



# U.S. SENATE COMMITTEE ON COMMERCE, SCIENCE & TRANSPORTATION



[committee info](#) | [hearings](#) | [markups](#) | [nominations](#) | [legislation](#) | [news room](#) | [contact](#)

[Home](#) > [Hearings](#) > Witness List

## Fire Research Act

Full Committee Hearing

Wednesday, April 30 2003 - 9:30 AM - Russell 253

**Description:** The hearing will examine the reauthorization of the United States Fire Administration (USFA) and its transition to the Department of Homeland Security (DHS); S. 321, the Firefighting Research and Coordination Act; and other issues relating to homeland security and the needs of firefighters. Sen. McCain will preside. Witnesses will be announced at a later time.

### LINKS

[▶ Back to Hearing List](#)

### Opening Remarks:

#### **The Honorable Curt Weldon**

, U.S. House of Representatives

#### **[The Honorable Dave Camp](#)**

, U.S. House of Representatives

### Panel 1:

#### **[The Honorable Arden L. Bement, Jr.](#)**

Director, National Institute of Standards and Technology, U.S. Department of Commerce

#### **[The Honorable R. David Paulison](#)**

Director, Preparedness Division, Emergency Preparedness and Response Directorate, U.S. Department of Homeland Security

### Panel 2:

#### **[Chief Randy R. Bruegman](#)**

President, International Association of Fire Chiefs

#### **[Mr. Kevin O'Connor](#)**

Assistant to the General President for Government and Public Relations, International Association of Fire Fighters (AFL-CIO-CLC)

#### **[The Honorable James M. Shannon](#)**

President and Chief Executive Officer, National Fire Protection Association

#### **[Chief Philip C. Stittleburg](#)**

Chairman, National Volunteer Fire Council

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Given at a Full Committee Hearing:

**Fire Research Act**

Wednesday, April 30 2003 - 9:30 AM - Russell 253

LINKS

[▶ Back to Witness](#)

[List](#)

The Testimony of  
**The Honorable Dave Camp**  
, U.S. House of Representatives

Mr. Chairman, I appreciate the opportunity to testify before the Committee on a subject that has taken on added importance since the September 11th terrorist attacks. I applaud your decision to convene today's hearing on "Needs of the Fire Services." America's fire fighters are taking on heightened responsibilities that go beyond combating fires. Today, our first responders must plan for and respond to possible acts of terrorism.

Mr. Chairman, as you know, I have introduced the House companion to a bill you introduced in the Senate, the Firefighting Research and Coordination Act, H.R. 545. I believe this legislation will help address current policy questions on how the federal government can most effectively provide firefighters with the training and equipment necessary to protect lives. In my view, the Firefighting Research and Coordination Act gives appropriate weight to top fire service needs. More specifically, the bill seeks to:

1. Support the development of voluntary consensus standards for firefighting equipment and technology;
2. Establish nationwide and State mutual aid systems for dealing with national emergencies, and;
3. Authorize the National Fire Academy to train firefighters to respond to acts of terrorism and other national emergencies.

The first objective of the bill focuses on establishing equipment and technology standards. It would allow the U.S. Fire Administrator, in consultation with the National Institute of Standards and Technology, and other national voluntary consensus standards development organizations to develop voluntary consensus standards for evaluating the performance and compatibility of new fire fighting technology. Examples of these new technologies include: personal protection equipment, devices for advance warning of extreme hazard, equipment for enhanced vision, and robotics and other remote-controlled devices, among others. Equipment purchased under the Assistance to Firefighters grant program must meet or exceed the voluntary consensus standards. The second objective of the bill addresses mutual aid systems. Mutual aid compacts are widely acknowledged to be an effective and efficient means of sharing emergency management resources among different jurisdictions. Federal support for mutual aid could better prepare states and localities for all types of disasters, including acts of terrorism. The Firefighting Research and Coordination Act directs the U.S. Fire Administrator, in consultation with the Director of Federal Emergency Management Agency (FEMA), to provide technical assistance and training to state and local fire service officials to establish nationwide and state mutual aid systems for responding to national emergencies. An important example of why model mutual aid systems are important to establish comes in part, as a response to the September 11th attacks. The third objective of the Firefighting Research and Coordination Act permits the Superintendent of the National Fire Academy to coordinate with other Federal, State, and local officials in developing new curricula at the Academy. New training courses would focus on: building collapse rescue, the use of technology in response to fires; including terrorist incidents and other national emergencies; and strategies for dealing with terrorist-caused national catastrophes. Last December the National Fire Protection Association released its "Needs Assessment of the U.S. Fire Service" report that included sobering statistics on fire personnel and their current capabilities. An estimated 233,000 firefighters are involved in structural firefighting but lack formal training in those duties. Similarly, an estimated 40% of fire department personnel

involved in hazardous material response lack formal training in those duties. The Firefighting Research and Coordination Act aims to reduce these alarming statistics. This legislation enjoys wide support among many of this nation's fire groups including the Congressional Fire Services Institute, International Association of Fire Chiefs, International Association of Fire Fighters, and many others prominent fire organizations. Thank you again Mr. Chairman for the opportunity to testify before the Committee.

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[committee info](#) [hearings](#) [markups](#) [nominations](#) [legislation](#) [news room](#) [contact](#)[Home](#) > [Hearings](#) > Testimony

Given at a Full Committee Hearing:

**Fire Research Act**

Wednesday, April 30 2003 - 9:30 AM - Russell 253

## LINKS

[▶ Back to Witness](#)[List](#)

The Testimony of  
**The Honorable Arden L. Bement, Jr.**

Director, National Institute of Standards and Technology, U.S. Department of Commerce

Good morning, Mr. Chairman and members of the Committee. My name is Arden Bement. I am the Director of the National Institute of Standards and Technology (NIST). I appreciate the opportunity to appear today. NIST supports the goals of S. 321 and understands the Department of Homeland Security is working with Committee staff concerning a number of comments. NIST conducts research that advances the nation's measurement and standards infrastructure and works closely with national voluntary consensus standards organizations to support the development of consensus standards. These standards are needed by U.S. industry for continually improving products and services.

Equipment for first responders is very specialized. It also constitutes a small market that is generally served by small manufacturers. Producing new equipment for the market in the absence of generally-accepted standards is a high-risk venture. In addition, standards that reflect in use conditions for determining the performance of firefighter equipment would assist industry in providing equipment that meets or exceeds firefighter needs.

The U.S. fire service looks to the National Fire Protection Association (NFPA) and the National Institute for Occupational Safety and Health (NIOSH) as its primary sources of equipment performance standards and safety information. NFPA has established committees that consider the need for equipment performance standards and develop consensus standards where views of industry, the fire service, government and commercial laboratories, and other interested parties are represented. Many of the staff in the NIST Building and Fire Research Laboratory and the Office of Law Enforcement Standards at NIST are members of NFPA and serve on their standards developing committees. NIST provides technical assistance to NIOSH in firefighter fatality investigations and thermal sensor evaluation. Technical reports from NIST on measurement techniques, methodologies, and results, provide NFPA committees and NIOSH with data and procedures to help advance national standards. NIST developed measurement methods are also adopted by the American Society for Testing and Materials (ASTM) and the International Organization for Standardization (ISO).

In FY2001, FEMA established the Assistance to Firefighter's Grant Program following passage of the Firefighter Investment and Response (FIRE) ACT that provides fire departments funding through grants for needed equipment. These funds are now allowing firefighters to be better equipped and prepared for fires and other emergencies. However, many new technologies are not yet supported by the existence of consensus standards. Individual fire departments are forced to assess the performance of these new technologies or rely solely on manufacturers information and demonstrations. Interoperability of equipment also suffers from lack of consensus standards.

To help address this issue, a Memorandum of Understanding (MOU) between NIST and FEMA was signed in March 2002 and establishes a framework for NIST to serve as a standards and measurement science resource for the Department of Homeland Security's FEMA in the areas of fire, disaster prevention, and homeland security. One of the purposes called out in the agreement is to aid the development of standards and methods to evaluate equipment for use by the Nation's first responder and emergency management communities.

Additionally, NIST will continue to work with other agencies and directorates of the Department of Homeland Security. In particular, the Under Secretary of Technology will soon formalize this cooperation with a memorandum of understanding between the Technology Administration and the Directorate of Science and Technology at the Department of Homeland Security.

In order to develop consensus standards for new fire fighting technologies as described in S. 321, there is a need for several interrelated activities.

First, priorities must be established for the development of the standards. In cooperation with the U.S. Fire Administration (USFA), NIST has hosted workshops with representatives of the fire service, industry, and other laboratories to establish priorities for fire service research. Published results of these workshops have helped set the current research agenda for both NIST and USFA. Similar workshops should be held to establish priority and a timeline for the development of measurement techniques, testing methodologies, and consensus standards.

Second, measurement techniques and testing methodologies need to be developed for evaluating the performance of firefighter equipment using new technologies. NIST is the nation's primary measurement laboratory. Our mission is to develop measurements and standards to enhance productivity, facilitate trade, and improve the quality of life. NIST has specialized laboratory facilities and staff expertise ideally suited for the development of these techniques and methodologies for many of the new fire fighting technologies.

