From the Director’s Desk:
By Richard L. Jaehne

Greetings from your State Fire Academy

Contrary to rumors that are floating around Illinois, the Institute is very much alive and looking forward to providing you with the very best fire service training in the 21st Century. We had a terrific Winter Fire School in February with over 400 attendees. Thank you to all who came and to our coordinator G. Terry Smith and all of the field staff and administrative staff who made this happen!

We have developed many new programs, which will allow us to continue to deliver training to anyone who needs and desires it. Here is a brief description of some of the innovations. Please look inside the newsletter, call e-mail or visit us for more details.

FSI Financial Situation. FSI is alive, well and working to ensure that we can continue to provide you with the best fire service training possible, at a reasonable cost, and when and where you are available to train. Our reality is that since 1990, the Fire Prevention Fund has declined 15% while costs have risen 30%. We are working with the Fire Services Association to address this decade-long funding decline in your training dollars. We are seeking government and corporate grants to underwrite the costs of training. We have worked in partnership with the cities and fire departments of Galesburg, Carbondale and Mt. Vernon to open regional training centers... now you must help us plan and implement training programs there. We want to develop partnerships for training which match our curriculum and extraordinary instructors with your training programs.

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No-/Low-cost Training. In 1998, the Fire Marshal’s Reimbursement Task Force and federal grants have allowed FSI to deliver 35 days of training at no cost to you. Here is a partial list of no cost courses, which are available to you...all you need to do is bring a group of firefighters together to train that is cost-effective in size. We normally look for 20+ in classes and 35+ in burns. Call and schedule a class now... Essentials I (2 days) Essentials II (2 days) Essentials III (2 days) House Burn Tower Burn

75th Annual Fire College (3-6 June) Plan to attend the celebration of the nation’s oldest continuing fire college. We will have hands-on training and fire for everyone who wants it. We also will have officer training to include National Fire Academy courses. We plan a history display and alumni barbecue. The Illinois Firefighters Association will continue to provide some 90+ tuition scholarships. Registration and catalogues will be mailed in early April... PLEASE PRE-REGISTER... FIRST-COME FIRST-SERVE for limited enrollment classes. Enrollment fee is $50 for all firefighters (career or volunteer) postmarked before 7 May 99, $75 thereafter.

Library. Over the past year, your FSI librarian, Lian Ruan, has created a way for you to receive books and training materials through your local library at no cost...check out the library page.

EMS CEU’s. We have expanded the number of courses that qualify for both firefighting and EMS CEU credit. We are now creating a series of 2-day EMS Awareness classes for non-fire EMS personnel (which qualify for EMS CEU’s). Our intent is to provide an added train-

(Continued on page 2)
The practical field exercise is designed for less experienced investigators and involves the actual investigation of a fire scene, as well as completing the investigation through a scenario process and role-play. Enrollment for this exercise is limited. An optional test will be given at the end of the seminar for those wishing to gain points toward the Certified Fire Investigator program of the IAAI. Registration for the Annual Fire Investigation Training Conference is $175.00 for IAAI members and $200.00 for non-members. The registration includes lunch each day, as well as a Barbecue mixer Monday evening and buffet dinner on Thursday night. Special Conference room rates are available at the Best Western Cunningham Place. Further information about the seminar can be obtained by calling G. Terry Smith, of the Fire Service Institute, at (217) 333-9014 or (800) 437-5819. You may also call Russ Nummer at the River Forest Fire Department at (708) 366-7629.

GPS for Emergency Service Applications
Howard “Doc” Eskridge

Hunters and fishermen have equipped themselves with Global Positioning Systems (GPS) receivers to help find those magic production areas, and to find their way home in the dark and fog. These are the same devices used by the Department of Defense to direct missiles and provide accurate locations for military aircraft, land vehicles, and water based craft. They are also found on commercial trucks, tied to a radio that can pinpoint the location of the trucks.

The non-military GPS receivers
lack the pinpoint accuracy of the military models, but being within snowball range is good enough for the average user.

Across the country, the use of GPS equipment is growing in the public safety sector. The equipment can be used to track police vehicles. It can be used to locate water sources, or any other designated location.

One of the more common uses of the system is to direct medi-vac helicopters to accident scenes on highways and expressways. An inexpensive hand-held unit read out the longitude and latitude of it’s location. This information can be relayed to incoming aircraft, programmed into their on-board system, and a direct heading can be established that avoids navigation by landmark.

