From the Director’s Desk

As I write this, fresh in my memory is the recent loss of firefighter Brian J. Munz of the Fairbury Fire Department. As it is with firefighters, he loved what he did and strove everyday to be better at it. Just this spring, he participated in Cornerstone funded courses hosted by his department. Our thoughts and prayers are with Brian’s family and the Fairbury Fire Department as they mourn his loss, remember his many contributions and stand ready to respond to the next call.

While Brian was killed by a collapse, many firefighters die each year due to cardiac arrest. Last fall we received a significant research grant and, with your help, tested 122 firefighters to help us better understand the nature of heat stress during fire fighting and its contribution to the cardiac risk factors associated with fire fighting. On page 23 you will find a presentation of some of the results of the research. The critical component in our research is to help translate science into proactive action on the fireground and in the firehouse. We seek your continued support to help us do precisely that and to help us continue to study fire fighting scientifically. Because of the efforts of all concerned, we have received additional grant funding from the Department of Homeland Security to continue our research next year.

The new State fiscal year caused a short delay in the Cornerstone program. The program is now up and running again. Fortunately, the Office of the State Fire Marshal was able to secure FY 2009 grant funds for the program and to finalize a grant agreement. The LP live burns funded by the Illinois Propane Education and Research Council (IPERC), grant–funded HazMat training programs and regular IFSI courses continued unabated. Please contact your local IFSI regional representative for more details or visit our web site.

In addition, the ethanol courses we promised are up and running, thanks to the herculean efforts of Duane Bales, Rick Haase, Rich Valenta and Dave Clark. We are now offering a series of courses, seminars and an interactive web site specifically on ethanol. Also, check out the five new videos on foam applications for ethanol response at:  
[http://www.fsi.uiuc.edu/content/courses/programs/ethanol/]

The design for the new Learning Resource and Research Center has been approved by the University of Illinois Board of Trustees. On page 22, you’ll find several photos, but here is the front elevation. As I told you in the last newsletter inside will be the library, research space, conference center, and emergency operations training center which will allow us to expand programs to serve you. We will create a Firefighter Memorial Hall that builds upon our line-of-duty-death (LODD) memorial project to honor each fallen Illinois firefighter. It is our intent to offer bricks and capstones as part of the project to allow firefighters, families and organizations to participate in a permanent way. We hope to break ground early next year.

Thank you for allowing us to serve you. Your feedback is always welcome, either through our regional reps, instructors or directly to me. You can e-mail me directly at Jaehne@uiuc.edu. Be safe and train hard.
The Illinois Fire Service Institute Newsletter is the official publication of the Illinois Fire Service Institute, University of Illinois Urbana-Champaign. The Newsletter is published twice a year and is solely an educational and advisory aid to the fire service and individuals working to establish and maintain a fire safe environment in Illinois.

Opinions expressed in the Illinois Fire Service Institute Newsletter are those of the authors and do not necessarily represent the official opinions of the Illinois Fire Service Institute unless otherwise noted in the article.

The Illinois Fire Service Institute will consider for publication articles or items of interest to the fire service of Illinois and encourages materials from all fire-related professions for consideration.

Persons interested in furnishing articles, should forward materials to: IFSI Newsletter, 11 Gerty Drive, Champaign, IL 61820 or E-mail information to Terri Hopper at hopper@uiuc.edu. Please include appropriate graphics or digital photos.

Materials in this newsletter may be reproduced or republished provided credit is given to source and author.

The University of Illinois is an affirmative action, equal opportu...
June was another busy month with HazMat and Tech Rescue Team Validations, plus our annual Fire Explorer / Cadet hands-on training. This event brought young people from fire departments across the U.S. and Canada as well as throughout Illinois. This wrapped up another very successful year of training.

IFSI has begun offering ethanol training classes. Check our website www.fsi.uiuc.edu for a listing of these classes. The Ethanol classes for fire departments are available at no cost. Contact us to schedule a class. Ethanol Awareness On-Line will soon be available, also.

Due to the state budget impasse, training funded by the “Cornerstone” grant was suspended temporarily, since the state grant money was not available to fund it. We are now again able to offer these “free” classes. The suspension did not include LP, Oil & Gas, and Ethanol classes which are not funded by OSFM state funds.

Work continues on duplicating the new “Down & Dirty” series DVDs on “Fireground Support & Aerial Operations.” They will be distributed free to every fire department in Illinois soon. This has been a major project, and it will have two DVDs on truckwork/support activities, two on aerial apparatus construction and use, and one disc with 270 pages of downloadable PDF Study Guides for these subjects. Thanks to the Illinois Firefighter’s Association, Underwriter’s Labs, numerous fire departments, apparatus manufacturers, and our staff -- particularly Rich Valenta, for making this super project possible. We hope you will make good use of this and the previous “Down & Dirty” training packages that have been provided to you. We are now working on a “Down & Dirty Fire Attack” CD.

Our new fire station annex is now housing two of our aerials and an ambulance. This building will pay for itself over time, because it will reduce our costs for tent rental for major events such as Fire College.

The architects are moving forward on detailed design of and interior finishes for the new IFSI Learning Resource & Research Center. We will break ground in a few months.

IFSI is involved in a variety of interdisciplinary research projects with several U of I colleges, UL, NIST, State Farm Insurance, the Chicago Fire Department and others.

Several Incident Management Teams (IMTs), which were trained by IFSI over the past year or so, were deployed to area command centers and the State Emergency Operations Center during the recent flooding along the Mississippi. These interdisciplinary specialists proved to be a great asset in helping manage the flood issues. Previously, some of these trained team members assisted with the Northern Illinois University (NIU) shooting incident. The IMTs are a resource that is available to every Illinois community. This fall IFSI will host, in conjunction with NIU, the first ever national meeting of IMTs from across the nation to share information and lessons learned. Hopefully this will help standardize things across the country so we can all work together better. This is another example of Illinois taking a national leadership role.

