
Glossary and Abbreviations



Used in Investigations

Glossary and Abbreviations Used in Investigations

Accident—An unplanned event that results in an injury, illness, or damage to Forest Service property (see glossary) involving Forest Service employees, volunteers, youth program members, contractors, cooperators, emergency personnel, or the public.

Accident (aircraft)—An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and the time all such persons have disembarked, and in which any person suffers death or serious injury or the aircraft receives substantial damage.

Accident Review Board—The Accident Review Board is an internal Forest Service entity that serves as an independent evaluative body representing Forest Service management regarding an accident or incident.

Aerially Delivered Firefighters—Aerially delivered firefighters are smokejumpers, helitack crew members, rappellers, or other personnel deployed by aircraft to wildland fires or prescribed burns. Accidents associated with aerial delivery will be considered aircraft related if they occur and personnel have safely disembarked from the aircraft.

Administrator—The authorized official on the unit at the time the accident occurred.

Briefing, Expanded (72-hour)—This document contains a brief narrative of the accident based on factual information gathered at the site. It is drafted by the chief investigator within 72 hours after the team arrives at the accident site and is released under the signature of the team leader. The team leader sends the expanded briefing to the safety manager at the organizational level that authorized the investigation. This information is subject to change and may contain errors. Any errors will be corrected when the factual section is completed.

Briefing, Preliminary (24-hour)—This document contains the first details of the accident. It is prepared by the unit and transmitted within 24 hours of the accident to the safety manager at the organizational level that authorized the investigation. This information is subject to change, and may contain errors. Any errors will be corrected when the factual section is completed.

Causal Factor—A causal factor is any behavior, omission, or deficiency that if corrected, eliminated, or avoided probably would have prevented the accident. A causal factor may be related to persons or machines.

Contributing Factor—A contributing factor is any behavior, omission, or deficiency that sets the stage for an accident, or increases the severity of injuries or extent of property damages.

Collateral Investigation—A collateral investigation is an independent, concurrent investigation of a management issue that becomes known during the factual investigation that has no direct causal relationship to the accident. The investigation team leader will notify the appropriate line officer that an issue or issues with management implications has been discovered and will need to be investigated. This notification may result in a collateral investigation.

Entrapment—The National Wildfire Coordinating Group defines entrapment as a situation where personnel are unexpectedly caught in a fire-behavior-related, life-threatening position where planned escape routes and safety zones are absent, inadequate, or have been compromised. An entrapment may or may not include deployment of a fire shelter for its intended purpose. These situations may or may not result in injury.

Equipment—A term used to describe the “hardware” involved in an accident, such as vehicles, systems, and equipment.

Fact—Reality, actuality, truth.

Fatal Injury—Any injury that results in death within 30 days of the accident.

Findings—Findings are statements of significant events or conditions leading to the accident. They are based on facts, the investigation team’s professional knowledge, and the team’s best 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.

First Aid—Any medical treatment provided that does not involve a medical bill. If a physician prescribes medical treatment for and charges for this service, that injury becomes one requiring “medical attention.”

Forest Service Property—Includes lands and resources managed by the Forest Service and privately owned and commercially leased or rented motor vehicles, watercraft, aircraft, specialized equipment, or any other motor vehicle used for official business.

Hazard—A condition associated with an operation that poses an avoidable or unacceptable threat to the safety of personnel, equipment, or property, but has not yet resulted in an accident.

Incident (aircraft)—An occurrence, other than an accident, associated with the operation of an aircraft that affects, or could affect, the safety of operations. Aircraft incidents are documented on Form FS-5700-14, SAFECOM, which is also approved for interagency use as Form OAS-34.

Incident With Potential (aviation)—An incident that narrowly misses being an accident, and in which the circumstances indicate serious potential for substantial damage or injury. The Forest Service national aviation safety and training manager determines classification of an incident with potential.

Incident—Any situation that narrowly misses being an accident in which the circumstances indicate serious potential for substantial damage, injury, or death.

Management Evaluation Section—A management documentation tool for gathering information to develop action plans and make appropriate policy decisions that can help prevent future accidents or incidents.

Medical Attention—An injury, less than a serious injury, for which a physician prescribes medical treatment and charges for this service.

Mishap—A broad term that includes accidents, incidents with potential, and aircraft incidents, but does not include hazards.

