external communications.
 - A PAO that is qualified as a NWCG Type 1 or Type 2 Public Information Officer (PIOF) would also meet the skills set for this position.

Writer/Editor

- In complex investigations, it may be necessary to have a writer/editor to assist in the drafting and the completion of the factual and management evaluation reports. Team Leader will determine the need for a writer/Editor and request through the Delegating Official(s) or their designee.

Interagency Representative

- An Interagency Representative will be assigned to the SAI Team per the Memorandum of Understanding between the Department of Interior and Department of Agriculture. They will assist as assigned by the Team Leader and will provide an outside agency perspective.
- This person can be assigned multiple duties on the investigation team, i.e., Fire Operations Specialist/Interagency Representative.

3.2 Delegation of Authority

Each Agency (Federal, State, and Local) will have a jurisdictional representative that is the responsible official for ensuring that serious accidents are fully investigated for the Agency.

The Team Leader will be given delegation of authority from:

- Agency DASHO or Responsible Agency Official
- Fire Directors for Department of Interior Agencies are DASHOs for Wildland Fire operations.

This Delegation of Authority is the SAI Team Leader's authority to conduct the investigation and request the needed resources.

For interagency accident investigations, the delegation is through one joint delegation of authority letter from the involved agencies officials. **(Exhibit 3-1 Delegation of Authority Letter Template)**

There are some key areas that may require decisions on a case-by-case basis and should be determined and identified in the delegation of authority. These areas may include:

- Identify Office of Record (for retaining final case file and processing FOIA requests)
- Accident Review Boards (ARBs) – identify single agency or joint interagency ARBs as applicable

3.3 SAI Team Activation/Mobilization

Teams are selected and activated by the affected Agencies. For interagency investigations, team membership will be negotiated by the agencies that are part of the delegation of authority.

Team member mobilization will be coordinated within the respective agency process.

3.4 Initial Team Briefing

The initial team briefing is conducted by the Team Leader, it serves as the basis for the team to understand how the investigation will be conducted and what each team members role will be. Topics include:

- Delegation of Authority
- Team introductions
- Team member roles and responsibilities
- Investigation Methodology
- Team Performance and Conduct
- Standards for confidentiality
- Evidence collection and accountability
- Team Assignments
- Team Safety and Health Issues
- Team Logistics

3.5 In-briefing with Agency Administrator

When the Serious Accident Investigation Team arrives at the local unit, it is imperative that there be a transition briefing between the local Agency Administrator/Staff and the SAIT to get an overview of the activities that have occurred before their arrival. All records and information that have been gathered should be transferred to the team at this time. The briefing should include information regarding:

- Overview of accident (get copy of 24 Hour Report)
- Determine what activities have occurred and what information has been gathered prior to SAIT arrival
- Accident Site Transfer to SAIT
- Medical Examiner/Coroner (if applicable)
- Witness List
- Victims' names and contact information
- Local Issues (political, land use, etc.)
- Level of current or anticipated media interest (get copies of any news releases)
- SAIT's expectations of local unit (e.g., support needs)

3.6 Team Management (Logistics and Safety)

Preplanning and acquiring the resources needed to accomplish the accident investigation will significantly contribute to the team's functionality and success. Once logistical needs are identified and acquired, the decision needs to be made about who is

going to manage them. These tasks can be assigned to a team member who has the skill and time to manage this important task by the Team Leader.

Possible Administrative Support:

- Lodging/meeting place for SAIT (including private interview room(s))
- Office supplies (including flip charts, markers
- Map to accident site
- Consider the need for an escort to the site
- Shredder
- Fax machine
- Laptop computers
- Printers
- Computer projector
- Computer scanner
- Computer flash drives
- Vehicles
- Cellular phones
- Conference call/Speaker phone
- Personal Protective Equipment
- Access to TV/DVD
- Programmable Portable Radio
- Satellite Phone (remote areas)
- GPS

Team Meeting Location

When selecting a location for team meetings, there are some things to consider. There are advantages and disadvantages to meeting and working out of the agencies offices:

Pros of utilizing agency headquarters:

- Equipment availability
- Access to agency personnel
- Building security (limited access to public)

Cons of utilizing agency headquarters:

- Appearance of conflict of interest or lack of objectivity
- Distractions/interruptions

- Greater opportunity for interviewers/discussions to be overheard by agency personnel,
- Lack of personnel security

The Team Leader and the Chief Investigator should discuss the pros and cons of the location that will best meet the needs for the investigation.

Team Safety and Health

The Team Leader has the overall responsibility to ensure that team members are protected from hazards while conducting the investigation. The Safety Manager will provide information on what hazards to expect for the planned activities and prepare risk assessments as necessary.

Monitor individual team member's performance and wellbeing.

- Continuously watch the team for signs of stress due to circumstances surrounding the accident, long hours, and pressure from the public and media.
- If necessary, seek individual or team critical stress debriefing/peer support services.

Exhibit 3-1

Delegation of Authority Letter Template

Date:

Memorandum

To: _____, Team Leader

From: (Respective involved agency's Delegating Official)

Subject: Delegation of Authority - Serious Accident Investigation

This memorandum formalizes your appointment as Team Leader to investigate the serious accident which occurred on (location and date). Your duties include, but are not limited to:

1. Organizing, conducting and controlling the accident investigation.
2. Providing for in briefings and out briefings with affected personnel and agency officials.
3. Coordinating information exchange between team members, local law enforcement, coroner's office and others.
4. Maintaining liaison with affected units.
5. Approving requests and allocating funding for resources.
6. Requesting technical, logistical or other support as required to conduct the investigation.
7. Providing daily briefings to the Delegating Official or their representative's as appropriate.
8. Providing the following formal briefings/reports:
 - a. Preliminary report (24 hours) (If not completed by local unit)
 - b. Expanded report (72 hours)
 - c. Factual and Management reports (45 days)
9. (Other Items for Delegation of Authority consideration:
 - Identify Office of Record (for retaining final case file and processing FOIA requests)
 - Accident Review Boards (ARBs) – identify single agency or joint interagency ARBs as applicable

You will be provided a charge code to pay for all travel and associated costs.

(Name of official authorizing the investigation)
(Title)

cc:
Official case file
Agency Safety Manager (if appropriate)

Chapter 4 - Visiting the Accident Site

4.1 Accident Site

Once the SAIT takes over the site from the local unit or applicable law enforcement agency, the Chief Investigator has responsibility to manage that site until the site is turned back over to the local unit.

All site visits will be coordinated through the Chief Investigator.

4.2 Site Controls

Any site security procedures that had been established prior to the SAIT arrival should be documented and the Team Leader should coordinate with the Agency Administrator or Incident Commander for continued site security as necessary.

The accident site must be secured and hazards identified and mitigated to an acceptable level prior to entering or visiting the site.

Contact agency or local law enforcement to ensure that any available preliminary investigation information and/or special interest in the incident are known.

- If there is evidence that may be easily disturbed the chief investigator and team leader should consider controlling access.
- Controlling the accident site. People not assigned to the SAIT or not invited to the site should be prohibited from entering by the Chief Investigator.

The entire accident site needs to be controlled and the evidence protected until it is released back to the local unit by the Team Leader.

4.3 Planning the Accident Site Visit

Once the team arrives at the local area and completes the in brief, visiting the accident site is generally the next step. Other agencies assigned to investigate the accident and those who have jurisdictional responsibilities for the accident shall coordinate with the Chief Investigator for all accident site visits.

For wildland fires, the following steps will be taken:

- Receive advanced approval from the Incident Management Team (i.e. Incident Commander or delegated representative.) for visiting the fireline.
- The IC will likely assign a liaison to the SAIT to ensure this coordination takes place for each visit.
- Visitors must maintain communications with the Division/Group Supervisor or the appropriate fireline supervisor of the area they are visiting.
- Serious Accident Investigation Team members visiting the fireline will need specific PPE and meet basic requirements for visiting the fireline (see Non-escorted and Escorted sections below.)

Required Field Attire and Fireline Personal Protective Equipment (PPE):

Field Attire:

- Appropriate field attire in accordance with agency policy.
- PPE as identified in the Job Hazard Analysis (JHA)/Risk Assessment (RA).

Wildland Fire Field Attire:

- Boots (Field Attire) – a minimum of 8-inch high, lace-type exterior leather work boots with Vibram-type, melt resistant soles. The 8-inch height requirement is measured from the bottom of the heel to the top of the boot. All boots that meet the footwear standard as described above (or by specific agency policy if more restrictive) are authorized for firefighting.
- Undergarments – should be made of 100 percent or highest possible content of natural fibers, aramid, or other flame-resistant materials.

PPE:

- New Generation Fire Shelter
- Hard hat with chinstrap
- Yellow long-sleeved aramid shirt
- Aramid trousers
- Leather or leather/flame resistant combination gloves (flight gloves are not approved for fireline use)
- Wear additional PPE as identified by local conditions, material safety data sheet (MSDS) or Job Hazard Analysis (JHA)/Risk Assessment

Other Required Items:

- Hand Tool
- Hand-held radio (if not escorted)
- Water canteen

The SAIT should have these items or make arrangements to obtain these items upon arrival.

Visits to the fireline may be “Escorted” or “Non-Escorted” depending on the following requirements:

Non- Escorted:

Visitors must have successfully completed the Work Capacity Test (WCT) at the “light” fitness level.

- Must have adequate communications and radio training
- Completed the following training:
 - Introduction to Fire Behavior (S190)

- Firefighter training (S-130)
- Annual Fire Safety Refresher Training

Deviation from this requirement must be approved by the IC for other non-escorted support personnel involved in vehicle operations or other support functions or established roadways and working in areas which pose no fire behavior threat.

Escorted personnel:

All non- incident, non-agency, and visitors lacking the above training and physical requirements must be escorted while on the fireline.

- Visitors must receive training in the proper use of PPE.
- Requirement for hand tool and water to be determined by escort.
- Visitors must be able to walk in mountainous terrain and be in good physical condition with no known limiting conditions.
- Escorts must be minimally qualified at the Single Resource Boss. Any deviation from this requirement must be approved by the Incident Commander.

Helicopter Flights

Personnel who take helicopter flights must meet requirements as identified in the Interagency Helicopter Operations Guide (IHOG). A helicopter manager will be on-site to provide assistance in meeting IHOG requirements. In all cases, passengers will receive a passenger briefing and meet the following requirements:

Required PPE:

- Fire Resistant Clothing (long-sleeved shirt & pants, or flight suit)
- Fire resistant and/or Leather Gloves
- Approved Aviator Flight Helmet
- All-leather Boots
- Hearing Protection

Occasional passengers/visitors have no training requirement, but a qualified flight manager must supervise loading and unloading of passengers. All flights need to be approved by the agency administrator or incident commander for wildland fire.

4.4 Approaching the Accident Site

The Chief Investigator has control of the accident site and the accident site should be approached slowly getting the overall picture of what was going on and what the conditions were at the time of the accident.

The Chief Investigator will establish:

- Who needs to go to the accident site

- What main tasks need to be done
- Order in which tasks should be done
- Who will do tasks
- The extent of the site
- Site security and entry requirements, if any
- Initial description and mapping of the site
- Photographs of everything before they are touched
- Collection of evidence
- Logging of evidence and photographs- Anything taken from the accident site needs to be logged in on the evidence log so the chain of custody is established

4.5 Initial Description of the Accident Site

The description of the site needs to be prepared very carefully to ensure that it is accurate and well defined. Drawings, photographs, maps historical records can all be useful.

4.6 Integrity of the Accident Site

In most cases the accident site has been disturbed. (E.g. EMS response) Witnesses should be used to determine how the site looked at the time of the incident or how it typically looks during a similar operation.

Chapter 5 - Evidence Gathering

5.1 Evidence General

Evidence provides the factual information needed to establish and support your findings.

There are two reasons why it is important to gather all relevant evidence and facts:

- Establish the accident sequence. This includes events occurring before, during, and after the accident.
- Identify factors directly related to the sequence of events.

Collected evidence will be used during team deliberations to establish the sequence of events and support findings and causes.

5.2 Physical Evidence Preservation and Collection

The Chief Investigator must determine what evidence is fragile or perishable and may be destroyed or lost due to weather or theft, or moved, in order to protect valuable evidence or equipment. This may require the need to increase site security personnel, expand the site security perimeter, cover the site (or parts of the site) with plastic to preserve evidence, obtain a secured facility, or carefully collect, catalog and remove evidence.

The Chief Investigator will establish:

- What evidence needs to be gathered and in what order
- Procedures for evidence collection
 - The evidence and the chain of custody logs
 - Who will gather the evidence
 - Where the evidence should be stored and secured

The Chief Investigator will need to evaluate the necessity of utilizing technical specialists, cartographers, photographers, depending on the complexity and severity of the serious accident.

Key tools that may be used for gathering evidence and documenting the accident site:

- Sketches
- Drawings
- Diagrams
- Measurement and Mapping
- Global Positioning System
 - Engineering. Generally this requires a technical specialist

- Navigational. Good for most requirements and does not require a technical specialist.
- Photography
- Video

Consider the following precautions when collecting evidence that may have, or have been exposed to biohazards, blood borne pathogens, or hazardous materials:

- Team members and technical specialists dealing with hazardous substances must follow Universal Precautions and their agency protocols.
- Personal protective equipment as identified in the JHA/RA will be used.