I hope you will contact IFSI to enroll in a class or to schedule a class for your department.

Find classes close to you by using the COUNTY MAP SELECTOR option on the IFSI web site. Click on COURSES in the upper left hand corner, then click on COUNTY MAP SELECTOR.
How about we spend a few minutes discussing the Illinois Fire Service Institute Education and Development Fund? I would hope that all IFSI family, both career service and field staff, are aware of and participate in this effort. As is the case in this life, when a couple of Irish lads get together for an after Fire College debrief, ideas are fostered. Many are forgotten by the next day, many are beyond the realm of possibility, most are stupid, but ahh the one that makes sense and sticks becomes what we know and love as the Scholarship Fund.

On a coaster in a Savoy business during June 1990 this meeting of the two fragile minds conceived the “what if,” about the creation of a fund, supported by the field staff to help the field staff do “stuff” – like investigative studies of notable fire and rescue incidents to then bring the information back to the entire body of Instructors. This idea was presented to Jim Straseske, who at that time was IFIS’s Assistant Director. Jim fronted the concept to the Development Association of the University of Illinois Foundation. Over the following several months there was discussion on things like the name of the fund, purpose of the fund, Governing Board, selection committee, and so on and so forth. A formal document was hammered out and the Illinois Fire Service Institute Education and Development Fund came to life on 5 June 91, with the following members:

- Jerry Monigold, IFSI Director: Chairman
- Ed Enright (tog) Field Staff: Vice-Chair
- Mac McCastland (tog ii) Field Staff: Finance
- Bob Moff, Field Staff: Finance
- Bill Farnum, Field Staff: Member
- Steve Wilcox, Field Staff: Member
- Howard Eskridge, Full Time IFSI: Member

The first order of business was to determine how money was going to be raised to establish a level of endowed, thus allowing eligible activities. Each instructor was to be asked to donate a sum equal to two hours pay to the fund. This would be a voluntary donation sought on an annual basis. After we reach a certain monetary level in the endowment, the process of funding activities could begin.

As time went on, the committee sought ways to increase the funding level through sales of decals, coffee cups, photos, raffles, assistance from external donors and whatever way they could raise a legal buck. The Committee also wrestled with an idea of supporting educational scholarships. It was agreed that this was a good idea, but the selection could be a bag of snakes.

So where are we today? We’re in good shape!! Through the solid effort of the IFSI financial management folks (Marcia), the fund has grown to a point that we are able to fund six scholarships through the Illinois Fire Chiefs Education and Research Foundation. Each of these scholarships has an educational value of $1000.00 to be applied toward tuition for either formal education, Fire Officer certification or training. We put up $500.00 for each and the Chiefs match that amount. Each spring fire service members from the state can make application through the Chiefs for an award.

The IFSI Committee named the scholarships in the names of members who contributed in numerous ways to the success of the Institute. They are: Gerald Monigold, Dean Mercer, Jim Berggren, Bill Renaker, Andy Fredricks and Pete Lund.

Other notable efforts that have been funded over the years are some of the early heat stress research, structural component burn testing, Officer Training research and other projects.

There was a time when we were able to sit with each new addition to the IFSI family and cover this fund and it’s workings during an orientation, but with our explosive growth over the years, that has not happened. What you need to know is that if you are part of the IFSI Family you are encouraged and welcomed to donate to this cause, the rate is the same—a dollar amount equal to two hours of field staff pay. If you were a member and fell off the program -- come back – no juice, no interest, no visit from Vito. If you are hearing about this for the first time, jump in. You get a tax break for your donation. Make your check out to the IFSI Scholarship Fund and send it to Marcia Miller at IFSI.

Today the committee is still as it started with two career IFSI and five field staff. Some names have changed, but the mission is the same.

The committee includes:

- Mac McCastland: Chair
- Ed Enright: Vice Chair
- Tom Brady: Member
- Hugh Stott: Member
- Brian Brauer: Member
- Rick Scott: Member
- Dan Hite: Member

And nothing gets done without Marcia Miller doing finance and Terri Hopper keeping track of what goes on in the meetings.

If you have any questions give me a shout. Time to strike it out.

Take care and stay safe.

Mac
As we move into the next season of live-fire training, I want to provide updated contact information for some of IFSI’s programs.

For all Fire Fighting classes in Champaign, including the Fire Apparatus Engineer program (on- and off-campus) contact Fire Fighting Program Director Brad Bone. Brad’s email is bgbone@fsi.uiuc.edu, or via phone at 217-265-9438.

For classes to be held at your fire department, either through the Cornerstone grant or delivered via contract, contact your IFSI Regional Representative. A list of these representatives can be found in this newsletter on page 11.

To request Basic or Advanced Wildland Fire Fighting training, please submit a request for training (from the IFSI website) to Brian Brauer by paper mail to IFSI in Champaign, or via email attachment to brbrauer@fsi.uiuc.edu. As this newsletter goes to print, IFSI is offering the 20-hour Basic Wildland for Structural Firefighters, as well as five 200-level classes. We are awaiting funding from IDNR to offer these programs through a grant, but the classes are available on a contract basis in the meanwhile.

Tower Burns are live-fire classes scheduled between a MABAS Division or Fire Department and IFSI held at the Champaign campus. These burns require a minimum of 35 students and a group may request one per fiscal year. The first step in scheduling one of these classes is to submit a request for training, in the same manner as described in the above paragraph. Funding for these burns for FY2009 is through the Cornerstone program. We are now scheduling burns for March through May of 2009.

Light-and-Fights at the Champaign campus are intended for individuals or very small groups of firefighters. Pre-registration is required. This program is also paid for through the Cornerstone grant, and is free of charge to the firefighter(s) as long as they fulfill the class requirements. Please contact Kurt Glosser (kglosser@fsi.uiuc.edu) with questions pertaining to Champaign Light-and-Fights.

