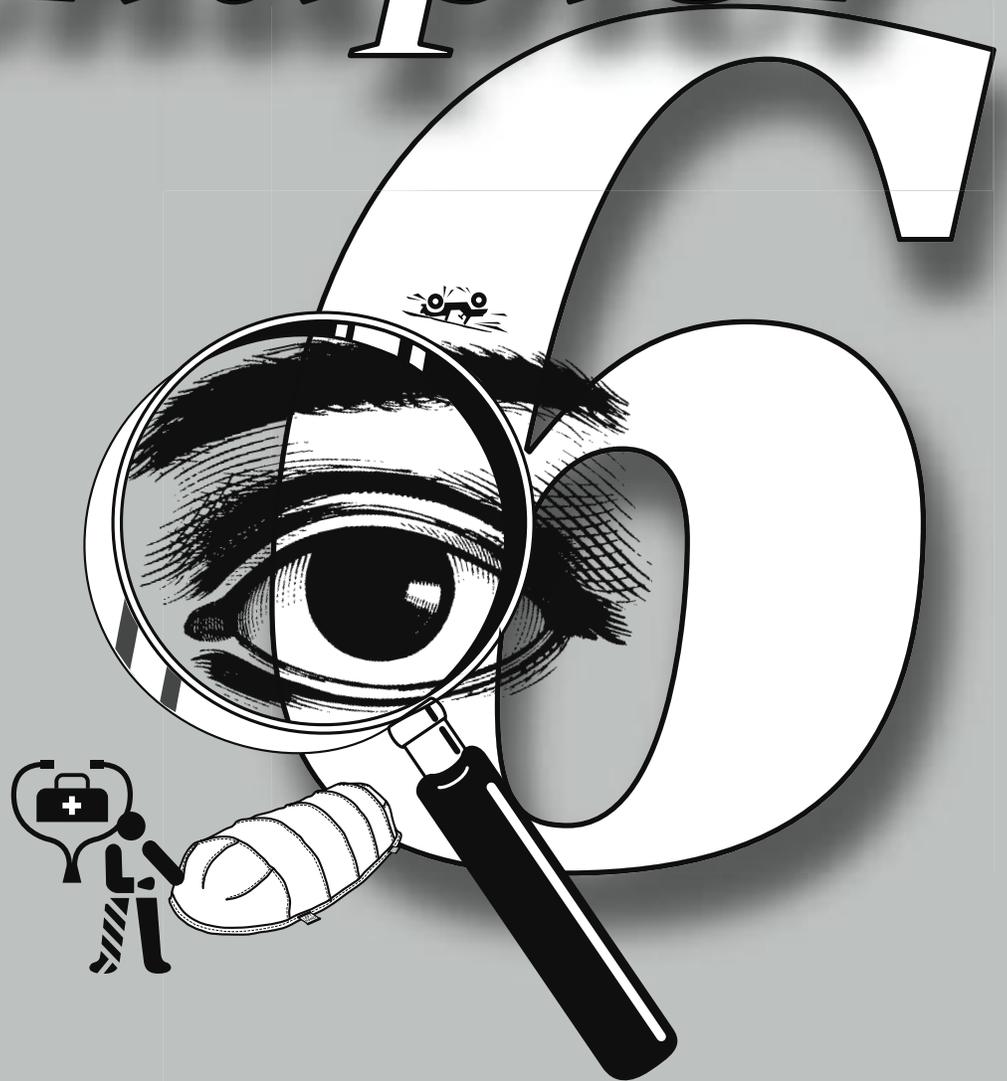


Chapter



***The Investigation Report: Factual and
Management Evaluation Sections***

Chapter 6—The Investigation Report: Factual and Management Evaluation Sections

6.1 General

The accident investigation report will consist of a factual section and a management evaluation section. The sections shall be inserted into a three-ring binder with tabs identifying each. Follow formatting guidelines in this chapter.

The complete investigation report will be presented in draft form to the Accident Review Board (ARB) (exhibit 6–1).

Factual data, such as maps, pictures, and weather data may be included as appendixes to the factual section if they are needed for clarity or understanding of the sequence of events. Other evidence, such as witness statements, autopsy photos, portions of policy, emergency logs, and equipment that are not appropriate or are too bulky to include in the factual section should be placed in the case file. Even though items placed in the case file are not in the factual section, they are used by the ARB for their deliberations.