Any clothing recovered with body fluids that is going to be analyzed, should be placed in a paper bag or cardboard box. This will allow for the clothing to dry and not get moldy. If collecting from a medical examiner, also place in a paper bag or cardboard box and mark it “biohazard”. Once evidence is ready for disposal, place in plastic “biohazard” bag.

For wildland fire PPE and clothing analysis, please refer to MTDC protocols in **Exhibit 5-1 Investigating Burnovers and Shelter Deployments: Assessing Personal Protective Equipment.**

Physical evidence such as equipment and parts need to be “bagged and tagged” at the time of collection.

For vehicle or heavy equipment evidence consider the following:

- Properly identify and document (e.g. VIN number, property number, serial number).
- If further analysis is required, store the equipment in a secure location.

The Chief Investigator will establish logs for all evidence. It is imperative that all evidence be cataloged and accounted for at all times (**Exhibits 5-2 Evidence Log and 5-3 Evidence Chain of Custody Log**).

The originals or a copy of important documents (evidence, potential evidence) should be placed in the investigation case file.

Note: Evidence gathered during accident investigations may be utilized in other official proceedings and must be collected and processed correctly. The SAIT is the custodial officer on behalf of the agency until the evidence is sent to the official office of record as part of the case file.

Criminal Activity

If evidence of criminal activity other than negligence, dereliction of duties, disobedience of a directive, or possible third-party liability is discovered; the SAIT should discontinue the accident investigation and notify the Delegating Official. If the evidence is based on witness statements, the SAIT should not disclose the individual statements, but provide a list of all witnesses to the law enforcement authorities.

The Delegating Official, in consultation with Law Enforcement and the Team Lead, may decide to continue with a parallel investigation.

5.3 Types of Evidence

There are three principle types of evidence:

- Human
- Material/Materiel
- Environmental

Human – evidence examples:

- Autopsy/toxicology reports
- Medical records and test results
- Training records
- Employment records
- Witness statements
- Dispatch logs

Human and organizational factors are also considered Human Evidence. Some statistics show that 20 percent of accident causal factors are material, while 80 percent are human factors.

Important Note: Human and organizational factors evidence indicates the human element of the interaction between people's tools and tasks and the working environment that influences human performance. Identifying Human Factors evidence is not to determine individual failure, but to determine how it contributed to the accident from the system/organizational perspective.

Materiel evidence examples:

- Equipment, parts, and structures
- Manufacturer's operating instructions
- Equipment inspections
- Condition reports and operation logs
- Repair reports (documenting previous equipment failures)
- Building blueprints
- Facility layout diagrams
- Personal Protective Equipment
- Field Attire

Environmental – evidence examples:

- Weather reports
- Meteorological analysis
- Weather damage analysis, such as:

- lightning strike points
- wind damage
- Terrain analysis
- Altitude
- Environmental hazards i.e.;
 - smoke
 - fire
 - asbestos
 - radiation
- River volume & speed
- Surface slip resistance
- Noise levels
- Remote Automated Weather Information (RAWS)

5.4 Measurements and Mapping

Measurement and mapping of the accident site is critical, as hand drawn documentation will be used for many purposes after leaving the accident site; this demands thoughtful and deliberate planning.

Chief Investigator will determine the type and specifics of accident measurements and mapping.

Consideration should be given to:

- Establish a baseline of the accident site for your drawings or sketches.
- Determine measurements that must be taken.
- Provide definitive scope and size of the accident site.
- Be careful entering the debris field to not disturb evidence locations and condition.
- It is helpful to use a grid pattern for a debris field, identifying each grid in its x and y axis.
- Specific points must be identified and recorded from the notes.

Important Note: Remember to identify and document any personal items that have already left the accident scene by victims or emergency response personnel.

Global Positioning System (GPS)

Global Positioning System (GPS) is commonly available and a very useful tool for accident investigations.

There are two types of Global Positioning Systems (GPS):

- Navigational
- Engineering

Navigational GPS data and software is usable for quick, accurate mapping, for spatial locations and gross distances between areas of interest. DO NOT rely on navigational GPS units to provide accurate minute detail.

Engineering GPS units used with Geographic Information System (GIS) programs (e.g. ArcView), will provide accurate minute detail, as well as, data documentation, and multiple mapping opportunities to more accurately display the accident scene and occurrences. Generally, a technical specialist will be required to use this equipment.

Depending on accident complexities, the Chief Investigator may determine that a professional GPS/GIS specialist is needed.

5.5 Photographic Evidence

Cameras provide a versatile medium for the investigator to document the accident scene.

General information for photographs:

- Digital cameras with at least 5 mega pixels will work very well for investigations. They provide good quality pictures that are easy to incorporate into a report and pictures are easily storable on a removable disc. Also, pictures can be produced (printed) without using a commercial film processor. (Include extra batteries or charging unit, and a minimum of 1G memory card).
- 35 mm cameras can produce very good quality pictures and can be converted to electronic format; however the film must be developed commercially. (Precaution: film developed locally may be seen by members of the community, so it is imperative that processing is done in a secured environment.)
- Cell phones that have the capability to take pictures should not be used as the primary camera for an investigation. The mega pixels are generally low resulting in poor quality pictures. Some smart phones may have adequate pixel resolution, but a dedicated camera is preferred. (Be aware that witnesses may have cell/smart phone photos of the accident).
- Law Enforcement may have pictures of the undisturbed accident scene.
- Witnesses may have taken photos or videos (note in Evidence Log who took photo and location and any other pertinent identifying information.)
- Social media is being used as a way of sharing information and the public may have posted photos or videos.

- The news and social media may have videos of the accident scene, and available.
- Depending on accident complexities, the Chief Investigator may determine that a professional photographer is needed.

Important Note: Photograph the accident scene working from the outside in. **However; note that you must capture photos of perishable evidence promptly.** These are photographs of items that are likely to change or disappear if not photographed immediately. For example:

- Accident aftermath or rescue in progress.
- Victim(s) position, gauge readings, ground scars, radio setting, fire damage, body fluids/parts, items that may switch positions.

Wildland Fire Photos:

There is specific photographic evidence that needs to be obtained for wildland fire related accident investigations. For example, burn patterns on the landscape and equipment, performance of PPE, and evidence of heat intensity.

- Surrounding fuel type and burn patterns from the 8 cardinal directions.
- Fire origin, containment lines, and personal travel routes.
- Entrapment and/or deployment sites before, during, and after the incident.
- Final resting position of fatally injured.
- New firefighter clothing can be laid out to represent firefighter positions.
- All fire resistant clothing, PPE, line gear, and tools, Include detailed photographs of components showing identifying marks, name tags, labels, etc.
- Other equipment that responded to the incident.

Photographs used in the factual report should be mounted and captioned. **(Exhibit 5-4 Accident Photographic Documentation Form)**

Each photograph taken will be entered into a log and labeled. **(Exhibit 5-5 Accident Photographic Log)**

Video:

Video is particularly valuable for showing slope and terrain features when filmed from aircraft.

It can also be helpful in the team deliberations and any accident review processes.

Employees or private citizens may have video footage of the accident or aftermath. Original video or copies of original video should be gathered as evidence for the investigation.

5.6 Witness Statements and Interviews

Persons who observed or were involved in the accident are included in the “witness” category.

It is important for investigators to identify witnesses, develop a witness list, and hold interviews as soon as possible.

It’s important to handle Serious Accident Investigations involving multi-cultural employees with sensitivity and respect for cultural differences.

For example, in wildland fire:

- Have the Interagency Resource Representative (IARR) attached to the crew act as a liaison between the team and the tribe.

If there is no IARR, contact tribal leaders through the employing agency’s home unit manager.

Each agency has specific policies as it relates to employee rights and responsibilities in accident investigative interviews. Refer to respective agency specific policies prior to conducting interviews as identified in Appendix.

Exhibit 5-6 Witness List can be used by the Chief Investigator to establish contact information as well as document interview scheduling times.

During the in-briefing from the Agency Administrator the Team Leader should have received:

- List of persons who observed or were involved in the accident.
- Witness statements taken prior to the arrival of the SAIT.
- Contact information for witnesses.
- Information regarding cooperation of witnesses.
- Any changes from initial witness statements.
- Information regarding the relationship of the witness to the victim(s).

All of this information can assist you in establishing the investigation teams witness list.

Important Note: Individuals assigned to take witness statements need to inform the witness that the Serious Accident Investigation Team’s intended use of their statements is for accident prevention purposes. However an assurance of confidentiality cannot be given.

Exhibit 5-7, Witness Statement, can be used to serve as a template to document the witness’s statement.

To increase accuracy while obtaining statements, witnesses should be separated from each other while making their individual statements.

Witness statements and interview/conversation notes are not to be construed as formal written depositions.

Note: Some individuals are not very descriptive in their writing and the team may not gain a lot of information based solely on their statements. A follow-up interview may reveal additional information.

There may be instances where witnesses are only available for a short period of time to the SAI team and the witness statement is the only opportunity to obtain witness information. Immediate action may be necessary to get witness statements in these situations.

Preparing for Interviews

Before conducting witness interviews consider the following:

- Witness may be distraught or unavailable due to funeral/memorial services.
- A critical incident stress debriefing may have taken place.
- Relationships of the witnesses to the victim(s) or the accident.
- Witnesses may be on medication or may be hospitalized and the team may need the approval of a physician or family members to conduct an interview.
- No witness can be compelled by the SAIT to be interviewed or to write a statement.

Review witness list and statements to determine which witnesses will need to be interviewed. This will also assist in developing specific interview questions.

The Unit Point of Contact may be able to assist the team in locating and scheduling witnesses for interviews.

The Chief Investigator should coordinate the preparation of the questions for witness interviews, but may not necessarily be the interviewer in all investigations.

- Interview duties can be assigned to other Investigation Team members.
- Interviews need to be taken in a quiet, private, comfortable, safe location that is free of disruption.
- Frequent breaks should be offered.

Depending on the amount of information needed, an interview may need to be divided and held in subsequent sessions. However, try not to break-up the interview if at all possible.

Note: Should an employee refuse to cooperate, the Team Leader should contact the Agency Administrator and Delegating Official. If no cooperation ensues, make note in Final Report within the Management Evaluation Report.

Consideration of Critical Incident Stress

It is best to interview witnesses before any Critical Incident Stress Debriefing (CISD). Often times CISD involves groups of individuals and sharing of stories which may homogenize witness' recollection of events.

However, should the events of an accident cause severe psychological burden on a witness; it may be necessary to secure the services of a Critical Incident Stress

Debriefing counselor before interviews are completed. Always try to get a statement from the witness prior to any CISD if you cannot interview them first.

If you observe signs of employees being affected by Critical Incident Stress during interviews have the Team Leader recommend to the Agency Administrator to contact the local Employee Assistance Program Coordinator and arrange for counseling as needed.

Conducting the Interviews

Exhibit 5-8, Witness Interview, can be used to document interviews.

Investigators conducting interviews need to introduce themselves and identify their role in the interview/SAIT process. They also need to inform the witnesses that the purpose of the interview is to obtain information for accident prevention **only** by the accident investigation team. *State that an assurance of confidentiality cannot be given.*

If an employee is part of a bargaining unit, they may request union representation during an interview. Any time a representative is requested, the interview will be discontinued until representation is obtained.

The interviewee may request that peer support, legal counsel, or other personal representative be present during their interview. Other individuals who were directly involved in the accident should not be present since they will be interviewed separately.

Recording Interviews

For complex investigation interviews, and with consent of the witness, it is best to record the interview. If the recorded interview is transcribed, a reasonable effort should be made to allow the witness to review the transcription. The recording becomes a part of the accident investigation case file.

Digital recorders can hold hours of recordings on them and are available with many features that can be helpful to your investigation. There are models of the recorders that can take the recording and download the information to your computer.

There are services available that can transcribe your recorded interviews and transcription services may be available within the area that you have been assigned. Contact the Local Unit Point of Contact to see if these services are available locally. (a General Services Administration (GSA) source: TransPerfect, FSS# GS-10F-0076S)

Recording of witness interviews can be valuable to the team members that did not participate in the interview. It can also be helpful during the team deliberation phase of the investigation.

The investigator conducting the interview should take notes during the interview for follow-up questions and documentation of the interview.

The interview begins by asking the witnesses for their:

- name,
- work address,

- phone number,
- position (job title),
- Their location during the accident.

The goal of the interview is to help the witnesses to tell you everything they know in their own words from beginning to end without being influenced by either the question or by what they think you want to hear.

The interview should include questions about:

- the chronology of events,
- human factors issues,
- environmental factors issues,
- Material factors issues.

Usually, it is advantageous to move from general to specific questions.

One technique is to start with the known (what you know) and go to the unknown.

Experts suggest the following approach (Dekker, Klein):

- 1) Have witnesses tell their story from their view point (do not prompt them with any type of replays to “refresh their memory” at this step).
- 2) Tell the story back to them as an investigator.
- 3) Assist the witnesses with determining the critical junctures in the sequence of events.
- 4) Progressively probe and rebuild how the world looked to witnesses of the accident at each juncture. Replays, such as, maps, pictures maybe helpful at this step.