For Light-and-Fights held at Regional Training Centers throughout Illinois, please contact the hosting agency/fire department.

If you’re not sure who to contact, or have a question that isn’t answered here, please feel free to contact Brad, your IFSI Regional Representative, or me. We’re here to help your department get the training you need to provide superior services to your community.

Wildland, Tower Burns, and Light and Fights: Updated Program Contact Information

Visit the IFSI web site to see the line-of-duty-death memorial project

IFLODD, the Illinois Firefighter Line of Duty Deaths Digital Image Collection Database, documents the ultimate sacrifice of more than 750 Illinois firefighters over the past 150 years.

www.fsi.uiuc.edu/content/library/IFLODD/
**Fire Prevention Officer Program**

Last year the Fire Prevention Officer Program adhoc committee for the Office of the State Fire Marshal (OSFM) began the task of “updating” the Fire Prevention Officer training and certification program. It was an effort that was somewhat overdue, but the entire committee felt like it wouldn’t take too long to revise and update the course material. Wow, were we wrong. It’s taken over a year to review, restructure, rewrite, organize, coordinate, etc., the entire Fire Prevention Officer training and certification concept for Illinois and OSFM. As the committee began the revision process we quickly realized that the program needed to be totally restructured in order to bring it in line with other state certification programs and the NFPA standards.

Three levels of training / certification have been designed for individuals interested in these fire prevention areas. All three of the levels are modular in design and allow the student to advance through the program at a manageable rate. Instead of one long and complex course, the three programs now present a variety of training courses based on current standards and the students’ local agency requirements.

Pilot classes are presently being conducted for the first course required in the FPO I series. Other required courses are in the final stages of design and will be brought “on line” as the series progress. The Illinois Fire Service Institute and the Illinois Fire Inspectors Association have partnered together to accomplish this extensive effort and to provide continuity in class delivery and management. Presently the plan is for the IFIA to advertise, schedule and deliver the training classes in the Chicago Metro area, with IFSI doing the same for central, southern and western Illinois.

The organizational charts shown in this article will give you the basic requirements for the FPO I, FPO II and Fire Marshal programs. Check the IFIA and the IFSI web sites for future Fire Prevention Officer class offerings as we progress into the three FPO series.

---

**FIRE PREVENTION OFFICER I**  
Certification Structure

- **Fire Prevention Officer I**  
  160 Hours  
  (State Certification)

  - **Inspector 1**  
    40 hours  
    NFPA 1031  
    2003 ed. Ch. 4  
    Text: IFSTA – FICE  
    (State Certification)

  - **Public Fire & Life Safety Educator**  
    40 hours  
    NFPA 1035 2005 ed.  
    Text: IFSTA – FSLE  
    (State Certification)

  - **Leadership 1**  
    (Management 1)  
    40 hours  
    NFPA 1021

---

Eddie Bain  
Fire Investigation  
Fire Prevention Program Director  
Winter Fire School Manager
Sizing Up

In our classes, we have always emphasized the importance of size up – from preliminary to initial to sustained size up. Preliminary size up starts as soon as the call comes in. We begin formulating what to take into consideration: location, weather, time of day, manpower and time of year.

The initial size up is formulated upon arrival at the scene. As we arrive, we can start looking for number of vehicles involved. Are the vehicles on all four wheels, on their sides or upside down? Do we see any victims outside the vehicle(s)? Can we observe any hazards around the area, such as downed power lines or fuel spills?

The next step we have always talked about and one that I feel is very important in today’s accident scenes. Once we step out of our rescue vehicle, we must do a 360 degree walk around the accident scene. What are we looking for? What are the conditions of the vehicles and is extrication needed to get victims out of the car? How many victims and what is the best way to get them out if extrication is needed? Some departments are taking their thermal imaging camera and looking at each seat to see if there are more hot spots than number of accounted victims. As we do the 360, can we observe any additional hazards around or away from the vehicle?

Nowadays, we must look to see what type of vehicle are we dealing with – gas or alternative fuel. Is it a hybrid? Since most hybrids look like any other vehicle, we must look for some other indicator as identification. Some will have a hybrid symbol on the side, but as you walk to the rear of the car, look on the back side where you should see whether it is a hybrid. Does that affect the extrication process? Not normally, because the wiring from the back to front is located where we would not do any cutting for extrication, still we need to be aware of what kind of vehicle we are dealing with.

Then we have the sustained size up which continues until the victim has been removed from the car. Remember with today’s vehicles, your older hydraulic tools may not do the job. You must start thinking of plan B or C.

Harvest Season

The harvest season is underway and the farming community is putting in long hours to get the crops out and wheat in. That means that accidents can and will happen. Are you prepared to handle these situations? IFSI and the Illinois Farm Bureau have been working closely these past couple of years to provide free training throughout Illinois in agriculture and grain bin rescue. GROWMARK helped us acquire a new trailer so that we can now easily offload the GSI grain bin. We can now take the bin off the trailer to do the cutting exercises.

I would recommend an eight-hour class in ag rescue and an eight-hour class in grain bin rescue. Some have wanted both in one day, but I don’t recommend it. There is just too much information to try and do both in one day. If you are interested in a class, submit the Cornerstone Request Form and contact your local Farm Bureau to work with you in setting up a class. They have been great to work with throughout the state.
“It's hard to believe that the summer has gone by. Fire College, HazMat and TRT validations, and the Explorer-Cadet “Hands-On Training” Fire School have all been completed. Over 1500 responders, future firefighters and IEMA/ITTF approved teams have learned new skills, honed old ones and demonstrated the specialized skills in scenario-based operational readiness exercises…and that was just June!

