

Wildland Fire Investigator Certification A National Initiative

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Every year, over 100,000 wildfires in the United States burn an average of 4 million acres of wildland resources and hundreds of homes and other structures within the rapidly expanding urban/wildland interface zones. Annual property losses and suppression costs have reached staggering proportions. In 2000, federal wildland agencies expended approximately \$1,362,367,000 to suppress these fires. Statistics from the National Interagency Fire Center in Boise, Idaho show that lightning causes approximately 15% of the fires, human negligence and arson are responsible for the remainder. (1)

Most state & local and all federal wildland fire suppression agencies are required to determine the cause of these fires. Accurately identifying fire cause trends is critical to the success of a fire prevention program, and it is equally important to determine responsibility for the fire's cause. In cases that involve negligent acts, the responsible party may be pursued for recovery of suppression costs and property damages. Finally, in those cases involving arson or other criminal acts, identifying and apprehending the perpetrator is of vital public interest.

Over the past decade, the fire investigation profession has undergone significant changes. These have, in part, resulted from Supreme Court decisions and the evolution of the National Fire Protection Association's (NFPA) Guide for Fire and Explosion Investigation, (NFPA 921), into a document that is used with increasing frequency by investigators and litigators alike.

One of the responses to these changes has been an overall effort to increase professional credibility of fire investigators through the establishment of Certified Fire Investigator (CFI) programs. These programs have a variety of sponsors, ranging from professional associations to government agencies. They all share an underlying objective: to establish minimum professional standards and a consistent scientific methodology for conducting fire investigations. One weakness in the existing CFI programs, is the lack of specific standards for the wildland fire investigator, which are significantly different from those of a structure fire investigator.

Unfortunately, the mission of developing guidelines and standards for the wildland fire investigator has been pursued with varying degrees of diligence and consistency nationally. In many cases, there have been no clear directions for conducting wildland fire investigations, few specific job descriptions, and a hodge-podge of training curriculum.

In January 2000, a group of wildland fire investigators met with the National Wildfire Coordinating Group, (NWCG). The NWCG is an umbrella group composed of representatives from state, local and federal wildland fire management agencies, the NFPA, the New Zealand, and Australian fire services. Congress established the NWCG for the purpose of coordinating wildland fire standardization issues nationally. Their mission is carried out through the chartering of working teams to identify and solve problems or issues within a specific area of wildland fire management. There are currently thirteen working teams that address areas ranging from Training to Incident Operation Standards. (2)

The investigators' presentation, made to the NWCG Board, focused on the need for establishing professional standards and a consistent methodology for the wildland fire investigator. Because the skills and knowledge required to conduct a wildland fire investigation are different from a structure fire investigation, the representatives felt that current CFI programs did not adequately address the needs of the wildland fire management community. The proposal to the NWCG board was to establish a professional standard and accompanying training curriculum specifically for wildland fire investigators.

In May of 2000, the NWCG Board unanimously approved the chartering of the Wildland Fire Investigation Working Team. Senior fire investigators from the United States Forest Service, Oregon Department of Forestry, Bureau of Land Management, Minnesota Department of Natural Resources, (representing IAAI and the Great Lakes Forest Fire Compact), Bureau of Indian Affairs, South Carolina Forestry Commission, Florida State Fire Marshal, (representing the National Association of State Fire Marshals), Federal Law Enforcement Training Center, Tennessee Valley Authority, National Park Service, California Department of Forestry and Fire Protection, (representing the Western States Fire Managers Association), Saskatchewan Environmental Resource Ministry, Alberta Sustainable Resource Development, New Zealand Rural Fire Service and the New South Wales, Australia, Rural Fire Service are members of the team.

The Canadian members also represent interests of the Canadian Interagency Forest Fire Centre and their respective National Training Working Group and Resource Management Working Group. Their effort is working toward a national wildland fire investigation standard in Canada.

The wildland fire investigation working team first met in June of 2000 and prepared a set of draft standards for certification of wildland fire investigators. These draft standards were distributed to a wide variety of agencies and individuals for peer review. The working team received, reviewed, and evaluated approximately 160 written comments, which were then used to draft the proposed standards. The final proposed standards were reviewed and approved by both the NWCG Incident Operations Standards and Training Working Teams. Subsequently, the NWCG Board approved the standards at their October, 2001 meeting. The standards will officially be transmitted to member agencies for implementation upon completion of the accompanying training programs and Position

Task Books. Upon completion of the final packages, the NWCG position descriptions will be published in the Wildland and Prescribed Fire Qualification System Guide, (PMS 310-1), and will be the minimum standards for all interagency fire assignments.