At each juncture in the sequence of events, here are the “cues” the investigation team would want to know:

| | |
|-----------------------------------|--|
| Cues | What were you seeing? What were you focusing on? What were you expecting to happen? |
| Interpretation | If you had to describe the situation to your colleague at that point, what would you have told? |
| Errors | What mistakes (for example in interpretation) were likely at this point? |
| Previous Experience/ Knowledge | Were you reminded of any previous experience? Did this situation fit a standard scenario? Were you trained to deal with this situation? Were there any standard operating procedures that applied clearly here? Did you rely on other sources of knowledge to tell you what to do? |

| | |
|---------------|--|
| Goals | What goals governed your actions at the time? Were there conflicts or trade-offs to make between goals? Was there time pressure? |
| Taking action | How did you judge you could influence the course of events? Did you discuss or mentally imagine a number of options or did you know straight away what to do? |
| Outcome | Did the outcome fit your expectation? Did you have to update your assessment of the situation? |

Other suggested specific questions to consider asking during an interview are:

- What is your connection with those involved in the accident?
- What was the position of the vehicle or equipment, and individual involved in the accident, when first seen?
- What was the direction of travel, fall, or final resting place of the vehicle or equipment, and individual involved in the accident? (Have the witness draw a diagram, if appropriate. Keep this diagram with their interview documentation).
- What was the weather at the time of the accident? Was it clear & sunny? Was it rainy or smoky? What was the wind conditions (velocity, gusty)?
- What actions did you take at the accident site?
- Were there any other witnesses?
- Do you wear glasses or a hearing aid? What type? Did you have your glasses or hearing aid on?
- What do you think was the main cause of the accident?
- Always close with: "If you think of any additional information that would help us in the investigation please contact us".
- Let them know that if you have additional questions you may be contacting them again.

Other Interviewing Techniques

Summary questions help the witness organize his/her thoughts and draw attention to possible additional information.

Restate what you think the witness told you in your words and ask if that's correct. Frequently, the witness will add more information.

Avoid leading questions. A leading question is one that contains or implies the desired answer. Once you ask a leading question, you have forever frozen an idea about what the witness is supposed to have seen, for example:

“Was a red light flashing?”

Some interview techniques do not require questions. A nod of your head or an expectant pause may encourage the witness to talk. To keep a witness talking, say something like “uh-huh”, “really”, or “continue”.

Considerations that should be taken into account during the interview process are:

In some instances, the witness may have to be taken to the accident site or crash scene after the initial interview for clarification of their statement.

- Avoid interviewing more than one witness at a time.
- One team member should ask the questions. Other members should only interrupt and ask questions with the permission of the interview lead.
- Do not prejudge a witness. Keep an open mind. Be receptive to all information regardless of its nature—be a good listener.
- Be serious. Maintain control of the interview. Don’t make promises you can’t keep. Avoid contemptuous attitudes. Avoid controversial matters. Respect the emotional state of the witness.
- Place the witness at ease. Explain the purpose of the interview is for accident prevention purposes and that you only seek the facts related to the accident.
- Make sure you read the witness’s written statement (if available) before the interview.
- Permit witnesses to tell what happened in their own words **DO NOT INTERRUPT.**
- Be a good listener. Be unobtrusive in note taking. Maintain self-control during interviews. Don’t become emotionally involved in the investigation.
- The interviewer can ask follow-up questions of the witness as necessary. Investigation team members should coordinate their questions at the direction of the Chief investigator. Do not assist the witness in answering questions.
- Avoid revealing to the witness conflicting statements or items discovered during interviews with other witnesses.

5.7 Collateral Investigations – Evidence Sharing

As stated in Chapter One of this Guide, there will most likely be collateral investigations occurring during a SAI. While full cooperation and coordination is imperative with these other investigation, the SAIT needs to protect the integrity of the SAI investigation and in doing so, there are protocols to be followed for sharing evidence.

Evidence that can be shared:

- Make all factual information available (e.g., photos, maps, logs, training records, etc. without investigator notes on them).
- Make copies of paper evidence (do not provide original)
- Physical evidence should be checked out and tracked on Chain of Custody Log (Exhibit 5-2). This evidence must be returned to SAI for case file.
- Witness lists
 - Specific to Federal OSHA, only provide them with a copy of the witness list. This is consistent with Federal OSHA's Field Operations Manual, Directive Number CPL02-00-1098, and Chapter 3.1(5).

Evidence that cannot be shared:

- Witness statements and/or interview statements -- collateral investigators must gather their own statements and conduct independent interviews
- Personal medical information—Release of this information has to be negotiated between agencies human resources channels.

The local unit point of contact or employee's home unit can assist other agencies with making all witnesses available.

The Team Leader should assign the Team Safety Manager or a liaison to work with collateral investigations. Collateral investigators shall be accompanied by a member of the SAI or the assigned liaison for accident site visits. For other collateral investigation's fact finding activities, the SAI should provide facilitation, but not required to accompany them throughout the entire process.

Should issues arise with collateral investigations, the Team Leader should contact the Delegating Official(s) or their designee(s).

5.8 Evidence Protection

The SAIT is the temporary custodial official for all evidence gathered. Evidence shall be protected in locked area and not returned to other entities (including family members of victims) until:

- Investigation is complete
- Team Lead and the Delegating Official(s) determine which items shall stay within case file

Any deviation from this should be requested to the Delegating Official(s) or their designee(s).

Exhibit 5 - 1

Investigating Burnovers and Shelter Deployments: Assessing Personal Protective Equipment

Introduction: Specialists familiar with the technical aspects of personal protective equipment (PPE), especially fire shelters, should examine the PPE used during a burnover. These assessments can help investigators clarify events surrounding a burnover and can help improve equipment, procedures, and training. Missoula Technology and Development Center (MTDC) equipment specialists or individuals recommended by MTDC can:

- Interview the firefighters who were involved about the use and performance of PPE
- Examine the entrapment area
- Analyze the fire shelters and PPE

Technical specialists must be ordered through the National Interagency Coordination Center. To prepare for the arrival of the technical specialists, see Part A of this document, *“Steps to Take Before Technical Specialists Arrive”*.

Persons who are not trained in the analysis of wildland firefighting PPE should not attempt to analyze PPE used in a burnover or entrapment. If the technical specialists from MTDC are not at the site, PPE can be sent to MTDC for evaluation. Reports based only on offsite examination of materials will be limited in scope and detail compared to those based on onsite inspections. Important information has been lost when the technical specialists have not been present at the site of the deployment or entrapment. Instructions for collecting, preparing, packaging and sending PPE and supporting documentation can be found in Part B of this document, *“Process to Follow when Sending PPE to MTDC”*.

The written report provided by the technical specialist should become part of the investigation record.

Part A—Steps to Take Before Technical Specialist Arrive

The technical specialists will want to interview those directly involved in the deployment and examine the deployment site and PPE that was used. You can help by:

- 1) Protecting the site to prevent disturbance, to the extent possible. Fire shelters left onsite can be weighted with rocks or other heavy objects to keep them from blowing away.
- 2) Collecting affected clothing from firefighters who were involved. It is not necessary to collect clothing from coroners. Technical specialists can do this, if necessary.
- 3) Helping make arrangements for the technical specialists to interview firefighters directly involved in the entrapment.

- i. Arranging to make the firefighters available to talk to the technical specialists. Let firefighters know that the purpose of the interview is to learn as much as possible from the event so that equipment and training can be improved.
- ii. Having union representation available if necessary.

Part B—Process to Follow to Send Personal Protective Equipment to MTDC

If PPE is to be sent to MTDC, it must be collected, prepared and packaged properly. Supporting documentation should be collected and sent with the equipment to assist in the analysis.

1. Collection precautions:

- i. Items may be exposed to body fluids. Anyone coming in contact with these items must follow their agency's protocols against contracting blood borne diseases.
- ii. Clothing recovered from burned firefighters cannot be laundered. It should be completely air dried in sunlight before being placed in red biohazard waste bags.
- iii. Protective latex gloves should be worn when handling these items, even after they have dried.

2. Supporting documentation: Include the following photographs and additional information with the equipment sent to MTDC:

- i. Pictures of the site. Identify where the items of PPE were located and to whom they belonged, if known.
- ii. Pictures of surrounding fuels and terrain.
- iii. Pictures of the items found underneath the fire shelter.
- iv. As much information as possible about the deployment. If it is possible to interview victims, try to obtain answers to the questions listed below in the section titled "Interview Questions". If it is not possible to interview victims, try to provide answers to as many of the interview questions as possible, based on the available evidence.

3. Interview Questions:

- i. Firefighter information:
 - a. How many seasons of fire experience have you had?
 - b. What was your position on this fire?
 - c. Were you wearing flame-resistant pants and shirt? Leather boots? Hardhat? Leather gloves? Where did you obtain these items?
 - d. What is your height? Weight?
 - e. If a shelter was used, was it a regular- or large-size shelter? Did you feel it fit you properly?
- ii. Training:
 - a. Have you received fire shelter training?
 - b. When did you receive your training?
 - c. Did you view a training video?

- d. Which video did you watch?
- e. Did you practice any deployments? If so, in what conditions did you practice?
- f. Did you read the fire shelter training booklet?
- g. How did you feel your training prepared you for this deployment?
- h. Do you have any recommendations for changes in the training?
- iii. Decision to deploy:
 - a. How did you determine that you should deploy your fire shelter?
- iv. Deployment sequence:
 - a. When did you remove your fire shelter from your pack?
 - b. When did you remove your shelter from its clear plastic bag?
 - c. Were there any problems with either step?
 - d. What did you do with your pack once your shelter was removed?
 - e. How did you deploy your fire shelter? [For instance, from a standing position or a kneeling position?]
 - f. Was the fire shelter fully deployed?
 - g. Where were you located (show on map, ground or photo)?
 - h. Which way was your body positioned? [For instance, where were your feet? Were you lying face down? Were you lying on your back?]
 - i. Did you have any trouble getting into the shelter? Please describe.
 - j. What items did you take into the shelter with you?
- v. Shelter experience:
 - a. Please describe your experience inside the shelter.
 - b. Did you feel heat inside the shelter?
 - c. Was smoke inside the shelter?
 - d. How long did you remain in the shelter?
 - e. Did you change locations during the deployment?
 - f. How did you know when to come out of the shelter?
- vi. Did you receive any injuries? If so what were they? When did they occur?
- vii. Did you notice any problems with the shelter?
- viii. Did you notice any problems with your PPE (pants, shirt, gloves, hardhat, etc.)?
- ix. What can other firefighters learn from your experience?
- 4. Shipping Equipment to MTDC:
 - i. Fire shelters and fire shelter bags, PPE, packs, and personal belongings can be shipped to MTDC for examination.
 - ii. Follow the precautions listed in Step 2.
 - iii. Collect and bag the fire shelters and affected clothing. Label the bags with the name of the user, if known.
 - iv. Mark the location where the items were found on a map of the site.

- v. Send as much of the supporting documentation described in this document as possible, along with the equipment.
- vi. Before sending items to MTDC, contact the Center's Fire Shelter Project Leader (Tony Petrilli), or the Fire Program Leader (Leslie Anderson) at:

Missoula Technology and Development Center
5785 Highway 10 West
Missoula, MT 59808
Phone number: 406-329-3900

If no one is available at MTDC, call the Missoula Interagency Dispatch Center:
406-829-7070.

DRAFT

Exhibit 5 – 2
EVIDENCE LOG
(Non-Photographic Evidence)

Incident Identification: _____

Evidence Custodian: _____

| Date Collected | Name of Individual who Collected the Evidence | Name of Person Logging the Evidence | Description of Evidence | Remarks (location found, etc.) | Evidence Identification Number | Sign In (Signature Required) | Date Signed-in |
|----------------|---|-------------------------------------|-------------------------|--------------------------------|--------------------------------|------------------------------|----------------|
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Exhibit 5 - 4

Accident Photographic Documentation Form

| | |
|---|---------------------------------|
| ACCIDENT PHOTOGRAPHIC DOCUMENTATION FORM | |
| Accident: | Location: |
| Name of Photographer: | Date and Time Photograph Taken: |
| Camera Type: | Film: |
| Description of Photograph: | |
| <div style="text-align: center;">DRAFT</div> <div style="text-align: center;">MOUNT PHOTOGRAPH HERE</div> | |

Exhibit 5 - 5

ACCIDENT PHOTOGRAPHIC LOG

Incident Identification: _____ Evidence Custodian: _____

Film Roll Number Established by Chief Investigator: _____ Film Speed: _____

Type of Film or Video Tape (Check One): _____ Black/White _____ Color _____ Slide _____ Digital _____ Video Tape

| Photo Date | Photo ID Number | Name of Photographer | Description of Photograph | Remarks Point of Reference | Sign In Signature Required | Date Signed-In |
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Page ____ of ____

ACCIDENT PHOTOGRAPHIC LOG **(Continuation Page)**

| Photo Date | Photo ID Number | Name of Photographer | Description of Photograph | Remarks Point of Reference | Sign In Signature Required | Date Signed-In |
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Page ____ of ____

