As required by Public Law 107-203, the Office of Inspector General (OIG) of the Department of Agriculture (USDA) conducted an investigation into fatalities that occurred in Cramer Fire in the Salmon-Challis National Forest in Idaho on July 22, 2003.

The statute requires that whenever a Forest Service fatality is caused by wildfire entrapment or burnover, OIG shall "conduct an investigation of the fatality ... completely independent of any investigation of the fatality that is conducted by the Forest Service". After completing its investigation, the statute requires OIG to submit a report containing its investigative findings to the Congress and the Secretary of Agriculture.

The posted items are one copy of the transmittal letters by which OIG submitted our report to the Congress (pp. 2-3) and the OIG investigative report (pp. 4-15).

# USDA

#### UNITED STATES DEPARTMENT OF AGRICULTURE

#### OFFICE OF INSPECTOR GENERAL



Washington, D.C. 20250

FEB - 8 2005

The Honorable J. Dennis Hastert Speaker of the House of Representatives Washington, D.C. 20515

Dear Mr. Speaker:

As required by Public Law 107-203, the Office of Inspector General (OIG) of the Department of Agriculture (USDA) hereby submits its investigative report of the Forest Service (FS) fatalities that occurred in the Cramer Fire in the Salmon-Challis National Forest in Idaho on July 22, 2003.

This statutory requirement stipulates that whenever an FS fatality is caused by wildfire entrapment or burnover, OIG shall "conduct an investigation of the fatality . . . completely inclependent of, any investigation of the fatality that is conducted by the Forest Service." After completing such an investigation, OIG is required to submit a report containing its investigative results to the Secretary of Agriculture and the Congress.

The OIG investigative report of the Cramer Fire fatalities is our third work product since September 2004 related to FS wildland fire activities and programs. On September 23, 2004, OIG issued two separate reviews. The first was the OIG audit report of the FS Firefighting Safety Program.<sup>2</sup> The audit examined FS procedures to implement safety recommendations and FS compliance with established firefighting safety practices. On the same day, OIG also issued an Informational Memorandum to the Chief, Forest Service, which provided an analytical overview as to whether common factors existed in the three most recent wildland fires involving FS fatalities.

To place OIG's investigative findings on FS fatalities in the Cramer Fire in a broader context of how FS firefighting safety programs and management controls can be improved, brief summaries of the key findings of OIG's Firefighting Safety Program Audit and its accompanying Informational Memorandum are contained in the first enclosure (Enclosure 1) to this letter. OIG's official report to the Congress on our investigation of the fatalities at the Cramer Fire is provided in the second enclosure (Enclosure 2).

We hope you will find this report informative. Our intention is that the entirety of OIG's work regarding FS firefighting actions and capabilities in 2004 will assist agency managers in improving their firefighting training, oversight, and effectiveness. Each year thousands of

<sup>1</sup> Public Law 107-203, enacted July 24, 2002.

<sup>2</sup> OIG Audit Report No. 08601-38-SF.

# The Honorable J. Dennis Hastert Page 2

FS personnel display dedication and skill in protecting vast areas of public forests and neighboring communities from devastating forest fires. A thorough examination of the facts and circumstances surrounding any FS fatalities that occur during these efforts can help agency officials refine and strengthen their firefighting policies and procedures and, thereby, limit such tragedies in the future. OIG extends its appreciation to the Chief, Forest Service and FS officials and regional personnel for their assistance and cooperation as OIG conducted this investigation.

A similar letter is being sent to The Honorable Richard B. Cheney, President of the Senate, and The Honorable Mike Johanns, Secretary of Agriculture. Copies will be provided to the leadership of the congressional committees and subcommittees with oversight for the Forest Service.

Sincerely,

Phyllis K. Fong
Inspector General

2 Enclosures

# Enclosure 1: Summaries of the OIG Forest Service Firefighting Safety Program Audit and the OIG Information Memorandum for the Chief, Forest Service.

### A. The OIG Forest Service Firefighting Safety Program Audit

The objectives of the report of OIG's audit of the FS Firefighting Safety Program issued on September 23, 2004 were to (1) assess FS management controls to implement recommendations that arose from investigative findings, accident prevention plans, and other information; (2) assess FS controls to ensure compliance with established firefighting safety standards; and (3) compare FS with other wildland firefighting agencies to improve FS safety practices.