As we gear up for this fall and the return of Cornerstone funding, the second half of the fiscal year will have a whole new set of practical skills-based classes to choose from. These classes will reflect the “hands on” needs of the local departments, MABAS divisions, and other regional schools or mutual aid associations. Besides the classes listed on the Cornerstone Request for Training to date, the training sessions can be drawn from a wide variety of firefighter skills to fit the ongoing need of groups requesting training. As always, the Cornerstone classes will not exceed 16 hours. If a department would like to train on a given skill in say, two sessions totaling six hours, this will be an option not available in the past. The Cornerstone brochure and request for training will be entirely new. As we finish up the format, skill sets and objectives this fall, keep an eye on the website for downloadable forms and updates to come.

www.fsi.uiuc.edu

Accolades
Too often our field staff goes about the business of providing lectures, drills and practical classes without the recognition they deserve. Below are some comments from students in Cornerstone classes that represent a very small portion of what they deserve.

From a home owner who donated his property for training...
“...I was most impressed overhearing one of the younger firefighters tell how much he had learned that day, and what a great experience it was to take part in the event. I will also commend you for the professionalism with which you conducted yourselves…The day proved to be a worthwhile endeavor for everyone that participated.”

From a new training officer in a small department...
“In the past year I’ve put on ten guys under the age of 25…they are excited to get the training. I owe a lot of the change to IFSI. Thanks again.”

From a participant in this year's Fire College...
“I was in a class at IFSI... and I just wanted to thank you. I’ve been at few bad fires (and one) last month I was sent to the second floor. I had fire above and below me all at once... and was stuck in a room with no window and no way out. Thanks to some of the stuff you guys taught I was able to get through the wall to another room where I was able to get out a window. I know you guys don’t get a lot of credit for all you do. So I just wanted to say thanks.

“All of the instructors were extremely professional and full of information. It is nice to know that there are classes like yours available to those of us in the fire service. I am far more comfortable going into a burning building now than prior to this class. I am more prepared than I could have ever been before. Thank you so much for sharing all of your experience, tricks of the trade, proper use of tools, easier ways to get better end results, and your endless knowledge with all of us. You have a truly beneficial program here and I hope it continues.

“As with any IFSI taught class, you guys never cease to provide a top-notch educational and safe learning environment and we all appreciate the opportunities afforded us to be part of the learning experience.”

To all the field staff, stokers, class support specialists, regional representatives, transportation, facilitators and administrative staff… Thank you all for your dedication to the Fire Service Of Illinois and the work you do for the Illinois Fire Service Institute.

Turn the page to get updates from each Cornerstone region.
The 2007/08 fiscal year ended on June 30 and as most of you know we began experiencing a state funding interruption on July 1. I share your disappointment in this training challenge. Funding has been reinstated, so continue to submit your Cornerstone Request-For-Training sheets.

Since November, I have attempted to meet many of you via station visits, training forums, county schools, IAFPD and AFG Workshops and association meetings. I have met representatives from 150 of the nearly 165 fire departments within the Central Region. Whether the purpose of a visit is a brief presentation, training or simply to observe and visit with a cup of coffee, I always appreciate the opportunity. It is likely that if I have not stopped by, it is because I do not know your meeting or training night schedule. Feel free to email or phone me if you would like to update the records of your contact information as well as your department meeting/training schedule. Central Region counties are Cass, Christian, Logan, Macon, Marshall, Mason, Menard, Montgomery, Morgan, Peoria, Tazewell, Sangamon, Shelby and Woodford.

Cool weather did not keep the 2008 Tazewell County Fire School from being a well-attended training success. Planning for next year has already begun. The 2009 Tazewell County Fire School will be May 2nd and 3rd at the Illinois Central College in East Peoria.

The Beardstown Training Center Light and Fight was held in March and was attended by 36 Central Region firefighters. This was the first time many of these firefighters had visited the Beardstown FSI Regional Training Center. Based on conversations at the end of the day-long training, I believe firefighters enjoyed and benefited from the training opportunity. The Beardstown Fire Department is pursuing ideas that should provide new and challenging props in their training cans. The Chief there is anxious to have more firefighters benefit from their Regional Training Site and is seeking additional training sessions that will be focused on the skill development interests/needs of area firefighters. Thank you to the members of the Beardstown FD for demonstrating an unselfish support in regional firefighter training. I appreciate your help with the Light and Fight training and support in the planning of future training activities.

Sangamon County Fire Departments are pursuing their first annual Fire School. The school is schedule for October 25th. Mark your calendars and feel free to contact Chief Rogers of the Riverton Area FPD for additional information.

Christian County received a FEMA/HLS AFG Region Grant in the third round of the 2008 awards. The grant will support unified training for nine fire service jurisdictions. This nearly $31,000 project requires a respective department share of approximately $350. Way to go Christian County and best of luck with your “Train Together to Respond Together” program! If you would like to know more about this grant contact Asst. Chief Crews of the Taylorville FD. If you hold specific concerns with your grant application success, feel free to contact me. I promise nothing other than offer suggestions that have shown some success with applications in the past.

The Central Region has been busy training. Frequent requests for IFSI instructors have ranged from basic and advance auto extrication to LPG burns, Anhydrous Emergencies, Ethanol Awareness and Ag Rescue. Fireground training requests have included topics such as Rural Water Operations, Basic Pumps, and Fire Service Vehicle Operator, Fire Ground Management for Small Career and Rural Departments, Firefighter Rescue, Essentials I, II, III and IV, and burning acquired structures. There appears to be a growing interest in the Fire Officer I series of classes. If you are interested in hosting all or one of these classes, please let me know.

Be Smart, Be Careful, Be Trained

Roger Lunt; rlunt@fsi.uiuc.edu, or phone 217-722-5125.
From the Northwest Territory

Cornerstone summer classes started off quickly then came to a halt when the Cornerstone funding was suspended. Great efforts have been made to maintain the regional schools and any pre-arranged ethanol training. I will do my best to reschedule any classes that were scheduled during the time when the funds were not available. I will be contacting any department that had a class postponed to see if they want to reschedule the class or cancel their request.

