

inFIRE Conference 2011
Illinois Fire Service Institute
Champaign, IL
May 8-13, 2011

Issues and Challenges in the Digital Age of Fire Information

The current chairperson, Mike Culhane, could not attend and I volunteered to assume the role of acting Chair for this conference.

An opening reception was held Sunday evening and we met the group of librarians and fire researchers from China who are new members and are attending inFIRE for the first time. On Monday we opened the conference at the Illinois Fire Service Institute (IFSI) Learning Resource and Research Center. This is a new facility that was dedicated in January 2011. It houses the Library, Incident Management Training Facility, Research Laboratories, auditorium and classrooms. After a welcome from the IFSI Director, Richard Jaehne, we were provided with a walking tour of the new facility and the impressive fire training grounds.

Sessions:

Action Research in Fire Fighter Training: Using Libraries to Connect Students to Knowledge, Brian Brauer, Assistant Director, IFSI

Provided examples of how Action Research has been incorporated into the firefighter training at IFSI. They have incorporated the training into both basic, advanced, and fire officer training programs. Training includes optimum use of materials in the Library, how reference staff can help locate appropriate research material by ensuring quality data sources, and available online resources for the topics assigned to the students at IFSI. This will prepare students for future roles of leadership in the fire service.

An Overview of the National Incident Management System Consortium, Mike Wieder, Executive Director, IFSTA, Oklahoma State University

Covers the inception and development of the Consortium from its beginning in 1980s to present. Incident Management was defined and performed by individual units; states, metro fire departments, counties, regions, and sometimes individual municipal fire departments which led to confusion and sometimes competition and discord between arriving units. NIMSC was formed to address the need to have adopted guidelines for response to any incident and wrote seven manuals which, in the next edition, were combined into two volumes and they have been published by Fire Protection Publications. The U.S. Dept of Homeland Security's National Response Plan is replacing the Consortium. Mike Wieder has served as secretary of NIMSC since its beginning.

Champaign Fire Department Chief Doug Forsman hosted a welcome party and tour at Champaign's newest fire station.

Firefighter Safety Initiatives: The Need for Quality Learning Resources, Doug Forsman, Fire Chief, City of Champaign.

Need for safer operating environment for firefighters has led to both science and practice to determine what can be done with buildings and operations to reduce the number of line of duty injuries and deaths. Access to information and published research on this subject is critical to the understanding of safer ways to operate. Discussed how libraries play a key role in accumulating, organizing and making available this information.

Digital Librarianship in Library Information Science (LIS) Education, Linda Smith, Professor, Graduate School of Library and Information Science, University of Illinois

Developments in technology and growing importance of digital resources have led to the need for development of new courses and areas of specialization at both the master's and post-master's level. Dr. Smith discussed how this is being developed and delivered at U of I.

Building an Association-wide Taxonomy, Sue Marsh, NFPA Library

NFPA did not have a controlled vocabulary for material on its web pages. Consultants and an in-house committee will start working on developing taxonomy for use throughout NFPA. The ultimate result will be a controlled vocabulary that will be managed by the library staff. The taxonomy will be built through a consensus based decision process and applied to all NFPA internet and intranet pages.

(Taxonomy is used to classify and organize available resources on the Internet. Libraries use the concept of taxonomy to classify books by genre and sub-genre and order to organize books, magazines, articles, and periodicals by subject matter, for ex. Dewey Decimal System of Library of Congress Classification System)

Library Practices and Management in the Digital Age of Fire Information: Development of the Illinois Fire Service Institute Library, Lian Ruan, Diane Richardson, Adam Groves, IFSI Library

Discussed the establishment and development of the IFSI Library over the last 20 years. Topics include, proactive library practices, management techniques to provide no-cost fire emergency library service to Illinois; outreach practices, pursuit of grant awards, patron training program, and efforts of the Library Staff (in particular Lian Ruan) to reach their goal of a new state of the art Resource Center.

Tour of the Univ. of Illinois Library and their offsite storage facility

What will be the Attitude of People using Elevators for Evacuation in Super High-Rise Buildings, S.M. Lo, Dept of Building and Construction, City University of Hong Kong

Research into the attitude of people's perception and use of elevators as a means of egress in high rises instead of the accepted practice of using stairwells. Using information from studies of people's egress preference put into a computer model, it was found that people will follow the first ones out, even if there are two exits available. The goal is for building designers and facility

managers to increase people's levels of trust in using elevators in spite of needing to break from the already established exit to a stairway.

Firefighter Life Safety Research Center Studies, Gavin Horn, Director of Research, IFSI

IFSI's Firefighter Life Safety Research Center's mission is to provide a research program dedicated to studying firefighter health and safety issues. They conduct research to study the combined effects of the firefighter's characteristics, firefighting equipment, fire ground environment, and how that relates to injuries and fatalities. Some of their projects are: effects of firefighting on cardiovascular system, risk for cardiac events (heart attacks), changes in firefighter biomechanics from wearing ppe that leads to increased risk of slips trips and falls.

I have two research reports from this research – available in the Library.

[Firefighter Fatalities and Injuries. The Role of Heat Stress and PPE](#)

[The Effects of Fire Fighting and On-Scene Rehabilitation on Hemostasis](#)

IFSI's Current Technological and Future Delivery Mechanisms, Rich Valenta, Program Director for Distance Education, IFSI

IFSI is responsible for reaching and teaching firefighters throughout the state and IFSI is doing this through the use of multi-media, audio and video lectures, and synchronous chat sessions. He has developed e-learning programs (using Moodle) for FF II, Technical Rescue Awareness, Haz Mat Awareness, Origin and Cause Awareness, Ethanol Awareness, Vehicle Operator (classroom portions only), Fire Apparatus Engineer and Emerg Response to Terrorism: Basic.

www.fsi.illinois.edu/content/virtual%20campus/courses

The Application Progress of Fire Engineering in the Construction of Underwater Tunnels in China. Zheng Fang, School of Civil Engineering, Wuhan University

Due to population density and heavy traffic, China has a large number of underwater tunnels. Because of high fire risk and rescue difficulties, there has been a large amount of research on safety and evacuation. Topics covered were smoke exhaust and ventilation systems. Fire fighting systems, fire alarm and monitoring systems, and developing emergency response plans.

Transition of Fire Protection Systems at Nuclear Power Plants to Performance Based Risk Informed Process NFPA 805, Christian Dahms, Loss Control Consulting Services, Browns Ferry and Point Beach, Alabama

After the nuclear reactor disaster in Japan, US nuclear facilities are performing risk assessments. Browns Ferry was built in 1966 and is the exact design as the Fukushima plant in Japan. Steps taken to perform a risk assessment were discussed. Browns Ferry was not damaged by the recent tornadoes in Alabama but the power system was knocked out, causing the use of their back up system for a few days until the priority electricity was restored. An intelligent evacuation plan, Human Evacuation Route Optimization Model (HEROM) and Fire Prevention Joint Control system (FPJCS) are in place if there is a need to activate.