FS has excellent written firefighting safety policies and procedures, and firefighter units interviewed by OIG gave very positive reviews of the agency's emphasis on safety issues in training and operations. FS has improved its coordination with other wildland firefighting organizations by incorporating the National Wildfire Coordinating Group's interagency standardized training requirements and has required additional courses for FS firefighting personnel.

The audit identified elements of FS firefighting safety programs and management responsibilities that require additional attention and improvement. OIG provided recommendations to further improve the agency's firefighting programs and suppression activities. The audit identified four areas in which the agency could strengthen controls in order to enhance firefighting safety: (1) monitoring its ongoing response to prior fire safety recommendations, (2) maintaining centralized records to support firefighter qualifications, (3) conducting administrative investigations on all serious fire accidents (including non-fatal fires), and (4) incorporating firefighting safety standards as critical elements in firefighter performance evaluations.

As of the date of this document, FS has concurred with or acted on eight of OIG's nine recommendations contained in the audit and reached a tentative agreement on the final recommendation regarding accident investigations. At present, the FS' planned response meets OIG objectives for corrective action. In advance of the 2005 fire season, OIG will monitor FS progress in implementing corrective measures to address the management issues identified in the OIG audit, the Informational Memorandum described below, and the OIG Cramer Fire investigation. OIG is currently conducting an audit of the FS' use of private, contract firefighting crews. The audit will include a review of factors that may affect firefighting safety.

#### B. The OIG Informational Memorandum For the Chief, Forest Service

On September 23, 2004, OIG also provided an Informational Memorandum (Memorandum) to the Chief, Forest Service, which examined whether common factors existed in the three most recent wildland fires that involved FS fatalities. OIG analyzed previously published investigative reports and information (produced by other Federal agencies and a private consultant) on the three fires to determine whether there were similarities in the causal factors for the deaths that occurred during three wildland fire burnovers.

OIG's objective in performing the additional analysis contained in the Memorandum was to provide FS officials and congressional committee leaders with information on recurring problems at the three most-recent fires with FS fatalities. The facts and circumstances of these three fatal fires demonstrate the arduous and dangerous task faced by FS and other firefighting personnel to combat wildland fires. As the number of "mega fires"—high intensity fires burning hundreds of thousands of acres—increases in the United States, their unpredictability and the specific hazards they pose to individual firefighters are also increasing. During each of the three fatal fires in question, FS firefighting supervisors and front-line personnel were attempting to control multiple fires, and these fires were in extended attack mode and growing in complexity. The growth of the dangers posed by the fires in each incident strained the availability of FS resources and required firefighting crews to transition from relatively independent action to a more coordinated approach.

The Memorandum concluded that the primary similarity between the three fires was a failure by FS fire suppression personnel to follow one or more important fire safety rules and guidelines and to exercise acceptable supervision and judgment. In each of these three fires, certain firefighters and managers exhibited a lack of situational awareness.<sup>2</sup> The reports emanating from the three fires showed that these failures were pervasive, involving almost every critical aspect of the suppression effort.

OIG analysis of the reports issued on the three fatal fires determined that the following were the FS management issues that were common to each fire.

- Fire suppression personnel violated all of the "10 Standard Fire Orders" and failed to mitigate most of the "18 Watchout Situations."
  - Each fire had rapid growth unexpected by management; fire suppression personnel employed questionable or improper tactics, and did not adjust their tactics as necessary.
- Incident Commanders (IC) failed to maintain clear command and control at critical points, and key personnel lacked situational awareness.
- FS officials failed to provide adequate oversight and supervision to the ICs.

<sup>&</sup>lt;sup>1</sup> The three fires were the South Canyon ("Storm King") Fire (1994), Thirtymile Fire (2001), and the Cramer Fire (2003).

<sup>&</sup>lt;sup>2</sup> Accurately perceiving and assessing the conditions of the fire and the adequacy of current suppression measures.

The 10 Standard Fire Orders" and the "18 Watchout Situations" are provided in the Appendix to this document.

If implemented properly, the corrective actions taken by FS in response to the OIG Firefighting Safety audit, discussed in the previous section, should help to alleviate the problems that are identified in the Informational Memorandum. The FS has also instituted an active hazard abatement monitoring process; this is a formal, structured process to monitor the status of outstanding recommendations from all investigations, audits, and reviews. If systematically utilized, this process could help ensure a more productive management review of, and accountability for, the performance of FS fire suppression personnel in the field.