Exhibit 5 - 6

WITNESS LIST

| Witness Name | Agency | Work Address | Supervisor | Office Contact Information | Date and Time of Scheduled Interview | Location |
|--------------|--------|--------------|------------|----------------------------|--------------------------------------|----------|
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Exhibit 5-7

| ACCIDENT INVESTIGATION WITNESS STATEMENT | | |
|--|---------------------------------------|---|
| ACCIDENT/INCIDENT | | |
| | | |
| PERSON MAKING STATEMENT <i>(Last, first, middle)</i> | | HOME PHONE NUMBER |
| | | |
| HOME ADDRESS <i>(St., city, state, zip code)</i> | | WORK PHONE NUMBER |
| | | |
| EMPLOYMENT <i>(Occupation and location)</i> | | |
| | | |
| LOCATION STATEMENT TAKEN | NAME OF INVESTIGATOR TAKING STATEMENT | DATE TIME STARTED |
| | | |
| STATEMENT | | |
| <div>DRAFT</div> | | |
| | | |
| _____ SIGNATURE OF PERSON GIVING STATEMENT | | DATE/TIME ENDED |
| | | |
| | | WITNESS' SIGNATURE <i>(If Applicable)</i> |

**ACCIDENT INVESTIGATION
WITNESS STATEMENT**

DRAFT

ACCIDENT INVESTIGATION WITNESS INTERVIEW

☐ Initial Interview

☐ Follow-up

1. Nature Of Investigation:

2. Name Of Person Interviewed:

3. Home Address (St., City, State, Zip Code):

4. Phone (H) (Area Code):

5. Employer (Name And Address):

6. Phone (W) (Area Code):

7. Location Of Interview:

8. Name Of Interviewer:

9. Others Present:

10a. Started
Date:
Time:

10b. Ended
Date:
Time:

11. Remarks:

12. Interviewer's Signature:

13. Witness' Signature:

Page ____ of ____

Exhibit 5-8

WITNESS INTERVIEW

DRAFT

Chapter 6 - Evidence Analysis and Deliberations

6.1 Evidence Analysis General

When team members have completed all their tasks and begin evaluating evidence, the team should meet to collectively review the data and finalize the investigation analysis. We call this the deliberative process/team deliberations. The Chief Investigator leads this analysis. Core SAIT members are part of the deliberations and other technical specialists (other than contractors who have potential conflict of interest and law enforcement) can be part of the deliberation process at the discretion of the Team Leader.

The team will review all the evidence, identify the facts, and categorize them into Human, Material or Environmental evidence (reference Chapter 5). The objective is to determine facts and come to a consensus based on the evidence.

During deliberations four key tasks must be accomplished:

- Agree-on the accident sequence based upon the facts gathered
- Establish the Findings
- Construct Causal factors
- Develop-Recommendations

Evidence analysis has two major components:

- Establishing the accident chronology
- Identifying findings and construct the causes of the accident

Important Note: For wildland fire investigations, the team should refrain from conducting a separate analysis of the 10 Fire Orders and 18 Watch Out Situations. Completing a stand-alone analysis of these guiding principles has led to the path of stopping short of identifying true casual factors (they are symptoms, not causal factors). This also results in developing inadequate recommendations.

Definitions:

Evidence – everything that is gathered in course of the investigation (i.e. Human, Material/Materiel, Environmental).

Fact – verified information based on the evidence.

Finding – Findings are the conclusions based on the factual data, and professional knowledge and judgment.

Causal Factor – Something that produces an effect, result or consequence. It is a condition that the correction, elimination, or avoidance of, would likely have prevented or mitigated the accident outcome.

6.2 Accident Chronology

Once the chronology is developed from the evidence, the team must review it carefully to ensure that the accident timeline is complete and there are no unexplained gaps of time. Looking at the three types of evidence, consider the following in your chronology:

- Pre-Accident- Events leading up to the accident, pre accident;
- The accident sequence; accident ; and,
- Actions taken after the accident, post-accident

Pre-Accident

Establish the sequence of events leading to the accident to answer the questions:

- Who, what, when, where, why, and finally how the operation was to be conducted.

Identify any pre-accident contributing factors:

- Sense of urgency,
- Known weather conditions that were not taken into consideration,
- Equipment conditions,
- Management pressure to complete a job or task,
- Organizational factors (policies, SOPs, culture/norms, etc.)

Accident

Determine the accident sequence of events. All types of evidence must be considered (Human, Material, and Environmental)

Identify any accident contributing factors, such as:

- use of seatbelts
- worn tires
- lack of information
- poor communication
- equipment malfunction

Post-Accident

Identify the post-accident sequence of events/actions (e.g. search & rescue effort, medical efforts), how the accident was first reported, and the locations of personnel/ equipment at the conclusion of the accident.

Describe any actions that may have contributed to post accident injury or damage -- describe rescue, first aid, extraction/evacuation, equipment retrieval/recovery efforts, etc.

Identify all medical facilities that provided treatment.

Note any disturbance to the accident site, including:

- security/preservation measures taken
- EMS/medical response
- equipment retrieval/recovery

Injuries

Record all injuries - injury sustained in accident through subsequent rescue and medical care.

Document the condition of the patients, medical treatment, and summarize autopsy reports, if applicable.

Damage

Estimate the extent and cost of the equipment or property damage and through agency policy determine level as minor, major, destroyed or repairable.

In summary, during deliberations four key tasks must be accomplished:

- Determine the accident sequence based upon the facts gathered
- Establish the Findings
- Construct Causal factors
- Develop Recommendations

6.3 Findings

Each finding is a single event or condition. Each finding is a factual element of the accident. Each finding is not necessarily causal. Do not include any more information in each finding than is necessary to explain the event occurrence.

Ensure all findings are supported by facts.

Ensure critical events required to sustain the accident sequence have not been omitted.

Findings are identified by category (human, material, and environmental) in the findings section of the Factual Report. Number each finding consecutively in the order in which they occurred, not necessarily in the order they were discovered. Precede each number with the word "finding" i.e., Finding 01, Finding 02, Finding 03.

Write findings as full sentences and not bullet points.

Other Findings

The Team may have determined other findings during the investigation which were not related to the accident, but if left uncorrected, could lead to an accident.

Other Findings shall be documented with recommended corrective actions.

6.4 Causal Factors

The team must continue to ask the question **WHY** until all the cause(s) of each condition leading to the accident has been identified. Failure to identify all causes,

could lead to inappropriate recommendations to prevent future accidents. Multiple causes can be identified, but it is imperative to continue the investigative process until all possible causes have been determined – again, continue to ask WHY (sometimes this is referred to as root causes).

Findings (events or conditions) that started or sustained the accident sequence are the basis of causal factors. Finding can also be latent conditions that existed in the system allowing the active failures that occurred to result in the accident (e.g., reduced funding, inadequate training).

Each causal factor must be supported by a finding. Although all findings are significant, not all are causal.

Occasionally the team may not be able to conclusively determine a specific causal factor. In rare instances, the causal factors may remain unknown.

The condition and circumstances that led to the active failures may be the symptom of an existing latent condition which contributed to the individual making the decision that led to the undesired outcome. In this case, the causal factor is not the decision made, rather it is the latent condition and lack of defenses in the system along with the individual(s) decision resulted in the accident. It was not the individual(s) decision alone that was the causal factor.

Key to preventing a similar accident from occurring again is to clearly identify the latent conditions that existed and what defenses are necessary to prevent reoccurrence.

Definitions:

Active Failures – Is an error that has immediate consequences, such as a change of equipment, system or process that triggers immediate undesired consequences.

Latent Conditions – Are organization-related weaknesses, conditions, or equipment flaws that are buried inside the organization undetected for long periods of time but can be triggered in a particular set of circumstances.

Important Note: It is important to understand why it made sense for the people involved to make the decisions they did. What you think “should have” happened or “could have” happened is irrelevant -avoid this hindsight bias trap.

Writing Causal Factors

Write each causal factor in the active voice, clearly identifying the action, and outcome along with any necessary clarifying ***initiating event and/or actor(s)***, information. Apply the reasonable person concept. If a person’s performance or judgment was reasonable considering the accidents circumstances, it might not be a causal factor.

Example: Finding 04: (Cause) Failure of retread tire. In the vicinity of mile marker 225, while traveling northbound on Highway 210, the front right retreaded tire failed catastrophically. This caused the operator to lose control of the vehicle. The vehicle rolled over off of the right side of the road and came to rest on its wheels facing north. The front seated passenger received fatal injuries when the vehicle rolled over a fence post that came through the passenger side window.

6.5 Recommendations

Once the team has completed the analysis of the findings and identified causal factors and reached consensus, the next step is to develop recommendations to prevent similar accidents.

Recommendations are reasonable courses of action, based on the identified causal factors that have the best potential for preventing or reducing the risk of similar accidents.

The Team Leader and Chief Investigator will lead the team in the development of recommendations.

Recommendations can range from small to large scale and can be directed to various levels within the organization for implementing the corrective action.

The organizational level assigned responsibility for the corrective action should have authority commensurate with the nature of the recommendation.

In some cases, more than one level in the organization or even other agencies will have action responsibility.

Number recommendations consecutively, precede each number by the word "recommendation" i.e. Recommendation 01, Recommendation 02, Recommendation 03.

Not every causal factor will have a recommendation...however; every recommendation needs to be supported by a causal factor.

Recommendations should:

- Identify measurable, "concrete", action(s) that can be assigned to an organizational level.
- Include definitive solution(s) to the problem/causal factor(s) that are achievable and realistic.
- Be specific to the related causal factor.
- Provide the most optimal opportunity of success in preventing potential future related causal factor.

Recommendations should not:

- Identify punitive actions addressing an individual's failure or error.
- Recommend briefing unit personnel on the accident. Such briefings are a basic management responsibility on every accident.
- Recommend sweeping or general recommendations that cannot be implemented by the assigned action level (s) or identified as a completed action.

Chapter 7 – Reports

7.1 Reports – General

The purpose of this chapter is to provide standardization for interagency serious accident investigation reports and the following formats shall be used.

Any additional agency specific guidelines will be applied once the final interagency accident report is complete. Consult specific agency manual handbooks or guides when preparing additional agency specific reports.

7.2 24-Hour Preliminary Report

The local unit has the responsibility to produce this report and provide it to the delegating official or their designee for distribution. This report contains the first details of the accident. This information does not necessarily become part of the Factual Report but is retained as part of the accident investigation case file.

The “**RELATED SAFETY REVIEW TOPICS FOR FIELD USE**” - This section should contain a brief statement that personnel can use to review specific guidance pertinent to operations related to the accident. This may include statements such as, “Review protocols for off highway vehicle (OHV) operations; consult NWCG Incident Response Pocket Guide (IRPG) for hazard tree felling protocols,” etc.

- In the event it was not completed by the local unit, the Team Leader shall complete the report through obtaining information from Agency Administrator in-brief (and other sources).

7.3 72-Hour Expanded Report

This is the first product of investigation team. It is prepared by the Chief Investigator within 72 hours of the team’s arrival and signed by the Team Leader. The Team Leader sends the report to the delegating official for approval and release.

The “**RELATED SAFETY REVIEW TOPICS FOR FIELD USE**” – This section may contain additional items that the SALT believes is pertinent to operations related to the accident for review by personnel.

Reports shall be prepared in accordance with the following:

- Prepare the report using the format in **Exhibit 7-1**(24 Hour Preliminary Report).
- Prepare the report using the format in **Exhibit 7-2** (72 Hour Expanded Report).
- Confirm/verify information received
- Avoid speculation
- Coordinate with the Delegating Official for content prior to final approval. Once the form has been approved by both the Agency Administrator and the Delegating Official, the Delegating Official shall send out the courtesy copies and release the report.

7.4 Safety Alert

A safety alert is prepared when the investigation has identified a safety hazard that poses an imminent threat to life or property. Examples include a failure of a piece of

equipment or an inadequate policy or procedure or environmental conditions that could lead to an accident before the investigation report is completed.

The Team Leader prepares a draft Safety Alert which identifies the hazards and recommended corrective actions to be taken. The draft Safety Alert is forwarded to the Delegating Official or the designee for approval and release.

For wildland fire related safety alerts, the delegating official or the designee will submit the final Safety Alert to their respective agency's NWCG Risk Management Committee representative who will submit the safety alert via the NWCG Safety Alert System.

Exhibit 7-3 (Interagency Safety Alert) is a template that may be used, check agency specific direction for Safety Alerts.

7.5 Final Report

The SAIT will provide its Final Report, which consists of the Factual and Management Evaluation Reports, to the Delegating Official within 45 calendar days of the accident.

7.6 Final Report Extensions and Status Report

Extensions beyond the 45 day deadline need to be requested by the Team Leader and approved by the Delegating Official(s) authorizing the accident investigation. If extensions are requested, the Team Leader will provide a Status Report identifying current status of investigation and any other related pertinent information. The Delegating Official(s) in coordination with Team Leader will determine if it is necessary to provide an additional expanded report to be released to the field.

7.7 Factual Report

The purpose of the factual report is to provide a narrative of the events leading up to, during, and after the accident.

This information about the factual events and the findings of the accident will help prevent similar types of accidents from happening in the future.

The report should provide:

- Executive summary of the event
- Chronology of the accident sequence
- Any post-accident actions (e.g. emergency response)
- Attachments or addendums essential to support the factual information (e.g. maps)

The Team Leader and Chief Investigator are responsible for the Final Report. They may assign the draft report writing (or portions of the report) to other members of the SAIT, depending on the complexity of the accident. In more complex investigations a writer editor may be used.

