From the Director’s Desk

I am just over six months as your Director. To say I have learned a lot would be an extraordinary understatement. In the last 180 days I have attended the instructor meetings for all of our regional/Cornerstone representatives. I have traveled the entire state and attended more than 15 Chief’s meetings, fire district meetings, fire trustee meetings, and fire service organizations annual conferences. I have personally visited more than 13 fire departments/fire houses from Chicago to Metropolis (and yes, I did see Superman) and points in between. And I completed my first Ride-A-Long – spending 24 hours with CFD’s Squad-5 in Englewood, IL. I will participate in additional Ride-A-Longs this spring in East St Louis and with CFD Hook and Ladder Co. #26. All of these opportunities have helped me bridge the gap between my Marine Corps experience/knowledge and my understanding of the fire service.

At each of these events I have spoken of my vision of the future for IFSI. But more importantly, I have listened to the firefighters, fire chiefs (active and retired), IFSI instructors, and community leaders as they expressed their concerns, ideas, and training/education needs for the first responders they represent. In order for me to best serve the fire service in Illinois, I must understand the true nature of the needs and problems we face. This can only be achieved through my seeking first-hand knowledge and engagement with all of you, as well as the rest of the fire service. I think I have a good start, yet I know I have a long way to go.

IFSI continues its solid relationship with the State Fire Marshal and his office as we work together on issues including training standards and certification, SWD team training, fire prevention/education, hydraulic fracturing/industrial gas drilling (also known as fracking) awareness for first responders, and many other issues to better the fire service in the state of Illinois. IFSI has played an active role in the new State Certification Advisory Committee process, sending representatives to meet in Springfield to help develop and approve the training programs for Illinois. As a result of the Explorer/Cadet Training Grant we received from the OSFM, we executed the first of four Explorer/Cadet field training days. The first session was hosted by the Frankfort Fire Department and supported by 12 IFSI instructors. Over 65 Explorer/Cadets received training.

Through the hard work of our regional reps and their instructors we continue to expand our critical mission of delivering quality hands-on training to fire departments across the state through Cornerstone. We must continue to be creative and responsive in our delivery of the Cornerstone program across the state. It is an essential foundation of our mission. We must spare no effort in making quality hands-on training easily available for firefighters in every department and county – regardless of department size.

Whether it’s training and education, research partnerships, information sharing or simply collaborative shared goals for the fire service, our relationship with Chicago Fire Department continues to grow. We have and will continue to partner with, and deliver, the highest quality training and education available to Chicago’s finest.

It is with anticipation and pride that I look forward to the months and years ahead as your Director. I believe together we can lead the fire service in Illinois and the nation by providing the best training, education, information, and research possible. I am proud to be part of the IFSI team.

Thank you and Semper Fidelis.

Royal P. Mortenson
Director

A number of initiatives are underway that are outlined on page 6. Please take a moment to read through the list.
The Illinois Fire Service Institute Newsletter is the official publication of the Illinois Fire Service Institute, University of Illinois at 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 email information to Terri Hopper at hopper@illinois.edu. Please include appropriate graphics or digital photos.

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The most up-to-date schedule of classes can be found online at

www.fsi.illinois.edu

Want your own copy of the IFSI newsletter?

Ask to be added to the mailing list by email to Terri Hopper (hopper@illinois.edu)

OR

A copy is available on our web site under ABOUT IFSI/Documents.
**IFSI Organizational Structure**

We have developed a new IFSI Organizational Structure. It was time to address a new wire chart to better line up programs and line-of-reporting duties. The structure addresses current business and responsibilities of IFSI as well as recognizing future growth areas. The new structure adds new Program Managers under the Firefighting and SOTP programs, as well as establishes the Site Operations Officer position. See page 29.

**Stokers**

Stokers are a valuable resource for IFSI in providing hands-on live-fire training. The value of IFSI’s stokers was recognized with an hourly rate increase in January. The program also changed to have two levels of stokers. Level 1 designates the brand new stoker. They are to move immediately to the Level 2 rate once approved and signed off by the Firefighting Program leadership. Level 1 is not considered a probationary period. It is simply a brief performance time to teach the new stoker what they need to know.

To move from Level 1 Stoker to a Level 2 Stoker classification, stokers must complete the Annual Stoker Orientation, which is a three-hour classroom and building walk through. It is available twice a year. Stokers must also work a minimum of 16 hours under the direct guidance of a Level 2 Stoker, and they must have support from a Level 2 Stoker and the Fire Fighting Program Director.

**On-Site Operations Officer**

Tad Schroeder accepted the position of On-Site Operations Officer. His responsibilities have moved from the Assistant Director of Firefighting Programs to this newly established position.

**Burn Team Instructors**

We have resurrected the practice of IFSI Live Burn Team members. These are instructors who meet specific criteria to conduct acquired structure fire training sessions.

It is the policy of IFSI to provide live-burn training in acquired structures in the safest manner and under the safest conditions possible. This includes providing qualified, well-trained, and experienced instructors to conduct live-fire training in acquired structures.

The first Live Burn Team was established in 1990s, and all members were provided with live-burn procedures, training and equipment needed to conduct live burns in acquired structures. In November of 2012, Director Mortenson requested that this policy and procedures be updated.

In January, new training and education requirements were implemented for acquired structure live-fire training instructors. The requirements follow the already established IFSI five-step learning model.

While never minimizing the value of properly prepped structures, fuel loads, and water supplies, the success of these training sessions is rooted in responsible, knowledgeable, and safety-conscious instructors. It is our intent to continue a tradition of safe and realistic training with acquired structures, and better support our instructors responsible for the live-fire training environment.

**Cornerstone Program**

The Cornerstone Program continues to be the best way for IFSI to deliver classes at no-charge to fire departments around the state. IFSI’s Regional Representatives are the conduits for class requests and information about training programs. There are a number of procedures in effect to request Cornerstone-funded classes.

- Host department submits a completed IFSI Cornerstone Request for Training (RFT) form.
- One RFT per training topic.
- **NEW** A department can request the same training session, repeated, to accommodate shift and work schedules of neighboring departments.
- Repeat training sessions require multiple RFTs.
- **NEW** The number of approved RFTs per department is determined by meeting hosting requirements and the available funding for training within the region.

If you are interested in becoming a stoker for IFSI, contact Brad Bone, Fire Fighting Program Director.

Roger Lunt
Deputy Director

continued on the next page
As I sit here in front of the “magic machine” it has just flipped into 2013, and this article will not hit your mailbox for a couple of months, so it can be difficult to try to predict what the hot topic will be for the Spring of 2013. There is a topic that has been discussed over the past few years that is no longer a prediction but has moved into reality, and that is the matter of decreasing Homeland Security Grant funding coming to the State. One does not have to be real bright to figure out the economic trickledown from this. Since 2003 the training of first responders has been fairly well funded, but as funding has decreased so has the ability to offer and deliver numerous classes to the MABAS Deployable Teams.

No one anticipates that the funding will dry up completely, and there will always be MABAS Team members who require baseline training at both the Operations and Technician levels, so how do we meet the needs? This is one of the challenges that we have before us relative to the issue of Team training.

There are those who would advocate that it may be time to “look outside the box”. But I prefer to advocate that we “look inside the box”.

Who are we?? The Illinois Fire Service Institute was created by law (110ILCS 365/) as the State of Illinois Fire Academy “for the purpose of instructing fire protection personnel throughout the State of Illinois, providing services to public and private fire departments in Illinois and conducting research in the methods of maintaining and improving fire protection and control services consistent with the needs of Illinois communities.” This verbiage provides the direction for the future, as well as it has for the past.

The direction of IFSI was set to be “the best in the Country, hands-on, down and dirty fire school” and that core value will always be our driving force. There are numerous doors of opportunity within the language creating IFSI that may have been cracked, and now can be the time to push them a little farther open, and move down hallways that we really have not pursued at any great depth!!

Well time to strike it out, and go to work, so stay safe, put the coffee pot on and give me a call.

Thanks,
MAC

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**Request For Training status will be determined by Regional Representative.**

- With a focus of training firefighters, Regional Representatives will manage their budgets to reach as many firefighters as possible.
- IFSI will mail a training Memorandum of Agreement (MOA) to the fire department that is requesting training.
- The requesting fire department must return the signed MOA.
- **NEW** The requesting fire department must invite other fire departments and appropriate response agencies to the training, and cannot deny other fire department access to the training.
- Fire departments must encourage attendees to preregister online.
- **NEW** Cornerstone training must be attended by a minimum of 15 attendees per session (training session example: 12-hour class over the next three nights is three training sessions).
- Cornerstone training sessions should be 70 – 80% hands-on training.