## Enclosure 2: The OIG Investigation of the Fatalities Occurring in the Cramer Fire

OIG's statutory mandate to investigate the Cramer Fire is established by Public Law 107-203, enacted on July 24, 2002.<sup>4</sup> It provides:

Sec. 1: "In the case of each fatality of an officer or employee of the Forest Service that occurs due to wildfire entrapment or burnover, the Inspector General of the Department of Agriculture shall conduct an investigation of the fatality. The investigation shall not rely on, and shall be completely independent of, any investigation of the fatality that is conducted by the Forest Service."

Sec. 2: "As soon as possible after completing an investigation under section 1, the Inspector General of the Department of Agriculture shall submit to Congress and the Secretary of Agriculture a report containing the results of the investigation."

#### A. OIG's Investigative Procedures

The day after the fatalities, July 23, 2003, OIG initiated its investigation by dispatching a team of senior investigative personnel to the site of the fire in Idaho. Additionally, Federal investigators from the Office of Safety and Health Administration (OSHA) and FS initiated their own investigations on the same day.

OIG Special Agents examined the site of the fatalities and the fire's location. Over the course of the next year, OIG Special Agents conducted independent interviews of individuals relevant to the investigation, including

- the firefighters involved in fighting the Cramer Fire, employed by both FS and private contractors;
- individuals who were involved in firefighting, contracting, training and equipment matters, and who are experts in fire behavior, weather conditions, and fire history in that area; and
- other personnel on the Forest and in the region who were knowledgeable of the incident.

Additionally, OIG Special Agents reviewed FS policies and regulations pertaining to firefighting safety, tactics, procedures, and training. OIG Special Agents closely coordinated their efforts with the U.S. Attorney for the District of Idaho to evaluate the conduct of FS employees who were involved in fighting the Cramer Fire, and participated in a follow-up visit to the Cramer Fire site with two Assistant U.S. Attorneys from that office, along with two senior FS Fire and Aviation Management officials. The OIG Assistant Special Agent-in-Charge also met with the families of the two deceased firefighters and explained OIG's investigative process and its status.

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<sup>&</sup>lt;sup>4</sup> 7 U.S.C. 2270, et. seq.

In order to assist FS officials in their evaluation of various firefighter safety issues and the conduct of FS personnel in the Cramer Fire, OIG investigators kept FS regional and FS Accident Investigation Team (FSAIT) officials advised of key OIG findings during the course of the investigation. OIG also monitored the progress of the FSAIT that conducted the separate FS investigation.

### B. Investigative Summary: The Cramer Fire and Efforts to Contain It

On July 19, 2003, a lightning strike started a fire in the Salmon-Challis National Forest (SCNF). FS designated it as the "Cramer Fire." The fire was located approximately 25 miles northwest of Salmon, Idaho. The fire occurred in rocky terrain containing deep gullies and steep ridges, making it a difficult area for fire fighting personnel to traverse by foot.

The following day, July 20, a SCNF Fire Management Officer told the North Fork and Middle Fork District Ranger that the Cramer Fire was burning in their district. Later in the day, the Initial Incident Commander (IIC) of the fire suppression effort conducted a helicopter surveillance of the fire. After this flight, the IIC, an Incident Commander (IC) trainee, and a 5-person fire fighting crew were flown to a helispot located on the east flank of the fire. This area was designated "H-1."

By the evening of July 20, the fire had spread approximately three acres through the sagebrush and grass near the bottom of the fire and into timber near the top. High temperatures, low humidity, and winds gusting from 10-20 miles per hour added to the unfavorable firefighting conditions. Rocks and large trees were rolling from the top of the fire into its middle and lower sections. The IIC determined that evening that the conditions were too dangerous for the fire crew to engage the fire. As a result, the ground crew slept at the fire that night, while both the IIC and IC trainee monitored the fire and ensured the safety of the crew. Throughout the night, the Cramer Fire continued to spread.