In addition to medical uses, fire departments and districts that cover rural areas have used GPS systems to direct incoming or mutual or automatic aid companies. Static water supplies have been identified with appropriate coordinates, and allow those unfamiliar with the area to locate these sources.

The increased marking of country roads with appropriate coordinates has been a great help in the rural areas, however, the use of GPS equipment enhances response in unfamiliar territory.

The cost of GPS units suitable for emergency service activities has gone down dramatically over the past few years. Excellent units are available for less that $100.00 each. GPS users have recommended that the simpler the better. Some of the more exotic (and expensive) units require two hands to operate. The less expensive units typically require only one hand.

When considering a GPS system, there are several options to consider. Some are battery only powered. Some are battery with the option of using a 12 volt power cord. Permanent antennas are in some units. Others have detachable and remotable antennas.

If a GPS receiver or receivers are purchased for use, they should be “exercised” at least once a week. The satellites that provide the information to the receiver do move, and if the unit has not been used for some time, it may take 15 to 30 minutes for it to acquire and establish a link. With a weekly workout, this problem can be avoided.

Information about how the GPS system works can be found on the World Wide Web (WWW), or on home pages of various manufacturers. Most sporting goods departments have a variety of units.

### Training at low or no cost

<table>
<thead>
<tr>
<th>Core Competencies (Essentials I)</th>
<th>15 hours</th>
<th>Reimbursement / no cost</th>
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<tbody>
<tr>
<td>Essentials II</td>
<td>15 hours</td>
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<td>Essentials III</td>
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<tr>
<td>House Burn</td>
<td>8 hours</td>
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<td>Tower Burn</td>
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<td>Basic Pumps</td>
<td>4-12 hours</td>
<td>Possibly under reimbursement</td>
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<tr>
<td>Down &amp; Dirty Hydraulics</td>
<td>12 hours</td>
<td>Grant funded / no cost</td>
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<tr>
<td>Hazardous Materials Awareness</td>
<td>12 hours</td>
<td>Grant funded / no cost</td>
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<tr>
<td>Hazardous Materials Operations</td>
<td>40 hours</td>
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<td>Hazardous Materials Technician A</td>
<td>40 hours</td>
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<td>Hazardous Materials Technician B</td>
<td>40 hours</td>
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<td>Hazardous Materials Incident Command</td>
<td>16 hours</td>
<td>Grant funded / no cost</td>
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<td>Terrorism: Basic Concepts</td>
<td>16 hours</td>
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<tr>
<td>Terrorism: Mass Casualty, Advanced Response</td>
<td>24 hours</td>
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<tr>
<td>Winter Fire School</td>
<td>2 days</td>
<td>$25</td>
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<tr>
<td>Fire College</td>
<td>4 days</td>
<td>$50-$75</td>
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(Continued on page 4)
Manufacturers list most or all of their models on their Web pages.

Considering the Winter of '99, one might consider the use of GPS in the event of being stranded in a white out, buried in a snow drift, or caught in a fog bank. At least the incoming responders would know where to dig.

**Officer Programs**

Bill Farnum

We have finished presenting most of the programs for the year, and have taken a close look at curriculum. Though the programs meet all the objectives set by the Office of the State Fire Marshall and National Fire Protection Association, we have decided to tweak a few of the courses. We will be offering the Management series in a new format which has been jointly copyrighted by the Illinois Fire Chief's Association and the Illinois Fire Service Institute. It is this kind of cooperation which will provide Fire Officers in the State of Illinois the best quality education, now and in the future. The Institute staff is making an effort to provide training at a distance from Champaign-Urbana. We will be scheduling the Fire Officer I and II series in the Chicago area, Champaign-Urbana, and Downstate every year. This will allow us to tailor the programs for the geographical area in which it is presented and allow the instructors to teach closer to home. We are examining the possibility of sponsoring seminars of interest to Fire Officers each year. We are looking for speakers and topics of interest. Call me, Bill Farnum, at (217) 333-9027 if you have topics which are of interest to you or if you know speakers to consider.

**HOW DO I BECOME AN IFSI FIELD STAFF MEMBER?**

**Basic Qualifications:**
- Minimum of 5 years experience in the fire service.
- Demonstrated teaching experience.
- Preferably some subject area of particular expertise.
- Recommendations from Field Staff or other fire service personnel.