Third, a network of private sector laboratories and facilities are needed where the measurement techniques and the methodologies can be used in a reproducible way, a necessary condition for the success of any standard. NIST will work with other organizations to assure that the measurement results are reproducible.

Finally, NIST will work closely with national voluntary consensus standards organizations to support the development of the consensus standards. An unbiased source of technical information and data, such as that supplied by NIST, is critical to the success of this effort.

Current NIST Research in Support of the Fire Service NIST is proud of its role as a science and technology resource in helping to improve the effectiveness and safety of fire fighting. Below is a brief description of its current and recent activities.

Portable thermal imagers are used by firefighters to enhance vision. They are used to identify hot spots in cool surroundings such as hidden fires in void space or over-heated fluorescent light ballasts lights. They are also used to identify cool objects, like victims of fire incapacitated by smoke or downed firefighters in hot surroundings during building search and rescue. Unfortunately, the performance of the sensors implemented in various products has not been measured under controlled conditions. Furthermore, the minimum level of important performance attributes, such as image contrast, have not been determined.

NIST, with added funding from USFA, is developing an apparatus to measure how well thermal imaging hardware is able to aid vision and hazard sensing under a variety of realistic conditions. These laboratory measurements will be compared to measurements made in actual building fires and in large-scale fire experiments at NIST. The results will be used to assure that laboratory measurements are reliable indicators of real-world performance. Standards built on this foundation will provide for accurate measurement of the important performance attributes of firefighter equipment essential for quality, reliability, safe, and effective use.

Another example of our work deals with firefighter protective clothing. The NFPA Standard on Protective Ensemble for Structural Fire Fighting (NFPA1971) specifies the minimum design, performance, certification requirements, and test methods for structural firefighter protective ensembles. The test method for measurement of thermal protective performance for firefighter protective garment and the minimum rating required for safety is part of this

NFPA standard. The Thermal Protective Performance (TPP) rating is determined by exposing dry materials to a single high intensity exposure condition that is often related to an extreme fire condition called flashover. This standard has contributed substantially to improved safety for firefighters, but firefighters tell us they are being burned through their gear under lower intensity exposures.

During fire fighting, a firefighter's protective clothing is wet from the outside by water spray and the inside by perspiration produced from strenuous activity. NIST, assisted by funding from USFA, is performing measurements under a range of thermal exposures and moisture conditions and has found that wet gear performs differently than dry gear with respect to burn injury protection. Manufacturers have come to NIST to utilize the NIST apparatus to understand more about the behavior of their products under conditions different from those assumed in the present standard. This data generated by manufacturers working at NIST will be used to improve protective clothing products. In addition, the testing approach used at NIST will be offered for consideration for adoption as part of the current standard. The apparatus is also being used in exploratory NIST research to evaluate the thermal protective attributes of new materials such as carbon nano-tube composite fabrics. These measurements can help in the development of future protective clothing that has even better resistance to burn injury with reduced weight.

NIST works hard to anticipate needs so that information is ready when needed by industry to advance their products and provide for interoperability. Four years ago, NIST formed a consortium with several fire alarm hardware manufacturers. The fire alarm panel in buildings, often found in the lobby near the main entrance, is the heart of the building's fire information system. Condition measurements and alarms from fire detectors placed throughout a building are sent to this display. Until recently even the best displays offered only rows of lights that indicated the zones in the building where fire was detected. Often a key or map was needed to interpret the lights. In many cases, it was easier to look for the fire than to use the information from the panel display.

The development of more powerful and affordable computer and graphic displays have provided manufacturers with the opportunity to expand the display capabilities and the amount of information available at the panel using graphic icons. NIST created a standard set of icons for these panels and other fire command devices. In this way, firefighters would only have to learn the meaning of one set of symbols if they were applied on all fire service graphic displays. Last fall, working from documents submitted by NIST, the NFPA Technical Committee on Testing and Maintenance of Fire Alarm Systems adopted a set of standard icons for fire alarm system displays and published these in the 2002 Edition of National Fire Alarm Code (NFPA 72). NIST is now turning its attention to the standards that will be needed to advance the wireless transmission and display of information contained in the building emergency systems to responding firefighters even before they arrive at a building.

Interagency research managed by NIST is also helping to protect firefighters responding to terrorism incidents. Threat analyses and simulations have been conducted to examine chemical warfare agent hazard concentrations in a variety of domestic terrorist attack scenarios, both for respiratory and percutaneous (skin) threats. Results are being supplied to the NFPA committee revising the Standard on Protective Ensembles for Chemical/Biological Terrorism Incidents (NFPA 1994).

Closing Remarks I am delighted that there is recognition by the committee of the need for the development of firefighting equipment standards. NIST is the nation's primary measurement laboratory and has always played a critical role in the development of effective consensus standards in support of industry and public needs. I expect NIST to continue to contribute substantially to improved safety and effectiveness of fire fighting in America. Thank you and I would be happy to answer any of your questions.

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Given at a Full Committee Hearing:

**Fire Research Act**

Wednesday, April 30 2003 - 9:30 AM - Russell 253

LINKS

[▶ Back to Witness](#)

[List](#)

The Testimony of  
**The Honorable R. David Paulison**

Director, Preparedness Division, Emergency Preparedness and Response Directorate, U.S.  
Department of Homeland Security

Good Morning, Mr. Chairman and Members of the Committee. My name is R. David Paulison. I am the Director of the Preparedness Division in the Emergency Preparedness and Response Directorate of the Department of Homeland Security. I appreciate the opportunity to appear before you today on behalf of Secretary Ridge.

Each year, fire injures and kills more Americans than the combined losses of all other natural disasters. Death rates by fire in the United States are among the highest in the industrialized world. The U.S. Fire Administration's mission to reduce loss of life and property because of fire and related emergencies is a sobering challenge, but also a hopeful challenge, since most of these deaths are preventable.

As a part of DHS, the staff works diligently to prevent these deaths, injuries, and the damage to property through leadership, advocacy, coordination and support in four basic mission areas: fire service training, public education and awareness, technology and research, and data analysis.

To accomplish this mission, we work with the fire service, other emergency responders and state and local governments to better prepare them to respond to all hazards, including acts of terrorism. We are also listening to State and local governments, and working with private industry, to provide standardized, practical, compatible equipment that works in all possible circumstances. We are assisting first responders and emergency managers practice and refine their response plans with partners at the local, State and Federal level. We will continue to provide training and education programs to prepare for the routine hazards as well as the emergent threats posed by WMD and terrorist incidents.

Today, I will focus my remarks on the U.S. Fire Administration, its programs and services, how to improve the preparedness and effectiveness and safety of our first responders, and summarize our current activities and future needs.

Accomplishments

The U.S. Fire Administration is a national leader in fire safety and prevention and in preparing communities to deal with fires and other hazards. USFA is working to support the efforts of local communities to reduce the number of fires and fire deaths and it champions Federal fire protection issues and coordinates information about fire programs.

In terms of our preparedness programs, we recognize the importance of training as a vital step toward a first responder community that is prepared to respond to any kind of emergency, ranging from a small fire to a terrorist attack involving a large number of victims. We continue to administer training and education programs for community leaders and first responders to help them prepare for and respond to emergencies regardless of cause or magnitude. We also provide equipment, vehicles, and training and wellness programs through our Assistance to Firefighter Grant program to help first responders perform their

duties.

This year, Congress appropriated \$750 million for USFA to provide grants directly to fire departments to build their basic response capabilities for all types of emergencies, including suppressing fires. This brings our total funding for this grant program to a little over \$1 billion since the program began three years ago. This benefits the community as a whole and benefits other first responder entities by building the base capabilities of local fire departments to respond to all types of incidents.

FEMA also continues to provide training in emergency management to our firefighters, law enforcement, emergency managers, healthcare workers, public works, and state and local officials, at our Emergency Management Institute. I would like to give you a few more details about these and other USFA activities.

#### Assistance to Firefighters Grant Program

The Assistance to Firefighters Grant program provides competitive grants to address training, safety, prevention, apparatus, personal protective gear and other firefighting equipment needs as well as wellness and fitness issues of local fire departments. We have streamlined the online application process for fire grants and sped up the flow of resources to first responders, while ensuring that the funds are used effectively and appropriately. In 2001 and again in 2002, we received nearly 20,000 applications from fire departments across the country. Beginning with the 2001 Grant Program, the Emergency Education NETwork (EENET) broadcast valuable information on the grant programs and process. Prior to the application period in 2003, EENET broadcast an actual applicant workshop, which was rebroadcast six times during the application period. We heard from many organizations that this eased the application process. The 2003 application process closed on April 11 and again we received nearly 20,000 applications. We expect to distribute those funds to successful applicants beginning in June 2003.

In 2004, the Office for Domestic Preparedness in the Border Transportation and Security Directorate of DHS will manage the fire grants program to offer one-stop shopping for grants in the new Department. EP& R will work closely with ODP to ensure the continued success of this vital program.

#### Fire Service Training

The National Fire Academy (NFA) and the Emergency Management Institute (EMI) offer a wide variety of training programs to promote the professional development of command level firefighters, emergency managers, emergency responders and technical staff. Fire departments will continue to receive training to respond to terrorist attacks from the Department of Homeland Security in addition to training to respond to other hazards, such as chemical accidents, floods, or hurricanes. We will continue to develop policy, procedures and training for a cadre of structural firefighters that will be identified by States in wildland fire threat zones.