IMPORTANT: To the maximum extent possible, do not use names or other personally identifying information in the factual or management evaluation sections. Use of names or other personal information usually requires redaction to comply with Privacy Act regulations. To maintain the factual section of the investigation report as an accident prevention tool, use the positions of the individuals involved in the accident, such as dozer operator, crew boss 1, witness 3, instead of their names. This approach allows those interested to understand the roles of the participants and keeps the agency from being accused of covering up relevant data.

Follow the procedures in this chapter to develop the investigation report.

A. The factual section includes: the cover, title sheet, table of contents, executive summary, narrative, findings, causal and contributing factors, and appropriate appendixes. Examples of applicable appendixes are:

- Maps
- Fire behavior synopsis
- Weather summary

The purpose of the factual section for use as an accident prevention tool for management, employees, and other interested agencies. This information about the facts and the findings of the accident will help prevent similar types of accidents.

NOTE: Because the National Transportation Safety Board has the primary responsibility for investigating aviation accidents,

the board will need to approve all aviation preliminary factual sections before they are sent to the ARB. Any subsequent changes by the ARB will need to be approved by the NTSB for accuracy.

With the assistance of the documentation specialist or writer/editor, the chief investigator will prepare the draft factual section for ground investigations and the QTI will prepare the preliminary factual section for aviation investigation accidents.

B. The management evaluation section includes an executive summary and recommendations to prevent or reduce the risk of similar accidents.

With the assistance of the documentation specialist or writer/editor, the chief investigator will prepare a draft management evaluation section for ground investigations, and the QTI will prepare the preliminary management evaluation section for aviation investigation accidents.

C. Formatting Guidelines – Factual section and management evaluation section. For aviation, also refer to the accident investigation template (exhibit 9–3).

Factual Section

- **Cover.** The Freedom of Information Act disclaimer statement (“This document contains materials for internal agency use only that are not releasable under the Freedom of Information Act,” exhibit 6–2).
—For aviation, use exhibit 9–3.
- **Title Sheet.** The name and location of the accident or incident, the date of the accident or incident, and the list of investigation team members and their respective agencies (exhibit 6–3).
—For aviation, use exhibit 9–3.
- **Table of Contents.** Use three-ring binders to set up the document, with dividers for each section of the document. Include page numbers. When a section includes supporting documents (such as maps, photos, or technical reports), refer to the tabs and page numbers of the exhibits and figures.
- **Executive Summary.** The summary briefly explains how the accident occurred. It normally 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.

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

- Who had an active role in the accident?
- Who were injured in the accident?
- Whose actions or inactions initiated or sustained the accident sequence?

- Maps, photographs, illustrations, graphics, figures, and exhibits can be included or referenced in the factual section but need to be properly identified (for example: figure 1, figure 2).
- Findings. Conclusions of the accident investigation team based on the chronological facts, weight of evidence, professional knowledge, and good judgment. They are grouped in the factual section in the following categories: human, material, and environmental.

Each finding should, where possible, be supported by two or more facts from the investigation.

- Causal Factors. Any behavior or omission or deficiency that started or sustained the accident occurrence.
- Contributing Factors. Any behavior or omission or deficiency that contributed to, but did not directly cause or sustain the accident or incidence occurrence.

Appendixes

Appendixes can be used as reference information in the factual section.

Management Evaluation Section

- Executive Summary. The summary briefly explains how the accident occurred. It normally should not exceed one page.
- Recommendations. Suggested measures that management may take to prevent similar accidents. They must be reasonable, feasible, and relate to the causal or contributing factors of the accident. All recommendations must allow for a definite solution to the problem. Every causal factor should have recommendations for future prevention or mitigation, although exceptions may occur.
- Number recommendations consecutively (for example: Recommendation 01, Recommendation 02).

D. Case File

The accident investigation case file has two components: the accident investigation report (factual section and management evaluation section), and the supporting documentation and equipment that are not in the investigation report. Cassette 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 equipment that the chief investigator feels should be kept, such as a hardhat that failed, becomes part of the case file.

The Washington Office, Office of Safety and Occupational Health is the office of record for all Chief's level investigations. The office of record for delegated Chief's level investigations is the safety office of the region or station delegated responsibility to conduct the investigation. However, a copy of the accident investigation report will be forwarded to the Washington Office, Office of Safety and Occupational Health.