**Process:**
- Submit an IFSI application (available from Virginia Stahl) & a resume.
- Periodically we review applications based on our needs geographically or subject wise.
- Potential candidates are called in for an interview as needed.
- Selection is made based on the needs of IFSI.

**Current Status of Hiring:**
- We have recently built up the staff in most areas where we needed them.
- We are being very selective in adding additional instructors at this time.
From the Watchdesk...
By Rick Fritz

Back-To-Basics - More than a Catch Phrase

The Fire Service recently suffered another horrific loss. Three FDNY firefighters were killed while fighting a "routine" room and contents fire in a high rise apartment building. "Routine" in the fact that it was started by careless smoking in bed. "Routine" because it was being contained in a single apartment in a non-combustible building. "Routine" because the sprinklers weren't working and in order to extinguish the fire, firefighters had to make an aggressive interior attack. "Routine" in the fact there was a life to be saved.

Things did go wrong. Terribly wrong. The thermopane windows failed, just as the building was buffeted by a 25 M.P.H. wind. The occupant had left the door open and fire was in the public hall. The hall turned into a blast furnace and three brothers were incinerated before one complete "mayday" could be uttered over the radio.

There is more to the story. Much of the story is not good. Fingers are pointed, questions asked, blame shifted. I don't know the entire story, and I won't repeat rumor or innuendo. What I do know is three firefighters are dead, incinerated on the spot.

The Fire Service is ripe with buzzwords and catch phrases. Departments claim to be training firefighters to high levels of certification (which is not always to a high level of competence), setting up programs to insure firefighter safety through the development of complex safety programs, safety officers, R.I.T. teams and highly specialized technical rescue.

Firefighter safety and surviving the fireground are much deeper issues and cannot be quick fixed with safety officers or R.I.T. teams. Firefighter safety and survival begins with a well-trained company of firefighters, not just an individual certified by somebody that at one point they were able to recognize a hose two out of three times with a 70% success rate.

The officer must be competent and capable of reading a building, fully understanding fire behavior, familiar with building construction and confident in his company and his own abilities. He must understand water flow, the amount of water needed to extinguish the fire and the ability to think ahead and anticipate problems and have worked out a variety of solutions before he commits himself and his crew to the fire floor.

Firefighters must know their job. This includes how to stretch hand lines in many different situations and different configurations. They must understand the principle of water flow and recognize the fire behavior to select the right size hand line to stretch to produce the needed volume of water. They must be experts in nozzle use, hose advancement, fire behavior, building construction, and water supply. Firefighters must be trained in the mechanical skills, the backbreaking work of firefighting and must be trained to think.

Back-To-Basics is more than a catch phrase or fad of the '90's. R.I.T. teams, technical rescue, 2-in-2 out are fine. They are needed. Things go wrong on the fireground even with the best of companies and departments.

They aren't the replacement for drilling and training. Do you really know how to use that nozzle? What will you do if you can't get water from the hydrant? What happens at the nursing home fire when the standpipe fails to function?

Back-To-Basics is more than just a catch phrase. Back-To-Basics is your life. Stay safe.
The field of fire investigation is a specialized area requiring a wide array of knowledge. Personnel at the Fire Service Institute and FSI Field Staff often are asked where a person should start if they have an interest in fire investigation. Of course, anyone with the desire to become proficient in this field will take every opportunity to gain knowledge of investigation techniques, but what else can they do?

Some of the most important knowledge needed by a fire investigator is the same basic knowledge every firefighter must acquire. Fire chemistry, fire behavior, and building construction are major study topics for the firefighter and fire investigator alike. The firefighter must have this knowledge not only for their own safety, but also for use in suppression techniques and tactics/strategy decisions. The fire investigator needs this same knowledge in making fire cause determinations.

Now the question comes as to how much knowledge is enough. Another question often asked is, "When can I stop going to classes to learn about these things?" Unfortunately, you will never reach a point where you can stop learning. Building products, construction techniques, and the contents we put in them will continue to change. Thus, we must continue to study these changes, the effects on the way they burn, and the way they fall down under fire conditions.

The Illinois Fire Service Institute's training site at 11 Gerty Dr., in Champaign, serves not only as the mandated state fire training academy, but also some of our facilities are available as the RTC for the east-central part of the state.