The regional reps continue to work on updating and upgrading the Cornerstone course offerings. We are getting close to bringing out a new list of classes to be offered through the Cornerstone program.

Regional schools are being scheduled for this fall. In my area, the Great Northwest Fire School in East Dubuque has yet to be scheduled. Watch the IFSI web site for additional information.

If your region, county or division has a meeting coming up that you would like me to attend and discuss IFSI class offerings, please let me know. This is a great way to get information out to a greater number of people and departments in one visit.

If any departments in my region still need the new 2008 ERG please let me know. I keep a supply in my truck and would be happy to drop off copies at your department.

Stay Safe!
Hi!

I would like to introduce myself. My name is Jim Streu and I have been in the fire service for 32 years – most of those with the Lombard Fire Department. Lombard Fire Department runs nearly 7,000 emergency calls per year which gave me the opportunity for a good amount of field exposure – from being the only firefighter in the house and having to jump between vehicles alone, to having a team of eight firefighters and responding with a tower, engine and medic unit. With that experience, I believe I can assist in coordinating training to all size departments. Large or small, we are all in the fire service for a reason – to help and make a difference.

When I was promoted to Lieutenant in 1987, I requested the assignment of training officer along with my shift assignment. Training and education became my passion. Working with the staff of the Fire Service Institute has always been a goal of mine. I always say “everyday you learn something new whether you realize it or not.” This is where our field experience comes into play. Along with my shift work, I spent the rest of my career educating myself to be a better firefighter along with my fellow firefighters.

I have an educational background as a Fire Officer II, Training Program Manager, Instructor IV, additionally I have an Associate’s Degree in Fire Science and Safety, Bachelor’s Degree in Fire Service Management and a Masters Degree in Organizational Development.
This summer wraps up another Fire Officer I & II series at the Southern Kane Training Association (SKTA). These classes are delivered by IFSI instructors. Lew Lake did an excellent job coordinating the instructors and it was a good learning experience for all. In addition, newly-promoted Chicago Lieutenants, Captains and Battalion Chiefs went through a new officer training orientation conducted at the Chicago Fire Academy, Carol Stream burn tower and IFSI drill yard. These classes were done in conjunction with IFSI instructors and Chicago Fire Department instructors.

The next series of Fire Officer Classes will begin this fall, so keep checking the web site for updates. In addition to SKTA there are Fire Officer Classes scheduled at the Fire Service Institute location as well as Marion and Edwardsville Illinois.

The fire service is an ever changing organization deeply embedded with tradition. I feel that embracing that tradition, and continuing to enhance ourselves through training and education is key. My new role with the Fire Service Institute will give me the opportunity to assist our firefighters in Illinois, as well as others, to become a safer and more effective fire service. I look forward to this new and exciting challenge.

Till next time
Be safe
Jim Streu

---

**Hazardous Materials Program Report**

We are currently working on purchasing new monitors to replace the older units we use for HazMat training. Thank you to all that responded to Chris Downey’s call for input on devices. We are also replacing some worn tools and equipment in anticipation of a busy fall and winter schedule.

The 2008 calendar for HazMat classes is full. Any requests for new hazmat classes will be scheduled after January 1, 2009. We have been making an extra effort to get classes out to parts of the state that are sometimes harder to reach than others. Please keep an eye on the web site for these class offerings. Click on your county to learn what classes are nearest to your home station. We still have to have the minimum of 15 students to make any class a “go”.

If you have any questions concerning the hazardous materials program please do not hesitate to contact me.

---

This 2008 hazardous materials team validation exercise is now history. We were able to validate eight teams this year – up from the six validated last year. The intent of the effort is to validate ten teams each year. Next year’s validation will be moving to March or April, with solid dates yet to be set. Please be advised that the original MABAS team participation list generated by MABAS is only a guideline. Over the past two years there have been many alterations to the teams validated. The original list is no longer accurate and serves only as a guideline for team invitations. Please do not plan on attending validation until you receive a formal invitation. This will be done with a minimum of six months notice.

Course rewrite work has been completed on HazMat Operations, Tech A and Tech B. Work is underway on Awareness with the arrival of the 2008 ERGs. If you have not received your ERGs, contact your regional representative and they can get you the books you need.

Ray Palczynski
HazMat Program Director

---

Jim Streu
Officer Program
Practical Podcasting

In the spring newsletter I presented the development of ELearning by creating videos. Keeping with that theme, I would like to cover audio/video podcasting. You may ask why podcasting? Well it is a simple way to record any fire department message and to deliver it to all your members. Podcasting does not necessarily have to be just for training. It can be to deliver general orders in a direct fashion that is clear and concise. It can convey information on changes to response procedures. If you have a new tool, you can record operations and safety points for everyone on the department. The important thing to understand is that everyone gets the same message. What a great way to deliver the same communications and information to all your members.

With this thought in mind, I will present this segment on “Practical Podcasting.”

Why Podcast

From a training or administrative perspective, creating audio and video presentations that can be downloaded over the internet or burned to CD makes more sense now than ever before. I call what I create an audio and video presentation because they differ from a true podcast. A true podcast is created so presentations can be syndicated and be accessed by the masses. From my perspective, I monitor who has access to many of my presentations. You can do the same by using a fire department web site or burning your audio / video presentations to CD.

So you say you have a problem getting people together for training or lines of communication are blurred when disseminating important fire department information. The use of a podcast can help remedy this problem.

As an example, I recently had a phone conversation with one of my students. He was thrilled that we posted audio lectures for the fire certification program. He shared that as a farmer, he spends long hours on the tractor. His time was limited for such things as reading or online presentations. Having lectures in a downloadable format to listen to while working, allowed him to participate in our course. So you see training can be delivered away from the fire department.