Case files will be maintained for the time period required by Forest Service records management rules or FOIA rules as appropriate and then destroyed, except one copy of the accident investigation report that will be kept permanently.

6.1
6.2

6.2 Distribution of the Report

After completing the investigation:

- Label copies of the investigation report: DRAFT—FOR OFFICIAL USE ONLY, and number them: 1 of 10, 2 of 10, and so forth.
- The team leader will contact the appropriate safety manager to determine the number of draft copies that should be forwarded.
—For aviation investigations, a draft copy of the investigation report will also be sent to the National Aviation safety and training manager for a quality assurance review of format and content, and approval before distribution by the appropriate safety manager.
- The appropriate safety manager will establish the Accident Review Board and supply a draft copy of the investigation report for each board member.

EXHIBIT 6-1



United States
Department of
Agriculture

Forest
Service

Washington
Office

1400 Independence Ave. SW.
Washington, DC 20250

File Code: 6730
Route To:

Date:

Subject: Draft Factual and Management Evaluation Sections
(Name and location of accident)
(Date of accident)

To: (Appropriate safety manager)

—FOR OFFICIAL USE ONLY—

Enclosed are the draft factual and management evaluation sections to be presented to the Accident Review Board (ARB). Please contact me when scheduling the ARB so that I can coordinate with the investigation team, which may be required to attend.

If you need additional assistance in this matter, please contact me at (phone).

(Name)
Team Leader

Enclosure



Caring for the Land and Serving People

EXHIBIT 6-2



United States Department of Agriculture
Forest Service

**THIS DOCUMENT CONTAINS MATERIALS FOR INTERNAL AGENCY USE ONLY
THAT ARE NOT RELEASABLE UNDER THE FREEDOM OF INFORMATION ACT**

Accident Investigation Report

(Type of accident)
(Unit, location)
(Region/station/area/institute)
(City, state)

(Date of accident or incident)

Draft copy ____ of ____

Exhibit 6-2

EXHIBIT 6-3

Accident Investigation Report

Accident: (Type of accident or incident and name of individual involved)

Location: (Unit and location where accident occurred)

Date: (Date of accident)

Investigation team leader: (Name, title, location of home unit)

Signature

Date

Investigation chief investigator or qualified technical investigator: (Name, title, location of home unit)

Investigation team members:

(Name, title, location of home unit)

Investigation technical consultants:

(Name, title, location of home unit)

(Name, title, location of home unit)

Chapter



Accident Review Board

Chapter 7—Accident Review Board

7.1 Purpose

The Accident Review Board (ARB) reviews the draft accident investigation report.

The board reviews for adequacy and accepts, modifies, or rejects the accident investigation report. The board's last task is to prepare the accident prevention action plan. This plan is based on the recommendations approved by the ARB.

7.2 Composition of the Accident Review Board

A. The approving authority at the level authorizing the investigation will designate the chairperson and ARB members within 21 days after the accident investigation report has been completed (exhibit 7-1).

B. For aviation, the composition of the ARB shall be determined jointly by the national aviation safety and training manager and the Washington Office, Office of Safety and Occupational Health director.

C. The director of fire and aviation management will determine the need to convene an ARB for incidents with potential.

D. The ARB is comprised of representatives with expertise and knowledge in areas appropriate for reviewing this accident (exhibit 7-2). The members should be limited to three to five individuals.

Persons who are not members of the board may need to attend. These are usually line officers representing the unit where the accident occurred and technical experts to advise the ARB on the feasibility of contemplated actions. Attendees will be limited to individuals who have a connection to the accident or incident and who can contribute in a positive manner. Parties to litigation, insurance representatives, and news media are specifically prohibited from attending any portion of the proceedings. Attendance by non-board members is at the discretion of the chairperson.

7.3 Duties and Responsibilities

A. Chairperson. The chairperson is appointed by the approving authority at the level authorizing the investigation and is charged with managing the ARB proceedings. The chairperson will transmit the final accident investigation report, recommendations, and action plans from the ARB to the approving official (voting).

B. Management Official(s). A management official(s) is selected from outside the unit where the accident occurred. The official provides information and advice to the ARB on management-specific policies, procedures, and so forth, as related to the accident (voting).

C. Safety Manager. A safety manager (usually from outside the unit that experienced the accident) is selected to provide information on safety and occupational health management as related to the accident (nonvoting).

D. Local Management Representative. A local management representative is selected to provide information on local management-specific policies, procedures, and other matters related to the accident (nonvoting).