As a result, on Monday, July 21, 2003, the fire had grown to a "Type 3" fire. FS categorizes each fire according to its severity and the level of training required to control it. FS maintains a trained staff of managers and field personnel to control and extinguish forest fires and categorizes them on a scale, which descends from a "Type 1" to a "Type 5," based upon their individual knowledge, skills, training, and experience. According to these FS categories, a Type 1 designation is for ICs considered to have the highest level of skills and experience, and who are thereby assigned to handle more complex and challenging fires. A Type 5 IC has the lowest level of skills and experience, according to FS, and would be assigned to control the least challenging fires. As a result of the Cramer Fire growing to a Type 3 fire, a new IC with the requisite training and experience was assigned to lead FS suppression efforts.

The new IC who took command of Cramer Fire suppression efforts on July 21 was qualified by FS as a Type 3; the original IIC whom he replaced was categorized as a Type 4. As a Type 3, the IC had greater resources available for firefighting, including more firefighting teams and aircraft. By mid-afternoon, the IC inserted a firefighting crew at H-1 to assist the original ground crew working the east flank of the fire. Additionally, one aerial fire-retardant drop and several

helicopter water-bucket drops were made in an attempt to control the fire. However, the winds picked up and the fire doubled in size causing the IC to pull everyone from the fire zone. By evening the fire had spread to 200 acres.

On July 22, 2003, the conditions for firefighting efforts had worsened. The temperature was around 100 degrees, humidity was very low, winds were gusting at 10-20 miles an hour, and visibility was limited. To make the situation worse, the vegetation was a mixture of grassland and timber, thereby making the area highly combustible. During a reconnaissance flight over the fire that morning, the Assistant Helitack Foreman (Foreman) and the IC discussed tactics to control and contain the fire and selected a new, second helispot. The Foreman, who worked directly for the IC, was responsible for evaluating a potential helispot for safe landing and takeoff, pointing out to the rappellers the safety routes and safety zones previously identified by the IC, instructing the rappellers on their work assignment, and supervising the actual rappel operation from the helicopter to the ground.

At approximately 0930 hours, two helitack firefighters, Shane Heath and Jeff Allen, were taken via helicopter to be inserted into the new helispot, which was designated as "H-2." Heath and Allen were instructed by the Foreman to clear some trees from the area to make an adequate helispot at "H-2." The IC then assigned the Foreman to be the helibase manager at Cove Creek, several miles away from the Cramer Fire, where he participated in shuttling fire crews into "H-1."

Meanwhile, helicopters began shuttling three different firefighting crews to H-1, located on the east flank. One crew was comprised of FS employees and the other two crews were private crews under contract with FS. A fourth crew, also comprised of contract firefighters, was waiting for H-2 to be cleared by helitack firefighters Heath and Allen as a helicopter-landing zone.

At approximately 1100 hours and 1230 hours, the Foreman checked with Heath and Allen regarding the status of their work at H-2. Heath and Allen said they needed a little more time, estimating it would take them an additional 30-45 minutes to complete the clearing. The Foreman never asked why it was taking so long for them to clear the half dozen trees at H-2. Approximately 4½ hours after Heath and Allen rappelled to H-2, the Foreman became concerned.

Throughout the morning and early afternoon of July 22, 2003, the fire spread below H-1 on the east flank of the fire and near the position of H-2 on the west flank. Below H-2, the fire spread up and over the ridge where Heath and Allen were working. According to the statement of the IC given to the FSAIT,<sup>5</sup> no lookout was posted to keep track of the fire where Heath and Allen were located.

At approximately 1326 hours, the IC flew a reconnaissance of the fire. He flew over H-1 and could not land because of smoke. He spoke to the strike team leader, who informed the IC that the three crews had moved to their safety zones. The IC then flew to the west side of the fire and

<sup>&</sup>lt;sup>5</sup> Per the advice of his attorney, the Incident Commander declined OIG's request for an interview about events at the Cramer Fire.

observed that the fire had moved beyond the west ridge into a new drainage called Cache Bar, which extended up to H-2.

The IC then flew up to the H-2 area and spoke via radio to Heath and Allen about their status. Allen and Heath told the IC that they needed a little more time to complete the job. The IC did not inform Allen and Heath of the following material facts: the crews at H-1 had moved to their safety zones; the IC would probably not use H-2 for crew insertion that day as originally planned; and there was new fire spread below them in the Cache Bar drainage.

