

## **Federal Fire Working Group Meeting**

Federal Emergency Management Agency/U.S. Fire Administration  
16825 South Seton Avenue, Emmitsburg, Maryland 21727

June 25, 2015 Time: 9:30 a.m. – 11:30 a.m.

**Call in#: 1-800-320-4330, PIN#: 607172**

### **ATTENDEES**

John Staub  
Jim Bisker  
Ross Mowrey  
Marc Tonnacliff  
Steve Tansky  
Henry Regal  
Bill Troup  
Larry McKenna

### **ORGANIZATIONS**

Army  
DOE  
EPA  
FAA  
FAA  
FAA  
USFA  
USFA

### **PRESENTERS**

Rick Davis, PhD., NIST  
Mark Henry Salley, P.E., NRC  
Jason Steinmetz, USDA Forest Service  
Everett Hinkley, USDA Forest Service

### **USFA ATTENDEES**

Ernest Mitchell	Administrator, U.S. Fire Administration
Denis Onieal	Deputy Administrator, U. S. Fire Administration
Alex Furr	Director, National Fire Program Division/USFA
Sandy Facinoli	Chief, Prevention & Information Branch (P&I), National Fire Programs Division (NFPD), USFA
Rebecca Ryan	Fire Program Specialist, P&I/NFPD

### **Opening**

Ernest Mitchell, Administrator, U. S. Fire Administration, welcomed all to the meeting and expressed his interest and appreciation to the members for their participation in this group. He acknowledged he was joining from California so would not have WebEx access but had copies of the presentations and would follow along.

Through the kindness of Rick Davis, one of our presenters from NIST, the presentations were shared in real time using WebEx. Rick controlled the presentations as prompted by the presenters. All members had received the PP documents previously so those who were not able to participate via WebEx could use them as reference during the presentations.

Roll Call was taken followed by the first of several presentations.

The following presentations were provided:

**Rick Davis, Ph.D.**  
**Manager, Fire Risk Reduction in Buildings Program**  
**National Institute of Standards and Technology**  
**Presentation:** *Flammability Reduction Technologies*

Dr. Davis opened his presentation by stating that the National Institute of Standards and Technology (NIST) fire research looks at reducing fire losses and costs by enabling cost-effective fire protection of people, buildings, and communities and improving the safety and effectiveness of firefighters. His presentation focused on ignition resistant materials and low flammability products.

Residential Upholstered Furniture (RUF) is the single largest source of deaths and injuries in residential fires. The foam in the furniture is the single largest fuel source and dictates the severity of a fire.

NIST focuses on enabling commercialization of inexpensive, fire and environmentally safe residential upholstered furniture by testing:

- Fire Resistant Coatings (research solution)
- Fire Blocking Barrier Fabrics (commercial solution)
- Standardized Foam for Smolder Ignition testing
- Smolder Ignition Testing (standardized test method)

In summary, NIST research is enabling the development of low flammability furniture by providing guidance to 1) standards and regulatory agencies on robust methods for assessing the flammability of furniture, and 2) manufacturers on materials/products that lower the flammability of furniture. NIST research is driven by strong stakeholder collaborations and input with several groups: Consumer Product Safety Commission; CA Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation; and Foam and Barrier Fabric manufacturers.

**Mark Henry Salley, P.E.**  
**Chief, Fire Research Branch**  
**U.S. Regulatory Commission**  
**Presentation:** *Nuclear Regulatory Commission*

Mr. Salley opened his remarks by explaining that the Nuclear Regulatory Commission (NRC) and Department of Energy (DOE) are relatively new organizations having divided the responsibilities of the original Atomic Energy Commission (AEC) in January of 1975. During the AEC era, fire protection in the Nuclear Power Plants (NPPs) was an afterthought and believed to be an insurance concern and not a safety issue. This all changed with the Browns Ferry Fire in March 1975.

The Office of Nuclear Regulatory Research (RES) is one of the major NRC Offices. It has 3 divisions; 15 branches; and approximately 220 engineers, scientists, and support staff. The RES activities are mainly in the “applied research” area. They continue to advance science and understanding by developing methods, tools and data; improving the state-of-the-art; and expanding the knowledge base.

NRC has several research partners with whom they collaborate: Electric Power and Research Institute (EPRI), National Institute of Standards and Technology (NIST) (particularly on fire modeling and experiments); DOE Laboratories; International partners, i.e. Japan; and Academia such as University of Maryland and Cal Tech.

Mr. Salley mentioned some Fire Probabilistic Risk Analysis (PRA) training that was available. There are currently 5 separate classes:

- Fire Probabilistic Risk Analysis
- Fire Analysis
- Electrical Circuit Analysis
- Fire Human reliability Analysis
- Advanced Fire Modeling

The five (5) modules cover the major technical areas of the fire PRA methodology. This year’s offerings will provide each module only one time at either the NRC or EPRI offices. Participants may attend as many modules as they wish during the year. Remember both EPRI and NRC will host, so please note the date and location and be sure to read the course descriptions prior to registering. Participants in this workshop are eligible to receive up to 31 Professional Development Hours (PDHs) per module upon successful completion. The training is provided free to any interested party. A complete description of each module is provided below with a link to the course website and registration.