E. Team Leader. The team leader presents the accident investigation report to the ARB and helps the board develop the accident prevention action plan (nonvoting).

F. Chief Investigator or QTI. The chief investigator or QTI helps the team leader present the accident investigation report (nonvoting).

G. Technical Specialists. These individuals are selected from outside the investigation team and provide technical assistance to the ARB (nonvoting).

H. Recorder. The recorder will document the board's decisions and action plans, and submit that documentation to the chairperson (nonvoting).

7.4 Convening the Accident Review Board

A. Call to order.

The chairperson:

- Calls the ARB to order.
- Introduces the ARB members and others attending the meeting.
- Discusses the review process.

B. Presentation of the draft factual (ground) section/preliminary factual (aviation) section and the draft management evaluation (ground) section/preliminary management evaluation (aviation) section.

The team leader and the chief investigator or QTI:

- Present the draft sections.

The chairperson:

- Opens the discussion and comments.

The voting members:

- May move into closed session to review the draft sections.
- The report will be accepted or rejected based on the following:
 - Contents (narrative, findings, causal factors, contributing factors, and recommendations)
 - Format (required as outlined in chapter 6)
 - If the draft report is accepted, the voting members and the rest of the board resume the meeting.
 - If the draft report is accepted, and the board makes additional recommendations, the recommendations must be feasible, reasonable, and relate to the causes of the accident. (See section 5.4, Developing Recommendations)
 - If the report is rejected, the chairperson will direct the team leader to initiate action to resolve the ARB's concerns and resubmit the report. The chairperson will reconvene the board when the revised report is received.

C. Preparation of the Accident Prevention Action Plan. The ARB, using the report recommendations, prepares an accident prevention action plan. This plan outlines prevention measures, develops timelines, and assigns responsibility for completion of action items. Progress of the plan will be tracked through completion by the appropriate safety official.

Each recommended action from the team must be considered individually to make sure that it would be reasonable to implement. The resources required to implement a recommended corrective action must be weighed against the value received and the practicality of implementation. Corrective actions must allow for a definite solution to the problem. Following are examples of possible recommendations:

- Referral to a management official for corrective actions related to hazardous conditions or practices.
- Referral to a staff area (health and safety, the Missoula Technology and Development Center, or a resource staff) for design of equipment or job procedures to correct the problem.
- Referral to a specialized team for further analysis to determine why specific causal factors existed. The team should include individuals in the areas of concern, such

as management, contracting, procurement, personnel, budget and finance, health and safety, and engineering.

Each action must specify who has lead responsibility, and others with responsibility, for completing the action and any other activities that are needed to support its accomplishment.

The Washington Office, Office of Safety and Occupational Health sends the recommended actions to the responsible staffs for review and comment. Responsible staffs have 10 working days to respond.

Issues that are not directly related to the accident's cause must be administratively separated from the accident prevention recommendations. These subsidiary issues shall be addressed in a separate letter from the team leader or ARB chairperson recommending that the approving authority take action they deem appropriate.

7.5 Final Approval of the Accident Prevention Action Plan and Distribution of the Report

The chairperson forwards the final investigation report, the draft accident prevention action plan and its transmittal letter to the Chief's office for approval (exhibits 7–4 and 7–3). When the Washington Office DASHO assigns the ARB responsibilities to a Region, the final investigation report and the draft accident prevention action plan will be forwarded to the Washington Office, Office of Safety and Occupational Health for review and approval.

7.6 Disposition of the Report and the Case File

- A.** After completing the ARB process, the chairperson will collect all copies of the draft investigation report and notes, and ensure that all are destroyed.
- B.** The case file will remain in the custody of the safety official at the level where the investigation was authorized for internal use only. The case file includes factual data, evidence, witness statements, interviews, and other records that were used during the investigation.
- C.** The chairperson will forward the final investigation report and two copies of the report to the safety manager at the organizational level authorizing the investigation. These

documents must be mailed by a traceable means (such as certified mail).

One copy of the accident investigation report and the accident prevention plan will be sent to the Washington Office Safety and Occupational Health director. One copy of the preliminary aviation accident investigation report will be also sent to the national aviation safety and training manager. One copy of accident investigation reports involving fire operations will also be sent to the national fire operations safety manager.