According to interviews conducted by OIG of the strike team leader, the Foreman, and other fire personnel, the spread of fire into the Cache Bar drainage marked a critical "trigger point" in the fire's behavior and should have resulted in the IC taking immediate mitigating action to ensure Heath and Allen's safety. Among the firefighters on site, however, only the IC had this vital information. When the lead plane pilot above the fire discussed the critical spread of the fire into the Cache Bar drainage via the radio with the IC, the pilot was unaware that any rappellers were still at H-2, and the IC did not mention this fact.

By 1400 hours, the fire on the east flank was such that the ground crews were ordered to move away from the fire to their safety zones. The safety zones were areas that had burned previously. Shortly after all those ground crews had moved, the fire burned over their previous position at H-1.

The strike team leader on the Cramer Fire (who was at H-1) directed the activity of three crews on the fire, one comprised of FS employees and two contract crews. He observed several problems at H-1, which caused him to pull the FS crew and the two contract crews off the fire. His reason for pulling the crews was due not to the fire's behavior, but from his observation that the contract crews were not following instructions.<sup>6</sup>

In his interview with OIG investigators, the Foreman stated the IC spoke with him at 1400 hours about the possibility of not using H-2 that day, even though Heath and Allen had been inserted 4½ hours previously. The Foreman then stated that the IC was "wishy-washy on whether he wanted to use it or not."

Following his conversation with the IC, the Foreman requested that the next helicopter flight crew determine whether H-2 was "landable." He advised the Aviation Base Radio Operator (ABRO) to check on the status of the firefighters' work on H-2 and advised that if the helispot was completed, Heath and Allen were to be pulled from H-2. In contrast to the IC, the Foreman and the ABRO were not aware at this time of the fire spread into Cache Bar. Therefore, they did not convey this information to the two firefighters or suggest that they be promptly withdrawn.

By 1430 hours, the fire in the Cache Bar drainage had become an active fire front. The drainage was west of and below Heath and Allen, who continued to clear the helispot at H-2, unaware of the threat on the west slope below them. At approximately 1445 hours, following lunch, the

<sup>&</sup>lt;sup>6</sup> OIG's investigation determined that the private contracting crews at the Cramer Fire performed poorly. OIG is continuing to work with the U.S. Attorney's Office for the District of Oregon regarding the investigative findings on the private crews.

Foreman asked if Heath and Allen were back and learned they were still on H-2. According to radio log transcripts, at 1447 hours, the IC decided to pull Heath and Allen from their position. However the IC conveyed no timely instructions to any subordinate personnel to implement this decision. Heath and Allen were not notified at this time of the threat to the west or ordered to safety zones.

By approximately 1500 hours, the winds at H-2 had increased, moving the fire rapidly upcanyon. As the fire began to cause heavy smoke to blow over H-2, Heath and Allen themselves called the helibase and requested they be taken off the helispot. A review of the handwritten Helibase log for July 22, 2003, showed that at 1505 hours and again at 1509 hours, Heath and Allen requested immediate pickup. At 1513, Heath and Allen reported that fire and smoke was below them and again asked for immediate pick up. Six minutes later, at 1519 hours, Heath and Allen contacted the helibase asking the status of the helicopter. The Helibase log indicates that at 1520 hours, the helicopter arrived over H-2 but was unable to land due to heavy smoke. Heath and Allen then attempted to flee up the ridge on foot. They made it approximately 75-100 yards from H-2, before the fire burned over and around H-2, killing Heath and Allen shortly after their last radio transmission. The temperature of the fire was estimated to have been 1300-2000°F when it overtook Heath and Allen.

Numerous attempts were made to locate the firefighters after the burnover. Two personnel rappelled below H-2 later in the afternoon and were notified by a helicopter over the area that it had located Heath and Allen. They flagged and secured the fatalities site. Two more personnel were delivered close to H-2 and the four spent the night near H-2.

On the morning of July 23, 2003, FS personnel assisted the Lemhi County Sheriff and a deputy in removing the bodies of Heath and Allen, which were located on a ridge below Long Tom Lookout and above Cache Bar on the Snake River. The recovery effort determined that neither firefighter's personal fire shelter had been deployed. However, fires studied by the Missoula Technology Development Center have shown that under testing, conditions inside a fire shelter are not survivable at 1300°F or greater. An autopsy conducted on the body of Shane Heath determined that the cause of death was thermal injury secondary to a forest fire.