In addition IFSI, in conjunction with host fire departments, operates RTCs in Galesburg, Carbondale, and Mt. Vernon.

It is our intent to conduct at least one IFSI activity at each RTC each month. These class subjects will be based on regional needs. Some RTC basic fire fighting activities will appear on our regular annual calendar. Depending on demand, we may produce regional calendars in the future for the RTCs. The host departments and local firefighters' associations will help advertise these classes.

The facilities will be available for use by local fire departments for their own training at times when IFSI is not there, as long as permission is obtained from the host department and IFSI. Site specific rules apply. The facilities are not available to other individuals or organizations which are in any way charging any fee to students, without prior approval from IFSI.

Note: The live fire training simulators are for smoke training only! Facilities at each location should be available for use early this spring.

**Carbondale RTC**
Contact: T.O. Dave Keim 618/457-3245
3-story Smoke Building
Rescue Tower
Drafting Pond (dry hydrant)
Classroom

**Champaign RTC**
Contact: Rick Fritz 217/333-4215
2-story Smoke Building
Pumper Test Pit
Buildings for Ladder Training
Railroad Tank & Box Cars

**Galesburg RTC**
Contact: T.O. Brad Stevenson 309/345-3791
2-story Smoke Building
Saving Our Own Prop
Railroad Tank Car
Roof Simulator
Assorted Haz Mat Props
Classroom

**Mt. Vernon RTC**
Contact: T.O. Dave Jennings 618/242-6883
3-story Smoke Building
Drafting Pond
Hydrants

We suggest you work within your local area to bring together enough students (typically at least 25) in order to make a class. Let us know (Continued on page 7)
what subject you want, and we can schedule it. Classes can be conducted on weekdays, evenings, or weekends.

Basic fire fighting classes may be provided at no charge, from the Reimbursable Fund, and others must be at cost.

Initially, we will concentrate on short courses, but if the demand is sufficient we can run others, such as the FO series, for example.

We also plan to conduct some EMS courses for CEUs at the RTCs.

*Let us know what you need.*

### Auto Extrication

**G. Terry Smith**

Auto Extrication training takes many forms. Just as building construction is a primary component of firefighter training, vehicle construction is an area of knowledge needed in the auto extrication field. Types of tools and tool usage is another major training area that must be addressed in auto extrication training. Tools used in auto extrication range from basic hand tools to specialized hydraulic and battery operated rescue tools. The Fire Service Institute is fortunate to have several major rescue tools available for training purposes. These rescue systems include the following major brands.

- AMKUS
- GENESIS
- HOLMATRO
- HURST
- POWER HAWK
- TNT

Questions concerning the Roadway Extrication Specialist course, the Auto Extrication Technician II course, or any auto extrication short course may be directed to Patty at (217) 333-8921 or G. Terry Smith at (217) 333-9014.

### What now, Lieutenant?

In this Newsletter, we will begin a new series. We will ask a question and readers can send an answer to the question. The best answers will be included in a later edition of the Newsletter. All of the answers will be compiled into an information base which will grow into a valuable asset over time.

Now for the first situation.

Your department has been dispatched to an address for smoke in the residence. You are on the first arriving Engine and report nothing showing. As you approach the front door, you are met by a woman who states that there is no emergency at this address. You also notice light smoke coming from the kitchen.

**What will you do, Lieutenant?**

Send your answers to:

Lieutenant Answers
11 Gerty Drive
Champaign, IL 61820

### Service Awards for Field Instructors and Staff

**Five-year awards**

- Mary Avelis
- Roger Bassett
- John Brady
- Richard Fritz
- Robert Hamilton
- William Hottendorf
- Earin Land
- Rudy Rinas
- Kevin Togami
- Susan Welch
- G. Terry Smith

**Ten-year awards**

- Mark Clapp
- Daniel Czarnecki
- Joe Drennan
- Nancy Ducey
- Gary Gula
- Robert Hoff
- Marjorie Mosbarger
- Patty Wieland

**Fifteen-year awards**

- Jan Rusk
- Denny Wilson
- Virginia Stahl

**Twenty-five-year award**

- Jim Straseske

**Thirty-year awards**

- Jim Berggren
- Dean Mercer
Terrorism: "Hazardous Materials with Attitude"

Nancy Ducey

My first fire was in a dental building seventeen years ago. Upon entering the building, our crew came in contact with hazardous materials. At the time, we did not recognize the risks associated with fighting fires in buildings containing hazardous materials.