D. Before returning any physical evidence, the chairperson and the team leader shall contact any other agency that is conducting an ongoing collateral ground investigation to approve release of the physical evidence. When approved, physical evidence will be returned to the property manager, insurance company, or owner under signed receipt. Return of contractor property will be coordinated through the appropriate contracting officer.

For aviation accident investigations and other collateral aviation investigations, release of physical evidence must be approved by the NTSB.

7.7 Release of the Accident Investigation Report and Documents

On approval and release by the WO Forest Service Chief, the accident investigation report will be forwarded to the Forest Service freedom of information officer for review of Freedom of Information Act/Privacy Act issues.

On completion of the review, information and lessons learned from the accident investigation report will be released on the Forest Service Web site and to the public.

Any request made under the Freedom of Information Act for copies of factual section and management evaluation section and supporting documents shall be forwarded immediately to the appropriate Forest Service freedom of information officer. Sections prepared during an investigation may contain information that must be kept private, and they may contain another agency's documents.

If there are privacy or personnel issues and redactions covered by the Freedom of Information Act, a partial release of the factual section and management evaluation section may occur.

7.8 Briefings, Press Releases, Family Meetings

Each accident investigation will have some level of interest and involvement from other governmental agencies, the media, family members, and Forest Service employees. The team leader and chief investigator may be asked to participate in meetings, briefings, and possibly congressional testimony. These contacts should always be done in coordination with the appropriate region, station, or Washington Office liaison personnel. Presentations should emphasize that the investigation is for accident prevention purposes only and should be restricted to factual data and findings from the report. Team recommendations should not be discussed. Instead, reference the ARB action plan if it has been issued.

EXHIBIT 7-1



United States
Department of
Agriculture

Forest
Service

Washington
Office

1400 Independence Ave. SW.
Washington, DC 20250

File code: 6730
Route to:

Date:

Subject: Delegation of Authority
(Name and location of accident)
(Date of accident)

To: (Chairperson, Accident Review Board)

This memorandum formalizes your appointment as chairperson of the Accident Review Board to review the Chief's Office Investigation Report on the _____ fatality that occurred near _____, on _____.

Using the *Accident Investigation Guide* (most current edition), your board will:

- Review the report for content and format.
- Accept or reject the report.
- Develop an action plan based on the report's recommendations.
- Submit the action plan to the Chief for approval.

The (level authorizing the investigation) safety office will assist you with selecting the members of your board and arranging for logistical support.

All travel and associated costs related to the board should be charged to (job code). For additional information, please contact (safety manager at level authorizing the investigation).

Title (Name of official authorizing the board)

cc:
Safety Manager (at level authorizing the investigation)