One training program under development is to prepare regional Incident Management Teams (IMT) to provide support for major incidents prior to, or in lieu of, the arrival of a Federal IMT. Simultaneously, we are developing the training for the Federal Incident Management Teams Program.

In 2002, EMI conducted 278 resident training activities for 8,968 students; participants also completed 143,000 EMI independent study courses. The National Fire Academy held 340 residential classes for 7,860 students and provided training to another 87,265 through outreach, regional and direct deliveries, distance learning efforts with several colleges and universities and on-line training efforts. A curriculum review for the National Fire Academy curriculum is scheduled for FY 2004 and we expect to see those results by 2005.

Emergency responders, firefighters, emergency managers and others who have taken courses

at EMI and NFA have told us these courses have added value to job performance and professional development. In fact, surveys conducted in FY 2000 and 2001 revealed that our student's supervisors have reported an 88 percent improvement in the student's job performance following training. Ninety-three percent report that EMI and NFA training have contributed to the student's professional development and almost 87 percent report that the training has improved the department's performance.

State and local support of fire service training must be increased and the federal role is to foster that participation. In the future USFA will:

- Coordinate the exchange of training materials and information among State and local fire training systems;
- Focus on distance learning and alternate training delivery methods such as the National Incident Simulation and Training network; independent study programs and computer-based courses;
- Increase the number of Integrated Emergency Management Courses with bio-terrorism scenarios aimed at bringing officials of local jurisdictions together to simulate and critique their responses to terrorism-driven events;
- Revise training courses to include the most updated information on risk management, public fire safety education and emergency response;
- Partner with associate and bachelor degree programs to align the national academic fire curricula; and
- Include multiple delivery formats in future course development so that the nexus of the course may be provided to the field in a variety of adaptable formats.

During 2002 and early 2003, the USFA held summit meetings in the FEMA regions looking for information that defined the needs of the first responder community in the new environment that included WMD and terrorism preparation and response. Our staff also met with focus groups, course developers, and students at the National Emergency Training Center for the same purpose. Without exception every outcome was the same. Each group identified the skill sets necessary to conduct or support a WMD or terrorism catastrophe. Over 95% of those skills are already being taught in the existing curriculum and courses. The message is very clear. We need to:

- Continue teaching the curriculum we have on hand;
- Update our course materials regularly to reflect emerging issues;
- Increase the number of courses available to the first responder community; and
- Continue to maximize learning opportunities for all first responders.

During the past year, the importance of working directly with the emergency management, fire service and EMS communities has become even more apparent. It is critical that we keep the most likely first responders to any terrorism or WMD event fully advised of information and circumstances that might affect their response and their community's preparation. Partnering with the law enforcement community has enhanced our ability to deliver direct warnings that will result in improved operations and better outcomes. We look forward to continuing our partnership in critical infrastructure protection.

Public Education and Awareness USFA continues to deliver fire safety messages to those most vulnerable to fire -- the very young, the elderly and others. We will continue to manage Emergency Response Team activities with an eye toward public outreach and community hazards assessment and mitigation efforts. USFA will assist communities in establishing Community Emergency Response Teams.

We will continue to broadcast training information via the Emergency Education Network (EENET) twice a month to enhance State and local preparedness for all hazards, including terrorist incidents. Since 1981, EENET has broadcast more than 400 programs to meet the needs of all levels of emergency management, from volunteer fire fighters to State Emergency Management Directors.

EENET is an effective way to get timely information or training out to a large audience. Coupled with other outreach and training programs, EENET is a good way to share information about training and education and to keep first responders abreast of emerging issues.

## Data Collection

The Fire Administration continues to collect, analyze, publish and distribute data and information related to fire prevention, occurrence, control, and related fields; defines and describes the national fire problem; and supports State and local collection and analysis of fire incident data.

This past fall, in cooperation with the National Fire Protection Association, the USFA completed a needs assessment of the U.S. fire service to gain a current understanding of problem areas and to guide future planning and initiatives. Combined with the ongoing national fire department census, we continue to develop an increasingly complete and accurate picture of the nation's fire departments' capability to meet the challenge of expanding roles and responsibilities in response to all hazards, including acts of terrorism.

## Research and Technology

USFA leverages research partnerships and technology developments to improve fire prevention and promote public safety. In April, the USFA met with the fire sprinkler community to reenergize our advocacy for residential fire sprinklers. I am happy to report that industry agreed to work with USFA on this project. Data suggest that localized fire suppression systems in kitchens would dramatically reduce the number of civilian fire deaths in this country by as much as 25 percent. The cost to retrofit a kitchen is minimal. This is an excellent opportunity to reduce residential fire losses in the U.S. Since 40 percent of firefighter deaths in the line of duty occur at or en route to residential structures; the long-term, benefit is that firefighter injuries and deaths will also be reduced.

Challenges Reducing the loss of life and property caused by fire remains a significant challenge. Each year, fire kills more than 4,000 people and injures more than 22,000. Annual property losses due to fire are estimated at nearly \$10 billion. And, firefighters pay a high price. In 2002, 102 firefighters died while on duty. These losses are unacceptable because most can be prevented. While the numbers are still too high, great progress is being made to reduce the toll from fires. Since 1974, when Congress passed the Federal Fire Prevention and Control Act (P.L. 93-498), and established the United States Fire Administration and its National Fire Academy -- USFA has helped to reduce fire deaths significantly. Over the last 10 years, fires have declined by 16 percent. During this same period, a 22 percent decline in civilian deaths and a 31 percent drop in civilian injuries were also reported.

## Conclusion

Thank you, Mr. Chairman, for giving me this opportunity to appear before you today. Your continued support is greatly appreciated. I will be glad to answer any questions you and other Members of the Committee may have.



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LINKS

[▶ Back to Witness](#)

[List](#)

The Testimony of  
**Chief Randy R. Bruegman**

President, International Association of Fire Chiefs

Good morning Mr. Chairman and members of the Committee. I am Randy Bruegman, Chief of Clackamas County Fire District #1 located outside Portland, Oregon. I appear this morning as the president of the International Association of Fire Chiefs which represents the leaders and managers of America's fire service. The fire service consists of about 30,000 fire departments staffed by 1.1 million firefighters and emergency medical personnel. America's fire and emergency service is the only organized group of citizens situated in local communities throughout the nation - like fabric across the land - trained and equipped to deal with all risks and all hazards both natural and manmade.

The Fire and Emergency Service Community America's fire and emergency service is the only organized group of citizens situated in local communities throughout the nation trained and equipped to deal with natural and manmade disasters. Fire departments respond to all risks, all hazards ranging from earthquakes, hurricanes, tornadoes and floods, to acts of terrorism, hazardous materials incidents, technical rescues, fires, and medical emergencies.

The fire service protects America's critical infrastructure - the electrical grid, interstate highways, railroads, pipelines, petroleum and chemical facilities - and is, in fact, even considered part of the critical infrastructure. The fire service protects most federal buildings, provides mutual aid to most military bases, and protects interstate commerce. No passenger airliner takes off from a runway that is not protected by a fire department. Hazardous materials transports are an integral part of the United States economy, when they spill or ignite, the fire service responds to protect lives and property and clean-up the mess.

Assistance to Firefighters Grant Program One of the most important relationships between the fire service and the federal government is the Assistance to Firefighters grant program, better known as the FIRE Act. I come before you today to ask for your help in securing its future.

The FIRE Act has been called—by both congressional and administration officials—one of the very best federal grant programs. We agree. And there are good reasons for its success.

I recently became aware of a document indicating the success of the FIRE Act grant program. The "Survey, Assessment, and Recommendations for the Assistance to Firefighters Grant Program" is an independent report compiled within the U.S. Department of Agriculture. This document explicitly and precisely describes the strengths of the FIRE Act program.

In their words, "The USFA Grants to Firefighters Program has been highly effective in increasing the safety and effectiveness of grant recipients... 99% of program participants are satisfied with the program's ability to meet the needs of their department... and 97% of program participants reported positive impact on their ability to handle fire and fire-related incidents. Overall, the results of the survey and our analysis reflect that the USFA Grant to Firefighters program was highly effective in improving the readiness and capabilities of firefighters across the nation." I think we all recognize the value of these words when

coming from one federal agency to another.

I will be happy to provide copies of this document for review upon request.

The current assistance process works. First, when applying for a grant, the fire chief must clearly define an urgent need. Then the application is subject to rigorous peer review by fire service representatives. Third, for a department to be awarded a grant, the community must agree to a significant co-payment. This assures local government buy-in. Finally, federal funds cannot supplant funds from the local government, they are supplemental only. The hallmark of the FIRE Act is that funds go directly to the local fire department for the intended purpose in a timely manner without being diminished or diverted. That's a federal success story for which the taxpayers can be proud.

But we see problems ahead. The president's budget proposal for FY 2004 recommends \$500 million in funding for the FIRE Act; it also moves the program from the U.S. Fire Administration to the Office for Domestic Preparedness. This transfer is proposed in accordance with Section 430 of the Department of Homeland Security Act which states: "The Office for Domestic Preparedness shall have the primary responsibility ... for the preparedness of the United States for acts of terrorism...."