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**Finally**

At the request of the OSFM, IFSI is researching the Hydraulic Fracturing “fracking” drilling techniques to see if there are any unique first responder considerations that might fit into a Cornerstone-funded awareness class.

The Fire Fighting Program has updated materials in support of the Basic Aerial, Basic Truck and Basic Engine classes.
There’s a misunderstanding in our business that practice makes perfect. We practice SCBA donning and doffing, driving, knots, ladder raising, monitoring, IAP development and the myriad of other skills and competencies, thinking that by such repetition we will improve our readiness to respond safely and to perform effectively at the emergency scene. It turns out that the adage that we are basing this intention upon is only partially true.

Practice doesn’t make perfect. This desired end result is limited by HOW we practice. Dr. Anders Ericsson spent his career studying how those at the top of their profession or field got there. He tells us that only perfect practice makes for perfect execution. If you train or develop skills in an inferior setting, you will fall short of perfection.

For example, if you practice donning your SCBA while missing steps, the end result of all of your practice won’t be perfection, but rather an ingrained, wrong set of behaviors that will be at best difficult to correct, and at worst a faulty execution of the skill that could lead to injury. This is why at IFSI we focus first on the mastery of skills, and then on the rapid application of skills. You must focus on form first and speed second. If you’re not practicing perfectly, or if you focus on speed before form, you’re not likely going to execute perfectly.

How can you obtain perfect practice? There are several ways, but the most common is “not alone.” Perfect practice requires feedback from an expert in the skill that you’re trying to learn. What you practice also has an impact. According to Ericsson, those seeking perfect practice both continue to perfect skills that they have already mastered, and also work on improving upon skills that they have not mastered. They are challenged across the entire range of skills that they may be called upon to perform by coaches and high-level peers that offer critical and meaningful feedback to help them improve. When they are geared up for practice, they practice at the level at which they expect to perform.

In addition to practicing perfectly, practicing realistically is also critical. If you are training to work in a live-fire environment, a component of your training must be in that environment. To create a “perfect practice” scenario in a live-fire training environment, having the right, experienced instructors is a must. Reaching a high-level of performance is hampered without the right people providing feedback to help you improve performance.

The University of Illinois Fire Service Institute is one of those islands of high-quality practice that can help you develop the skills that you already know while helping you grow your skillset to include new skills and concepts that you have not yet mastered. IFSI strives to hire the top one percent of fire instructors in the state to provide you with that critical feedback during your deliberate practice in classes on any fire service topic. It’s no coincidence that 89 percent of the persons that have received the Medal of Valor or Medal of Heroism in the State of Illinois have taken classes from IFSI.
In the last four months we have begun and finished many initiatives that will ensure IFSI is prepared for the future and continues to lead the fire service in helping firefighters succeed and excel through training, education, information, and research. Some of those initiatives are:

- An internal organizational review and subsequent organizational changes that include: consolidation of all fire fighting course/curriculum/programs under a new Assistant Fire Fighting Programs position, establishment of the Director of On-Site Fire Fighting Programs position, establishment of an on-site Operations Officer for on-site training and education activities, movement of The Rapid Intervention Team (RIT) course from Fire Fighting programs to SOTP, establishment of seven new Program Managers – RIT, Smoke Divers, Engine Ops, Truck Ops, Fire Apparatus Engineer, Light and Fight, and National Fallen Firefighters Foundation programs.
- Update and formalization our IFSI Acquired Structure Burn SOP and instructional team member qualifications task book that meets or exceeds all NFPA standards and acknowledged best-practice.
- Establishment of the IFSI Professional Development Program (PDP) online through our web site.
- Standardization of all IFSI curriculum and testing functions to include; format, design, development, approval, updating, and record keeping. (underway)
- Formalization and mandatory Program Manager training, ensuring they are prepared for and understand the requirements and expectations of their position.
- Submission of The Rapid Intervention Team (RIT) course/curriculum for FEMA Training Division (ODP) approval. (underway)
- Expansion of the 2013 Academy classes from six to seven weeks in order to include Courage to be Safe, HAZMAT Awareness, TRA, FSVO and NIMS 100 and NIMS 700.
- Expansion of our international partnerships by working with the Chinese Peoples Armed Police Forces Academy (the CPAPFA is the national organization in China responsible for all first responder training and education – firefighter and police) to develop a five-year Memorandum of Understanding for training and education, library, and information exchange between IFSI and CPAPFA. (underway)
- Partnering with the University of Illinois at Urbana-Champaign for submission of a grant proposal (IFSI as the lead) to the Institute of Museum and Library Sciences for a National Leadership Grant to conduct research into using library digital assets in a digital game-based platform for firefighter training and learning. (underway)
- Development of a “cradle to grave” fire officer leadership development and decision-making training and education continuum for the Illinois fire service. (underway)
- Formation of an Agriculture Rescue Endowment Fund which will grow to provide a consistent funding stream for Ag Rescue training. In the coming months we will begin the process to create endowment funds for fire fighting and research.
- Development of a Large Animal Rescue Awareness course for Cornerstone. (underway)
- Expanded HAZMAT course delivery through partnering with IEMA for additional grant funding and specific courses.
- Development of a ten-year Motor Transport Plan that will enable IFSI to upgrade and expand our vehicle and trailer fleet in a way that supports mission success.
- Completion of our DHS-sponsored Escape System Performance and Design in Fireground Applications study and completion of the first round of the Effect of SCBA Design & Fire Fighting Induced Fatigue on Balance, Gait and Safety of Movement.
- Continued collaboration with research partners across the country and delivery of the research results to Fire Service Partners. IFSI research presentations have been made at National Workshops focusing on Fire Fighting Tactics and PPE, directly impacting applied research in the field.
IFS1 has implemented some significant changes to our Basic Firefighter Academy class.

Historically, the Academy has been a six-week program that included classroom and hands-on training for the required firefighter skills. Students were then provided the opportunity to complete the co-requisite courses online (usually at little or no cost) through IFSI. In the past, the Institute had resisted extending Academy to include the co-requisite classes, in an effort to keep tuition and other associated costs down during a tough economic climate. At the request of our customers, the Academy is now a seven-week program with two optional weeks of follow on training for Hazardous Materials Ops and Vehicle Machinery Ops.

The additional week (seventh week) will allow for the addition of: NIMS 100, NIMS 700, Technical Rescue Awareness, Hazardous Materials Awareness, the classroom component of Fire Service Vehicle Operator, and Courage To Be Safe. These topics have been blended into the existing Academy program – not as a stand-alone week during the Academy.

Fire College
Planning for the 89th Annual Fire College is well underway. This year will be the third year for the event being held entirely on our campus. IFSI’s Fire College is still one of the most economic training opportunities available to departments. The classes include many of our core classes, as well as a repeat of a few of the new topics added last year. I encourage you to take advantage of new opportunities like the “Fire Dynamics in Modern Construction” and “Fire Dynamics and Stream Application”. If you have taken hands-on courses for several years, maybe it is time to think about “Leadership in the Trenches” or “First-in Officer”. Registration opens on April 8th, and online registration remains the fastest way to register, and the most likely way to get a seat in the classes you’re most interested.

Explorer Conference
During last year’s Explorer Conference, we experienced the hottest temperatures in the ten years we have been hosting the event, giving new meaning to HOT Training.

Thursday morning prior to the start of training, Champaign was under a heat advisory with a heat index of 110 degrees and climbing. The temperatures forced training indoors for part of the weekend and introduced cadets to new topics. The response to many of these topics was very positive. Based on the response and feedback by the post leaders, IFSI has redesigned the weekend to include more classroom sessions. While the weekend will still include 24 hours of training – both in live fire and in the classroom – the registration process and rotations will be quite different. In addition, this will be the first year that the conference is being supported by a grant from the Illinois State Fire Marshal’s Office. We are grateful to Fire Marshall Matkaitis and his staff for their efforts in securing this grant. With that said, it is important for all to understand that the grant will be used to offset direct delivery costs. Costs that are still associated with the conference include lodging and meals. There may still be a small tuition fee as well.

Re-organization
The following individuals will be serving as the Program Managers for these IFSI Fire Fighting Programs:

- Jason Demas - Smoke Divers
- Tim Meister - Engine Ops
- Mike McCastland - FAST
- Jim Vaughn - Truck Ops
- Tal Prendergast - FAE/FSVO
- Tom Rushing - Light and Fight (on campus)
- Ralph Webster - Courage to be Safe

They are your first line of contact for questions related to the content of delivery of their respective programs, or you can contact Fire Fighting Program Director Brad Bone. Contact information can be found on page 29.