Only the facts go into this report—no inferences, conclusions, or recommendations.

Autopsies, witness statements, names of witnesses, or other documentation containing personal information will not be included in factual report. These documents will be

included in the case file.

Exhibit 7-4 provides a template of the factual report content and format.

Formatting of the Factual Report

Cover:

- Self-Explanatory

Title Sheet

- The name of the accident or incident
- The date of the accident or incident
- The list of the investigation team members and their respective agencies

Table of Contents:

- Use three-ring binders to set up the reports with dividers for each section. Include page numbers. When the report refers to or includes supporting documents (such as maps, photos, or technical reports refer to them by exhibits or figures).

Executive Summary:

- The summary briefly explains how the accident occurred. It should not exceed one page.

Narrative:

- The narrative portion explains why the accident happened. It should provide a detailed chronology of the facts, before, during, and after the accident. This section should address the who, what, when, and where of the accident as much as possible.
- Do not identify involved personnel by name in the narrative. Identify involved personnel by their position (i.e. victim 1 engine leader 6-1...) Involved personnel are individuals:
 - Who (by position) had an active role in the accident
 - Who (by position) were injured in the accident
 - Whose actions or inactions initiated or sustained the accident sequence

Investigation Process:

- A brief narrative stating that the team was assigned to investigate the accident
- It should include a standard statement that human, material, and environmental factors were considered.
- If one of these factors is determined to be non-contributing to the accident it should be addressed first and discounted, i.e. temperatures.

Findings:

- Each finding is a single event or condition.
- Each finding is an essential step in the accident sequence, but each finding is not necessarily causal.
- Findings are the conclusions of the accident investigation team based on the facts, weight of evidence, professional knowledge, and good judgment. They are grouped in the factual report in the following categories: Human, Materiel/Material, and Environmental.
- All findings should be documented and substantiated within the narrative section of the report. This may be done in a matrix or table format.

Maps/Photographs/Illustrations, graphics, figures and exhibits:

- Graphic information used to document and portray facts. They need to be properly identified throughout the reports (i.e. figure 1, figure 2).

Appendices:

Can be used as reference information an examples of applicable appendices are:

- Fire Behavior synopsis
- Weather forecasts
- Human factors analysis
- Equipment analysis
- Personal protective equipment analysis

Records:

Factual data and documents used to substantiate facts involving the accident.

Important Note: Autopsies, witness statements, names of witnesses, or other documentation containing personal information will not be included in Final Report. These documents will be included in the case file.

7.8 Management Evaluation Report

The Management Evaluation Report (MER) is the second part of the Final Report and is intended for internal agency use only. Its purpose is to review the following:

- Management Policies
- Practices
- Procedures
- Human Factors related to the accident

It takes the findings identified in the factual report and identifies the causes of the accident.

Exhibit 7-5 provides an example of the Management Evaluation Report content and format.

This report contains:

- Findings identified in the factual report
- Causes of the accident
- Conclusions and observations
- Confidential information
- Recommendations for corrective measures
- Other Findings

Formatting of the Management Evaluation Report

Cover

- Self – explanatory

Title Sheet

- The name of the accident or incident
- The date of the accident or incident
- The list of investigation team members and their respective agencies
- The Freedom of Information Act Disclaimer Statement

Table of Contents

- Include page numbers

Executive Summary

- A brief summary of the facts involving the accident

Findings

- From the factual report

Causal Factors – Something that produces an effect, result or consequence. It is a condition that the correction, elimination, or avoidance of, would likely have prevented or mitigated the accident outcome.

Recommendations

- Recommendations are the prevention measures that management can implement to prevent similar accidents.
- A recommendation should identify measurable, “concrete”, action(s) that can be assigned to an organizational level.
- They must be reasonable, feasible, relate to the cause(s) of the accident, and allow for definitive closure.
- Every cause need not have a recommendation.

- Number recommendations consecutively (for example recommendation 01, 02, etc.) with identifying associated causal factor(s).

Other Findings

Other findings are: findings that did not contribute to the accident but if left uncorrected, could lead to other accidents.

Enclosures

- Information used to support the recommendations that were not included in the Factual Report.

7.9 Distribution of Accident Reports

Within 45 days of the accident, the original and two copies of the Factual and Management Evaluation Reports will be sent to the delegating agency official or their designee. These documents must be sent by traceable means. The agency will review the reports and approve them or submit them for other review processes within their agency or interagency as outlined within their policy.

It is important to remember that these reports are draft until they have been approved or gone through their established agency accident review process.

7.10 Case Files and Physical Evidence

The accident investigation case file has two components: the accident investigation Final Report (Factual and Management Evaluation Reports) and the supporting documentation and equipment that are not in the investigation report. Evidence i.e. tapes, photos not used or unfit for distribution, witness statements, and documents that may be too large, should not be included in the investigation report. They should be kept in the case file and only referenced in the accident investigation report to support the team's findings.

Any physical evidence that the Chief Investigator feels should be kept, such as a hardhat that failed, becomes part of the case file.

Case files including factual data that was generated during the investigation but not contained within the report will be forwarded, by traceable means, to the agency office of records. In most cases, this will be Agency Safety Officer. Refer to agency specific policy or consult with delegating official or their designee.

Prior to returning physical evidence, coordinate with the delegating official or their designee. Most property may be returned to the property owner or insurance company under signed receipt. Return of contractor property will be coordinated through the appropriate Contracting Officer.

The identification of the Office of Record (for retaining final case file and processing FOIA requests) should be identified in the Delegation of Authority (refer to Chapter 3 of this Guide). However, if not identified, this will need to be negotiated between involved agencies.

7.11 Release of Accident Report/ Information

The internal distribution and external release of all reports (or their parts) will be determined by the Delegating Official(s) or their designee(s).

The Serious Accident Investigation Team does not have authority to release or distribute the Factual or Management Evaluation Reports (or any portion of these reports).

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Exhibit 7 - 1

24 Hour Preliminary Report Cover Letter and Format

To: Delegating Official(s)
From: Local Unit Agency Administrator
Subject: Preliminary (24 Hour) Report

THE FOLLOWING INFORMATION IS PRELIMINARY AND SUBJECT TO CHANGE

Names of injured personnel are not to be included in this report—reference them by position.

LOCATION:

DATE OF OCCURRENCE:

TIME OF OCCURRENCE:

LOCAL AGENCY ADMINISTRATOR OR TEAM LEADER:

ACTIVITY:

NUMBER OF INJURIES:

NUMBER OF FATALITIES:

PROPERTY DAMAGE (such as to vessels, equipment, and structures):

RELATED SAFETY REVIEW TOPICS FOR FIELD USE:

cc:
(Follow agency notification protocol)

Exhibit 7 - 2

72-Hour Expanded Report Cover Letter and Format

To: Delegating Official

From: Team Leader

Subject: 72-Hour Expanded Report

This report contains additional information from the 24-Hour Report.

Name of Fatality Victim(s) (if the next of kin have been notified)

Number and Type of Injuries (reference employees by position, not name)

Narrative: (include all of the 24 hour report information plus mission/activity info.)

Action Taken to Date:

RELATED SAFETY REVIEW TOPICS FOR FIELD USE:

//s// (Team Leader)

cc:
(Follow agency notification protocol)

Exhibit 7 - 3 Interagency Safety Alert

No.

Date:

Page ____ of ____

Subject:

Area of Concern:

Distribution:

Discussion/Background:

Recommendations:

Additional Information:

Point of Contact:

(Name)

(Agency Safety Manager)

Exhibit 7 - 4

FACTUAL REPORT CONTENT

Cover. (Self-explanatory).

Title Sheet.

- The name of the accident or incident.
- The date of the accident or incident.
- The list of investigation team members and their respective agencies.

Table of Contents. Include page numbers.

Executive Summary. A brief narrative of the facts involving the accident. Keep this section short.

Narrative. A narrative is a detailed chronological record of the facts leading to the accident.

Do not identify involved personnel by name in the narrative. Identify involved personnel by their position

Investigation Process. A brief narrative stating that the team was assigned to investigate the accident. It should include a standard statement that human, material, and environmental factors were considered. If one of these factors is determined to be non-contributing to the accident it should be addressed first and discounted.

Findings. Findings are based on the weight of evidence, professional knowledge, and good judgment and are listed in chronological order.

Each finding is a single event or condition. Each finding is an essential step in the accident sequence, but each finding is not necessarily causal. Do not include any more information in each than is necessary to explain the event occurrence.

All findings should be documented and substantiated within the narrative section of the report.

Opinions or recommendations are not findings.

Maps, Illustrations, and Photographs. Graphic information used to document and visually portray facts.

Appendixes. Excerpts, tests results, and similar items used as reference information for documented facts involving the accident.

Records. Factual data and documents used to substantiate facts involving the accident.

Important Note: Autopsies, witness statements, names of witnesses, or other documentation containing personal information will not be included in Final Report. These documents will be included in the case file.

Exhibit 7 - 5

MANAGEMENT EVALUATION REPORT CONTENT

Cover - (Self-explanatory).

Title Sheet

- The name of the accident or incident.
- The date of the accident or incident.
- The list of investigation team members and their respective agencies.
- The Freedom of Information Act Disclaimer Statement and Privacy Act Statement.

Table of Contents - Include page numbers.

Executive Summary - Brief narrative of the facts involving the accident. Keep this section short. Readers can refer to the factual report if they want more detail

Findings - From the factual report

Causal Factors - Something that produces an effect, result or consequence. It is a condition that the correction, elimination, or avoidance of would likely have prevented or mitigated the accident outcome.

Recommendations - Recommendations are the prevention measures that management may take to prevent similar accidents. They must be reasonable, feasible, relate to the cause(s) of the accident, and allow for definitive closure. Every cause need not have a recommendation. Number recommendations consecutively (for example recommendation 01, 02, etc) with identifying associated causal factor(s).

Other Findings - Other findings that did not contribute to the accident but, if left uncorrected, could lead to other accidents

Enclosures - Information used to support the recommendations that were not included in the Factual Report.

Important Note: Autopsies, witness statements, names of witnesses, or other documentation containing personal information will not be included in Final Report. These documents will be included in the case file.

Chapter 8 - Closeout Briefings

8.1 Team Close out Briefing

As part of the closure for the Serious Accident Investigation Team it's important to review and critique the team's performance. This process is an opportunity for the team members to improve their skills and abilities for future assignments. This feedback is also valuable to the agency to make improvements in Serious Accident Investigation Training and processes.

The Team Leader facilitates the briefing ensuring all members participate, keeping the team focused on the issues. The review should include:

- Critique the accident investigation process used.
- Discussion of what was planned.
- What actually happened?
- And what can be done in future assignments to improve process and performance of the team.

At the conclusion of the team review briefing the Team Leader should send any suggestions for process improvement to the Agency's Safety Office.

The Team Leader and Chief Investigator should evaluate and make recommendations for team members to receive critical incident stress debriefing (CISD). Many times team members will say that they don't need the debriefing when in reality they have been affected by the event. It is important for the Team Leader and Chief Investigator to encourage them to attend and monitor team members for signs of stress during the and after the investigation.

Another closeout briefing with the investigation team may need to be scheduled after the Final Report is finalized and accepted.

8.2 Close out Briefing with Internal and External Entities

There will be different levels and types of briefings based upon where the Serious Accident Investigation Team is at in the investigation process as well as whom the audience is. Each closeout briefing will need to be tailored to the audience.

On Site Closeout Briefing with Agency Administrator

The first closeout briefing occurs with the Agency Administrator at the conclusion of the field investigation process on the unit. This is presented by the Team Leader. The Team Leader's presentation is important in that it will influence how the Serious Accident Investigation Team is perceived as they leave the on-site investigation portion of the process. Keep in mind as you prepare your briefing that you may not have complete information as the investigation and evidence analysis is in progress and could significantly change. Only provide the facts known at the time of the briefing.

The on-site out-brief should cover:

- Where the Serious Accident Investigation Team is at in the investigation process and the expected timeline in completing the investigation process/final report.
 - If an extension is requested beyond the 45 days, the Delegating Official(s) should ensure the affected agency administrator(s) are notified.
- The known facts of the accident (e.g. timeline of the accident, cause of injuries, etc.)
- Any findings which left uncorrected could lead to future accidents
- Any recommendations that can be implemented currently to prevent future accidents.
- Any evidence in local storage that is being retained at that location.
- Release of accident site back to the local unit.

Note: The Team Leader should emphasize that the investigation and the Final Report are for accident prevention purposes only.

Investigation Closeout Briefing

Investigation closeout briefings will be coordinated with delegating official or their designee.

Closeout briefings may occur with any one of the following:

- Agency Directors
- Fire & Aviation Directors
- Agency Safety Office
- Designated Agency Safety and Health Official
- Cooperators
- Local Authorities
- Agency Accident Review Boards
- Congressional Staffers

8.3 Post – Final Report Closeout Briefings

Upon completion of the draft and final reports:

- The Team Leader, Chief Investigator, and specific subject matter experts may be requested by the agency(s) to make oral presentations to their management and/or agency(s) Accident Review Boards/Board of Reviews.
- The Team Leader and/or Chief Investigator may be requested by the agency(s) to present the Factual Report to the immediate family.
- Upon completion of the final investigation report, the agency director(s) may be requested to personally brief higher level authorities (e.g., Secretary of

Interior/Agriculture, Governors, etc.) to explain the accident and the corrective actions.