Mr. Chairman, I bring your attention to the authority for the FIRE Act, which originated in this Committee, and is found in Section 33 of the Federal Fire Prevention and Control Act of 1974. The law states that the Director of FEMA shall make grants "for the purpose of protecting the health and safety of the public and firefighting personnel against fire and fire-related hazards and provide assistance for fire prevention programs ..." Mr. Chairman, the FIRE Act is not designed nor intended for the sole purpose of enhancing terrorism response. The FIRE Act is structured to assist communities to better respond to all risks and all hazards—one of which could be an act of terrorism. Mr. Chairman, we ask for assistance from this Committee to keep the FIRE Act at the United States Fire Administration (USFA) where it has been so successfully managed.

Fire Service Presence in the Department of Homeland Security A very serious concern for the fire and emergency service is the continued reduction of the fire service presence in the Department of Homeland Security (DHS). In addition to our concern about the FIRE Act, the recent elimination of the Administrator of the U.S. Fire Administration and the cancellation of a significant number of National Fire Academy classes are matters of real concern. The creation of the Department of Homeland Security is a process which the IAFC and the fire community supported. This new department has the potential to provide great advancement for the first responder community. Unfortunately, we have reasons to be concerned about the representation of the fire service in this process.

This Committee understands the important role of America's fire and emergency service in the first responder community as it relates to major disasters—natural and manmade. We ask that you support our request for a voice at DHS that is appropriate and proportionate to the fire service contribution to homeland security.

Hazardous Material Placarding Recently, we have learned that the Department of Homeland Security may seek to substantially change, or even eliminate, the current placarding system for the transportation of hazardous materials. We would like to emphasize the critical role that the current placarding system plays in protecting the safety of American communities and the safety of HazMat responders. Every year, there are approximately 850,000 shipments of hazardous materials. Statistics indicate that there will be over 17,000 HazMat incidents each year and that almost 500 of those incidents will be classified as serious—meaning that the incident resulted in a fatality or major injury.

America's fire service, the primary provider of HazMat response in the U.S., relies upon the current placarding system to quickly assess a HazMat incident and initiate an appropriate response. This rapid assessment is critical to protecting nearby residents as well as the response team from the potentially serious effects of a HazMat incident. In the absence of a

proven replacement system, dismantling the current placarding system would be a significant mistake that would have serious ramifications for the safety of America's communities.

It appears that DHS is able to issue these regulations under "emergency" regulatory authority vested in the UnderSecretary of the Transportation Security Administration that precludes the normal notice and review process. These regulations could take effect with no outside notice other than "consultation" with the Secretary of Transportation and then review by the Transportation Security Board which is comprised solely of cabinet-level officials from the administration. There is no opportunity for oversight or input from Congress or the American public. Mr. Chairman, the IAFC and America's fire service is very concerned about this situation.

Communications One of the most persistent problems that plagues large-scale emergency response is the issue of communications interoperability. Fortunately Senator McCain, your Committee has jurisdiction over legislation that represents a significant step forward in addressing this problem.

In 1997, Congress set aside 24 MHz of radio spectrum for public safety agencies. This spectrum is currently used by TV channels 63, 64, 68, and 69. Congress directed that the transfer to public safety be completed by December 31, 2006 conditioned on digital television rollout reaching 85% of American households. Presently, only 1% of households have digital television. As a result of this enormous loophole, the public safety community is unable to utilize this badly needed spectrum.

The IAFC strongly believes that any effort to address the DTV transition must include a requirement that television stations operating on channels 60-69 vacate the band as quickly as possible, but no later than December 31, 2006—the original completion date set by Congress. We strongly urge this Committee to address this as a priority issue.

SAFER Another issue facing fire departments across the country is the lack of adequate staffing to appropriately respond to our communities' needs. The "Staffing for Adequate Fire and Emergency Response Firefighters Act of 2003", also known as SAFER, would provide federal assistance to local fire departments for the purpose of hiring new firefighters. Patterned after the highly successful COPS program, local governments would jointly share the costs of hiring new firefighters over a three-year period until the local government assumed all responsibility for funding the new positions. This legislation has garnered bipartisan support in both houses of Congress, as well as the support of the major fire service organizations.

The primary reasons for hiring additional firefighters are very simple:

1. Greatly enhanced efficiency on-scene,
2. Increased safety, both for firefighters and the victims they are assisting, and
3. Enhanced planning and training to protect both firefighters and the communities they serve.

While some jurisdictions require four firefighters to staff a single piece of fire apparatus, most staff with only three. By increasing to four firefighters per unit we will generate a 100 percent increase in operational capacity compared with three-person companies. Under federal administrative law and proper safety practices, firefighters must operate in teams of at least two people. Therefore, fire apparatus staffing of four will yield two working teams of two, doubling the capacity of apparatus staffed with only three personnel.

Linked to this substantial gain in productivity is a commensurate increase in safety both for firefighters and for the victims they are treating. On emergency responses time is critical and minutes, or even seconds, can often mean the difference between life and death. The SAFER bill will help local governments provide necessary staffing on the initial response and not allow precious time to slip away as the first personnel on-scene wait for additional firefighters to arrive.

Recent economic conditions have forced fire departments to make significant budget cuts which are forcing staff reductions across the country. Departments have also been directly affected by the military call-ups necessary for the war in Iraq. A recent IAFC survey has shown that the smallest fire departments are disproportionately affected by the call-up of military personnel. These departments are the least able to absorb the loss of trained staff.

Firefighting Research and Coordination Act: I would like to take this opportunity, on behalf of the IAFC and the fire service, to thank you, Chairman McCain, for introducing the Firefighting Research and Coordination Act. This act will help coordinate necessary standards for new technologies and training in order to better prepare first responders for the challenges they face daily. Many important groups have been advancing first responder standards including, the InterAgency Board for Equipment Standardization and Inter-Operability; national voluntary consensus standards development organizations, such as the National Fire Protection Association; the National Institute of Standard and Technology; and other federal, state, and local agencies.

Chairman McCain has provided Congress with a realistic approach to the interoperability issues that plague our community. It is time for Congress to pass this legislation.

Conclusion Mr. Chairman, the fire service stands today as a bulwark of the first responder community; ready to quickly respond to, contain, and resolve nearly all emergencies that arise in our local communities. We very much appreciate the opportunity to appear before your Committee today. We also appreciate the personal commitment you have demonstrated to the fire service through your committee work and your willingness to serve as Chairman of the Fire Caucus in Congress.



Given at a Full Committee Hearing:

**Fire Research Act**

Wednesday, April 30 2003 - 9:30 AM - Russell 253

LINKS

[▶ Back to Witness](#)

[List](#)

The Testimony of  
**Mr. Kevin O'Connor**

Assistant to the General President for Government and Public Relations, International Association of Fire Fighters (AFL-CIO-CLC)

INTRODUCTION

Good morning, Mr. Chairman. My name is Kevin O'Connor, and I serve as the Assistant to the General President for the International Association of Fire Fighters.

Prior to joining the IAFF, I had the honor of being a professional fire fighter in Baltimore County, Maryland, and I am very proud to say I was a member of our department's busiest and best ladder company. During that time, I served concurrently as President of the Baltimore County Professional Fire Fighters & Paramedics Association and the Maryland State and District of Columbia Professional Fire Fighters.

On behalf of my General President Harold Schaitberger, and the 260,000 professional fire fighters and emergency medical personnel we represent throughout the United States, and who collectively provide fire and emergency response protection to over ¾ of the nation's population, I am pleased to offer our views on the critical needs of the fire service.

While there are many daunting issues facing the fire service, I will limit my remarks to two specific pieces of legislation that will immediately, significantly and measurably enhance our nation's domestic preparedness. They are: S.321, the Firefighting Research and Coordination Act and S.544, the S.A.F.E.R. Fire Fighters Act.

FIREFIGHTING RESEARCH AND COORDINATION

The need for uniform technical standards for firefighting equipment, personal protective equipment, and other related gear is now greater than ever. Much of the emergency response equipment available today is not tested or certified by government or other labs. This problem is increasing as fire departments prepare to replace old and worn equipment, and manufacturers flood the market with new equipment in response to increased government spending and citizen awareness of homeland security.

S. 321 would finally establish a scientific basis for measurement and testing methodologies for new firefighting equipment. The legislation would authorize the United States Fire Administration (USFA) to work with NIST, the Interagency Board, and other federal, state, local, and private consensus standards organizations to accomplish this goal.

Significantly, the legislation would require equipment purchased with federal dollars—including grants from the highly successful FIRE Act program—to comply with these standards wherever feasible. In addition to encouraging communities to purchase quality equipment, we are optimistic that this language will promote the development of safer and better equipment as manufacturers strive to comply with new federal standards.

S. 321 also seeks to address the lack of coordination among responding agencies by directing

the USFA to provide technical assistance and training for state and local fire service officials to establish nationwide and state mutual aid systems for responding to national emergencies.

We are especially supportive of the concept of creating a national credentialing system for emergency responders. Emergency response and mutual aid networks have long been plagued by the lack of consensus about what fire fighters and fire departments should be capable of. S.321 will seek to rectify this serious deficiency by asking the U.S. Fire Administration report to consider a credentialing system as part of its report to Congress on the deployment of emergency responders.