To learn step-by-step procedures please visit my “Developing ELearning for the Fire Service” blog at:
http://rich-elearningdevelopment.blogspot.com/

IFS I Takes Over Delivery of IS Programs

Starting October 1, 2008, the Illinois Fire Service Institute will manage the IS-300 and IS-400 programs for the Illinois Terrorism Task Force. Bill Farnum is the Program Manager for these programs and can be reached at: wfarnum@fsi.uiuc.edu or 217 493-7597.

Descriptions of the classes follow:

ICS-300 Intermediate ICS

This 16-hour course provides training on and resources for personnel who require advanced application of the Incident Command System (ICS). The target audience includes all individuals who may assume a supervisory role in expanding incidents. This course expands upon information covered in ICS 100 and 200 courses. (Both are pre-requisites for ICS 300.) This course is required for those jurisdictions that choose to comply with the National Incident Management System (NIMS) ensuring they continue receiving their federal preparedness funding grants. We are recommending that jurisdictions identify middle management who will be acting in the role of incident commander or section chief during an event and enroll them in this course.

ICS 300 Pre-Requisites: Each student must successfully complete either IS 100 – “Introduction to Incident Command” and IS 200 – “ICS for Single Resources and Initial Action Incidents” (independent study courses listed on the FEMA website http://www.training.fema.gov/EMIWeb/IS/crslist.asp) "or" Unified
Illinois Incident Management Team assists in flood response

As the Mississippi River rose to levels reminiscent of the Great Flood of 1993, the Illinois IMT was called to act. IEMA requested IMT deployment and the deployment lasted for over three weeks.

IMT team members worked in the State Emergency Operations Center and both Unified Command Posts in Quincy and Alton. IMT members also worked at New Canton in the Sny Levee and Drainage District Office, Henderson and Mercer counties and in the Rock Island area.

The IMT program was made possible by training offered and coordinated through the Homeland Security Program at the Illinois Fire Service Institute. IS 100, 200, Unified Command, IS 300 and 400, Command and General Staff and the All Hazards Incident Management Team classes all contributed to the development of the Illinois IMT program.

The IMT consists of three groups that are located throughout Illinois. There is a Metro Team, a Northern Team and a Southern Team. Members from each of these teams participated in the flood response.

IMT members, for the most part, are not flood experts, but they took with them the knowledge and capability to implement a process of developing incident action plans and to help manage the many incidents where they were called to assist.

By participating with the local responders as they worked to enhance and stabilize levees, the IMT members were able to offer a tool that helped organize the response efforts. Many IMT members reported that local responders who may have been ‘cool’ to the process of IAP development, “fully embraced” the process and the IMT concept before the IMT members departed.

Many ideas and suggestions have been and will be offered to make IMT integration into state and local response more efficient and effective. The overall response to the IMT integration was positive and the IMT will provide a valuable tool to enhance state and local response in the future.

On another topic – The Command and General Staff Class is changing! The National Fire Academy has provided a new curriculum for the class. For students, it will mean a longer Tuesday and Wednesday, but an increased emphasis on topics that are relevant to the “bigger picture” of the response. These topics are presently discussed in the IS 400 class, but have now been fully incorporated into the Command and General Staff curriculum.
**Library Updates & Highlights**

**IFSI Library Operational Statistics Report for FY2008** The IFSI Library spent $14,533 on multimedia resources and $6,119 on periodicals to support IFSI teaching, training and research. Under Diane Richardson’s leadership, the reference/circulation services team answered 5,032 reference requests and circulated 3,532 items through direct (3,114) and interlibrary (418) loan services.

**New Grant Proposal for the Illinois Firefighter Line of Duty Deaths (IFLODD)** Head Librarian Lian Ruan worked closely with Archivist Adam Groves, fire organization partners, and others to develop a new LSTA grant proposal for the Illinois State Library to support IFLODD’s further development. The proposed project will build upon the library’s earlier LSTA grant project. We expect to implement innovative search capabilities within IFLODD to better serve fire service instructors, researchers, firefighters, and general public users, and to partner with Illinois fire departments, museums and libraries to collect new digital images and oral histories for the database. This project will develop educational tools and create exhibits both online and in print for the new Illinois Firefighter Memorial Hall. We hope the project will be funded and we will keep you closely informed.

If you can contribute any information about fallen firefighters, please contact Adam Groves at agroves@fsi.uiuc.edu or 217-265-6107.

**IFSI China Programs – 2008 Chinese Librarians Summer Program** A total of 24 participants, including administrators who supervise libraries, library directors, departmental heads and librarians participated in this year’s summer program. They learned about key American topics and trends in the library and information science field, and visited a number of libraries, including the UI Library, the Illinois State Library and the Abraham Lincoln Presidential Library and Museum. They also enjoyed learning about U.S. culture from a local family and by visiting several cities and libraries on the West Coast. During the past four years, the Summer Program has successfully trained 66 participants from various universities throughout China.

Ruan was invited by the 2008 Chinese American Librarians Association Annual Program to speak during the American Library Association Annual Conference in Anaheim, California.

Director Jaehne was invited by Tsinghua University’s Center for Public Safety Research to serve on the Steering Committee for the Urban Rescue International Conference, which will be held in Beijing from October 21 to 22. Under Director Jaehne’s leadership, IFSI provided invaluable help to the Center staff while they were responding to the WeiChuan Earthquake in May 2008.
Just a few comments from Explorers, Cadets and Advisors from this year’s school…

“Thanks for a great week in June for our Explorers… The interaction, teamwork, networking and education your staff and instructors provided our kids was beyond excellent.”

“The Cadets were exposed to many real-life scenarios and completed them all in a very safe and controlled manner and as realistic as possible. The instructors pushed the experienced kids and mentored/demonstrated to the less experienced on a level they could handle. The safety was without question.”