#### C. Investigative Findings

Documentary and testimonial evidence obtained during the OIG investigation shows that the actions/inactions of FS employees and their failure to follow the Standard Firefighting Orders and the 18 Watch Out Situations contributed to the Cramer fatalities. The FS personnel leading efforts to confine and contain the Cramer Fire displayed poor judgment in, among other areas, failing to deploy lookouts; failing to adequately monitor the status of the two firefighters who were landed onto a questionable helispot (H-2) and to notify them that the fire had spread directly below them; and, finally, failing to order them to a safety zone in a timely manner. Had existing FS fire suppression policies and tactics been followed in a prudent manner, particularly by the IC, the fatalities of Heath and Allen may have been prevented.

OIG's investigative findings are consistent with those reached by FS from its investigation. Based on FS' own "Accident Investigation Factual Report" dated December 19, 2003, FS determined that the IC and his team violated all of FS' "Standard Firefighting Orders" as well as nine of FS' "18 Watch Out Situations" (Appendix). According to the FS report, the IC and his team failed in the following: to stay informed on fire weather conditions and forecast, to identify the behavior of the fire, to base their actions on the current and expected behavior of the fire, to identify adequate escape routes and safety zones, to post lookouts in vantage points to protect all team members, to maintain prompt communications with the firefighting team members, to think clearly and act decisively, to provide clear instructions and ensure they were understood, and to fight the fire aggressively, while providing for safety first.

Additionally, the FS report indicated the decision regarding the placement of lookouts was not made in accordance with established FS guidelines. By not establishing appropriate lookouts, the IC compromised the safety of crews assigned to H-1 and endangered the lives of Heath and Allen at H-2.

Furthermore, statements provided to OIG investigators by SCNF personnel who were involved in the Cramer Fire, and who had experience working on other fires in the Forest, criticized the leadership of the District Ranger for the Northfork/Middlefork Ranger District where the fire occurred. While a District Ranger delegates primary authority to the IC to direct efforts to confine and contain a Type III fire, the District Ranger has an obligation to investigate and potentially act upon credible information he or she receives about problems that may arise. The District Ranger has oversight and direct line authority over the IC and fire suppression operations occurring at the district level. A number of SCNF personnel who provided statements to OIG said their views on firefighting-related matters, both generally and with respect to events that occurred at the Cramer Fire, were, in their estimation, often not properly considered or acted upon by the District Ranger.

One example is the statements provided separately to OIG and FS investigators by the SCNF Aviation Officer, who monitored radio traffic at the Cramer Fire on July 21, 2003. The Aviation Officer said he expressed his strong concerns about the IC's "disorganized" direction of suppression efforts at the fire to several FS personnel present in the dispatch office on July 21, including the Forest's Fire Operations Staff Officer. The Fire Operations Staff Officer told FSAIT interviewers that he conveyed the Aviation Officer's concerns about the "disorganized" efforts at the Cramer Fire to the District Ranger. The Aviation Officer stated that on the following morning, July 22, he encountered the District Ranger at a meeting and told her directly of his concerns about the competency of the IC at the Cramer Fire. The Aviation Officer said he advised the District Ranger that the IC had performed poorly the day before and should be pulled off the fire.

<sup>&</sup>lt;sup>7</sup> Another FS official present, the Fire Center Manager, provided a sworn statement to OIG corroborating that the Aviation Officer raised these concerns.

<sup>&</sup>lt;sup>8</sup> Per the advice of his attorney, the Operations Staff Officer declined OIG's request for an interview on the events at the Cramer Fire.

The District Ranger was interviewed twice by FSAIT investigators. In the first interview, the District Ranger said she had no discussions with FS personnel regarding the Cramer Fire on Tuesday, July 22. In the second interview, the District Ranger said that on July 22, before the fatalities occurred, she asked the Aviation Officer what his concerns regarding the fire were about and if they pertained to the IC. The District Ranger said the Aviation Officer responded that he had concerns about the use of resources (helicopter, firefighting crews) at the Cramer Fire, not about the performance of the IC.

The FS' "Management Evaluation Report" on the Cramer Fatalities determined that there were nine "Causal Factors" for the fatalities. The first factor listed was, "Management Oversight was inadequate." The FS findings supporting this factor include the following statement: "Once informed of the (Aviation Officer's) concern, the District Ranger did not follow up assertively to assess the suppression situation to determine whether or not problems existed."