Occupational Illness—A physiological harm or loss of capacity produced by systemic infection; continued stress or strain; exposure to toxins, poisons, fumes, and so forth, or other continued and repeated exposures to conditions of the work environment over a long period of time. For practical purposes, an occupational illness is any reported condition that does not meet the definition of occupational injury.

Occupational Injury—A wound or other condition of the body caused by external force, including stress or strain. The time and place the injury occurred and the part of the body or bodily function affected can be identified. An occupational injury is caused by a specific event or series of events within a single day or work shift.

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

Serious Non-Aviation Accident—Any accident that involves either:

- A death.
- Three or more persons hospitalized for other than observation.
- Wildland fire shelter deployments or entrapments
- Property damage that exceeds \$250,000.

Abbreviations Used in Investigations

ARB	Accident Review Board
CFR	Code of Federal Regulations
CI	Chief Investigator
CISD	Critical incident stress debriefing
CISM.....	Critical incident stress management
DASHO.	Designated agency safety and health officer
DOI	U.S. Department of the Interior
DOT	U.S. Department of Transportation
FOIA	Freedom of Information Act
FS	Forest Service
FSM	Forest Service Manual
GPS	Global positioning system
ICP.....	Incident command post
JHA.....	Job hazard analysis
LEI	Law enforcement and investigations
MER.....	Management evaluation report (now referred to as the management evaluation section)
NFES	National fire equipment system
NFFE	National Federation of Federal Employees
NFPA	National Fire Protection Association
NIOSH ..	National Institute of Occupational Safety and Health
NTSB....	National Transportation Safety Board
NWCG ..	National Wildfire Coordinating Group
NWS	National Weather Service
OSHA ...	Occupational Safety and Health Administration
PPE	Personal protective equipment and clothing
QTI	Qualified technical investigator
RO	Regional office
SES	Senior Executive Service
SM	Safety manager
TL	Team leader
USDA....	United States Department of Agriculture
WO	Washington Office

Notes

Notes

Notes

About the Authors

Chuck Whitlock has been a project leader at MTDC since 1998, specializing in safety and health and fire management safety projects. He has served as a Type I safety officer on national incident management teams and as a zone fire management officer on the Wallow-Whitman National Forest. Chuck worked on the Cleveland, Plumas, and Fremont National Forests before coming to the center. Chuck retired from MTDC in December 2003. Please direct all questions and comments to Safety Program Leader Gary Hoshide, e-mail: ghoshide@fs.fed.us

Jerry Taylor Wolf received a bachelor's degree in education from Indiana State University. She began her Forest Service career as a civil engineering technician on the Flathead National Forest. She served as a survey party chief on the Beaverhead-Deerlodge and Lolo National Forests. In 1994 she came to the Missoula Technology and Development Center to work as a mechanical engineering technician. She is now a technical writer/editor.

Library Card

Whitlock, Chuck; Wolf, Jerry Taylor. 2005. Accident Investigation Guide: 2005 Edition. Tech. Rep. 0567—2806—MTDC. Missoula, MT: U.S. Department of Agriculture, Forest Service, Missoula Technology and Development Center. 108 p.

Describes the procedures used by the Washington Office chief's investigation team for serious accidents, aviation accidents, and incidents with potential. These procedures

also apply to all accident and incident investigations conducted at any unit level by any individuals working under the direction and authority of the Forest Service. The guide can be used at the regional, area, forest, or district level following the investigation process.

Keywords: aviation, fatalities, fire fighting, firefighting, guidebooks, incidents, safety at work

Additional single copies of this document may be ordered from:

USDA Forest Service, MTDC
5785 Hwy. 10 West
Missoula, MT 59808-9361
Phone: 406-329-3978
Fax: 406-329-3719
E-mail: wo_mtdc_pubs@fs.fed.us

Electronic copies of MTDC's documents are available on the Internet at:

<http://www.fs.fed.us/t-d/> (Username: t-d, Password: t-d)

For additional information, contact Gary Hoshide at MTDC.

Phone: 406-329-1029
Fax: 406-329-3719
E-mail: ghoshide@fs.fed.us

Forest Service and Bureau of Land Management employees can search a more complete collection of MTDC's documents, videos, and CDs on their internal computer networks at:

<http://fsweb.mtdc.wo.fs.fed.us/search/>