In accordance with NWCG policy, the standards are progressively tiered and allow for certification at each level. The standards are performance based and will require the successful completion of a Position Task Book, written proficiency exam and a required training session at each level. Additional training that will assist in the development of the trainee's skills is also recommended for each level.

The three levels of certification are described as Wildland Fire Investigator (WFI), Type 3 through Type 1. At the lowest or entry level, Type 3, the standard will establish minimum skills needed to successfully conduct origin and cause determination investigations. These skills will focus on fire behavior, fire ignition sources and factors, burn pattern interpretation and basic investigation methodology and techniques.

At the WFI-Type 2 level, the focus will be on those intermediate skills needed to successfully develop more complex civil and criminal cases. Additional skills required for certification at this level will include an intermediate knowledge of fire behavior and origin and cause determination, the ability to manage an investigation team, an enhanced knowledge of civil and criminal processes, investigation strategies specific to serial arson cases and a knowledge of the investigation methodologies associated with those phases of an investigation beyond the preliminary origin and cause determination.

At the WFI-Type 1 level, the investigator will be expected to manage large and complex cases. The focus of the certification, at this level, will be on the development of advanced fire behavior knowledge and the management skills needed to serve as an Incident Commander of a complex investigation organization associated with major civil and criminal investigations.

Now that the standards have been approved, development of the accompanying training courses is underway. The working team, in concert with the NWCG Training Development Staff at the National Interagency Fire Center, has begun work on revising the existing Wildfire Origin and Cause Determination course, (previously designated as P-151; new course designator, FI-210). The new course should be available for pilot testing during the spring of 2002. The development and testing of the two additional levels of training for the Type 2 and Type 1 fire investigator is expected to be completed by late 2003 or early 2004. Development of the accompanying Position Task Books for each level of certification is taking place concurrently with the course development.

Once the training packages and Position Task Books are completed, NWCG will transmit the standard to all member agencies for implementation. Like other national interagency fire management positions contained in PMS 310-1, each agency that wishes to certify their personnel will be responsible for establishing a certification program, that as a minimum, is in accordance with NWCG standards and procedures.

The establishment of professional standards and a peer-reviewed methodology for the investigation of wildland fires is long overdue. The NWCG certification program will help ensure that investigations are being conducted with consistent standards nationally and are taking advantage of the most current scientific and technical information available.

Legal authority is inherently problematic when exchanging investigative personnel between jurisdictions. The Wildland Fire Investigation Working Team will study this issue and develop guidance to minimize problems during periods of mobilization.

Additional information on this subject may be obtained by visiting the NWCG website at www.nwcg.gov. Link to the Working Teams page and click on the Fire Investigation Working Team tab. You may contact the working team chair or co-chair through their respective e-mail addresses as well.

(1) National Interagency Fire Center, Wildland Fire Statistics. (n.d.)

Retrieved February 28, 2002 from:

<http://www.nifc.gov/stats/wildlandfirestats.html>

(2) NWCG, Miscellaneous Information: Updated Working Team List; July 12, 2001; National Wildfire Coordinating Group; Boise, ID

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Wildland Fire Investigation Working Team Update

Since its chartering, the working team has accomplished several phases of the long-term project of developing national standards for wildland fire investigators. These are periodically updated here on this web page. The date of this posting is June 2003. For more recent information, please contact Paul Steensland, Chair.

- 1) Submitted supplements to PMS 310 and 410 Fire Investigation sections.
- 2) Received approval to renumber the course curriculum. The new numbering system is as follows:
 - FI-110: Origin Protection for First Responders (Replaces the old P-130 course)
 - FI-210: Wildland Fire Origin and Cause Determination (Replaces the old P-151 course)
 - FI-310: Wildland Fire Investigation-Case Development (New course)
 - FI-410: Wildland Fire Investigation- Case Management (New course)

- 3) Prepared final draft of the FI-110 course revision. This course is designed to replace the old P-130 course. When completed, it may be used as a self-directed study course or may be taught in a classroom. The course will be alpha-tested at the end of June and beta tested in mid-summer 2003. Estimated availability of this course will be late fall 2003 or early winter 2004.
- 4) Prepared final draft of the FI-210 course. Alpha testing is completed and the beta test is scheduled for mid-July. Estimated availability of this course will be late fall 2003 or early winter 2004. This course is a complete revision of the old P-151 and features extensive new material.
- 5) Completed final drafts of position taskbooks. Taskbooks will be submitted for approval this summer.
- 6) Added representatives from Australia and New Zealand to WT.
- 7) Received IAAI endorsement of FI-210 curriculum.
- 8) WFIWT Chair Steensland appointed to NFPA 1033 Technical Committee.
- 9) Began development of Powerline and Railroad Fire Investigation courses. These courses will be developed as supplemental, stand alone courses designed to enhance the skills and knowledge of the Type 3 investigator.