#### D. The Results of Federal Investigations into the Cramer Fire.

On December 19, 2003, the FSAIT issued its "Accident Investigation Factual Report" and the companion "Management Evaluation Report," which documents the FS findings regarding the Cramer fire fatalities. On March 26, 2004, OSHA issued its report citing FS for serious unsafe or unhealthy working conditions by not providing a place of employment free from recognized hazards, which were causing or likely to cause death or serious physical harm. OSHA determined that the employees were exposed to the hazards of burns, smoke inhalation, and death from fire-related causes. In addition, they cited FS for violating the "Standard Firefighting Orders" and 14 of the "18 Watch Out Situations."

In May 2004, FS initiated various administrative actions against six FS employees relevant to the Cramer Fire fatalities. None of the six are currently working in the Salmon-Challis National Forest. OIG submitted investigative findings to FS in June 2004.

On November 30, 2004, the U.S. Attorney for the District of Idaho announced that the IC on the Cramer fire was terminated from his employment with FS and placed on Federal probation. The announcement stated that "based upon OIG's investigation," the U.S. Attorney concluded that the IC was "negligent in providing proper supervision and safety to the two firefighters who lost their lives." The agreement entered into between the U.S. Attorney's Office, the U.S. Probation Office, and the IC stipulates that the IC was terminated from FS effective November 13 and that he must serve 18 months of Federal probation. If his probation is successfully completed, the IC will not be prosecuted.

<sup>&</sup>lt;sup>9</sup> Per the advice of her attorney, the District Ranger declined OIG's request for an interview on the events at the Cramer Fire.

#### **APPENDIX**

#### Background

The original ten "Standard Firefighting Orders" were developed in 1957 by a task force commissioned by the USDA-Forest Service Chief Richard E. McArdle. The task force reviewed the records of 16 tragedy fires that occurred from 1937 to 1956. The "Standard Firefighting Orders" were based in part on the successful "General Orders" used by the United States Armed Forces. The "Standard Firefighting Orders" are organized in a deliberate and sequential way to be implemented systematically and applied to all fire situations. Shortly after the "Standard Firefighting Orders" were incorporated into firefighter training, the "18 Situations That Shout Watch Out" were developed. These 18 situations are more specific and cautionary than the "Standard Fire Orders" and described situations that expand the 10 points of the Fire Orders. If firefighters follow the "Standard Firefighting Orders" and are alerted to the "18 Watch Out Situations," much of the risk of firefighting can be reduced. (Cited from the U.S. Forest Service Website)

#### STANDARD FIREFIGHTING ORDERS

#### Fire Behavior

- 1. Keep informed on fire weather conditions and forecasts.
- 2. Know what your fire is doing at all times.
- 3. Base all actions on current and expected behavior of the fire.

#### Fireland Safety

- 4. Identify escape routes and make them known.
- 5. Post lookouts when there is possible danger.
- 6. Be alert. Keep calm. Think clearly. Act decisively.

#### **Organizational Control**

- 7. Maintain prompt communications with your forces, your supervisor and adjoining forces.
- 8. Give clear instructions and insure they are understood.
- 9. Maintain control of your forces at all times.

#### If 1-9 are considered, then...

10. Fight fire aggressively, having provided for safety first.

The 10 standard Fire Orders are firm. We Don't Break Them; We Don't Bend Them. All firefighters have a Right to a Safe Assignment.

#### 18 WATCH OUT SITUATIONS

Fire not scouted and sized up.

- 2. In country not seen in daylight.
- 3 Safety zones and escape routes not identified.
- 4. Unfamiliar with weather and local factors influencing fire behavior.
- 5. Uninformed on strategy, tactics, and hazards.
- 6. Instructions and assignments not clear.
- 7. No communication link between crewmembers and supervisors.
- 8. Constructing line without safe anchor point.
- 9. Building line downhill with fire below.
- 10. Attempting frontal assault on fire.
- 11. Unburned fuel between you and the fire.
- 12. Cannot see main fire, not in contact with anyone who can.
- 13. On a hillside where rolling material can ignite fuel below.
- 14. Weather gets hotter and drier.
- 15. Wind increases and/or changes direction.
- 16. Getting frequent spot fires across line.
- 17. Terrain or fuels make escape to safety zones difficult.
- 18. Feel like taking a nap near fireline.