“This is my 36th year in the fire service, attending training at many different facilities country wide. I feel you have one of the best programs and better facilities I have ever attended, this only reflects on good leadership and staff you have. According to the Cadets that attended…they all want to return next year.”

Over 350 participants from Alaska, Canada, California, Connecticut, Georgia, Indiana, Illinois, Iowa, Michigan and Wisconsin took part in 16 different live-fire training evolutions. The youth learned techniques for advancing hose, climbing ladders, working off stand pipes, ventilation, forcible entry and exit, RIT operations and SCBA skills, to name a few, all under live-fire conditions. Additional sessions in water rescue, rural water supply, rope rescue and water ball contests or time at the local aquatic center filled the afternoon with cooler things to do.

Many of us in Illinois take for granted the live-fire training options available at the IFSI campus, municipal fire academies and other regional training centers. This type of training is unavailable to most Cadet and Explorer programs. Advisors from some other state Explorer groups indicated there was more live-fire training for the youth here than he had received in his career at a large metropolitan fire department.

Thanks go out to the many Fire Service Institute staff that assisted in this event. Course evaluation questionnaires indicated, without exception, a top-notch program with great staff, great souvenir package, good food and plenty of things to do. Thanks for another tremendous effort whose success was built on the skill and dedication shown those four days in Champaign.

Another group requires recognition – without a doubt the most important – a group dedicated to young people – a group dedicated to teaching and mentoring – a group dedicated to sustaining competence, safety and leadership for the future of the fire service – a group without whom this “Hands-On Training” Fire School would be impossible: the advisors, cadet leaders, adult chaperones, parents and guardians who spent vacation time to haul these young people to Champaign, who for some was a once-in-a-lifetime experience. It was an experience to spur some to pursue careers in the fire service or take on public safety duties in communities as volunteers or paid on-call responders.

Conversations with many of these folks revealed their careers began as cadets, junior firefighters or Explorers. Most feel a sense of pride and duty to “pay back” with service to others their good fortune as a part of the best job in the world. Others were just trying to help out so their kids could participate in a unique event. Some last minute “draft choices” participated because of injuries or last minute changes in plans by chaperones. These folks helped keep the cost of tuition down by assisting in the instruction, safety, logistics, planning, medical, food service and overall flow of the event.

I am sure the young people have already thanked these dedicated adults after some long air, train, bus and car rides. I can only say thank you…thank you very much…for your commitment to Fire Service oriented youth programs and your personal sacrifices to make this happen.

**SOMETHING NEW**

**Ethanol Foam Videos**

IFSI has produced 5 short videos on foam and ethanol fires. These videos can be viewed on our website by clicking on Virtual Campus, Quick Hit Training, Ethanol Training Videos. They provide a basic understanding of foam types and application on ethanol fires.
These are exciting times at the University of Illinois Fire Service Institute!! We continue to train firefighters from the State of Illinois, the U.S. and from around the world. At the same time, we are meeting with companies and individuals who want to help “add value” to training and education programs.

Yes, we are very fortunate to have excellent corporate partners and we are continuing to develop new ones. But, there is still a lot more to be accomplished. Our focus is to inform corporations and individuals about the Institute and the firefighter training it provides.

Once a company or an individual understands our mission “to help firefighters do their work through training, education, information and research,” then it becomes a choice. It is a choice to help the Institute with a monetary donation, to provide a “gift in kind” or donate services. It can be equipment, products or other items which can be used to train firefighters. Or, providing services that are necessary to support the Institute’s training programs.

You can help IFSI develop new partnerships. Let us know of companies that may have an interest in learning more about IFSI. In turn, we will contact the company to explain our training, education and research programs.

The financial support,” gifts-in-kind” and services, like that provided by our current partners, makes it possible for IFSI to train more firefighters and to assure they have access to the most up to date facilities, props and materials. This includes our new building.

The new Illinois Fire Service Institute Learning Resource and Research Center will house an expanded library, an Illinois firefighter memorial hall, laboratory space and an EOC training area. This is another example of how the Institute is fulfilling its mission and helping build safer communities.

The IFSI Fund has been created to support all our training efforts and the new building. It is easy to help. Go to our web site at: www.fsi.uiuc.edu and push the Donate button. You will receive step-by-step instructions on how to donate to the University of Illinois Fire Service Institute by credit card. Even a $20 contribution will provide over one hour of firefighter training!

IFSI takes pride in guaranteeing that 100 percent of every donation will be used to directly support firefighter training, education and research programs.

Gifts may be fully tax deductible. IFSI is a 501(c)3 non-profit organization and will provide supporting documentation for all donations.

If you know a company that you would like us to contact or you would like more information on how to support IFSI training, research and education programs through the IFSI Fund, please contact Dennis D. Spice, Director of Corporate Relations at 217-359-0671 or by email at: dspice@fsi.uiuc.edu.

Do you know of a company that is a supporter of you and your role as a first responder? Do you see them as a potential financial partner? Let us know.

Vehicle extrication students have the advantage of working on modern Mitsubishi cars.
IFSI Corporate partners are recognized for their support

Pictured left to right: John Archer, president of AEC, distributor for Holmatro Rescue Equipment, North American office; Giff Swayne, president of Holmatro; Richard Jaehne, IFSI director.

Pictured left to right: Richard Jaehne, IFSI director; Larry Anderson, director of training for Hurst Tools, Bill Simmons, vice-president, Hurst Jaws of Life; Duane Bales, Vehicle/Machinery Rescue Program Director.

Pictured left to right: Dennis Spice, Director of Corporate Relations; Duane Bales, Vehicle/Machinery Rescue Program Director; Stewart McMillan, president of Task Force Tips.

Pictured left to right: Richard Jaehne, IFSI director; Joe Simon, distributor for Genesis Rescue tools.