Fire Fighting Programs

Brad Bone
Fire Fighting Program
Director

Fire College - June 6 - 9
Explorers Cadet HOT Training - June 27 - 30
From the Field: Cornerstone Reports

Northwest Region
Ray Palczynski
Cornerstone
Northwest Region

The year has started off fast. Cornerstone class requests have been streaming in pretty steady. If you are interested in hosting a class in the Northwest region, I would recommend you get your application submitted sooner rather than later. Most of my 2013 budget has been allocated so there are a limited number of classes left that I can provide to the region.

I’ve had the pleasure of serving the Northwest Territory for almost eight years now. Many departments have taken advantage of the Cornerstone program, but a greater number have not. In some cases one department with an established training facility requests the training for their region. That works great. Depending on the subject requested, an established training site is not always necessary. One of the goals of the Cornerstone program is to “bring the training to you”. To date, I have been able to allot two or three classes per year per host depending on demand in the region. As you can see from the monthly updates some locations host more than three classes each year. Those are the locations that bring the training to their region and act as a regional host. Whatever works best for your department, division, county or region works for me. Let me know what you need and we’ll work together to line it up.

Remember, “You are your greatest asset. Put your time, effort, and money into training, grooming, and encouraging your greatest asset.” – Tom Hopkins.

East Central Region
Tim Meister
Cornerstone
East Central Region

There has been an increase in Cornerstone requests for this spring and summer, which is exciting news. We are experiencing a higher demand for the New Car Technology class as well. Requests are coming in for numerous trainings and we will continue to fill these requests to fit the needs of your department.

Contact me or go to the IFSI website to review the Cornerstone training class list. I would be happy to assist in any way possible.

The OSFM Firefighter II & Firefighter III certifications are transitioning over to the Basic Firefighter and the Advanced Firefighter. Please make note of this when enrolling your department. In addition, there have been a couple of required prerequisite classes that are new to the levels of firefighter certification. These classes include: Courage to be Safe, Technical Rescue Awareness and Fire Service Vehicle Operations. All the classes listed above are covered under Cornerstone. Please contact your regional representative to set up one or all of the prerequisites.

All request forms are located on the IFSI website.

Explorer – Cadet Field Training
Explorer-Cadet Field Training sessions have been a true success! We had an excellent turnout on November 3rd in Frankfort and at Scott Air Force Base in March; and we are geared up for two more upcoming events in Galesburg on April 13th, and Quincy on May 11th. This grant-funded training has been an important opportunity thus far, and if the funding is there again next year, we will look forward to expanding our locations. This one-day training is key in introducing aspiring young firefighters to a hands-on firefighting skills lab, in which they will be educated on fire hose and appliances, self-contained breathing apparatus, search and rescue, ladders, forcible entry, and hand tools. The objectives for this training will continue to follow the NFPA 1001 and Illinois OSFM Basic Firefighter objectives.
From the Field: Cornerstone Reports

Northeast Region

Randy Schlichter
Cornerstone Northeast Region

This spring, the Northeast Cornerstone region will be funding two no-cost eight-hour weekend “Grain Bin Rescue” classes. One will be held at the Spring Grove FPD on April 13 to accommodate Lake and McHenry counties, and one at the City of Rockford Fire Academy on April 27 to accommodate Boone, Winnebago and DeKalb counties. Register your members online early as these classes typically fill up quickly. Visit the IFSI website for a full course description.

Watch our web page and my monthly flyer for other no-cost Cornerstone classes.

To sign up for my monthly flyer contact me at schlicht@illinois.edu.

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Cornerstone Regions
From the Field: Cornerstone Reports

Southwest Region

John Nichols
Southwest Regional Representative

Cornerstone class requests have been coming in very steadily. But the good news is there is still time to squeeze in a couple of classes before June 1, 2013. Just a reminder, we try to allow 30 days to process a request for a class.

I have also already received several requests for classes for the next fiscal year that starts July 1, 2013. One of the highlights since the last newsletter was an Acquired Structure Burn held in Staunton, IL in November 2012. There were 48 students representing nine fire departments. A special thanks to Chief Hasse and his department for sponsoring the burn.

One event that is coming up before the new fiscal year is a one-day fire school in Bond County on April 6, 2013. They are having the following classes at the school: Vehicle Firefighting, Ethanol Awareness, Firefighter Rehab and Heat Stress Management, and Firefighting Foam Applications.

The classes are being held in Greeneville, IL. For further information or to register please check the IFSI web site.

Acquired Structure Burn at Staunton, IL November 2012. Special thanks to Chief Hasse and his fire department.

Chicago Metro Region

Rich Stack
Chicago Metro Regional Representative

Cornerstone requests are coming at a steady pace now after a slow winter. Please send your request in now if you are looking to request a class between now and May 31st. If you are looking to host a Cornerstone class later in the year, do not wait. Request them now so we can get them set up and on the web site.

FEMA is moving toward eliminating the use of the Social Security Number (SSN) for any individual attending any training sponsored by FEMA, which includes the National Fire Academy and the Emergency Management Institute. For any course in which you are applying that began after October 1, 2012, you must provide a Student Identification (SID) number. This is just a reminder because a lot of students do not know that they need to do this.

Terri Hopper has done a great job explaining how to apply for the SID number. See page 13.
The Southern Cornerstone Region is now 25 counties strong. Effingham County has been added to the Southern Region. Many of the departments in the counties I represent have been very active requesting training. Others have not. I’d like to be able to provide and deliver quality training to all of the Southern Region counties.

If you have never requested training through the Cornerstone program, now is your chance. We have updated many courses and expanded the topics. Check out the Cornerstone class opportunities at www.fsi.illinois.edu.

The Fire Officer classes are going strong in southern Illinois with seven classes scheduled as of this printing. These are great classes designed to help soon to be officers or officers already in grade to become better fire officers.

In December 2012, new IFSI Director Colonel Royal Mortenson and I took a southern Illinois trip though the Southern Cornerstone Region. We were able to visit ten fire departments in eight southern Illinois counties. During our two day trip we spoke with Chiefs, Training Officers and firefighters from Centralia, Marion, Tamms, Cairo, Metropolis, Golconda, Cave-In-Rock, Shawneetown, Harrisburg and Galatia. The trip was very enjoyable and both Colonel Mortenson and I learned much about southern Illinois.

If you would like me to attend your regional, county or association meetings to share in more detail the training opportunities the Illinois Fire Service Institute has to offer, please let me know. You can contact me at wtbragg@fsi.illinois.edu.

Following are the Fire Officer Classes we have scheduled downstate:

- Management III – April 13, 14, 20, 21 in Mattoon
- Tactics & Strategy I – May 18,19, 25, 26 in Sesser
- Instructor II – June 1, 2, 8, 9 in Sesser
- Tactics & Strategy II – June 22, 23, 29, 30 in Effingham
- Management IV – Aug 3, 4,10,11 in Williamson County

Many of IFSI’s courses have end-of-course exams associated with them. In order for students to complete the course they must pass the IFSI end-of-course exam with a minimum score of 70%. In some instances, a student may not pass the initial attempt at the exam. This will result in an email being sent to the student stating they did not pass the exam, and to complete the course the student must sit for a retake of the IFSI exam. Retakes can be scheduled by contacting the IFSI Curriculum and Testing office at (217) 244-8340.

Passing the IFSI end-of-course exam is important for several reasons. First, passing certain IFSI exams will result in meeting the Office of the State Fire Marshal’s (OSFM) certification requirements, and in many cases the requirements of the ProBoard. Second, for those IFSI exams that are not approved by the state, in order to sit for the OSFM certification exam, the student must pass the class. In order to pass the class the student must pass the IFSI exam. If a student fails an IFSI exam, the exam MUST be retaken through IFSI. Challenging and passing the OSFM exam will not result in completing or passing the IFSI course or exam.

Students can access their grades for end-of-course exams through IFSI’s website by logging into the “Resource Center” and selecting the “My Account” tab. If the student passed the class, there they will be able to print off their course completion certificate(s) approximately six weeks after the last day of the class.
From the Field: Cornerstone Reports

Central Region

Jim Vaughn
Cornerstone
Central Region

The Central Region will be bursting with training opportunities through spring and summer. The MABAS 42 Fire School (Tazewell County) will be on May 4 and 5. IFSI will be providing a multitude of Cornerstone classes for this school ranging from Essentials to Company Officer level training. In addition, there will be classes on Auto Extrication, Live Fire Training, Technical Rescue Awareness, Fires on the Farm, Firefighter Rehab and many more.