The lone recommendation we wish to make regarding S.321 is to expressly include the National Institute for Occupational Safety and Health (NIOSH) in the list of organizations to be consulted. NIOSH has been doing exemplary work certifying respirators for WMD response, and has unsurpassed expertise in standards for first responder protective equipment.

Before leaving this issue, I would be remiss if I failed to commend you, Mr. Chairman, for your pioneering work on this issue. Prior to your involvement, the world of fire fighting standards was generally considered outside the scope of the federal government. Your innovative approach demonstrates that there is a significant role for the federal government to play in this arena, and for this, the nation's fire fighters are deeply grateful.

#### FIRE FIGHTER STAFFING

As you well know, Mr. Chairman, the work of fire fighters in protecting our nation long predates September 11, 2001. For nearly 100 years, the members of the IAFF have been the first on the scene whenever and wherever people's lives are in jeopardy.

Firefighting, or putting the "wet stuff on the red stuff," is but one dimension of our work. We are the ones who respond whenever a hazardous chemical is released into the environment. We search for and rescue people who are trapped or in danger. We are the nation's primary providers of pre-hospital emergency medical care. And more recently, in addition to all we have been doing, we must also assume the role of the nation's first responders to acts of terrorism.

The mission to protect Americans against terrorist acts poses a number of unprecedented challenges for the fire service. Each time the alarm rings, we must be prepared for the possibility that it is an act of war. Our enemies possess weapons of mass destruction, and appear unafraid to use them. If a biological, chemical, or radiological attack is unleashed against Americans, it will be fire fighters who will respond first. Moreover, terrorism is forcing us to rethink how personnel are deployed. Rather than viewing incidents as isolated events, we must confront the possibility that each incident is but one part of a coordinated attack.

To meet these crucial and growing demands, we need an adequate number of fire fighters. Firefighting always has been and always will be essentially about people. It is a labor-intensive operation that requires large numbers of properly equipped and trained personnel to perform the myriad tasks that must be undertaken at an emergency scene. Attempting to respond to a fire or other hazard with only 2 or 3 people per piece of apparatus is not only ineffective, it is extraordinarily dangerous. Every year in our nation, fire fighters lose their lives because there are not enough of them on scene to conduct a safe response.

Unfortunately, responses with 2 or 3 fire fighters have become the norm. Studies indicate that 2/3 of all fire departments in America lack adequate personnel, and the problem is growing. Even after September 11th, municipalities are failing to adequately staff fire departments. The IAFF receives at least two new requests each week from our locals seeking assistance to prevent layoffs, and station and company closings. Examples of short staffing are common in every part of the country.

· In Arizona, due to the \$100 billion state deficit, the city of Phoenix plans to eliminate three engine companies and lay off 42 fire fighters if it cannot balance its budget. · In South Carolina's largest cities, including Charleston, fire fighters respond with 3—and sometimes as few as 2—fire fighters per apparatus. · In New York City, a \$47 million reduction to the Fire Department would force the closure of 35 to 40 of the city's 207 firehouses. Mayor Bloomberg has proposed a plan to reduce the per piece staffing on 39 FDNY companies. · In Buffalo, New York, the city has already closed four fire companies. Still being debated are additional proposals to close more companies and reduce fire fighting personnel by as many as 200 fire fighters. · In Texas, the cities of Dallas and Fort Worth have proposed shutting down companies. And Fort Worth is planning to reduce the number of fire fighters per apparatus from four to three. · Seattle, Washington has proposed eliminating 31 fire fighters. · In the Midwest, Minneapolis, a dynamic cosmopolitan area and a commercial and cultural center, has laid off 44 fire fighters, reducing the fire department size to less than what it was a decade ago. In Dayton, Ohio, four engine companies have been eliminated and the city plans to reduce the number of fire fighters per apparatus from four to three. And, in the little township of Bellaire, Ohio, the Mayor and Town Council have proposed eliminating the fire department because of budgetary woes. · In Springfield Massachusetts, 53 fire fighters have been laid off. In nearby Worcester, Massachusetts, the city is honoring the memory of the six fire fighters who died in that horrific warehouse fire three years ago, by laying off 17 fire fighters.

These examples are merely the tip of the iceberg. Below the surface, there is a massive personnel crisis that is the weak link in our homeland defense. Congress would never allow our Army to engage in a war with 2/3 of its divisions understaffed. Incredibly, this is exactly what we are asking our local fire departments to do in this current war on our home soil.

Quite simply, far too many local fire departments don't have adequate personnel to perform their mission. With the new dangers posed by terrorists, this situation has reached crisis proportions. Whether it be a containment and evacuation mission following release of a radiological material in Texas, evacuating a skyscraper in Los Angeles, or providing emergency medical care to Members of Congress following an explosion in the Capitol, the frightening fact of life is that we simply do not have enough people to get the job done.

#### Staffing Studies

Frontline fire fighters have always understood the critical role of safe staffing. Beyond the anecdotal, numerous studies document the extent of fire fighter understaffing and the impact it has on fire fighter safety and community security.

In its seminal report, "A Needs Assessment of the U.S. Fire Service," USFA/NFPA found that the vast majority of fire departments cannot respond to emergencies in a timely manner, and when fire fighters do reach the scene of an emergency, there are not enough personnel to do the job safely and effectively. The report found that up to 75% of our nation's fire departments have too few fire stations to meet response time guidelines. In fire departments that protect communities with a population of less than a million, it is common to respond to emergencies with less than 4 fire fighters per apparatus. Further, the report found that only 11% of our nation's fire departments could handle structural collapse involving rescue and EMS operations for over 50 people. Considering the enormity of the destruction on September 11th, in Oklahoma City, or caused by Hurricane Andrew, it is a sobering and sad that only a small segment of our population has real protection from terrorism or natural disasters.

A study conducted by the Seattle Fire Department found that the severity of fire fighter injuries declined 35% when staffing per apparatus was increased from 3-person crews to 4-person crews. A study by the Dallas Fire Department found a direct correlation between staffing levels and both the safety and effectiveness of emergency response operations. Specifically, the Dallas study found that inadequate staffing delays or prevents the performance of critical tasks, increases the physiological stress on fire fighters, and increases the risk to both civilians and fire fighters. After analyzing their data, the authors of the Dallas study concluded, "staffing below a crew size of four can overtax the operating force and lead

to higher losses.”

And studies of fire fighter fatalities have consistently identified inadequate staffing as a key factor in fireground deaths. Since 1997, NIOSH has investigated every fire fighter line-of-duty death as part of its Fire Fighter Fatality Investigation and Prevention Program. Far too many of these reports have attributed these deaths to inadequate personnel on the scene.

NIOSH has been especially critical of the failure of fire departments to assure that there are adequate numbers of people stationed outside a dangerous environment during an interior fire suppression attack. These outside personnel, known as a Rapid Intervention Team (RIT), are equipped and ready to perform rescue missions when a fire fighter becomes disoriented or lost during an interior attack.

A recent NIOSH report concluded that a RIT should respond to every major fire. The duties of the team were enumerated in the report and are quoted below.

The team should report to the officer in command and remain at the command post until an intervention is required to rescue a fire fighter(s)...Many fire fighters who die from smoke inhalation, from a flashover, or from being caught or trapped by fire actually become disoriented first. They are lost in smoke and their SCBA runs out of air, or they cannot find their way out through the smoke, become trapped, and then fire or smoke kills them. The RIT will be ordered by the IC to complete any emergency searches or rescues. It will provide the suppression companies the opportunity to regroup and take a roll call instead of performing rescue operations...When a RIT is used in an emergency situation, an additional RIT should be put into place in case an additional emergency situation arises. This additional RIT should be comprised of fresh, well-rested fire fighters.

#### Staffing Standards

The need for adequate fireground personnel has been formally recognized by standards-making bodies of both the federal government and the fire service industry. Both the Occupational Safety and Health Administration (OSHA) and the National Fire Protection Association (NFPA), the consensus standards making body of the fire service, have promulgated standards designed to achieve safe staffing levels.

#### OSHA's "Two-In/ Two-Out" Standard

In 1998, OSHA amended its Respirator Standard for employees engaged in dangerous occupations that require use of breathing apparatus. The revised standard formally endorsed a safe staffing rule known as "2-in/2-out" that left no doubt about the vital link between sufficient staffing and fire fighter safety.

The 2-in/2-out regulation requires that whenever fire fighters enter a burning structure or other dangerous environment, they must do so in teams of at least two that operate in direct visual or voice contact. Additionally, for every group of two fire fighters inside the structure, there must be a corresponding number of at least two other fully-equipped and trained fire fighters who remain outside the structure, monitoring those inside and who are prepared to rescue them.

Unfortunately, most fire departments do not currently have adequate staffing to comply with these safety regulations. The result is that all too often fire fighters are sent into dangerous environments without sufficient personnel standing by to rescue them if they become disoriented, trapped or injured.

#### NFPA 1710

In the face of the mounting evidence of a severe shortage of fire fighters, NFPA--the consensus, standard making body of the fire service--issued its first standard on minimum staffing for fire departments in the summer of 2001. NFPA Standard 1710, governing

deployment and operations for fire and rescue departments, was the result of years of thoroughly investigating staffing related line-of-duty injuries and deaths, and gathering and analyzing data.