- The Occupational Safety and Health Administration may request a formal presentation detailing the factual findings and causes of the accident.

Each of these closeout briefings will need to be prepared and present the appropriate information to the audience.

Once the Final Report has been accepted by the agency's director(s) the SAIT is released by the delegating official.

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Chapter 9 - Accident Review Process

9.1 Purpose

Some agencies have a review process once the draft Final Report is completed by the Serious Accident Investigation Team. This additional process is often called the Accident Review Board/Board of Review. It is the agency's management level review of the accident.

The purposes of the review boards are to examine and evaluate the Factual and Management Evaluation Reports, validate the causes of the accident, and to develop corrective actions to prevent further occurrences.

As a Team Leader and Chief Investigator, you will need to be aware of this process when you have been assigned to an agency accident that utilizes this process. This is where you will present your draft reports to the agency for acceptance and approval.

Consult with delegating official(s) or their designee(s) to determine agency specific follow-up processes.

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Appendices

General

This Appendix includes information and web links on safety management programs, wildland fire safety programs, Serious Accident Investigation Training and web links to other related agencies. While this information is not all inclusive of every agency, it will provide information that can be useful to individuals that will be conducting serious accident investigations. Agency Administrators and agencies seeking to develop safety programs could also find this information useful.

Department of Interior

- Department of Interior Departmental Manual 485 DM Chapter 7
http://elips.doi.gov/app_DM/index.cfm?fuseaction=searchDM&keyword=485

Bureau of Land Management

- Draft BLM Manual 1112-3 Serious Accident Investigation Hand Book
www.nifc.gov/safety/reports/BLMChflnvstgtrManual.pdf
- Serious Accident Investigation Training Course Information
www.nifc.gov/safety/accident_resources.htm
- Employee Casualty Guide
www.blm.gov/nhp/efoia/nhrmc/2000/IB/HRIB2000-108.pdf

National Park Service

- National Park Service Reference Manual 50 B Occupational Health and Safety Program
<http://inside.nps.gov/waso/custommenu.cfm?lv=2&prg=46&id=5898>
- Line of Duty Death Handbook
<http://inside.nps.gov/waso/custommenu.cfm?lv=3&prg=175&id=4370>

Bureau of Indian Affairs

- Wildland Fire and Aviation Program Management and Operations Guide Bureau of Indian Affairs (Bluebook)
www.nifc.gov/policies/blue_book.htm
- Indian Affairs Manual (IAM), Part 25, Chapter 4 – Safety and Occupational Health.
<http://www.bia.gov/WhatWeDo/Knowledge/Directives/IAM/index.htm>

- BIA Safety and Health Handbook, Chapter 18, Reviews and Investigations.
<http://www.bia.gov/idc/groups/xnifc/documents/text/idc013078.pdf>

Fish and Wildlife Service

<http://www.fws.gov/policy/240fw7.html>

Department of Agriculture

Forest Service

- For USDA Forest Service accidents, coordination with agency law enforcement must be accomplished in accordance with the Accident Investigation *Protocol for Investigations of Serious Injuries and Fatalities of On-Duty Forest Service Employees*.
- For USDA Forest Service Accidents, Law Enforcement will be responsible for conducting an independent claims investigation in accordance with FS Manual 5303.11.
- USDA Forest Service provides for certain employee rights and responsibilities during investigations. Bargaining unit employees who are asked to participate in formal investigative interviews will be provided with this document prior to the interview.
www.nffe-fsc.org/committees/safety/documents/Employee_Rights_in_Administrative_Investigative_Interviews.pdf
- USDA Forest Service Accident Investigation Guide
www.fs.fed.us/t-d/ (Username: t-d, Password: t-d) (Publication 7E72H46)

Other Federal Agencies

OSHA

www.osha.gov

- OSHA 1960.29 Accident Investigation
http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=11280

NIOSH

- Fire Fighter Fatality Investigation and Prevention Program
<http://www.cdc.gov/niosh/fire/>

OIG

- OIG Public Law 107-203, To provide for an independent investigation of Forest Service firefighter deaths that are caused by wildfire entrapment or turnover.

http://www.nifc.gov/safety/investigation_guide/Handouts/6-3%20OIG%20Public%20Law.pdf

Wildland Fire Accident Investigation Resources

- **Department of Homeland Security, US Fire Administration**

Firefighter Autopsy Protocol

www.usfa.dhs.gov/downloads/pdf/publications/firefighter_autopsy_protocol.pdf

- Interagency Standards for Fire and Aviation Program Management and Operations Guide (Redbook) Chapters 7 and 18

www.nifc.gov/policies/red_book.htm

- NWCG Agency Administrators Guide to Critical Incident Management

www.nwcg.gov/pms/pubs/pubs.htm (Publication PMS 926)

- National Wildfire Coordinating Group

www.nwcg.gov

- NWCG Risk Management Committee

www.nwcg.gov/branches/pre/rmc/

- Interagency Helicopter Operation Guide IHOG

<http://www.nifc.gov/policies/ihog.htm>

Glossary and Abbreviations

Glossary

Active Failure – Is an error that has immediate consequences, such as a change of equipment, system or process that triggers immediate undesired consequences.

Agency Administrator – The authorized official on the unit where the accident occurred.

Briefing, 24 hour Preliminary Report - This report contains the first details of the accident. It is prepared by the unit and transmitted within 24 hours of the accident to the delegating official.

Briefing, 72 hour Expanded Report - This is the first product of investigation team. It is prepared by the Chief Investigator within 72 hours of the team's arrival and signed by the Team Leader.

Causal Factor – is a condition that the correction, elimination, or avoidance of would likely have prevented or mitigated the accident outcome.

Collateral Investigations - Other Agencies may have a jurisdictional responsibility to conduct their own investigation (i.e. Law enforcement, Federal OSHA, State OSHA, NIOSH, and OIG). These investigations are independent and can run concurrently while Serious Accident Investigations are being conducted.

Designated Safety and Health Official (DASHO) - Each Agency (Federal, State, and Local) will have a jurisdictional representative that is the responsible official for ensuring that serious accidents and incidents are fully investigated for the Agency. Some agencies title these representatives Designated Safety and Health Official (DASHO) or these duties are contained within their agency responsibilities.

Entrapment - A situation where personnel are unexpectedly caught in a fire behavior-related, life threatening position where planned escape routes or safety zones are absent, inadequate, or compromised. Entrapment may or may not include deployment of a fire shelter for its intended purpose (NWCG Glossary of Fire Terminology). Entrapment may result in a serious wildland fire accident, non-serious Wildland fire accident, or a near-miss.

Evidence – Everything that is gathered in the course of the investigation. There are three principle types of evidence Human, Material/Materiel, and Environmental.

Fact – Verified information based on evidence.

Factual Report - The factual report is to provide a narrative of the events leading up to, during, and after the accident.

The factual events and the findings of the accident will help prevent similar types of accidents from happening in the future.

The report should provide:

- Executive summary of the event
- Chronology of the accident sequence
- Any post-accident actions (e.g. emergency response)
- Attachments or addendums essential to support the factual information

Final Report - The Final Report, which consists of the Factual and Management Evaluation Reports, will be submitted to the Delegating Official within 45 calendar days of the accident. Extensions beyond this deadline need to be requested by the Team Leader.

Finding – Findings are the conclusions based on factual data, and professional knowledge and judgment. Findings are arranged in Chronological order. Each finding is an essential step in the accident sequence, but each finding is not necessarily a causal factor.

Fire Shelter Deployment: - The removing of a fire shelter from its case and using it as protection against fire (NWCG Glossary of Fire Terminology). Fire shelter deployment may or may not be associated with entrapment. Fire shelter deployment may result in a serious Wildland fire accident, a non-serious Wildland fire accident, or a near-miss. Anytime a fire shelter is deployed (other than for training purposes), regardless of circumstance, notification to the National Fire and Aviation Safety Office of the jurisdictional agency is required.

Latent Conditions – Are organization-related weaknesses, conditions, or equipment flaws that are buried inside the organization undetected for long periods of time but can be triggered in a particular set of circumstances.

Management Evaluation Report - The Management Evaluation Report (MER) is the second part of the Final Report and is intended for internal agency use only. Its purpose is to review the following:

- Management Policies
- Practices
- Procedures
- Human Factors related to the accident

Multi Agency Investigations - Serious accidents involving more than one agency will require the DASHO(s) or designee(s) to collaboratively develop a delegation of authority that is signed by each of the respective agencies.

Near-Miss - An unplanned event or series of events that could have resulted in death; injury; occupational illness; or damage to or loss of equipment or property but did not.

Non-Serious Accident - An unplanned event or series of events that resulted in injury, occupational illness, or damage to or loss of equipment or property to a lesser degree than defined as a serious accident.

Recommendations - Recommendations are reasonable courses of action, based on the identified causal factors that have the best potential for preventing or reducing the risk of similar accidents.

Safety Alert – A safety alert is prepared when the investigation has identified a safety hazard that poses an imminent threat to life or property. Examples include a failure of a piece of equipment or a faulty policy or procedure or environmental conditions that could lead to an accident before the investigation report is completed.

Safety Investigations - Any investigation or review that is conducted for the purpose of accident prevention. This includes, but is not limited to, Non-serious and Serious accident investigations, Near-miss reviews, and Entrapment or Shelter Deployment investigations.

Serious Accident - An unplanned event or series of events that resulted in death; injury, occupational illness, or damage to or loss of equipment or property. For operations, a serious accident involves any of the following:

One or more fatalities

- Three or more personnel who are inpatient hospitalized as a direct result of or in support of operations.
- Property or equipment damage of \$250,000 or more.
- Consequences that the Designated Agency Safety and Health Official (DASHO), or Designated Agency Official, judges to warrant Serious Accident Investigation.

Abbreviations

| | |
|-------|--|
| AA | Agency Administrator |
| CFR | Code of Federal Regulations |
| CI | Chief Investigator |
| CISD | Critical Incident Stress Debriefing |
| DASHO | Designated Agency Safety and Health Official |
| DM | Departmental Manual (DOI) |

| | |
|-------------|--|
| GIS | Geographic Information System |
| GPS | Global Positioning System |
| IC | Incident Commander |
| ICP | Incident Command Post |
| IHOG | Interagency Helicopter Operation Guide |
| IRPG | Incident Response Pocket Guide |
| LE | Law Enforcement |
| M.E. | Medical Examiner |
| MER | Management Evaluation Report |
| MOU | Memorandum of Understanding |
| NICC | National Interagency Coordination Center |
| NIFC | National Interagency Fire Center |
| NIOSH | The National Institute for Occupational Safety and Health |
| NWCG | National Wildfire Coordinating Group |
| OIG | Office of the Inspector General |
| OSHA | Occupational Safety & Health Administration |
| PAO | Public Affairs Officer |
| PIO | Public Information Officer |
| POC | Point of Contact |
| PPE | Personal Protection Equipment |
| RMC | Risk Management Committee |
| SAI | Serious Accident Investigation |
| SAIT | Serious Accident Investigation Team |
| SME | Subject Matter Expert |
| USDA | United States Department of Agriculture |
| USDI or DOI | United States Department of Interior or Department of Interior |

Interagency Serious Accident Investigation Guide

List of Exhibits

| Exhibit Number | Exhibit Name |
|-----------------------|--|
| 1-1 | Interagency Serious Accident Investigation Process |
| 2-1 | Initial Actions to be Taken by Local Unit. |
| 2-2 | Wildland Fire Fatality Entrapment PMS 405-1 |
| 3-1 | Delegation of Authority Letter Template |
| 5-1 | Investigating Burnovers and Shelter Deployments: Assessing Personal Protective Equipment. |
| 5-2 | Evidence Log (non-photo) |
| 5-3 | Chain of Custody Log |
| 5-4 | Accident Photographic Documentation Form |
| 5-5 | Accident Photographic Log |
| 5-6 | Witness List |
| 5-7 | Witness Statement |
| 5-8 | Witness Interview |
| 7-1 | 24-Hour Preliminary Report |
| 7-2 | 72-Hour Expanded Report |
| 7-3 | Safety Alert |
| 7-4 | Factual Report Content |
| 7-5 | Management Evaluation Report Content |

Literature References

Conklin, Todd. 2010. Human Performance Power Point.

Dekker, S.W.A. 2006. The Field Guide to Understanding Human Error. Ashgate, Burlington.

Klein, Gary. 1998. Sources of Power: How People Make Decisions. Massachusetts Institute of Technology.

Reason, James. 1997, reprinted 2002. Managing the Risks of Organizational Accidents. Ashgate, Burlington

DRAFT



NATIONAL WILDFIRE COORDINATING GROUP

National Interagency Fire Center
3833 S. Development Avenue
Boise, Idaho 83705

TASKING MEMORANDUM

Reference: TM-2010-004

To: NWCG Serious Accident Investigation Task Team

From: NWCG Chair *William Raage*

Date: June 3, 2010

Subject: Wildland Fire Serious Accident Investigation Standards and Protocols Tasking

Background:

In December 2009, the Fire Executive Council (FEC) sponsored a Serious Accident Investigation Summit to discuss a number of issues associated with accident investigations with our partners in Safety and Law Enforcement in our agencies. The FEC Memorandum (Attachment A) summarizes the Summit and serves as the basis for this tasking.