Over the next ten years, the Federal Government, and organizations such as the National Fire Protection Association, established standards and response capabilities for emergency responders. Specialized teams are available in larger communities, and for every firefighter, resources are available for training in hazardous materials emergency response. We now take for granted the standardization of response to hazardous materials incidents.

As one firefighter put it, "I am glad I have those haz-mat guys around so they can handle that kind of stuff." In certain areas of the State of Illinois, this comment would be accurate.

In these areas, teams of responders are equipped with the training, apparatus, personnel, equipment and supplies necessary to respond to the scene of a hazardous materials emergency. Unfortunately, this is not the case in other portions of the State. The public in these areas must rely on private contractors to provide this level of response capability. The fire service takes a defensive role, providing back up to the experts coming in to mitigate the scene.

As we begin to close the 90's and move into the year 2000, the Fire Service is faced with a new challenge. The bombing of the World Trade Center, Oklahoma City, and Atlanta, took us out of realm of innocence, and plunged us into a world of counter-terrorism. We struggle with the monotonous tasks of dealing with these sorts of emergencies.

Emergency Preparedness News reports that California had more than 20 anthrax threats occurring in the greater Los Angeles area since last year. On Christmas Eve, after an anthrax threat against a department store in Palm Desert, California, over 200 shoppers and employees were taken to a parking lot, ordered to disrobe and rinsed with a bleach solution; as a precaution. Firefighters built shower facilities with covering and provided people with clothing after the rinsing.

A second incident is then described; after a man called police and threaten to release anthrax at a dance club in Pomona, California, December 26, FBI agents and officers from a county hazardous materials team spent four hours searching for anthrax spores and taking air samples for testing. None of the 800 people at the club were allowed to leave until the search was completed (it was not the Haz-mat team that contained those people).

Later, the author reported, the Center for Disease Control and Prevention, in Atlanta, is working on a uniform public health response plan for chemical and biological attacks and is urging local government to develop such plans. They now employ a variety of uncoordinated plans. (1)

What does that mean to firefighters? It means the hazardous materials teams have become significantly more valuable as they take on the additional responsibility of counter-terrorism response. Hazardous materials teams have the tools of the trade for responding to incidents involving chemical or biological emergencies. Field monitors, chemical protective clothing, and knowledge of chemical agents are what make them invaluable to the responding agencies. Yet, new knowledge is essential as hazardous materials teams gear up to deal with incidents involving products and weapons never before seen in the field of domestic response.

The National Fire Protection Association began the process of defining the additional training requirements by amending the 1997 edition of 472, "Competencies of Hazardous Materials Emergency Responders". This text now includes capabilities for response to terrorism events. Technicians must be prepared for what Gene Ryan referred to as "the attitude." Incendiary devices, bombs, mass casualty scenarios, and the fact responders may be the secondary target, are a few examples of "the attitude."

The federal government has been tasked with the responsibility of providing first responders with direct resources to improve our capabilities to respond to this ever growing threat. Training and equipment are being provided directly to 157 targeted cities by the Justice Department. The Office of State and Local Domestic Preparedness Support, which is within the Office of Justice Program is currently drawing up a list of those 157

(Continued on page 9)
cities. In Illinois, Chicago, Lake County, Springfield and St. Louis have been solicited in the first round of funding.

Beyond this, additional funding will be made available for local firefighters and EMS personnel, to provide basic awareness, basic incident response and incident management training. Criteria for selecting personnel for training is still being worked out.

Shortfalls become apparent in first responder capabilities, as training and knowledge expands in the area of counter-terrorism. Some areas include monitoring, on-site testing equipment, decontamination kits and protective chemical/biological suits. Where does this leave the awareness and operations trained firefighter when responding to a possible act of terrorism? It becomes clear, just as in the 80's, we learned to define hazardous material, so must we begin the process of training response to these kinds of emergencies.

The North American Emergency Response Guidebook has initial information for isolation distances; chemical and biological agents are listed in this text. Mass casualty plans are in place throughout Illinois. Fire department representatives should be familiar with the plans and participate in the testing of those plans on a routine basis to make sure they function for your jurisdiction. Recognizing the signs of an act of terrorism, isolating the scene and bringing in the resource necessary to mitigate the situation become strategic goals of the first in officer.