Ten years in the making, NFPA 1710 established consensus standards for minimum safe staffing levels for basic fire fighting operations; for responses to tactical hazards, high hazard occupancies, and high incident frequencies; and for overall, integrated fireground operations. If fully implemented, this standard would result in more effective and more efficient fire and EMS departments across the United States—and in our business that means lives saved.

OSHA's 2-in/2-out standard and NFPA 1710 clearly articulate the minimum staffing levels that fire departments need in order to perform emergency operations safely and effectively. Yet, as of today, jurisdictions that comply with these standards are in the minority. It is for this reason that federal assistance is needed and warranted.

#### The S.A.F.E.R. Fire Fighters Act

The solution to the staffing crisis is the adoption of S. 544, the SAFER Fire Fighters Act. In recent years, the federal government has increasingly recognized its responsibility to assist local governments with the cost of protecting Americans against hazards. Both the FIRE Act and the programs run by the Office of Domestic Preparedness (ODP) have provided training and equipment to local fire departments. Other federal programs provide funding for emergency response training involving transportation incidents, superfund sites and nuclear facilities.

None of these programs, however, currently provides any federal assistance for the most significant need of America's fire service: fire fighting personnel. Even the FIRE Act, which was originally conceived as a staffing proposal and lists staffing as the first of its 13 areas, can not currently be used to hire fire fighters due to the structure of the program and FEMA's decision to limit its grants to certain areas.

In order to address the critical staffing shortage, a bi-partisan group of Members of Congress has introduced the Staffing for Adequate Fire and Emergency Response (SAFER) Act. The SAFER Act provides grants to local fire departments to fund the hiring of 75,000 additional fire fighters over a seven-year period. SAFER would create a four year program under which fire departments would apply for federal grants that would contribute to the costs associated with hiring new fire fighters, not to exceed \$100,000 over four years for each fire fighter hired. Local jurisdictions would then be required to retain the fire fighter position(s) for at least one additional year.

The SAFER Fire Fighters Act is an innovative approach to solving the nation's need for more fire fighters. It is an example of the new type of federalism that our country needs to combat terrorism. Numerous federal studies and reports bemoan the lack of coordination between the different levels of government. The SAFER Fire Fighters Act would be a step towards better cooperation and coordination amongst local, state, and federal governments to respond strongly and decisively to terrorism and other emergencies.

Although we are aware of no organized opposition to the SAFER Act, some Members of Congress have raised some legitimate questions, which I would like to address.

Some argue that paying for fire fighter training and equipment may be a legitimate federal government function, but providing aid to hire personnel crosses some sort of boundary for appropriate federal involvement. But the federal government has long provided financial assistance to local government for the express purpose of hiring municipal employees, including police officers, teachers and many other occupations. President Bush's signature domestic issue, the No Child Left Behind Act, is only the most recent in a long line of federal programs that provide funding to hire local government workers.

Other Members question the authorized funding level. They argue that \$1 billion a year is

too much money at a time of fiscal restraint. We disagree. Since September 2001, Congress has passed in excess of \$55 billion in supplemental appropriations for homeland security and the war on terrorism. Additionally, the President has proposed over \$36 billion for homeland security in FY 2004, which includes the \$3.5 billion First Responder proposal. The funding is available. It is simply a matter of priorities.

As a fire fighter, a first responder, and someone who represents America's Bravest, I am here today to tell you that no investment in Homeland Security will do as much to protect Americans as enactment of the SAFER Fire Fighters Act.

## CONCLUSION

In conclusion, Mr. Chairman, the IAFF thanks you for your leadership on firefighting issues and, in particular, for tackling the need for more research and coordination in the fire service. The need for S.321 has never been greater. All firefighting equipment should meet minimum standards. More mutual aid agreements should be signed. And, fire fighters and departments should be credentialed so that parties to mutual aid agreements know the capabilities of their partners. If S.321 were enacted, fire fighters would respond to the next emergency knowing that their equipment work, and having the confidence in the capabilities and competency of the fire department providing mutual aid. This would be a real benefit to frontline fire fighters.

The other need of the fire service that the federal government must address is the shortage of fire fighters. This week marks the twenty-ninth anniversary of the publication of America's Burning, the first comprehensive analysis of the American fire service. In the nearly three decades that have past since that hallmark report, the problems identified continue and have worsened. In those many years, new threats have expanded our responsibilities, while the resources available to us have been reduced.

Domestic terrorism was not a real threat in the 1970s. On September 11th, we witnessed one of the "worst case scenarios" that terrorism experts have warned us about. Yet, the string of attacks that we suffered in the '90s, including the first attack on the World Trade Center, and the Oklahoma City and the Olympics bombings, should have alerted us to the threat. We, as a nation, should have been better prepared for September 11th.

Fire fighters have learned the lessons of September 11th. The signs won't be ignored as they were in the last decade. We know that the nation must confront, and realistically deal with, the next great threat to our homeland—an attack using weapons of mass destruction. In order to realistically deal with future terrorist attacks, the nation must address the staffing crisis in our fire departments. Federal dollars spent to purchase training and equipment for fire fighters will only go as far as the number of fire fighters. To fully maximize the money spent and to ensure adequate homeland security, more fire fighters need to be hired.

Mr. Chairman, help us do our jobs. Provide the resources and staffing we need to serve our nation and its people.

Given at a Full Committee Hearing:

**Fire Research Act**

Wednesday, April 30 2003 - 9:30 AM - Russell 253

LINKS

► [Back to Witness](#)

[List](#)

The Testimony of  
**The Honorable James M. Shannon**

President and Chief Executive Officer, National Fire Protection Association

Chairman McCain, Senator Hollings and members of the Committee, I am honored to appear before this Committee today. My name is James M. Shannon, and I am President and Chief Executive Officer of NFPA (the National Fire Protection Association). NFPA is a non-profit organization, founded more than 100 years ago, with a mission to save lives through fire and life safety education and training, fire research and analysis, and the development of consensus codes and standards that are adopted by state and local jurisdictions throughout the United States and widely used by the federal government. Today NFPA has nearly 300 codes and standards addressing safety, each accredited by the American National Standard Institute (ANSI) and developed by technical experts, the fire service, and others participating as volunteers in a consensus process. This process ensures that all interested parties have a say in developing standards. Congress affirmed its support for voluntary consensus standards in the National Technology Transfer and Advancement Act of 1995 (P.L.104-113) and reaffirmed that support in the Homeland Security Act of 2002, the law that created the new department. As the Congress considers the reauthorization of the U.S. Fire Administration (USFA) and its many important functions, I wish, Senator McCain, to testify today in support of your legislation, Senate Bill 321 the Firefighting Research and Coordination Act. I also want to bring to your attention -- and the attention of your colleagues -- a Congressionally authorized report that found serious gaps in the training, staffing and equipment of the U.S. fire service. First, let me state emphatically that the reauthorization of the U.S. Fire Administration is extremely important to the effectiveness of the fire service throughout the United States. In May of 1973, nearly 30 years ago to the day, the Chairman of the National Commission on Fire Prevention and Control, Richard E. Bland, transmitted to President Nixon its final report "America Burning." In that report the Commission recommended establishment of the United States Fire Administration to:

- Ø Evaluate the nation's fire problem through data collection and analysis and research
- Ø Create a National Fire Academy to improve training and education for fire service personnel
- Ø Strengthen public awareness of the fire threat
- Ø Provide grants to state and local governments

For nearly three decades, the USFA and the National Fire Academy have been working successfully with NFPA and the fire service to reduce the death and destruction caused by fire in the U.S. We have made great strides over the past 30 years. While both civilian and firefighter deaths have decreased dramatically, we must do much more to ensure that our fire departments can meet the new challenges of homeland security, including responding effectively to biological or chemical accidents or attacks. While we support the move of the USFA to the new Department of Homeland Security, there are important functions and positions that must be retained. For example, the USFA must continue to provide public education and fire prevention activities in partnership and cooperation with safety organizations, particularly those working to reduce fire deaths among high risk groups (children, older adults and persons with disabilities). It is also critical that the position of Administrator of the USFA remain a Presidential appointment to retain that important advocacy position within the Executive Branch. The staff at USFA has done a tremendous job in administering the Assistance to Firefighters (FIRE) Grant Program. Since its creation in FY2001, this program has provided more than \$1 billion in financial resources directly to fire departments. Nonetheless, fire departments applied for more than \$7 billion, demonstrating that the needs are great. It is crucial that the FIRE Grant Program be maintained as a separate and distinct funding source where fire departments can receive direct funding from the USFA and avoid

unnecessary red tape. I would also urge the Congress to fund the program at a level no less than its authorized amount of \$900 million dollars. This legislation and the companion bill introduced by Representative Camp in the House of Representatives will do much to focus federal agencies such as USFA and the National Institute of Standards and Technology on the needs of our first responders. It will provide additional research and support for an already strong process that will inevitably lead to safer firefighting equipment. By becoming a full partner in the consensus process, the Federal Government can be assured that first responders will have the finest equipment and technology available. And isn't that what we should demand for those who routinely risk their lives on our behalf? Another key element of your legislation is the requirement that equipment purchased through the FIRE Grant Program must meet or exceed applicable voluntary consensus standards. This concept is not new. Many existing federal grant programs already have similar requirements. For example, the Department of Justice's Bulletproof Vest Partnership Grant Program requires that vests meet minimum safety and performance standards. The voluntary consensus process has served the fire service well for many years, and it should serve as the national model. However, the development of new technologically-sophisticated equipment is only one aspect of improving the nation's fire service. Consider these findings from the recently published "Needs Assessment of the U.S. Fire Service," a study authorized by Congress and conducted by NFPA in cooperation with FEMA. The study, which I submit today for the Committee's full review, delivers some troubling findings. Allow me to focus on three distinct areas -- training, equipment and staffing. Here's just a sampling of what NFPA and FEMA found: Ø Only one in every 10 fire departments has the local personnel and equipment required to respond to a building collapse or the release of chemical or biological agents Ø 50% of our firefighters involved in "technical rescue" lack formal training, but technical rescue involves unique or complex conditions, precisely the situation they would encounter in a terrorist attack Ø There are other huge gaps in training -- There has been no formal training for 21% of those involved in structural firefighting; for 27% of those involved in EMS work; and for 40% who are sent in to deal with hazardous materials Ø And we don't protect our firefighters as we should. One third of the protective clothing worn by firefighters sent into a burning building is more than 10 years old. Ø On a typical fire department shift, 45% of first responding firefighters lack portable radios; 36% lack self-contained breathing apparatus; and 42% answer an emergency call without a Personal Alert Safety System (PASS) device that is critical in locating an injured or trapped firefighter Ø Finally, at least 65% of cities and towns nationwide don't have enough fire stations to achieve widely recognized response-time guidelines. Those guidelines recommend that firefighters be on the scene of any situation within 4 minutes, 90% of the time Not surprisingly, the picture is bleaker in our smaller communities. And remember seventy-five percent of the country's firefighters are volunteers. Twenty-one percent of rural communities often respond with too few firefighters to engage safely in structural firefighting. Our research also found that thirty-eight percent of fire departments in communities with more than 50,000 residents often respond with too few firefighters. We must improve these numbers. We cannot continue to ask our firefighters to do more with fewer resources. We would not expect the men and women in our armed services to defend our nation without proper training, equipment and staffing. That's how it should be. But as the country braces for the unknown at home, our nation's firefighters, who are nearly always the first responders in any crisis, are woefully unprepared to fully protect our citizenry or themselves. The need is urgent and overdue. Our firefighters face the same limitations and obstacles they encountered on September 11th. We can no longer ask our fire departments to survive entirely on local tax revenue supplemented by potluck dinners, auctions and fundraisers. The federal government must provide adequate resources and support to our firefighters to meet the many challenges -- whether natural, unintentional or deliberate -- as they protect us and the security of our homeland. Your legislation would begin to address these urgent needs, and NFPA enthusiastically endorses it. Mr. Chairman, thank you for the opportunity to testify today. I will be happy to answer any questions you or other members of the Committee may have.

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Given at a Full Committee Hearing:

**Fire Research Act**

Wednesday, April 30 2003 - 9:30 AM - Russell 253

LINKS

[▶ Back to Witness](#)

[List](#)

The Testimony of  
**Chief Philip C. Stittleburg**  
Chairman, National Volunteer Fire Council

Mr. Chairman and members of the committee, my name is Chief Phil Stittleburg and I am Chairman of the National Volunteer Fire Council (NVFC). The NVFC represents the interests of the nation's nearly 800,000 volunteer firefighters, who staff nearly 90% of America's fire departments. I have served in the volunteer fire service for the last 30 years and have been the Chief of the LaFarge Volunteer Fire Department in Wisconsin for the last 25 years. I have had experiences in all phases of the first responder community, including chemical and hazardous materials incidents, information management, EMS, rescue and fire.

In addition to serving as NVFC Chairman, I have represented the NVFC on a variety of national standards-making committees, including ones that set industry standards on firefighter health and safety. I also serve on the National Fire Protection Association's (NFPA) Board of Directors and I am an adjunct instructor for the National Fire Academy. I earn my livelihood as an attorney, which includes serving as an Assistant District Attorney on a half-time basis for the last 29 years. These positions give me an excellent opportunity to work in emergency services in both the law enforcement and fire service professions.

According to NFPA, nearly 75% of all firefighters are volunteers. In most years, more than half of the firefighters that are killed in the line of duty are volunteers. In addition to the obvious contribution that volunteer firefighters lend to their communities as the first arriving domestic defenders, these brave men and women represent a significant cost saving to taxpayers, a savings sometimes estimated to be as much as \$36 billion annually.

On behalf of the volunteer fire service, I appreciate the opportunity to comment on the needs of the fire service. More specifically, I would like to comment on the Assistance to Firefighters Grant program, the U.S Fire Administration, the National Fire Academy, the Firefighting Research and Coordination Act (S. 321 / H.R. 545), terrorism funding for first responders, and the Staffing for Adequate Fire and Emergency Response Firefighters Act (S. 544 / H.R. 1118).

The events of September 11, 2001 made it clear to all Americans that the fire service is the first responder to all terrorist attacks this country may face. Administration officials and Members of Congress continue to warn Americans of the certainty of a future terrorist incident. As America's domestic first responders, the fire service will be on the front lines of any incident and must be prepared to respond to and defend our citizens from the aftermath of a terrorist attack involving conventional weapons or weapons of mass destruction. This expands our normal services beyond the delivery of fire, EMS, rescue, and technical specialty services to our citizens. These services already have time and training demands that are escalating annually. However, the federal government must not forgo its commitment to the basic needs of America's fire service in the name of Homeland Security.

FEMA Assistance to Firefighters Grant Program One of the largest problems faced by America's volunteer fire service is funding. Thanks to your leadership Chairman McCain, and the leadership of many members of this Committee and throughout Congress, the Federal government took a giant step in addressing the basic needs of America's fire service

by creating the Assistance to Firefighters Grant program. Every fire department across the country is now eligible for funding for safety and firefighting equipment, apparatus, training, fire prevention and education, emergency medical service equipment and training, and wellness and fitness programs.

The Assistance to Firefighters Grant program has proven to be the most effective program to date in providing local volunteer and career fire departments not only with the tools they need to perform their day-to-day duties, but it has also enhanced their ability to respond to large disasters as well. As we move to prepare for terrorist incidents at home, we must first ensure that local fire departments have the basic tools they need to do their jobs on a daily basis, before we can ask them to be fully prepared to respond to large-scale incidents.

This program has been successful for a variety of reasons. First, it is the only federal program that provides funding directly to fire departments for training and equipment. Far too often federal funds intended to aid fire departments are diverted to other uses by state and local officials.

In addition, the U.S Fire Administration (USFA), under the leadership of Chief R. David Paulison, has spent the last two years developing and refining the program and has clearly demonstrated the capability to efficiently distribute these funds to local fire departments. The USFA Grants Office, which is under extremely tight deadlines, has performed remarkably in processing the 20,000 applications it receives annually and has been very responsive to the needs of the fire service. This is no surprise to us because the personnel at USFA know the fire service like no other agency and many of their personnel come from emergency services backgrounds themselves.

Finally, members of the fire service have been involved in nearly every aspect of the program to ensure that it addresses our current needs. We have helped to write the legislation, set the criteria for each category, and have staffed panels to grade the applications.

In February, President Bush included \$500 million for the Assistance to Firefighters Grant program in his 2004 budget request. The Administration also proposed moving the program out of FEMA and USFA, which are in the Emergency Preparedness and Response Directorate of the Department of Homeland Security, and into the Office of Domestic Preparedness (ODP), located in the Border and Transportation Security Directorate.

While \$500 million in funding is a good start and this is the first time that the program has been in an Administration budget, the NVFC feels that Congress needs to fully fund the program at the \$900 million level. In addition, the NVFC is strongly opposed to the proposal to move the program into the Border and Transportation Security Directorate of Homeland Security. The NVFC does not understand the benefit of moving a program aimed at equipping and training America's firefighters out of the lead federal agency for the fire service and into a section of the department that exercises little, if any control, over federal fire programs.

The move will require the government to reinvent the wheel, with new staff, new training, and new infrastructure, at a time when the Federal Government should be completely focused on delivering these dollars to our local first responders.

In its first year of existence (FY 2001), the program received \$100 million in appropriations. In FY 2002, the program received \$360 million in appropriations and awarded nearly 5,500 grants to needy fire departments. In FY 2003, Congress appropriated a total of \$750 million for the program and fire service personnel from across the country are reviewing applications as we speak at the National Emergency Training Center in Emmitsburg, Maryland.

Many of these departments who are receiving aid are rural and suburban volunteer fire departments that struggle the most to provide their members with adequate protective gear, safety devices and training to protect their communities. They are being asked to respond to

emergency calls involving hazardous materials, structural fire suppression, clandestine drug labs, search and rescue, natural disasters, wildland fires, emergency medical services, and terrorism. Many of these emergencies occur at federal facilities and buildings and on federal lands. In addition, these incidents can damage America's critical infrastructure, including our interstate highways, railroads, bridges, tunnels, financial centers, power plants, refineries, and chemical manufacturing and storage facilities. We as a fire service are sworn to protect these critical facilities and infrastructure.

Once again, the NVFC strongly urges Congress to fully fund the Assistance to Firefighters Grant program at the fully-authorized \$900 million level in FY 2004 and keep it as a distinct program under the Federal Emergency Management Agency (FEMA) and the U.S Fire Administration (USFA) in the Emergency Preparedness and Response Directorate of the Department of Homeland Security.

#### U.S Fire Administration / National Fire Academy

In 1971, this nation lost more than 12,000 citizens and 250 firefighters to fire. Acting to halt these tragic losses, Congress in 1974 passed P.L. 93-498, the Federal Fire Prevention and Control Act, which established the United States Fire Administration (USFA) and its National Fire Academy. Since that time, through data collection, public education, research and training efforts, USFA has helped reduce fire deaths by at least half -- making our communities and our citizens safer. The NVFC strongly supports reauthorization of USFA and asks Congress to do whatever possible to continue to enhance the agency's mission.

In early April, it was announced that the USFA was forced to take an 11% budget cut in fiscal year 2003. As a result, the Academy has been forced to cut 36 resident courses. This cut represents an over 40 % loss in the total amount of courses that will be delivered on campus between the beginning of May and the end of September 2003.

The National Fire Academy is the nation's premier fire service training facility, which provides our nation's firefighters and emergency responders with essential skills and leadership needed to keep pace with our ever-expanding role. Besides training responders to deal with the new threats of terrorism and weapons of mass destruction, the Academy also has continued its core mission to enhance the ability of fire and emergency services to deal more effectively with daily emergencies in our nation's communities.

Besides delivering courses at its Emmitsburg, Maryland campus, the Academy offers many courses which are available for direct delivery to our local communities through our nation's State Training Agencies. This system is especially beneficial to the many in the volunteer fire service that do not have the time to attend on-campus programs.

Obviously, this substantial cut is of great concern to the NVFC. Our organization has spent many years fighting to strengthen the U.S Fire Administration and the Academy. We find it very disconcerting that at the same time large sums of money are finally making their way to the states for homeland security, the Fire Academy is cutting its budget. Before you can train a firefighter to respond to terrorism incidents, they must first be trained as firefighters or fire officers. Firefighters should not have to choose between the Fire Academy and terrorism training, they need both. These classes must be restored immediately and Congress must ensure that the Fire Academy's role is enhanced in future years.

In addition, the cuts have also affected the Fire Administration's ability to work in partnership with national and local fire and emergency service organizations through cooperative agreements and with other Federal agencies. These partnerships help the USFA to accomplish its charge to provide public education, training, and data collection, and need to be protected.

Finally, the NVFC is also alarmed at the proposed actions to eliminate the U.S. Fire Administrator position. The individual who fills this position, serves as the lead advocate and spokesman for the fire service within the Administration. He or she is able to carry the fire

service's message to the President and the Secretary of Homeland Security, and vice-versa. We urge the Department of Homeland Security to reinstate this position immediately.

Many fire service organizations, including the NVFC, have worked hard to ensure that the U.S. Fire Administrator played an integral role in FEMA and now the Department of Homeland Security. We are concerned that these recent developments indicate a reversal in the fire service's role and stature in the new Department.

#### First Responder Terrorism Funding

Terrorism and hazardous materials response training and equipment are of vital importance to America's fire service. Even the best-prepared localities lack adequate resources to respond to the full range of terrorist threats this country faces. Many jurisdictions, especially those in rural and suburban areas protected by volunteers, have little or no capability to respond to terrorist attacks using weapons of mass destruction.

Although the fire service is pleased that Congress has begun to send real dollars to the States for first responder terrorism training, equipment, and planning, we do have some concerns that I would like to address.

First, we are concerned that the proposed move of the Assistance to Firefighters Grant program to the Office of Domestic Preparedness, which primarily distributes its funding through the states, will eventually lead to consolidating the program into other state-based block grants. This consolidation was proposed by the Administration in their FY 2003 budget and fortunately was not supported by Congress.

Secondly, we have heard from fire service personnel across the country that much of this funding that is being sent to the states by ODP is not making its way to the local level. This is unacceptable. In a July 2002 position paper on the creation of the Department of Homeland Security authored by the major fire service organizations, we advocated that at least 90% of the money reach the local level. While we see a role for the states in coordination and in some training, the Department needs to make sure that this funding reaches local response agencies in an expedited fashion.

Thirdly, the Department of Homeland Security needs to encourage the states to make sure that the fire service is at the table when discussing terrorism preparedness and response. In many states law enforcement, the National Guard, and emergency management will all receive higher priority than the fire service when it comes to receiving federal funding.

Fourthly, we have had many concerns regarding the use of the term "first responder." The definition must be clearly articulated from the onset, placing heavy emphasis on response times and exposure to risks. First responders are fire and rescue, emergency medical services and law enforcement personnel. Period.

Finally, although we understand the special needs and concerns of America's large metropolitan areas, the Department of Homeland Security cannot forget smaller communities, whose fire, rescue and EMS personnel also need the training and equipment to recognize and respond to these incidents. While these communities may not seem to be prime terrorist targets, it is this very perception that makes them especially vulnerable.

An often overlooked, yet key component to preparing our nation's fire and rescue personnel are our State Training Agencies. These agencies are well-established and have a proven track record in the training of the fire service. Each year the state fire training systems train over 750,000 students nationally, many of them volunteers.

While ODP's training consortium has developed some excellent terrorism programs for first responders, these centers service a small number of students at very high costs. We feel that some first responder terrorism training dollars need to go to enhance and strengthen the state training system. Unfortunately, terrorism training dollars are not going to them at all. In fact,

the small amount of terrorism funding that these agencies received in the past through the National Fire Academy has been redirected to ODP. The NVFC is again concerned that the Federal government is reinventing the wheel and not utilizing the most efficient methods of delivering services to the fire service, which is already in place.

#### Staffing for Adequate Fire and Emergency Response Firefighters Act (S. 544 / H.R. 1118)

Personnel shortages are another large concern of America's fire service. Many departments, in communities of all sizes, struggle on a daily basis to adequately staff local fire stations and respond to calls. Personnel shortfalls endanger the safety of firefighters and hinder the ability of first responders to effectively protect the public from fire and other hazards. Many studies and standards indicate there needs to be a minimum number of personnel on-scene to perform lifesaving measures safely. Other studies indicate proper staffing is required to adequately protect property. Simply put, when firefighters cannot safely work, they are unable to save lives and property.

The Staffing for Adequate Fire and Emergency Response Firefighters Act (S. 544 / H.R. 1118) authorizes the U.S. Fire Administrator to make grants to States and local governments to hire additional career firefighters. The NVFC supports passage of this legislation.

However, we feel that any initiative by Congress to address the personnel shortfall in the fire service must include a significant recruitment and retention component to account for the nearly 90% of America's communities that are protected by volunteers. The recruitment and retention of volunteer firefighters and EMS personnel has become the number one challenge facing America's volunteer fire service. The ranks of the volunteer fire service have decreased over 10% in the last 20 years. The biggest factor contributing to the decline is increased time demands on the volunteer. This results from increased training hours to comply with more rigorous training requirements, increased fundraising demands, people living further away from their jobs, combined with an increased volume of calls. Many volunteers firefighters become frustrated because they have to spend much of their time raising money to buy life-saving equipment, when they could be training or at home with their families. The increased call volume is a result of the fire services' ever-expanding role into areas such as EMS, terrorism, vehicle extrication, natural disaster response and more. In addition, in many of our communities the lack of affordable housing makes it hard to keep young firefighters in town. Some possible solutions that should be considered include: funding for national and local recruitment campaigns; tax credits and deductions for volunteers; funding for length of service award programs and other pension programs for volunteers; incentives for employers to allow employees, who are volunteers, time off for training or emergency calls; affordable housing programs; tuition assistance for higher education; and increased proliferation of on-line training for volunteers.

Finally, another concern our organization has is the growing trend of career firefighters being harassed by their local unions for volunteering as firefighters in their home communities during their off-duty hours. In the past few years, the NVFC has received reports from across the country of local union affiliates threatening to take action against their members if they do not stop volunteering. In many cases, these firefighters give in to the pressure and quit volunteering. This situation not only affects the readiness and response level of fire departments in smaller communities, but also discourages citizens from selflessly serving their community.

Since September 11, 2001, the President of the United States has been encouraging all Americans to commit to service of their neighbors and their nation by becoming volunteers. We hope that we can all work together to heed the President's call to community service. We furthermore urge Congress to include language in the SAFER Bill to ensure that a career firefighter, especially those who are hired under the provisions of this bill, has the right to volunteer in his or her community.

#### Firefighting Research and Coordination Act

Finally Mr. Chairman, the NVFC fully supports your legislation, the Firefighting Research and Coordination Act, which would allow the U.S. Fire Administrator, in consultation with other interested parties, to develop voluntary consensus standards for evaluating the performance and compatibility of new firefighting technology. The legislation would also include the establishment of a scientific basis for new firefighting technology standards, improve coordination among Federal, State, and local fire officials in training for and responding to terrorist attacks and other national emergencies. We stand ready to assist you and your staff in your efforts to pass this important piece of legislation.

Mr. Chairman, I thank you for your time and your attention to the views of America's fire service, and I would be happy to answer any questions you may have.

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508 Dirksen Senate Office Bldg | Washington, DC 20510-6125 | Tel: 202-224-5115  
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