After a very successful Light and Fight at the Beardstown Regional Training Facility this winter, we have scheduled another training day at that facility for September 7th. This time there will be Vehicle Extrication training available in addition to Live Fire training.

We also have many Cornerstone classes that are being hosted by fire departments within the Central Region. Keep your eye on the IFSI website for these classes, or send me an email if you would like to start receiving my monthly list of Cornerstone classes that are available in the region.

The spring and summer months are a great time to learn some new skills and brush up on the skills that you already have. If there is no Cornerstone training coming up in your area, we would be more than happy to come to your department and hold a class.

Clockwise from above:
Ladder training at Beardstown Regional Training Center.
Search training at the Beardstown Regional Training Center.
Acquired structure burn in North Pekin.
From the Campus: Program Reports

This year we are offering three Vehicle Machinery Operations class and two Vehicle Machinery Technician classes at the Institute.

The Vehicle Machinery Ops dates are April 29 to May 3.

Two Vehicle Machinery Technician classes will be offered the weeks of July 8 to 12 and again November 11 through the 15th.

Late October, the Institute is dedicating an intensive time with two Vehicle Machinery Operations classes. A weekend class at the Institute is also scheduled for two consecutive weekends – October 26 and 27 and November 2 and 3. Sandwiched between the two weekend classes is a weekday class (October 28 to November 1).

Once again Basic and Advanced Auto Extrication classes will be offered during Fire College (June 6 – 9). These classes are popular classes and fill quickly, so register after April 8th for the best selection of classes.

Upcoming Vehicle/Machinery Classes on the IFSI Champaign Campus
Vehicle Machinery Operations - April 29 - May 3
Vehicle Machinery Technician - July 8- 12 and November 11 - 15
Vehicle Machinery Operations - two weekends in late October and early November

Calendar year 2012 closed with several significant accomplishments. First, class requests for Grain Bin Rescue increased for the third straight year. Ag Rescue class deliveries increased, and we had positive feedback about the new rollover prop.

In November I was able to attend a conference in Cedar Rapids, IA about confined space in agriculture. At this conference IFSI, Ohio State, and Iowa each brought their Grain Bin rescue props and did demonstrations one afternoon. Penn State and Purdue also participated. After meeting with the other agencies and doing the demonstrations it was interesting to see how similar the programs are and this was the first time we had all met.

The Ag Rescue program continues to grow and this would not be possible without partnerships. The following organizations have provided both equipment and financial support to the Ag Rescue program. And to each and every one I say thank you for your support. Brock Grain Bins, GROWMARK, Illinois Farm Bureau, Country Financial, Crop Production Services, Fertilizer and Chemical Association, Farm Credit, harvestco, Midland State Bank, Prairie State Bank, and The Andersons.

How to Register for a Student Identification Number

FEMA is now requiring students to have a Student Identification Number (SID) for training of all resident, off campus and NFA-sponsored classes. This page may contain links to non-U.S. government websites. What does this mean for you?

This SID number is used in place of a Social Security Number and is obtained through the Center for Domestic Preparedness (CDP). Applications for NFA courses that do not include a SID will not be processed. When first responder credentialing is implemented, they will be tied back to this SID.

To obtain a SID
1. Register at https://cdp.dhs.gov/femasid
2. Select “Need a FEMA SID?” on the right side of the screen.
3. Follow the instructions to create your account.
4. You will receive an email with your SID. Save this number in a secure location.

Use the SID in place of the SSN on the General Admissions Application Form (FEMA Form 119-25-1) and General Admissions Application Short Form (FEMA Form 119-25-2).
From the Campus: Program Reports

Joe Gasparich
National Incident Management System (NIMS) Program Director

Homeland Security

The Command and General Staff Classes and All Hazards Position Specific Classes are offered by IFSI to prepare students for membership in local Incident Management Teams. These teams are instrumental in preparing for and responding to local incidents that develop into multi-operational period events over several hours or days.

The classes are designed to help students improve on the skills that are needed to staff various positions in the NIMS/ICS framework.

Classes are grant-funded and are available statewide.

Upcoming Homeland Security Class:
All Hazards Position Specific - Planning Section Chief - 32 Hours
May 14 - 17 in Sauget, IL

Ryan Reynolds
Confined Space Program Manager

Confined Space Rescue

The on-site IFSI confined space rescue props have been evolving over the past few years. Some of our new additions:

- The installation of a 30-foot steel superstructure/catwalk with an integrated overhead “I” beam above a 25-foot vertical poly tank, all of which is integrated into the south side of the TRT prop. This prop allows IFSI to simulate a factory or industrial setting.
- Installation of multiple ground level and elevated interior anchor points inside the TRT prop.
- Addition of ground-level horizontal hatches varying in diameter and height above grade.
- The addition of a dry-bulk hopper rail car, donated by ADM.

The Confined Space Program is looking to further develop our props. SABIC Innovative Plastics in Ottawa, IL has donated plastic ABS pellets for use inside one of our poly tanks, which enables us to simulate the controlled and safe rescue of a victim from an actual engulfment situation. This project is scheduled to be completed in the spring of 2013.
From the Campus: Program Reports

Our fire officer program at IFSI is off and running to a busy 2013. Classes are taking place statewide including Lockport for Chicago Metro and Champaign, and many more are scheduled in the southern region. The classes include the entire Fire Officer I and II series.

This spring marks the 10th year of our affiliation with the Chicago Fire Department’s Officer training. The Chicago Intensified Officer Training Program consists of all five Fire Officer I classes mixed with realistic hands-on training from roll calls to lead outs. We are in the midst of starting classes for 120 Lieutenants and 40 Captains.

Fireground Officer and Command Schools are popular, so we do not have seats available in our May class. But watch the web site for more opportunities and challenge your-

self to become a better Officer. It may be the best decision of your career.

Please be safe!

Upcoming Officer Classes

- **Instructor II**: over two weekends in Sesser - June 1-2 and 8-9. Tuition $250
- **Management II**: over two weekends in Mt. Vernon, September 14-15 and 21-22. Tuition $250
- **Management III**: Lockport - April 15-19. Tuition $250
- **Management IV**: Lockport - May 6-10. Tuition $250
- **Management IV**: over two weekends in Marion - August 3-5 and 10-11. Tuition $250

**IFSI Staff Travel to Quantico Marine Base**

In support of the IFSI Fire Service Leadership training development project, a team from IFSI traveled to the Quantico Marine Base, Quantico, VA. The IFSI team was represented by Deputy Director Lunt, Associate Director Brauer, Fire Officer Program Director Lake, and Chicago Metro Regional Representative Stack.

The goals of the trip were to identify consistent leadership themes, consistent curriculum areas, and ways to “train” leadership in complex pressurized decision making. We were able to learn from the USMC a cradle-to-grave leadership development, training and education concept and the process that goes from the enlisted ranks through the ranks of Lieutenants, Captains, Majors and Lt. Colonels, Colonels and General.

The team was shown numerous training and educational methods such as tactical decision games, ethical decision games, moral decision games/dilemmas, small group discussions, and sand-table exercises including small-unit decision training.
From the Campus: Program Reports

Gavin Horn, PhD
Research
Program Manager

Research

Illinois Fire Service Institute - 25 Years of Research

Since 1988, the Illinois Fire Service Institute (IFSI) has been actively involved in conducting heat stress related research with firefighters in real-life scenarios. Hundreds of firefighters have participated in the studies over the years and the research continues today as advanced technology and techniques provide tools to look closer at the effects of fire fighting activities and fire fighting equipment on the human body.

Currently there are three major research projects being conducted at the Firefighter Life Safety Research Center. The three projects are in varying stages of completion and reporting.

“Escape Rope Performance and Design in Fireground Applications” examines escape rope systems and particularly studies escape rope materials in realistic service conditions. The study aims to determine the failure mechanisms of rope systems and then design and test new thermal protection technologies to improve the functional capability of current escape rope systems. Underwriter’s Laboratories (UL) and Fire Department, City of New York (FDNY)’s research and development unit are serving as independent partners for these studies. The researchers have completed their data collections and are in the process of preparing the final report.

A second research study – “Effect of Aspirin on Hemostatic and Vascular Function After Life Fire Fighting” examines the effects of aspirin usage on cardiovascular function and changes in blood as a result of fire fighting activities.

Through the latest technology, including using an internal core temperature pill and cardiac and vascular ultrasound, the study compared the different effects of taking a one-time dose of aspirin before fire fighting with taking a regimen of aspirin daily for two weeks prior. Data collection was completed in the fall of 2012, with the results currently being analyzed. A report is expected in the summer of 2013.

A third study – “Effects of SCBA Design & Fire Fighting Induced Fatigue on Balance, Gait and Safety of Movement” focuses on the effects of SCBA size and design on a firefighter’s risk for slips, trips and falls. The study hopes to understand how SCBA design affects oxygen consumption, core temperature and heart rate during strenuous activity and to understand the interaction of the design on fatigue and safety of movement on the fireground.

Each of the more than 30 firefighters participating in the study will take part in typical fire fighting tasks within the laboratory setting and live-fire buildings. Throughout the activities, core temperature, heart rate, respiration rate, activity counts and oxygen consumption will be recorded. Subjects will breathe through an assigned SCBA system in a burn building or environmental chamber during all physical activities. Their gait and movements will be captured on a specially-designed platform with state-of-the art motion capture analysis.

MSA is providing the SCBAs and Globe Manufacturing is providing the PPE for the research. The study is scheduled for completion in 2014.

All research results are included on the IFSI web site at www.fsi.illinois.edu under the Research tab.

Plans are underway to create an IFSI Firefighter Life Safety Research Fund to help expand and support the research program. Watch the IFSI web site for details on how you can help advance this important activity.
Supervisors Responsibility

The most essential element of successful wildland firefighting is competent and confident leadership. Setting the proper example concerning safety practices and ensuring that personnel adhere to department, agency, and company policy with a zero tolerance for violating these policies is the best possible way for you to show the men and women under your leadership that you care about them. This operational leadership means providing purpose, direction and motivation for firefighters working to accomplish difficult tasks under dangerous and stressful circumstances.

In confusing and uncertain situations, a good and safe operational leader will: TAKE CHARGE of assigned resources; MOTIVATE firefighters with a “can do safely” attitude; DEMONSTRATE INTIATIVE by taking action in the absence of orders; COMMUNICATE by giving specific instructions and asking for feedback; and SUPERVISE at the scene of action.

Studies have shown that safety is a direct result of leaders exercising best practices through their actions – ways of ensuring others follow your lead is to be proficient in your job, both technically and as a leader. Take charge when in charge, adhere to professional operating standards, and develop a plan to accomplish given objectives. Make sound and timely decisions. Maintain situational awareness in order to anticipate needed actions to avoid dangerous situations and conditions, develop contingencies and consider consequences. Improvise within the leader’s intent to handle a rapidly changing environment. Ensure tasks are understood, supervised and accomplished within safety norms. Issue clear instructions, observe and assess actions in progress without micro-managing. Use positive feedback to modify tasks and assignments when appropriate to keep personnel focused on doing things safely.

Put the safety of your subordinates above all other objectives, take care of your subordinates needs (information, physical & logistical) and lead by example when it comes to safety policy, protocols and practices; these things always speak louder than words.

Let us help you to develop your operational leadership skills and build confidence in managing on the fireground. Courses such as Human Factors on the Fireground, Followership to Leadership, Look Up, Look Down, Look Around and Tactical Decision Making are available that will help make the difference between a safe, timely and efficient wildland suppression operation or a lengthy frustrating experience for all. Be alert. Keep calm. Think clearly. Act decisively.

In 2012, IFSI partnered with the Illinois Department of Natural Resources (IDNR) to assist with the Federal Excess Property Program (FEPP). Since the partnership began, a thorough inventory of all Federal property distributed throughout Illinois has been initiated. Included in this inventory is a detailed log of all agencies in Illinois and the Federal Property assigned to it. Upon completion of the inventory, we will begin working towards entering the Department of Defense Fire-fighter Program (FFP). With this program, any agency receiving surplus property will be able to take ownership of the property. Ownership can be changed over to the receiving agency only if said agency has met all of the program’s requirements. Further information on the FEPP and the FFP programs can be found at http://www.fs.fed.us/fire/partners/fepp/. If you have questions or if you would like to talk about the program feel free to contact IDNR Excess Property Coordinator, Jason Sartin. (815) 200-5064 / jason.sartin@illinois.gov

The Lake/McHenry County SRT Wildland Taskforce recently took delivery of this 1995 Type III Wildland Engine. While there was no cost for the engine, receiving agencies were responsible for transportation, paint and maintenance.
From the Campus: Program Reports

Rich Valenta
E-Learning Program Director

Online Classes

Down & Dirty Fires on the Farm Distributed!
The Illinois Fire Service Institute is happy to announce that Down & Dirty Fires on the Farm has been mailed to every fire department in the state. This training package is provided to the firefighter of Illinois through generous support of the Illinois Firefighter’s Association. It is our hope that fire departments and firefighters across the state will incorporate this training resource into their regular training schedule.

About Down & Dirty Fires on the Farm
Down & Dirty Fires on the Farm provides an overview of farm fires and brings strategies, tactics, operations and water supply logistics together. Today, rural fire departments can extinguish most farm fires. Emphasizing pre-planning, thinking “beyond your own back yard” and encouraging joint training and practice, rural fires can have successful outcomes. The class covers response capabilities, strengths and weaknesses of the department as well as considerations for farm fires in buildings, areas involving common farm chemicals, machinery, fields and/or crops.

Using the New CD-Rom
Viewers can use the CD-Rom training package for group fire department or use it for individual training. View the training modules in the order they are provided in the training package or select the sections of special interest.

Down & Dirty Fire on the Farm Now Offered in Two Formats for Computer Based Training
In addition to the Down & Dirty Fires on the Farm CD, IFSI offers Fires on the Farm as a more structured online course. The online course allows students to complete 16 modules of training at their own pace. Upon successfully completing the course, participants receive an IFSI certificate.

Online course information and registration can be found on the IFSI web site under the ONLINE LEARNING tab.

These offerings present essential training while providing fire departments and firefighter the flexibility of computer based training.

Whether training online or by use of the CD-Rom we are sure that you will find this training beneficial.

Rope Rescue Program

Mike Woodard
Rope Rescue Program Manager

Rope Operations is one of the core classes for the Special Operations Training Programs. For all the work that each and everyone have put into this training, I only have one thing to say – don’t let this skill die! Rope rescue rigging is one of the most perishable skills in the fire service. We are always looking for ways to make our job safer, easier, and quicker and the ideas go on and on. At present we are working on an online training program that not only will prepare students for their first rope class, but also help students to refresh their skills. We developed a field operations guide that allows firefighters a ready reference in the field and also as a training guide for new students.

There is a lot of equipment and new equipment being developed and placed on the market every day. Terminology is not always consistent and anyone who has been working with rope rigging for any length of time will tell you tribal knowledge plays a big part in your rigging preferences. You have heard me say it time and time again, “There is more than one way to skin a cat”, and in this case to set up your rigging. As long as it is safe, effective and efficient – go with it. Know the advantages and disadvantages of every piece of equipment or technique you use and what the manufacturer will stand behind.

One of the ways new students can prepare for their first rope class is to get with those who have already gone through the program. This helps the new students and refreshes you rope gurus out there. In the future, watch for an online Rope Tech program to be developed that will also help new students and refresh teams at the Technician Level.

See page 27 for more on Rope Rescue
Page 18

www.fsi.illinois.edu
Fire Investigator Training and Certification

There are several fire investigation classes available at IFSI. Some of these classes are delivered at Fire College or Winter Fire School and some through the Cornerstone program. The foundational fire investigation training classes, sometimes referred to as the "Modules", are fee-based classes scheduled by IFSI through host departments around the state and on the IFSI campus. The modules consist of three 40-hour classes delivered four or five times a year somewhere in the state. I depend on host departments to support the delivery of the modules because structures and vehicles in which training fires can be conducted and the necessary fire suppression efforts are required.

The Office of the State Fire Marshal's requirements for "Certified Fire Investigator" are:
- Firefighter II or Basic Operations Firefighter Certification.
- Course completion of the three class modules.
- Recertification every four years.
- NFPA Standard 1033 "Professional Qualifications for Fire Investigator" and NFPA 921

"Guide for Fire and Explosion Investigations" are the two documents utilized by IFSI for the design and delivery of the Fire Investigation Program. The student text for the modules is "Fire Investigator – Principles and Practice". The first two editions of this text were initially developed as handbooks correlating to NFPA 921. The third and current edition was written in a text book format based on NFPA 921 and NFPA 1033. Individual chapters in the text were written by subject matter experts and extensively reviewed by experienced fire investigation professionals.

The following locations and dates are scheduled for the 2013 fire investigation program.

- Frankfort Fire Department – April 15
- Bismarck Fire Protection District – July 12
- Northlake Fire Department – August 12

Check the IFSI web site for class and registration information.

IFSI International Program

In October 2012, the Dalian Jiatong University delegation led by President Li, Xuewei visited IFSI and was impressed by presentations made by Director Mortenson and Deputy Director Lunt. The delegation also toured the IFSI training facility.

In fall 2012, IFSI received six visiting scholars from Hong Kong City University; Beijing University of Technology; Dongbei University of Finance and Economics; South China University of Technology; Lanzhou Branch of National Science Library and Chengdu Branch of the National Science Library, and Chinese Academic of Sciences; Shanghai Maritime University. All made donations to the China Endowment Fund, administrated by the UI Foundation.

Ruan's and Zhu Qiang's article, titled The role of information technology in academic libraries’ resource sharing in Western China is being published in the GSLIS peer-reviewed magazine, Library Trend, in its special edition on Community Informatics in China.
Hurricane Sandy moved from the Atlantic Ocean onto the continental United States on October 29, 2012. It was a category 1 hurricane that the news media had named “Superstorm Sandy”. It is estimated that it left over $65 billion in damage and affected 24 states, with the New Jersey and New York coastlines receiving the brunt of the impact.

On November 2nd, Illinois received an Emergency Management Assistance Compact (EMAC) request for a Type-III Incident Management Team (IMT) to respond to Long Island NY and assist local government in planning the response. The request was for a “short team” consisting of Command, Command Staff and General Staff Positions. It was decided that each position would be a team member who was “red carded” and qualified in their respective position. Team members had two hours to determine deployment readiness. Many members worked diligently to secure the time off work and eight qualified members were able to deploy.

Getting the EMAC paperwork processed took until mid-morning on Sunday, November 4th. The deployment was finally scheduled for 09:00 on Monday, November 5th from the SIRC in Springfield. The wait over the weekend was a long one, however, the team stayed busy gaining intelligence from the media, people we knew who were already there, and weather sites online.

The team “checked in” at the State Incident Response Center (SIRC), received a briefing, then left for New York. The team deployed in a four-vehicle caravan and stayed in contact with one another using a cache of Illinois Public Works Mutual Aid Network (IPWMAN) portable radios. The need was so great we drove through the night and arrived around 06:30 in Upton, NY. We were housed in a dormitory at the Brookhaven National Laboratory near the center of Long Island. After resting for a few hours, we met with a Type-III team from Ohio that was working out of the Emergency Operation Center (EOC) in Suffolk County.

We learned that the Ohio team had convinced County Officials to change our final destination and to keep us at the EOC to work as a Logistics Section supporting all of Suffolk County. The team met to determine if we would accept the change in mission. We brought a short IMT, not a Logistics Section and only one member of the team was qualified in Logistics, the rest of us were qualified in other roles. We soon realized that the members present may not have a qualification card in Logistics, but we had a lot of talent and experience. We adopted the mindset that our “Training and Teamwork” would allow us to be successful in the mission and accepted it.

We hit the ground running on Wednesday, November 7th and worked 16-hour days for the first week. We helped consolidate four ordering systems into two. The goal was to have a single ordering system, but the political climate did not allow this luxury. We streamlined order tracking utilizing T-cards to track a resource from the time it was ordered until it was consumed or re-inventoried. We tracked down hundreds of resources that were deployed before a tracking system was implemented. We also assisted the Suffolk County Type-III IMT, the Western New York IMT, and a New York and FEMA employee in documenting the experience in their task books and helped them become qualified themselves. Five members of our team qualified in new positions on this deployment. One of the greatest experiences was finding the time to completely inventory the county warehouse and give them a good baseline to work from. That task took a huge

continued next page
Library Updates & Highlights

Built upon the success of the Illinois Firefighter Line of Duty Deaths Digital Image Collection Database (IFLODD), the Library is in the process of creating a new digital database of the recipients of the Illinois Firefighter Medal of Honor and Medal of Valor. The Medal of Honor and Medal of Valor are awarded each year in Springfield as part of the Illinois Fallen Firefighter Memorial and Firefighter Medal of Honor Awards Ceremony. Both medals are given for acts of bravery or heroism, and the Medal of Honor is the highest award given to an Illinois firefighter. The Illinois Firefighter Medal of Honor and Medal of Valor Database describes and documents the actions that each firefighter took to receive the award. The database includes the ability to search by agency, name, or other criteria. If you have information about a Medal of Honor or Medal of Valor award recipient that you would like to contribute, please contact IFSI Archivist and Metadata Librarian David Ehrenhart at ehrenha1@illinois.edu or 217/244-0783.

The IFSI Library has created two subject guides to help Illinois first responders locate information concerning hazardous materials and natural disasters. Each of these “libguides” collects at one convenient website a variety of information related to their specific subjects.

The Natural Disasters: Planning & Recovery Libguide, linked from the Library homepage, assembles resources about emergency preparedness and management from resources on several specialized topics, including:

- Types of Natural Disasters
- Preparation
- Recovery
- Volunteers
- Local Information

The Hazmat Resources Libguide is also linked from the Library homepage. It is designed to help firefighters, first responders, and EMTs learn how to use hazardous materials e-resources. This guide provides useful search tips as well as information regarding the different sources:

- National Library of Medicine (NLM)
- CHEMM
- WISER
- TOXNET
- REMM
- NIOSH Pocket Guide
- PHMSA Emergency Response Guidebook
- CAMEO
- ASTDR
- Smartphone/Tablet Apps related to hazmat

Dr. Lian Ruan
Head Librarian

On Feb. 1, 2013, Head Librarian Ruan, together with an interdisciplinary team and multi-institution partners, submitted a grant proposal to the Institute of Museum and Library Services (IMLS), entitled Simulation of the Use of Library Digital Assets in a Digital Game-Based Platform for Firefighters Training and Learning.


Load off the County IMT. This is one case when the warehouse was in better shape after the disaster than before.

The Hazmat Resources Libguide also provides information on accessing IFSI Library resources and using the IFSI Library’s online catalog. For further help, contact the library at 217/333-8925 or fsi@library.illinois.edu.

On Feb. 1, 2013, Head Librarian Ruan, together with an interdisciplinary team and multi-institution partners, submitted a grant proposal to the Institute of Museum and Library Services (IMLS), entitled Simulation of the Use of Library Digital Assets in a Digital Game-Based Platform for Firefighters Training and Learning.


Looking back, the deployment was a heavy lift, but a fulfilling one. We worked insane hours, but worked them with some pretty fine people. We built relationships with the Suffolk County IMT, the Western New York IMT and a couple members of the Ohio IMT. I have learned to always ask the question of the host, “Would you have our team back for another deployment”? The answer was an emphatic “yes”, another invitation from Suffolk County is one that I personally would accept without hesitation. Our “Training and Teamwork” did prove equal to the task.
We want to thank, again, all the companies shown in the photos for their support of the Institute.

You can play an important role in delivering training and building safer communities by becoming an IFSI Partner.

Go to our web site at: www.fsi.illinois.edu, push the Donate button and choose the program you would like to support at IFSI. 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 full support documentation for all donations.

To learn more contact Dennis D. Spice, Director of Corporate Relations, at 217-898-6507 or by email at dspice@illinois.edu.

We salute our Partners for their support during 2012

AEC receives the Titanium Level Appreciation Award (IFSI’s highest level of Partner achievement) for their support of IFSI Vehicle/Machinery Rescue Training. This is the sixth consecutive year that AEC has provided support to the Institute. Shown (L to R): John Archer, AEC President; Dennis Spice, IFSI Corporate Relations; and Mark Nixon, AEC Fire Apparatus Sales Manager.

ADM receives an Appreciation Award for their support of IFSI training. Shown left to right: Chris Downey, IFSI Hazmat Program Manager; Dennis Spice, IFSI Director of Corporate Relations; John Martin, ADM Director of Rail Fleet; Sean Brewer, ADM Rail Shop Manager; Gary Williams, ADM Rail Fleet Supervisor.

AMKUS receives the Titanium Level Appreciation Award (IFSI’s highest level of Partner achievement) for their support of IFSI Vehicle/Machinery Rescue Training. This is the sixth consecutive year that AMKUS has provided support to the Institute. Shown (L to R): Joe Drennan, IFSI Vehicle/Machinery Rescue Program Manager; Judy Weigand, AMKUS Vice President; and Dennis Spice, IFSI Corporate Relations.

Air One Equipment, Inc. receives an Appreciation Award for their support. Shown (L to R): Joe Drennan, IFSI Vehicle/Machinery Rescue Program Manager; Sandra Frey, President, Air One; David Frey, Vice President, Air One; and Dennis Spice, IFSI Director of Corporate Relations.

Brock Grain Systems receives an Appreciation Award for their continued support of the IFSI Grain Bin Rescue Training Program. Shown (L to R): Darren Zink, Brock Strategic Accounts Manager; Dave Newcomb, IFSI Ag Safety Program Manager; Mark Dingeldein, Brock Engineering Manager Grain Storage; Dennis Spice, IFSI Director of Corporate Relations; and Scott Thompson, Brock Sales Manager.

Bryant Industries receives an Appreciation Award for their support of the IFSI Vehicle/Machinery classes. Shown (L to R): Dennis Spice, IFSI; Mike Bryant, Chief Executive Officer, Bryant Industries; Brent Richards, Chief Operating Officer, Bryant Industries; and Harry Clore, IFSI Finance & Administration.
Comfort Suites in Urbana is recognized for their support of IFSI. (L to R): Harry Clore, IFSI Associate Director, Finance and Administration; Adam Friedrich, Comfort Suites Urbana, General Manager; Laura Raney, Comfort Suites Urbana, Sales Manager; and Dennis Spice, IFSI Corporate Relations.

Commerce Bank, Champaign, receives an Appreciation Award for their support of IFSI training programs. Shown (L to R) are: Harry Clore, IFSI Finance and Administration; Brian Egeberg, Commerce Bank President, Champaign Market; and Dennis Spice, IFSI Director of Corporate Relations.

Cook Illinois Corporation receives an Appreciation Award for their support of IFSI Vehicle/Machinery Rescue Training. Shown (L to R) Dennis Spice, IFSI Director of Corporate Relations; Roger Bannerman, Cook Illinois Fleet Manager; and Joe Drennan, IFSI Vehicle/Machinery Rescue Program Manager.

Coreslab Structures (Indianapolis) received an Appreciation Award for their support of the Institute’s training programs. Shown (L to R): Matt Ballain, Vice President and General Manager; and Harry Clore, IFSI Director of Finance and Administration.

Country Financial receives an Appreciation Award for their support of the IFSI Ag Training Program. Shown (L to R): Harry Clore, IFSI Finance and Administration; Dave Newcomb, IFSI Ag Safety Program Manager; Don Davis, Country Financial Loss Control Supervisor; Eric Vanasdale, Country Financial Senior Loss Control Representative; and Dennis Spice, IFSI Corporate Relations.

Crop Production Services receives an Appreciation Award for their support of the IFSI Ag Training Program. Shown (L-R): Dave Newcomb, IFSI Ag Program Manager; Sam Knott, Marketing Manager, Crop Production Services Eastern Illinois Division; and Dennis Spice, IFSI Corporate Relations.

EMC and Genesis received the Titanium Level Award for six consecutive years of support. The award is dedicated to Joe Simon, owner of EMC. Joe unexpectedly passed away during 2012 after having provided many dedicated years of support and training to the fire service. Shown: Dennis Spice, IFSI Corporate Relations; Teresa Simon, Owner, EMC; and, Joe Drennan, IFSI Vehicle/Machinery Rescue Program Manager.

Farm Credit Services of Illinois receives an Appreciation Award for their support of the IFSI Ag Training Program. Shown (L to R) Dave Newcomb, IFSI Ag Safety Program Manager; Thomas Tracy, Farm Credit Services Senior Vice President, Operations; and Harry Clore, IFSI Associate Director, Finance and Administration.

FE Moran Fire Protection receives an Appreciation Award for their support of the IFSI Firefighting training programs. Shown (L-R) Jeremy James, FE Moran Fire Protection Designer/Shop Foreman; Dennis Spice, IFSI Director of Corporate Relations; James Heinold, FE Moran Fire Protection President; and Craig Arbuckle, FE Moran Fire Protection Inspection Lead.
We salute our Partners for their support during 2012

Flex N Gate receives an Appreciation Award for their support of the Institute. Shown (left): Chris Evangelisti, Flex N Gate, Corporate Director of Security/Internal Audit; and Dennis Spice, IFSI Director of Corporate Relations. (R)

Global Emergency Products/Pierce receives an Appreciation Award for their support of IFSI. Shown (L to R) Dennis Spice, IFSI Director of Corporate Relations; and Mike Mikoola, President and CEO at Global Emergency Products.

harVestco, LLC receives an Appreciation Award for their support of the IFSI Ag Training Program. Shown (L to R) Dave Newcomb, IFSI Ag Safety Program Manager; Brian Swartz, Owner/Managing Broker and Auctioneer; Steve Wattinem, harVestco Real Estate Broker; and Dennis Spice, IFSI Corporate Relations.

Honeywell Life Safety receives an Appreciation Award for their support of IFSI. Shown (L to R) Tom Potosnak, System Sensor, VP/General Manager, US; Isaac Papier, Honeywell Life Safety, V.P. Industry Relations; Dennis Spice, IFSI Director of Corporate Relations; and Maureen Butler, Honeywell Analytics Americas, Market Manager, Safety Systems.

Hurtres an Appreciation Award for their support of IFSI. Shown at Hurst Jaws of Life headquarters in Shelby, NC (L to R): Harry Clore, IFSI Finance and Administration; Chris Jaques, Hurst General Manager; Kevin Halstead, Hurst Director Rescue Sales North, Central & South America; Dennis Spice, IFSI Corporate Relations.

The Illinois Fertilizer and Chemical Association receives an Appreciation Award for their support of the IFSI Ag Training Program. Shown (L to R) Dave Newcomb, IFSI Ag Safety Program Manager; Jean Payne, IFCA President; Kevin Runkle, IFCA Director Regulatory Services; and Harry Clore, IFSI Associate Director for Finance and Administration.

LKQ U-PULL-IT NORTH receives an Appreciation Award from IFSI for their support of the Auto Extrication Training Program. Shown (L to R) Dennis Spice, IFSI Director of Corporate Relations; Daniel Diaz, LKQ Plant Manager; and Joe Drennan, IFSI Vehicle/Machinery Rescue Program Manager.
UIECU-IFSI 2012 Award for Student Excellence in Furthering Firefighter Life Safety was presented to Supriya Hobbs, University of Illinois. Ms. Hobbs, a junior from Toledo, OH is majoring in Chemical Engineering and minoring in Spanish. This was the first year for the award, but through the support of UIECU an award will be presented annually to a student at the University of Illinois. Shown (L to R): Royal Mortenson, IFSI Director; Dr. Gavin Horn, IFSI Director of Research; Supriya Hobbs; and EJ Donaghey, UIECU President.

The Illinois Propane Education Research Council (IPERC) received the Titanium Award - IFSI’s highest appreciation award - for more than six continuous years of support. IPERC’s support has made a very significant impact on the Liquid Propane Gas (LP) Training the Institute is able to offer to students. Shown is Mike Faivre, Chairman of IPERC along with Royal Mortenson, Director of IFSI.

Midland States Bank receives an Appreciation Award from IFSI for their support of the Ag Rescue Training Fund. Shown (L to R) Dan Stevenson, Midland States Bank Regional Market President; Becky Von Holten, Midland States Bank, Market President, Champaign; and Dennis Spice, IFSI Corporate Relations.

Motorola Foundation receives an Appreciation Award for their support of the Institute’s training programs. Shown (L to R) Cynthia Leighton, Director, Public Safety Markets; Matt Blakely, Director, Motorola Solutions Foundation; and Royal Mortenson, Director, IFSI.

Nicor Gas receives an Appreciation Award from IFSI for their support. Shown at Nicor Gas headquarters in Naperville, IL (L-R) Beth Reese, President, Nicor Gas; Dennis Spice, Corporate Relations, IFSI; Margi Schiemann, Director of Corporate Community Relations and Economic Development, AGL Resources; Melanie Platt, Executive Vice President, Chief People Officer and President of the AGL Resources Foundation, AGL Resources.

Pekin Insurance receives an Appreciation Award for their support of IFSI. Shown (L to R) Harry Clore, IFSI Associate Director of Finance & Administration and Chief Financial Officer; Gordon Walker, Pekin Chairman of the Board and Chief Executive Officer; Todd Clark, Senior Vice President & Chief Operating Officer-Property Casualty; and Dennis Spice, IFSI Director of Corporate Relations.