As follow-up to the Summit, FEC agreed to focus on two principle areas:

- The development of consistent standards and protocols for serious accident investigations.
- The development of tools to communicate those standards and protocols, along with expectations of employees, supervisors, managers, and state and local partners.

FEC tasked the NWCG Executive Board to address these two focus areas. In addition, FEC notified the five federal wildland fire bureaus so they would have the opportunity to make safety and law enforcement representatives available to participate in the tasking implementation with NWCG membership. In turn, NWCG is tasking the Serious Accident Investigation Task Team to lead the development of these standards, protocols, and communication tools with the inclusion of additional subject matter experts in wildland fire, safety, and law enforcement.

Tasking:

1. Review, and recommend where appropriate, synchronized Serious Accident Investigation procedures, thresholds, and delegations.
2. Develop NWCG Serious Accident Investigation guidance and protocols.

3. Outline expectations of employees, supervisors, managers, and state and local partners with regard to developed Serious Accident Investigation guidance and protocols.
4. Recommend to the NWCG Executive Board where the guidance should be published and maintained, as well as who will be responsible for performing the reviews and updates.

Outcomes/Deliverables:

1. Provide consistent standards and protocols for conducting Wildland Fire Serious Accident Investigations.
2. Provide a NWCG Serious Accident Investigation guidance document.
3. Provide expectations for employees, supervisors, managers, and state and local partners with regarding Serious Accident Investigation.
4. Provide a recommendation for publication and maintenance of the guidance document.

Roles and Responsibilities:**NWCG Executive Board:**

- Establish taskings and desired outcomes
- Approve Task Team membership and Team Lead
- Approve and communicate tasking results.

Preparedness Branch Coordinator:

- Draft taskings
- Establish Task Team, and recommend to Executive Board
- Facilitate Task Team briefing
- Serve as liaison between Team Lead and Executive Board.

Task Team Lead:

- Ensures interagency and collaborative process
- Ensures Team completes tasks on established timeline
- Communicate progress and status to Branch Coordinator on a regular basis
- Troubleshoot problems
- Develop draft NWCG Guidance for Executive Board approval.

Team Members:

- Address each element of the tasking using their expertise and professional judgment
- Communicate progress and status to Team Lead on a regular basis.

Task Team:

Team Lead: *Michelle Ryerson, BLM Safety Manager, Office of Fire and Aviation

Team Members:

- *Louis Rowe, BLM Safety Chief
- *Jim Chandler, FWS Region 10 Safety Manager
- *Tony Beitia, BIA Wildland Fire Safety Specialist
- *Ralph Dorn, USFS Chief of Safety

*Chad Fisher, NPS Wildland Fire Safety & Prevention Specialist

* Denotes Team members are also SAI Training Cadre Members

Team Advisor: Jonathan Whitefoot, BIA Law Enforcement Special Agent

Timeline:

Tasking response and deliverables are due to the Executive Board at the NWCG August Monthly Meeting (August 18, 2010).

Contact:

Tim Blake, Preparedness Branch Coordinator
(208) 387-5262

Attachment A: FEC Memorandum, dated 2/03/10

cc: NWCG Executive Board



United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Wildland Fire Coordination
Washington, D.C. 20240

FEB 03 2010

Memorandum

To: See Distribution List

From: Kirk Rowdabaugh 
Chair, Fire Executive Council

Subject: Serious Accident Investigation Summit Follow-Up

Fire leadership at the Forest Service and the four Bureaus within the Department of the Interior (BLM, NPS, FWS and BIA) have strived to establish common interagency standards for fire and aviation operations, including uniform protocols for conducting accident investigations.

In December 2009, the Fire Executive Council (FEC) sponsored a Serious Accident Investigation Summit to discuss a number of issues associated with accident investigations with our partners in Safety and Law Enforcement in our agencies. At the conclusion of the summit, the FEC agreed to take the issues and recommendations under consideration and devise strategies to address them. Attached is a list of potential follow-up topics.

At the FEC's January 2010, meeting, we agreed to focus on two principal areas: the development of consistent standards and protocols for serious accident investigations and the development of tools to communicate those standards and protocols, along with our expectations, to employees, supervisors, and managers.

We believe the National Wildfire Coordinating Group (NWCG), is the appropriate group to address both items, with the full support and participation of representatives from our agency safety and law enforcement programs.

As a principal in your Bureau's safety or law enforcement program, I invite you to nominate an appropriate individual to join the NWCG in addressing the two principal areas. Please provide the name of your representative to William Kaage, Chair of the NWCG, by Thursday, February 11, 2010.

Please contact me at 202-606-3447, or your agency representative on the Fire Executive Council, if you have any questions.

I look forward to our continued progress with these important issues and your contributions to the process.

Attachment

cc: Andy, Loranger, FWS
Vicki, Forrest, BIA
Bill, Downes, BIA
Bryan Rice, BIA
Bill Kaage, NWCG Chair
Kelvin Cochran, DHS-USFA
Jennifer Roberson, DHS-USFA
Jim Douglas, BLM
Jim Karels, NASF
Tom Nichols, NPS
Mark Bathrick, MBC (Aviation)
Tom Harbour, USFS

Distribution List

William Woody, Director of Law Enforcement,
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Bureau of Land Management

Rick Obernesser, Acting - Associate Director for Visitor and Resource Protection,
U. S. National Park Service

Jonathan Whitefoot, Special Agent,
Bureau of Indian Affairs

Tony Beitia, Wildland Fire Safety Specialist,
Bureau of Indian Affairs

Gregory Siekaniec, Deputy Director of Refuges,
U. S. Fish and Wildlife Service

Paul Henne, Assistant Director, Business Management and Operations,
U. S. Fish and Wildlife Service

NEXT STEPS TO CONSIDER:

(From the December 2009 SAI Summit)

1. Thorough investigation of underlining authorities
2. Synchronized procedures - thresholds and delegations
3. Common witness statement protocols
 - a. We are not getting good witnesses on scene
 - b. Concerns witnesses perceive possible liability
4. Explain ownership - what we know about our procedures
 - a. How we evaluate for non serious accidents
5. Our views of full-time versus part-time collateral teams
6. Overall quality of investigations - strengthen profession and train “top notch” investigations
7. Agree on outputs of reports
8. Building trust with employees
 - a. Takes leadership to do this
9. Discuss full concept of privilege
10. Clearly articulate employee roles and responsibilities (e.g., different investigations)
11. Outreach to non-federal cooperatives
12. Public law – attached to FEC
13. Reasons and rationale for different investigations
14. How will “privilege” be defined
 - a. What does to lessons to learned mean
15. Guidance to fill void (e.g., processes)
16. What are norms of our profession
 - a. How do we behave
 - b. Create expectations for ourselves
17. Recommendations – what is our follow through process
 - a. What was done
 - b. What was criminal
18. Concerns about wrapping all witness statements into one type of statement
19. Clear/crisp distinction between LE (labeled bad guys) and SAI (safety investigations)
20. How do we protect the scene, get good information, put out timely reports
21. What is done with information
 - a. Who has access
22. What can we expect from Forest Service
 - a. How do we minimize discrepancies between agencies
23. Follow through and demonstrating a learning organizations - interacting with people on scene



NATIONAL WILDFIRE COORDINATING GROUP

National Interagency Fire Center
3833 S. Development Avenue
Boise, Idaho 83705

MEMORANDUM

Reference: NWCG#I-508-2011

To: Federal Fire Policy Council (FFPC)

Through: Wildland Fire Executive Council

From: NWCG Chair *William Kaage*

Date: June 13, 2011

Subject: Recommendation to Update the Serious Accident Investigation (SAI)
Memorandum of Understanding (MOU) between the United States
Department of the Interior and the United States Department of
Agriculture

NWCG would like the Federal Fire Policy Council (FFPC) to consider updating the current Memorandum of Understanding (MOU) for interagency serious accident investigations. The existing MOU, signed in 1995, does not reflect current policy language and lacks scope specificity.

Although an update to the existing MOU between the Departments of Interior and Agriculture was not part of the original Fire Executive Council (FEC) tasking request for Serious Accident Investigations (SAI), the SAI Task Team felt it was imperative to recommend that the MOU be updated with current terminology and policy references in order to support the use of the *Interagency Serious Accident Investigation Guide* and the associated authorities.

An updated draft Serious Accident Investigation MOU is attached for your review.

Please direct your response to William Kaage, the NWCG Chair, at (208) 387-5225. Mr. Kaage will highlight the issue as part of his update to the Wildland Fire Executive Council (WFLC) at their next scheduled meeting.

Attachment A – Draft Serious Accident Investigation MOU

cc: NWCG Executive Board

MEMORANDUM OF UNDERSTANDING

Between the United States Department of the Interior and the United States Department of Agriculture

I. Purpose. This Memorandum of Understanding establishes the basis for interagency serious accident investigations. These investigations are conducted for accident prevention and safety purposes only.

II. Introduction. Interagency activities often have increased complexity at all operational levels that may not be identified during single agency accident investigations. Serious accident investigations must consider these interagency complexities in order to be successful. When the causal factors of a serious accident are identified, effective corrective actions to prevent a recurrence can be taken. Interagency investigations add perspective and enhance the mix of skills and knowledge on the investigation team. Interagency investigations are especially important for identifying and correcting common management and operational issues that cross agency lines. This will also help ensure that lessons learned are shared across agencies.

III. Policy.

Wildland Fire Serious Accidents: Interagency investigations will be conducted whenever a serious accident occurs on a U.S. Forest Service managed wildland fire, Department of the Interior managed wildland fire, or a jointly managed wildland fire. Aircraft accidents occurring during wildland fire operations will be investigated by the National Transportation Safety Board, the U.S. Forest Service, and the Department of the Interior in accordance with established policy, laws, and agreements.

All Other Serious Accidents:

For serious accident investigations involving more than one agency, an Interagency Serious Accident Investigation will be conducted. For serious accidents involving a single agency, the jurisdictional agency will determine whether an interagency investigation is warranted.

Serious Accident Investigations will remain independent of other investigations.

IV. Requirements.

A. Requirements for investigating accidents are identified by the Occupational Safety and Health Administration in 29 CFR 1960.29. Additional guidance that defines serious accidents and investigation requirements is provided by respective agency policies.

B. Co-lead investigations may be conducted for non-fire accidents at the discretion of the affected agencies. Co-Lead Investigations will include team leaders and team members from both Departments.

Co-lead investigations will be conducted for wildland fire when the following criteria are met:

1. A serious wildland fire accident occurs on a U.S. Forest Service/Department of the Interior jointly managed fire, or,
2. A serious wildland fire accident involving U.S. Forest Service personnel occurs on a Department of the Interior managed fire, or,
3. A serious wildland fire accident involving Department of the Interior personnel occurs on a U.S. Forest Service managed fire.

C. Agency-Lead Investigations will be conducted whenever a single agency has jurisdiction over an accident and the accident affects only personnel of that same agency.

An agency-lead investigation will consist of a single team leader, and may include team members from both Departments. Wildland fire related serious accidents must include team members from both Departments.

VI. Timeframes. The final serious accident investigation report must be completed and a copy submitted to the appropriate Agency Designated Safety and Health Official(s) (DASHO) within 45 calendar days of the accident. Extensions to this timeframe must be approved by the respective DASHO(s).

VII. Training and Qualifications. Team leaders, chief investigators, and technical specialists will meet minimum training and qualification standards as established by the Department of Agriculture and the Department of the Interior.

VIII. Delegation of Authority. Serious accidents involving more than one agency will require a collaboratively developed delegation of authority that is signed by each of the respective agencies DASHOs.

Assistant Secretary Operations
U.S. Department of Agriculture

Assistant Secretary for Policy,
Management and Budget
U.S. Department of the Interior

Memorandum of understanding between the U.S. Departments of the Interior and Agriculture.



Proposal

Date: June 14, 2011

Subcommittee: NWCG

Description of Issue or Assignment:

Report of NWCG Response on FEC Interagency SAI Tasking

Discussion of Proposed Recommendation(s):

Seek concurrence with recommendation to place acceptance of interagency guidance document for wildland fire on WFLC agenda.

Identify Considerations:

Tasking has been completed. Guidance document ready for release upon approval by WFLC. Need to have WFLC discussion on use of same guidance document in affected bureaus other function areas, as well as other agencies within federal departments. Further work on LE coordination remains, as does agency policy on employee and employer expectations with respect to serious accident investigation engagement.

Rationale for Recommendation(s):

NWCG task group has completed and presented their work for acceptance as complete by NWCG. Path forward offers the best methodology for appropriate review and engagement by agency leadership with the input from state and local government partners.

Recommendation(s):

Accept NWCG tasking completion for carrying forward to WFLC

Decision Method used:

- ☒ Subcommittee Consensus **NWCG approval obtained**
- ☐ Modified Consensus (explain, i.e. majority, super-majority)
- ☐ Chair Decision

Contact Information:

William Kaage, NWCG Chair



Proposal

WFEC Decision:

- ☐ WFEC Approves
- ☐ WFEC Approves with Modifications (not required to resubmit for WFEC approval)
- ☐ Need More Information (required to come back to WFEC for approval)
- ☐ WFEC Does Not Approve

Roy Johnson, DFO

Date

Notes regarding decision:



Proposal

Date: June 14, 2011

Subcommittee: NWCG

Description of Issue or Assignment:

Proposal to WFEC to pass DOI-USDA Interagency SAI MOU to FFPC

Discussion of Proposed Recommendation(s):

NWCG SAI taskgroup as part of their work offered their thoughts on MOU edits for outdated Interagency SAI MOU.