Caring for the Land and Serving People

Exhibit 7-1

EXHIBIT 7-2

Accident Review Board

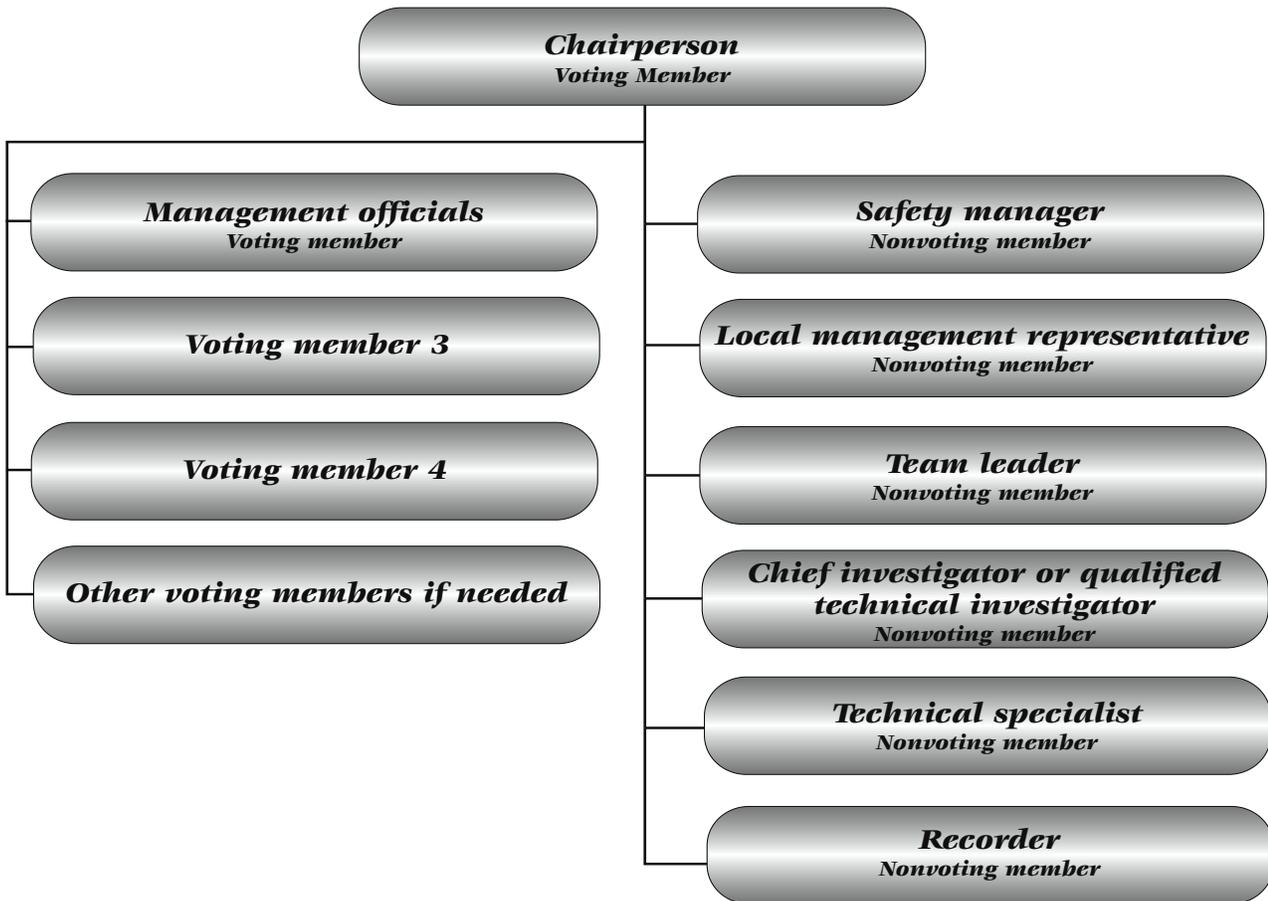


Exhibit 7-2

Exhibit 7-2—Accident Review Board organization chart.

EXHIBIT 7-3

 United States Department of Agriculture	Forest Service	Washington Office	1400 Independence Ave. SW. Washington, DC 20250
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File code: 6730
Route to:

Date:

Subject: Accident Review Board Letter of Transmittal
(Name and location of accident)
(Date of accident)

To: Chief

On (____ date ____) employees working on the (____ name ____) Forest in Region (____) died when the (brief statement of circumstances). A Chief's level accident investigation team was dispatched to investigate the accident. The investigation team's draft factual section and draft management evaluation section were presented to the Chief's Accident Review Board and were accepted (accepted with some revision).

The board has recommended actions to help prevent similar accidents from occurring in the future. Please review and approve the enclosed action plan and letter of transmittal.

If you would like to discuss these actions please contact me.

Chairperson, Accident Review Board

(Enclosure)

 *Caring for the Land and Serving People*

Exhibit 7-3

Exhibit 7-3—Accident Review Board letter of transmittal.

EXHIBIT 7-4

USDA United States
Department of
Agriculture

Forest
Service

Washington
Office

14th and Independence Ave. SW.
Washington, DC 20250

File code: 6730
Route to:

Date:

Subject: Accident Review Board Action Plan, (name and date of accident)

To: (Deputy Chiefs, Regional Foresters, Station Directors concerned with accident or action plan)

A Chief's Office Accident Review Board (ARB) was convened on (date), regarding (type accident and location). The victim was a Forest Service employee who was a member of (unit and region or station).

The Chief's Office Accident Investigation Team presented the factual section and management evaluation section to the ARB. These sections were reviewed and approved (approved after some revision). An action plan was developed by the ARB to focus on key actions that, when implemented, would best help prevent similar mishaps in the future.

I approved the Board's recommended action plan for implementation by the responsible units. Please review the enclosed action plan and take the appropriate steps to ensure completion of each respective action by the assigned date.

When an action item is completed, notify the Office of Safety and Occupational Health (OSOH). Quarterly status reports should be sent to the OSOH for action items with out-year completion dates.

Chief

(Enclosure)

cc:
Directors, (responsible for action items)



Caring for the Land and Serving People