Paratech receives an Appreciation Award for their continued support of the IFSI training programs during 2012. Shown at the award presentation are: (L to R) Joe Drennan, IFSI Vehicle/Machinery Rescue Program Manager; Roger Lunt, IFSI Deputy Director; Ken Nielsen, Paratech Chief Operating Officer; and, Dennis Spice, IFSI Director of Corporate Relations. All the Paratech employees are in the background observing the award presentation at Paratech headquarters in Frankfort, IL.
We salute our Partners for their support during 2012

Prairie State Bank receives an Appreciation Award for their support of the Ag Rescue Training Fund. Shown (L to R) Dennis Spice, IFSI Corporate Relations; Jeff Jacobs, Regional President; Colleen Pihl, Commercial Loan Officer; Laura Bryan, Personal Banker; Tim Jacobs, Secondary Market Assistant; and Kristie Hayes, Mortgage Lender.

Scott Safety receives an Appreciation Award for their support of IFSI, including the Fire Explorers Hands On Fire Training. Shown at Scott Safety’s North America Headquarters in Monroe, NC (L to R): Scott Phillips, Scott Safety Manufacturing Manager; Harry Clore, IFSI Associate Director, Finance and Administration; Trent Smith, Scott Safety, Vice President Americas Sales; Jeff Emery, Scott Safety Fire Services Marketing Manager; and, Dennis Spice, IFSI Director of Corporate Relations.

The Andersons, Inc. receives an Appreciation Award for their support of the IFSI Ag Training Program. Shown (L to R) Dave Newcomb, IFSI Ag Safety Program Manager; Chris Kernahan, The Andersons Operation Manager, Champaign, Grain and Ethanol Group; Adam Weedman, The Andersons Operation Supervisor, Mansfield, Grain and Ethanol Group, Jesse Funderburk, The Andersons Operations Worker I, Mansfield; Craig Halcomb, The Andersons Operations, Champaign.

LEFT: W.S. Darley & Co. receives an Appreciation Award for their support of IFSI. Shown at the award presentation are: (L to R) Dennis Spice, IFSI Director of Corporate Relations and Paul Darley, President and CEO of W.S. Darley & Co.

RIGHT Ajax Tools receives an Appreciation Award for their support of IFSI during 2012. Shown (L to R) Dennis Spice, IFSI Director of Corporate Relations; Bill Benedict, Ajax Tools Sales and Product Manager; and, Joe Drennan, IFSI Vehicle/Machinery Rescue Program Manager.

IFSI participated in Mitsubishi Owner’s Day 2012 on Saturday, September 22nd, at the Mitsubishi plant in Normal, Illinois. Shown in the auto extrication demonstration are: (L to R) Duane Bales, IFSI staff; John Nichols, IFSI Southwest Regional Representative; and Joe Drennan, IFSI Vehicle/Machinery Rescue Program Manager.
Instructors, students, departments and personnel performing rope rescue, ask me all the time: “How would you rig that?” Anyone who has been setting up rigging scenarios for training or on the job for real will tell you that finding a “bomb proof” anchor to place your anchor points on is not always simple. What are the forces applied, angles, distance to the edge and do I have to destroy something to place the anchor? How would I establish an elevated leading edge (high point anchor) in an elevator? I came up with different ways this could be accomplished. Mono-pods, tripods, going one floor above – all of which do not give you a simple or stable way to create an elevated leading edge either in an elevator or out a window.

With the help of Nigel Leatherby at Paratech, we came up with an idea using existing elevator stabilization and raker construction. We created a frame that can be placed in the doorway and be used as an elevated leading edge to attach equipment for hoisting a rescue load. Just like with any anchor, the integrity of the framework and floor around the opening must be assessed. The forces that are being placed on the frame work are directed downward into the floor. The framework is held in the doorway with tension applied to the struts using the collar and wrench supplied by Paratech. In the photo we placed protection, in the form of a rubber pad on the floor, due to the aggressive nature of the foot plate on the strut. Any number of mechanical devices can be used to hoist or lower rescuers from this anchor. In conclusion, like I said, this is not a change – just another tool for the tool box.

“How would you rig that?”

“Rope Rescue Technician Field Rope Operation Guide” can be ordered from IFSI for $75. The proceeds from the book go into IFSI’s Fire Fighting Fund.
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The IFSI Family

IFSI Director Mortenson recently presented Certificates of Service to three staff members:
Kristy Berbaum, Business Office: 30 years;  Chris Dupee, Building Service: 10 years
Beth Niswonger, Business Office: 10 years

Recent Additions to the IFSI Family

Josh Schwenk works in the business office and is responsible for processing payroll and assisting with other business operations.

Greg Evans helps with the maintenance and management of firefighting props, buildings and equipment. Greg has 16 years of fire service experience.

Ralph Webster joins IFSI as the National Fallen Firefighter Foundation Programs Manager. He is coordinating the classes for “Courage to be Safe.”

IFSI Research Staff Expands

The University Illinois Fire Service Institute has expanded its research staff with the addition of Richard Kesler. A 2011 graduate of the University of Illinois with a BS in Bioengineering, Kesler is expected to complete his Masters of Science degree in May 2013 in the same field. As a research scientist for the Institute, he will focus on the biomechanics studies of firefighter gait and balance and support biomechanics analyses of cardiovascular function changes due to fire fighting.

While working toward his Bachelor’s degree, Kesler co-founded Bump (initially Illini Prosthetic Technologies), a non-profit organization committed to developing low-cost prosthetic devices for those that have limited healthcare in developing countries.

As a graduate student, Richard worked with Professor Liz Hsiao-Wecksler in the Department of Mechanical Science and Engineering. In his Master’s thesis, in collaboration with IFSI, Kesler examined the effects of test environment on firefighter gait and balance and developed a new method for the collection of metabolic data during simulated fire fighting activities.
February 23 Leadership Exercise

Twenty-eight volunteering Fire Officers and Firefighters from eight Illinois departments participated in a special leadership development and decision-making beta-test exercise at IFSI on February 23. The exercise design focused on testing effective methods of pressurizing decision-making and creating friction for the Leader in a live-burn fireground scenario. Selected Incident Commanders were challenged to successfully demonstrate leadership and decision-making ability under pressure without needed information while in an uncertain, changing environment. The volunteers had varying ranks, experiences and skill sets which contributed to the uncertain decision-making environment of the IC. The exercise required rapid assessments, aggressive decision-making, and reassessment while simultaneously challenging the Incident Commanders ability to anticipate and think on his feet. The ability of an Incident Commander to rapidly Observe, Orient, Decide, and Act on a continuous cycle was tested to the fullest.

Two scenarios were used – the second more complex than the first. The pilot exercises provided invaluable information on decision-making exercise design for IFSI staff. The event greatly informed on-going IFSI efforts to design and create reality-based leadership and decision-making training for the fire service in the state of Illinois and hopefully nationwide. Key elements of the exercise tested: 1) The ability to make timely and effective decisions in an uncertain environment; 2) An ability to communicate and keep others informed; 3) The ability to be creative in the employment of personnel and resources; 4) An ability to create a system that will employ critical resources within respective capabilities; and 5) Leadership traits to seek responsibility and take responsibility for Incident Command actions.

Without the volunteer participation of the following departments, which included time, hard work and patience, the pilot Leadership Exercise would not have been possible.

RSP&E Fire Protection District Roseville
Urbana Fire Department
Taylorville FD
Champaign FD
Paxton FD
Godfrey Fire Protection District
Savoy Fire Department
Edge-Scott FPD

IFSRecently took delivery of a 75' ladder truck from the Decatur Fire Department.
There are several fire investigation classes available at IFSI. The foundational fire investigation training classes, sometimes referred to as the “Modules”, are fee-based classes scheduled by IFSI through host departments around the state and on the IFSI campus. The modules consist of three 40-hour classes delivered four or five times a year around the state.

Hundreds of spectators got a good look at how fast a dorm room can be engulfed in flames. The demonstration was part of the University of Illinois Engineering Open House, where members of the IFSI research team, with help from the Urbana Fire Department, set up the scenario. The Society of Women Engineers were the organizers for this portion of the Open House. Jack Reagan, a sophomore in Civil Engineering, narrated the event. Jack is a member of the IFSI research team and a volunteer on the Edge-Scott Fire Protection District in Urbana, IL.

Explorer-Cadet Fire School
June 27-30, 2013
Champaign IL

Tuition has been reduced to $220 for those staying in dorms and $175 for those not staying in dorms
See the IFSI web site for complete details.
Find complete details on classes and how to register on the IFSI web site. www.fsi.illinois.edu