Identify Considerations:

Ancillary to task group work.

Rationale for Recommendation(s):

Forwarding draft MOU to FFPC will allow federal partners to have discussion on necessary revisions to the outdated MOU for interagency SAI team tasks.

Recommendation(s):

Recommend to forward MOU draft to FFPC

Decision Method used:

- ☐ Subcommittee Consensus Presented and accepted by NWCG Executive Board
- ☐ Modified Consensus (explain, i.e. majority, super-majority)
- ☐ Chair Decision

Contact Information:

William Kaage, NWCG Chair



Proposal

WFEC Decision:

- ☐ WFEC Approves
- ☐ WFEC Approves with Modifications (not required to resubmit for WFEC approval)
- ☐ Need More Information (required to come back to WFEC for approval)
- ☐ WFEC Does Not Approve

Roy Johnson, DFO

Date

Notes regarding decision:



Status Report

Date: June 15, 2011

Subcommittee: Cohesive Strategy Subcommittee (CSSC)

Accomplishments Since Last Report:

- CSSC and NSAT Relationship – CSSC has discussed and provided a proposal recommendation on the CSSC-NSAT governance relationship. The NSAT and CSSC is finalizing an explanation of the roles and responsibilities of the NSAT in relation to all teams and phases of the cohesive strategy. This will be shared with the WFEC once completed.
- Webinar – CSSC has developed an agenda for an upcoming webinar on the cohesive strategy. The webinar will also be recorded and posted to the website. The date for the live webinar has not been scheduled.
- Region Outreach and Public Involvement – The West RSC drafted a statement of work (SOW) for contracted support in conducting outreach to stakeholder groups and the public. CSSC has reviewed this SOW and provided feedback. The SOW lists several options for garnering public input, including holding focus group sessions as well as soliciting, analyzing, and incorporating comments received on draft documents. Each RSC will decide which (if any) of the services accommodated under this contract will be used in the region.
- Communications and Messaging – CSSC has developed a list of communications and messaging products to be developed in the coming weeks. Example products include: brochure, fact sheet, display, new website pages, and enhanced website features to allow for comments and feedback.
- Fire Occurrence Data Proposal – The NWCG Fire Reporting Subcommittee developed a paper at the NSAT's request which describes the issues associated with the existing approaches to collect, organize, store, and use fire occurrence data and offers potential steps that might improve fire occurrence data in the near term and long term. This paper was shared for consideration with the CSSC, RSCs, and Working Groups. Recommended actions within the paper may appropriately be incorporated into regional strategies.
- NSAT Sub-Teams – To-date, all NSAT subteams have made contact with team members and all but one team has held at least an initial call. The next Sub-team Lead group call is June 20th.
- Co-Coordinators – Sandra Cantler and Jenna Sloan

Planned Activities for Next Reporting Period:

- Finalize the NSAT role and responsibilities
- Discuss the regional outreach and public involvement - what processes are being used? Should the Regions use the same/similar processes or can they develop their own outreach processes?
- Conduct the webinar



Status Report

Issues Identified:

None

WFEC Decisions/Approvals Needed:

None

References:

<http://www.forestsandrangelands.gov/strategy/index.shtml>

Contact Information:

Kirk Rowdabaugh, Director, Office of Wildland Fire Coordination
WFEC liaison to the CSSC
202-606-3447



Status Report

Date: June 10, 2011

Subcommittee: Western RSC

Accomplishments Since Last Report:

1. Formation of a Western Work Group standing @ 20 members, Joe Freeland from BLM will be the Work Group Lead.
2. Completion of the contract statement of work, the contractor representative will be @ the Boise meeting.
3. Scheduled a Western Work Group meeting on June 15th-17th (0800-1700) each day to complete the CRAFT training, begin the process of working thru the 24 CRAFT questions to populate fields, specifically identify the questions we want the contractor to use during the focus group meetings throughout the western region, and identify both locations and timelines for deliverables back to the Work Group.
4. Alan has facilitated the establishment of a Western Region Portal, populated most of the questions from the original 400 comments from the initial input for Phase 1.
5. Tom Quigley explained portal access and described the login process.
6. Tom Quigley shared progress with the Science Teams working with the various RSC's and appears to be on track with both conference calls, CRAFT Training and connection to the RSC's.

Planned Activities for Next Reporting Period:

1. Additionally the Western RSC has developed a work schedule to produce our deliverables for Phase III through September 6th, with planned meetings for both Western Work Group and Western RSC.
2. We have scheduled conference call every two weeks until completion.

Issues Identified:

1. The Western RSC shared a concern of the other two regions using the same contractor for focus group efforts that the preponderance of work may push back the dates for deliverables. The positive side would be essentially the same product delivered to the RSC's for their work.

WFEC Decisions/Approvals Needed:

None

References:

None

Contact Information:

Joe Stutler
Deschutes County Forester
(541) 322-7117 office
joest@co.deschutes.or.us



Status Report

Date: June 13, 2011

Subcommittee: NERSC

Accomplishments Since Last Report:

- RSC Charter in final draft.
- The NE RSC Working group has been staffed with Terry Gallagher and Maureen Brooks (U.S. Forest Service, Region 9) as leads.
- The working group is compiling foundational information and pre-work required for successfully completing the CRAFT Process.
- A virtual training session for the working group was conducted on Friday June 10.

Planned Activities for Next Reporting Period:

- June 20 – Preparatory work will be complete for the NE working group workshop.
- June 27-29 – Working group workshop will be convened to discuss the CRAFT framework questions and develop an initial draft report including goals, objectives, and actions.

Issues Identified:

- Currently NERSC has no outstanding issues.

WFEC Decisions/Approvals Needed:

- None during this reporting period.

References:

- None

Contact Information:

Matt Rollins, chair; mrollins@usgs.gov, 605.594.2633

George Baker, vice-chair; gbaker@mashpeema.gov

Jenna Sloan, coordinator; Jenna_Sloan@ios.doi.gov



Status Report

Date: June 15, 2011

Subcommittee: Southeast Regional Strategy Committee

Accomplishments Since Last Report:

- The Darryl Jones of the SE Working Group developed a first draft of the web-based outreach questions. They were shared with the entire Working Group on their conference call.
- The SE Working Group decided it will have an in-person meeting. The meeting will be in Atlanta on July 5 – 7. The format will be similar to the West and Northeast with the primary purpose being for the Working Group members to learn more about the CRAFT Analysis process. Danny Lee will be attending.

Planned Activities for Next Reporting Period:

- Working Group will finalize the web-based instrument to obtain public/interested party input/comments.
- Working Group will pull together an outreach list including names, emails and affiliation. The list will be used to notify people about the web-based outreach tool.
- Working Group will continue gathering background information from previous work including the Southern Risk Assessment, Southern Forest Futures Project, State Assessments, etc.

Issues Identified:

None

WFEC Decisions/Approvals Needed:

None

References:

None

Contact Information:

Mike Zupko - sgsfexec@zup-co-inc.com; Kevin Fitzgerald – 865.436.1202; Sandy Cantler – 202.205.1512



Proposal

Date: June 15, 2011

Subcommittee: Cohesive Strategy Subcommittee (CSSC)

Description of Issue or Assignment:

Assigned to provide a proposal on the relationship between the CSSC and the National Science and Analysis Team (NSAT)

Discussion of Proposed Recommendation(s):

In general, there was agreement among the CSSC and NSAT co-leads that the NSAT would appropriately fit as a team chartered by the CSSC; however it is recognized that though the NSAT organizationally reports to the CSSC, NSAT also works collaboratively with teams at all levels in the cohesive strategy hierarchy and organizational structure. The NSAT co-leads shared perspective on the need for some relative independence to ensure the scientific integrity of the work products assigned for completion by the NSAT (i.e. quantitative analysis proposal, conceptual/analytical model development, etc.). The CSSC and NSAT agreed that outlining the NSAT roles and responsibilities including reporting, communication, and documentation of critical paths by the NSAT would provide clarity for this topic.

Identify Considerations:

1. NSAT is a team chartered under the CSSC (current approved governance)
2. NSAT becomes a subcommittee to WFEC

Rationale for Recommendation(s):

The NSAT will continue to be a team chartered under the CSSC. This is consistent with the overall governance proposals previously shared with WFLC and WFEC. This recommendation will allow the NSAT to effectively complete the work products within given timeframes and yet still continue to support the science and analytical needs of the WFLC, WFEC, CSSC, RSC's, and RSC Working Groups. The NSAT will continue to describe and document critical paths in their processes to develop a quantitative analysis proposal with conceptual and analytical models necessary for Phase III. The updates, accomplishments and WFEC considerations from the NSAT will be included with CSSC reports and/or proposals.

Recommendation(s):

The NSAT will continue to be a team chartered under the CSSC. The NSAT roles and responsibilities is being drafted and will be provided to WFEC by the next meeting.

Decision Method used:

X Subcommittee Consensus



Proposal

- ☐ Modified Consensus (explain, i.e. majority, super-majority)
- ☐ Chair Decision

Contact Information:

Kirk Rowdabaugh, Director, Office of Wildland Fire Coordination
WFEC liaison to the CSSC
202-606-3447

WFEC Decision:

- ☐ WFEC Approves
- ☐ WFEC Approves with Modifications (not required to resubmit for WFEC approval)
- ☐ Need More Information (required to come back to WFEC for approval)
- ☐ WFEC Does Not Approve

Roy Johnson, DFO

Date

Notes regarding decision:



Proposal

Date: June 15, 2011

Subcommittee: N/A

Description of Issue or Assignment:

Review of ForestsandRangelands.gov

Discussion of Proposed Recommendation(s):

There have been both recent discussion and changes made to ForestsandRangelands.gov. Content on the website is primarily about:

- WFLC
- WFEC
- Cohesive Strategy
- Success Stories
- Biomass

The minor changes made thus far have been to improve the site navigation through modifications made to the left navigation menu as well as content updates for the Cohesive Strategy pages. There have also been updates made to content of the WFEC pages. Preliminary discussion has occurred between FS and DOI on additional changes necessary so that our internal and external audiences can easily have access to the information they seek. Some initial discussion among CSSC members has occurred on how to utilize the site for engagement and public involvement in the cohesive strategy Phase II report deliverables. Success stories (formerly the National Fire Plan Success Stories) is an important component of the site. Jenna Sloan has developed a draft revised submission requirements for stories to be vetted.

Identify Considerations:

DOI and FS have worked collectively on the current changes. Specifically, Jenna Sloan (DOI) is working with FS (Barry Lilly [webmaster] and Kate D'Ambrosio) to propose and implement additional changes within the site to:

- Improve the site navigation
- Update the content
- Remove outdated or irrelevant information
- Refresh the look-and-feel of the site
- Change the federal-centric logos in the banner
- Add FACA reporting requirement as content on the WFEC pages
- Add enhancements to collect public and stakeholder feedback (potential)
- Update contact information and generate an email box and protocol for response
- Update the Success Stories pages and change success story filtering options
- Revise DOI/FS success story submission requirements



Proposal

DOI has also solicited input on additional changes to forestsandrangelands.gov from the National Interagency Fire Center (NIFC) agency external affairs leads. A 10-question evaluation survey was created to solicit feedback from additional audiences (<http://www.surveymonkey.com/s/KJD38KJ>). It is recommended that the WFEC members also solicit and/or provide feedback if deemed appropriate.

Rationale for Recommendation(s):

The proposal is for DOI to continue to work with FS and other organizations/individuals to collect feedback and implement changes on content and structure additions necessary to improve forestsandrangelands.gov. Jenna Sloan would continue to lead this evaluation and revision effort for the DOI and will work with Sandy Cantler (FS) and Barry Lilly (FS Webmaster) to implement changes as appropriate.

The proposal will allow for broad input and consideration of changes through the website evaluation survey and/or individual feedback provided to either Jenna Sloan or Sandy Cantler. Updates on changes and summary of feedback can be provided to the WFEC at a subsequent meeting(s).

Recommendation(s):

WFEC will provide feedback on website improvements and changes by Friday June 24, 2011. Feedback may be provided via the survey (<http://www.surveymonkey.com/s/KJD38KJ>) or directly to Jenna Sloan at 202-606-5858 or Jenna_Sloan@ios.doi.gov.

Decision Method used:

- ☐ Subcommittee Consensus
- ☐ Modified Consensus (explain, i.e. majority, super-majority)
- ☐ Chair Decision

Contact Information:

Jenna Sloan, Strategic Planner, DOI Office of Wildland Fire Coordination
Jenna_Sloan@ios.doi.gov or 202-606-5858



Proposal

WFEC Decision:

- ☐ WFEC Approves
- ☐ WFEC Approves with Modifications (not required to resubmit for WFEC approval)
- ☐ Need More Information (required to come back to WFEC for approval)
- ☐ WFEC Does Not Approve

Roy Johnson, DFO

Date

Notes regarding decision: