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This bulletin was sent to the following groups of people:

Subscribers of Assistance to Firefighters Grant Program (58555 recipients)



- ▶ FIRE PREVENTION AND SAFETY APPLICATION PERIOD APPROACHING!
- ▶ SAM.GOV REGISTRATION REQUIRED TO SUBMIT AN FY 2013 AFG/FIRE PREVENTION AND SAFETY APPLICATION
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FIRE PREVENTION AND SAFETY APPLICATION PERIOD APPROACHING!

The FY 2013 Fire Prevention and Safety (FP&S) Grant Program application period is fast approaching! As you begin to develop your application, the AFG Program wanted to share some successful projects that have been funded previously through the Fire Prevention and Safety Grants, and that you may find beneficial to your department.

Get Ready Guides and Self-Evaluation Guides will be available shortly on the AFG website, www.fema.gov/firegrants, to assist you with developing and planning your FY 2013 Fire Prevention and Safety application.

SAM.GOV REGISTRATION REQUIRED TO SUBMIT YOUR FY 2013 AFG APPLICATION

Starting with the FY 2013 AFG application period, a valid registration in the System for Award Management (SAM), formerly the Central Contractor Registry, or CCR, will be required in order to submit an AFG/FP&S application. Federal law now requires that applicants to Federal grant programs have a valid registration within SAM.gov at the time of registration. Applicants will be asked to affirm that they have a current registration prior to submitting their application.

As part of the SAM.gov registration process, every eligible grantee must have their SAM.gov account validated through the Internal Revenue Service (IRS) and have their CAGE (Commercial and Government Entity) code validated in order to be eligible for award. These validations are conducted as part of the registration process after the organization has submitted their SAM.gov registration. A valid SAM.gov registration is now also required for any payment or amendment request to an existing, open award. A valid SAM.gov registration is now also required for any payment or amendment request to an existing, open award. If your department has not yet registered within SAM.gov, you are encouraged to do. SAM.gov is administered through the U.S. General Services Administration (GSA). Technical assistance may be obtained through the Federal Service Desk at 866-606-8220. **Please be advised that during peak activity periods, it may take more than 2 weeks to complete the**

registration process.

FIRE PREVENTION AND SAFETY PROJECT UPDATES

1. International Association of Fire Fighters (IAFF) – Health and Safety

The online Fire Ground Survival Awareness Program, <http://www.iaff.org/HS/FGS/FGSIndex.htm>, was launched September 1, 2010. In June 2011, IAFF fully integrated the online awareness program into the IAFF Learning Management System (LMS). The Train-the-Trainer (TtT) program was launched in fall of 2011. To date the IAFF has more than 25,725 registered users for the **free** Online Awareness Program with more than 80% of those registered users (21,000) completing the entire program. More than 30 Train-the-Trainer classes have been completed. These classes were attended by representatives from more than 30 departments across North America representing more than 63,000 fire fighters.

The IAFF/IAFC/ACE Peer Fitness Trainer Certification Program

The purpose of the IAFF/ACE Peer Fitness Trainer Certification Program and the IAFF/ACE Peer Fitness Trainer Recertification Program are to identify fire fighters who have demonstrated the knowledge and skills required to design and implement fitness programs, improve the wellness and fitness of their departments, assist in the physical training of recruits, and assist the broader community in achieving wellness and fitness. Over 228 workshops have been delivered in 39 states, Washington DC and 5 Canadian provinces certifying 6,473 Peer Fitness Trainers.

2. Vision 20/20 Model Performance Symposium Call for Papers

Don't miss the chance to present your fire prevention program at the third [Vision 20/20 Model Performance in Fire Prevention Symposium!](#) Fire prevention experts from across the nation will be gathering together in Towson, Maryland on March 26, 27 and 28, 2014 to learn from each other about what works in the world of fire prevention. You can also view past Model Symposium presenters and background information on successful model prevention programs on the Vision 20/20 website (www.strategicfire.org).

The Call for Papers is open and you can submit your proposal online at the [Vision 20/20 web site](#). The proposals will be evaluated by a peer review panel and those selected will have their travel and lodging costs covered.

Don't miss out on this opportunity, and to learn more, [visit us at Vision 20/20!](#)

3. National Fallen Firefighters Foundation – Suicide Prevention

The National Fallen Firefighters Foundation recently held a summit, entitled “Generating Strategies and Materials to Support Suicide Prevention and Intervention in the Fire Service” that was held October 25-27, 2013 at the National Emergency Training Center in Emmitsburg, Maryland. During the summit, participants reviewed what was known about depression and suicide in the fire service in 2013, were refreshed on the topic by experts in the field and most importantly, began the development of a strategic plan for moving this issue forward. A white paper, developed after the initial suicide prevention summit in 2011 can be viewed at http://lifesafetyinitiatives.com/13/suicide_whitepaper.pdf.

RESEARCH AND DEVELOPMENT UPDATES

The below press release is from the University Corporation for Atmospheric Research. This work was funded, in part, through an FY 2011 Fire Prevention and Safety Grant:

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Scientists nearing forecasts of long-lived wildfires

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BOULDER -- Scientists have developed a new computer modeling technique that offers the promise, for the first time, of producing continually updated daylong predictions of wildfire growth throughout the lifetime of long-lived blazes.

The technique, devised by scientists at the National Center for Atmospheric Research (NCAR) and the University of Maryland, combines cutting-edge simulations portraying the interaction of weather and fire behavior with newly available satellite observations of active wildfires. Updated with new observations every 12 hours, the computer model forecasts critical details such as the extent of the blaze and changes in behavior.

The breakthrough is described in a study appearing today in an online issue of Geophysical Research Letters, after first being posted online last month.

“With this technique, we believe it’s possible to continually issue good forecasts throughout a fire’s lifetime, even if it burns for weeks or months,” said NCAR scientist Janice Coen, the lead author and model developer. “This model, which combines interactive weather prediction and wildfire behavior, could greatly improve forecasting—particularly for large, intense wildfire events where the current prediction tools are weakest.”

Firefighters currently use tools that can estimate the speed of the leading edge a fire but are too simple to capture critical effects caused by the interaction of fire and weather.

The researchers successfully tested the new technique by using it retrospectively on the 2012 Little Bear Fire in New Mexico, which burned for almost three weeks and destroyed more buildings than any other wildfire in the state’s history.

The research was funded by NASA, the Federal Emergency Management Agency, and the National Science Foundation, which is NCAR’s sponsor.

-----Sharpening the picture -----

In order to generate an accurate forecast of a wildfire, scientists need a computer model that can both incorporate current data about the fire and simulate what it will do in the near future.

Over the last decade, Coen has developed a tool, known as the Coupled Atmosphere-Wildland Fire Environment (CAWFE) computer model, that connects how weather drives fires and, in turn, how fires create their own weather. Using CAWFE, she successfully simulated the details of how large fires grew.

But without the most updated data about a fire’s current state, CAWFE could not reliably produce a longer-term prediction of an ongoing fire. This is because the accuracy of all fine-scale weather simulations decline significantly after a day or two, affecting the simulation of the blaze. An accurate forecast would also have to include updates on the effects of firefighting and of such processes as spotting, in which embers from a fire are

lofted in the fire plume and dropped ahead of a fire, igniting new flames.

Until now, it was not possible to update the model. Satellite instruments offered only coarse observations of fires, providing images in which each pixel represented an area a little more than a half mile across (1 kilometer by 1 kilometer). These images might show several places burning, but could not distinguish the boundaries between burning and non-burning areas, except for the largest wildfires.

To solve the problem, Coen's co-author, Wilfrid Schroeder of the University of Maryland, has produced higher-resolution fire detection data from a new satellite instrument, the Visible Infrared Imaging Radiometer Suite (VIIRS), which is jointly operated by NASA and the National Oceanic and Atmospheric Administration (NOAA). This new tool provides wall-to-wall coverage of the entire globe at intervals of 12 hours or less, with pixels about 1,200 feet across (375 meters). The higher resolution enabled the two researchers to outline the active fire perimeter in much greater detail.

Coen and Schroeder then fed the VIIRS fire observations into the CAWFE model. By restarting the model every 12 hours with the latest observations of the fire extent -- a process known as cycling -- they could accurately predict the course of the Little Bear fire in 12- to 24-hour increments during five days of the historic blaze. By continuing this way, it would be possible to simulate even a very long-lived fire's entire lifetime, from ignition until extinction.

"The transformative event has been the arrival of this new satellite data," said Schroeder, a professor of geographical sciences who is also a visiting scientist with NOAA. "The enhanced capability of the VIIRS data favors detection of newly ignited fires before they erupt into major conflagrations. The satellite data has tremendous potential to supplement fire management and decision support systems, sharpening the local, regional, and continental monitoring of wildfires."

-----Keeping firefighters safe-----

The researchers said that forecasts using the new technique could be particularly useful in anticipating sudden blowups and shifts in the direction of the flames, such as what happened when 19 firefighters perished in Arizona last summer.

In addition, they could enable decision makers to look at several newly ignited fires and determine which pose the greatest threat.

"Lives and homes are at stake, depending on some of these decisions, and the interaction of fuels, terrain, and changing weather is so complicated that even seasoned managers can't always anticipate rapidly changing conditions," Coen said. "Many people have resigned themselves to believing that wildfires are unpredictable. We're showing that's not true."

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About the article

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Authors: Janice L. Coen, Wilfrid Schroeder

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On the Web

For news releases, images, and more:
www.ucar.edu/atmosnews

AFG Home Page: www.fema.gov/firegrants

AFG Regional Representatives: <http://www.fema.gov/fire-grant-contact-information>

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