EPRI/NRC-RES Fire Probabilistic Risk Assessment Training - Module I - Probabilistic Risk Assessment, September 28 - October 2, 2015 - EPRI Offices, Charlotte, NC  
Registration Link: <http://www.cvent.com/events/epri-nrc-res-fire-probabilistic-risk-assessment-training-module-i-probabilistic-risk-assessment/event-summary-7c6addcefb84aac80dc78b4c739b31c.aspx>

EPRI/NRC-RES Fire Probabilistic Risk Assessment Training - Module II - Electrical Analysis, August 24 - 28, 2015 - NRC Offices, North Bethesda, MD  
Registration Link: <http://www.cvent.com/events/epri-nrc-res-fire-probabilistic-risk-assessment-training-module-ii-electrical-analysis/event-summary-bbf8f380c4914ccf996c92ae2bca2e6f.aspx>

EPRI/NRC-RES Fire Probabilistic Risk Assessment Training - Module III - Fire Analysis, July 20 - 24, 2015 - NRC Offices, North Bethesda, MD  
Registration Link: <http://www.cvent.com/events/epri-nrc-res-fire-probabilistic-risk-assessment->

[training-module-iii-fire-analysis/event-summary-98d9f59e06f847c5a88be66eec6e1587.aspx](http://www.cvent.com/events/epri-nrc-res-fire-probabilistic-risk-assessment-training-module-iii-fire-analysis/event-summary-98d9f59e06f847c5a88be66eec6e1587.aspx)

EPRI/NRC-RES Fire Probabilistic Risk Assessment Training - Module IV - Fire Human Reliability Analysis, September 28 - October 2, 2015 - EPRI Offices, Charlotte, NC  
Registration Link: <http://www.cvent.com/events/epri-nrc-res-fire-probabilistic-risk-assessment-training-module-iv-fire-human-reliability-analysis/event-summary-69e85d2d1d664cd9b917319e52c96027.aspx>

EPRI/NRC-RES Fire Probabilistic Risk Assessment Training - Module V - Advanced Fire Modeling, August 17 - 21, 2015 - NRC Offices, North Bethesda, MD  
Registration Link: <http://www.cvent.com/events/epri-nrc-res-fire-probabilistic-risk-assessment-training-module-v-advanced-fire-modeling/event-summary-531a64c59ea94c20904035fe58100337.aspx>

If you have any questions, please feel free to contact the EPRI Meeting Planner/Event Registrar, Kris Vail. (704-595-2617)

Mr. Salley also explained that fires in NPPs were not design basis events like earthquakes or tornados, but rather were events expected to routinely occur. There were a few questions on the number and types of fires in the NPPs. Attached is the NRC annual fire metric report that lists and trends the major fire events annually. A more detailed account of the NPP Fire Event Operating Experience database can be found in NUREG 2169: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr2169/>

**Jason Steinmetz, Emergency Management Specialist-NIMS  
Fire & Emergency Operations and International Fire Support Branch  
U. S. Forest Service**

**Presentation:** *Overview of the 2015 Wildland Fire Season*

Jason Steinmetz, U.S. Forest Service, provided an overview of the 2015 Wildfire season. Jason mentioned that Alaska is currently experiencing serious wildland fires and 9 teams are in that state trying to contain the situation. Alaska hasn't seen this kind of fire activity since 1977. California, Oregon and Nevada are also under extreme drought conditions and their wildland fire potential remains above normal through September.

Jason also mentioned that they are projecting above normal wildland fire potential through July from the Carolinas to Georgia. Above normal significant wildland fire potential indicates a higher than usual likelihood that wildland fires will occur and/or become significant events.

Even Hawaii will experience above normal wildland fire potential up through September. Projecting warmer than normal temperatures from June-September which often times bring about lightening effects will make the June-September timeframe a long and extended fire season.

**Everett Hinkley, National Remote Sensing Program Manager**

## **USDA Forest Service**

### **Presentation:** *Unmanned Aircraft Systems UAS Update: Current Forest Service Perspective*

Everett Hinkley, U.S. Forest Service, provided an update on the Forest Service perspective of utilizing unmanned aircraft systems or UAS. He pointed out three (3) application areas for UAS: resource management, wildfire, and law enforcement and investigations. Resource management would include rangeland monitoring, engineering (bridge and dam inspections) and forest inventory. Wildfire would include near real-time high resolution fire detection and characterization and geospatial mapping/visualization. For law enforcement and investigation it could be an asset in surveillance and detection/mapping of illegal activities.

Mr. Hinkley pointed out that since UAS are “aircraft systems,” the responsibility for UAS in the Forest Service is the Aviation Division within Fire and Aviation Management in State and Private Forestry. The acquisition of any UAS will follow existing Forest Service policy. In addition there is a UAS Executive Steering Committee (ESC). The initial tasking of the committee will be to coordinate efforts with their state and federal partners and to develop additional Forest Service Policy on the operation and use of UAS, to include recreational use or any other use on National Forest System lands.

Everett gave an example of how far the technology has come in the realm of personal UAS by showing a photo of “Lily”, which is a small quadcopter UAS system which will follow a person and store live video. This type of UAS is designed primarily for filming sporting activities such as biking, skiing, etc.

\*\*The attendees were advised that the next FFWG teleconference/meeting would be in the late November-early December timeframe. Please feel free to notify Rebecca Ryan ([becky.ryan@fema.dhs.gov](mailto:becky.ryan@fema.dhs.gov)) if you have a topic you would like to present at our next meeting.

As always we appreciate the support of all our members and encourage your participation in future meetings.