Firefighters should not limit their training to simply hazardous materials emergency response. Counter-terrorism training is also essential for any member of the Fire Service. To date, $40,000.00 was given to Illinois Fire Service Institute to provide National Fire Academy classes on Counter-terrorism. We are offering the course Emergency Response to Terrorism (Basic Concepts). This program is being delivered throughout Illinois. (A current training schedule is enclosed in the Newsletter). Funding is available to schedule more offerings. If you would like information on scheduling this training for your department, contact us for the requirements and application. For Technician level responders, two advanced counter-terrorism conferences are to be held within 1999, one on the University of Illinois campus in June, the other will be the last weekend in September in Glenview. We are fortunate both of these conferences are being held in Illinois. Experts on the national and international level will be present, and in the latter case, a mass casualty mock incident will be done so that conference participants can observe for themselves how these kinds of incidents could be handled. Please contact the Institute for registration information.

"Terrorism- hazardous materials with an attitude," as Captain Ryan coined after the Democratic Convention, has been with us for years. The difference, it is not limited to one community or nation any longer. We in the Fire Service must be prepared to respond to these kinds of emergencies, if we are to survive them. In reviewing the intelligence information for our State, it is clear the size of the community will not predict whether it will be a target or not. How we prepare will have a direct relation on how many lives will be saved.

(1) Emergency Preparedness News, 8737 Colesville Road, Suite 1100, Silver Spring, MD 20910
Director Visits the Russian Fire Service.

In February, Director Jaehne visited counterparts in the Russian fire research and higher education establishment in Moscow, Russia. The invitation to visit was generated as a result of a visit to FSI in April 1999 by leaders of the Russian Ministry of the Interior responsible for fire and police training in Russia, sponsored by the Uofl Police Training Institute (under a State Department grant). Director Jaehne’s visit to Moscow was sponsored by Colonel, Dr. Topolsky of the Moscow Fire Safety Institute and underwritten by a matching-grant from the University. Director Jaehne reflected on his trip as follows:

"I was given access to previously closed and secret research facilities, government and business leaders and every level of the fire service from fire brigade (firehouse), to the Moscow Center, to the All-Russian Fire Research Institute – where firefighting equipment and techniques for the Russian space program were developed. I visited the Moscow Fire Department’s Central Dispatch where the real-time status of every piece of fire apparatus in 86 fire brigades is maintained on a large electronic board and watched as a brigade was dispatched to a fire – average response time 6 minutes. During my visit, every Russian official I met expressed deep concern for the Russian fire safety problem. International trade shows were on-going on security and fire safety equipment. The Deputy Chairman of the Moscow Duma (city council) was holding special fire safety hearings. He asked to meet me and expressed his personal commitment to resolve the problem. I also met with the 1st Secretary of the US Embassy who promised to help find federal grant funding for cooperative efforts. Some observations:

- Russian firefighters are tough, dedicated, hands-on and professional...just like American firefighters.
- Fire safety is largely an infrastructure replacement problem; e.g., five-year plan buildings without proper exits are standard housing. Infrastructure replacement demands will rival the Marshal Plan following World War II.
- Unlike the US fire service, the Russian fire service builds its officer corps through 5 years of undergraduate study at Academies with candidates who compete for admission and to become officers...the result is that the Russian fire service has a cohesive officer corps.
- Firefighters are trained much like we train for firefighter II with particular emphasis on timed drills, physical agility and knowledge... but live-fire is absent from training.
- Fire research and education are intertwined with every aspect of fire officer education and fire service policy development.
- Russian education and training establishments are eager to establish cooperative education and research partnerships, but will require US grant funding to support the effort.”

FSI has offered the Moscow Fire Safety Institute the opportunity to contribute articles in this newsletter. They also have a web site, check it out at http://ipb.mos.ru (yes, it has an English language switch).
Rescue Program

Terry Sutphen

Revisions to OSHA’s Permit-Required Confined Spaces – Final Rule

OSHA has issued a final rule amending the standard on Permit-Required Confined Spaces 1910.146. The effective date of these amendments was February 1, 1999. The revisions that were made clarify a number of issues.