Dave York, owner of Illini Contractors Supply(left) and Richard Jaehne, IFSI director.

Judy Wiegand, vice president of AMKUS Rescue Systems and Richard Jaehne, IFSI director.
IFSIs Answer National Call for Help

The University of Illinois Fire Service Institute’s Wildland Fire Fighting courses have only been available for three years, but the program recently had an impact on a national scale. Seven members of the IFSI staff assisted the State of California in training the California National Guard in the basics of wildland fire fighting. The training was in response to overwhelmed fire protection agencies in California, who have been hit hard this summer by a tremendous increase of wild fires, scorching the state.

Due to the shortage of trained staff, California Governor Arnold Schwarzenegger contacted President Bush in June requesting federal assistance to fight the fires raging in the state. Federal and state officials determined that 2,000 National Guard troops should be trained to ease the pressure felt by local fire agencies. When the call went out for qualified instructors, IFSI’s Director Jaehne contacted Lead Wildland Instructor Tom Richter to pass the word on to his staff. Tom Flader, Steve Rusin, Jason Sartin, Dave Sawlesville, Ken Terrill, Curt Timmer and Tom McDermott answered the nationwide call for assistance. Each member of the IFSI team spent between one and two weeks assisting the Department of Forestry in the training of more than 1,000 troops.

Safety was the key issue taught to the students during their coursework. Instructors also focused on the three aspects which most influence wild fires – fuels, topography and weather. These are the same critical components stressed during local delivery of the Wildland courses. During the sometimes 15-hour days, the instructors found time to rewrite sections of the wild fire training program. The military has established a five-hour training program, while the U.S. Forest Service has a 40-hour program. Instructors at the California Training Facility worked to create a more intense program and will submit it for review and the possibility of the adoption of a new standard for the Armed Forces Wildland Training.

What some say about IFSI

“I just wanted to express the level of satisfaction over the way in which Saturday’s burn was coordinated and taught. As we drove back to our station after the burn we were all in agreement on how well the burn went, how much we enjoyed being involved, and how we all took away with us a higher level of knowledge about firefighting tactics. Some of us have been to other burns in which the only true act seemed to be to watch a dwelling burn to the ground. During Saturday’s burn and even after feeling worn out, I still felt the enthusiasm within myself to go through another evolution to see if I can learn a little more.

“As with any IFSI taught class, you guys never cease to provide an top-notch educational and safe learning environment and we all appreciate the opportunities afforded us to be part of the learning experience.”

Brad Frankovich, Pesotum Fire Department

“Awesome course. I am a completely different firefighter after this course. I learned so much.”

RIT Under Fire student
Learning Resource and Research Center
It is well known throughout the Fire Service that more firefighters die in the line of duty from heart attacks than from any other cause. Furthermore, slips, trips and falls are one of the leading source of fireground injuries. While the origins of heart attacks and slips, trips and falls may appear unrelated, research suggests that heat stress may be a common causal factor and that modified personal protective equipment (PPE) can potentially mitigate both of these injuries and fatalities.

After a year-long research program into these issues, the Illinois Fire Service Institute’s Firefighter Life Safety Research Center is proud to release our report, *Firefighter Fatalities and Injuries: The Role of Heat Stress and PPE*. The report provides a review of the established research and new findings from our FEMA Fire Prevention & Safety program sponsored study concerning heat stress, cardiovascular function, firefighter biomechanics (balance and gait) and the design of personal protective equipment. A few of the key findings from this study include:

- Even though this study included relatively young (average age ~30 years), healthy firefighters, almost 65% of the participants were pre-hypertensive or hypertensive, which is one of the major risk factors for developing cardiac disease. Fortunately, this is also a modifiable risk factor.
- After only 18 minutes of firefighting activity, we measured significant increase in clotting potential — measured by an increase in platelet number and activity, increased coagulatory variables and altered fibrinolysis. These changes suggest a potentially hyper-coagulable state post-firefighting.
- The simple act of donning fire fighting personal protective equipment resulted in significant changes in firefighter balance and gait as compared to wearing only their station uniform. As such, any response in firefighting PPE is likely to change a firefighter’s biomechanics, potentially increasing the risk for slips, trips and falls.

A copy of the *Firefighter Fatalities and Injuries: The Role of Heat Stress and PPE* report will be made available in both hard copy and on-line at the IFSI website. We encourage all who are interested to pick up a copy and feel free to contact us with any questions.

- Gavin Horn & Denise Smith

We are pleased to report that the Federal Emergency Management Agency’s Assistance to Firefighters Grant Fire Safety and Prevention Program has awarded the Illinois Fire Service Institute with another grant to follow up this research project with a study focused on the cardiovascular effects of long-term fire fighting activities. This study will provide a more detailed investigation of the cardiovascular changes that are produced during fire fighting activities conducted as part of IFSI courses. We will be recruiting 72 firefighters who will be attending IFSI training and activities in Champaign to participate. Please, watch the IFSI web site for more information in the coming months.
It’s not too early to plan ahead for
Winter Fire School

January 24 - 25, 2009
Hilton Garden Inn,
Champaign

Planned classes:
Fire Behavior in a Single Family Residence
Wildland Firefighting
Farm Machinery Rescue
Rural Water Supply
Forming the Attack Team on Scene
Quality Customer Service
Mayday-Things To Do If You Get Into Trouble

We’ll also have a Saturday evening “bonus” session. Saturday lunch is included with the $50 registration fee.

Coming your way

The 2009 calendar will be in mailboxes by mid-November. Watch for your department’s copy and begin planning your 2009 training schedule.

The “Down & Dirty Fireground Support and Aerial Operations” DVD will be distributed free to every Illinois fire department in the next month.

Non-Profit Organization
U.S. Postage Paid
Champaign, IL.
Permit No. 499