The first revision covers paragraphs (c), and (d). The new language allows authorized entrants or their authorized representatives the opportunity to observe any testing or monitoring of permit spaces, prior to, or subsequent to, entry. Included in the revision is the inclusion of a new paragraph (I) Employee Participation. This paragraph is intended to ensure that employees are involved in the permit space program development and implementation. The changes help to ensure that the testing has been done properly, that the respirators and other personal protective equipment being worn are appropriate, and that the entrants understand the nature of the hazards present in the space.

The second revision helps clarify employer’s obligations to select and verify a rescue service that is trained, equipped, and available to respond to emergencies that occur during confined space entries. The emphasis is on the employer’s evaluation of potential rescue providers. Paragraph (k)(1) has been changed to de-emphasize the distinction between in-house and outside rescuers, and to focus instead on the employer’s obligation to evaluate rescue services to insure that the service selected is competent to perform potential rescues for the employer’s operations.

The evaluation of the rescue service must include an assessment of the training, competence, equipment, and ability of the service to respond in a “timely” manner. The employer must also evaluate the willingness of the service to become familiar with the particular hazards and circumstances faced during its permit space entries. The standard includes new criteria for evaluating rescue services. The criteria can be found in Appendix F. The criterion is non-mandatory and is only offered for guidance in choosing an appropriate rescue service. Once the rescue service has been selected, the employer must provide the rescue service access to all confined spaces from which rescue may be necessary so that the service can develop appropriate rescue plans and practice rescue operations.

No longer can employers simply say the local 911-response agency will provide the rescue services. If local industries, contractors, or governments plan to designate the local public emergency response agency as their confined space rescue service, then the responsibility to insure that equipment, facilities for training, and the financial support necessary to maintain the response agency’s competency, lies solely with those requesting the rescue services.

This does not relieve the designated rescue service of its legal and moral responsibilities of providing the service. A rescue service, which plans to provide the confined space rescue response, must then comply with the requirements of the standard to insure the safety and competency of its employees during the confined space rescue operations.

As with all the other emergency responsibilities accepted by the local fire/rescue agency, confined space rescue services will place higher demands of the agency’s time and budget. The changes made to the standard should assist the local emergency response agencies in obtaining needed support for training and equipment necessary for confined space rescues operations.

Each rescue agency must clearly understand OSHA requirements for confined space entry and rescue operations before the agency responds to a rescue call. To obtain a copy of the Final Rule for 1910.146, log on the OSHA’s Web Page

DO YOU NEED A CLASS FROM THE INSTITUTE?

Here are the steps you need to follow in requesting a class.

The first step in requesting a class is to fill out a “Request for Training” form. This form can be mailed or faxed to you. You fill out the form and mail or fax it to the Institute.

The appropriate personnel at the Institute will view your request and start the process. In most cases, an instructor, or program director, will contact you to confirm dates desired for training. We would appreciate a minimum 30-day lead time notice.

When dates are agreed upon, a “Memorandum of Agreement” will be mailed to you for your signature. Until this form is signed and returned to us, the class is not approved.

When we receive the “MOA”, the class is then approved and has the green light to go and the process begins. If you have any questions about the process, please call us at 217/333-3800. We would be happy to go over the steps with you.

YOUR ACCESS TO FSI LIBRARY SERVICES

ILLINOIS FIRE SERVICE INSTITUTE
LIBRARY, ROOM #120
FSI BLDG.
11 GERTY DRIVE
CHAMPAIGN, IL 61820

LIBRARIAN
Lian Ruan
Phone 217 333-8925
Fax 217 244-6790
E-mail L-ruan@uiuc.edu
Home page http://www.uiuc.edu/unit/FSI/
Toll free 1-800-437-6790

LIBRARY HOURS:
8:30 a.m. - 5: p.m. MONDAY through FRIDAY

LIBRARY SERVICES & RESOURCES ARE FOR:
All FSI faculty, field instructors, and students. Assistance is also provided to fire departments, other government agencies, research bodies, and the general public.

ACCESS TO THE LIBRARY:
We are usually open Monday through Friday. You can also get help by telephone, fax, e-mail or U.S. mail.

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The FSI Library can help you find specific facts, prepare lists of suggested materials on your area of interest, locate and supply materials to you, or suggest other sources or agencies that may be of help to you.

**LIBRARIES ARE EASY TO USE:**

The FSI Library is connected to other state and national libraries. This library is a member of inFIRE (the International Network for Fire Information and Reference Exchange) which is a worldwide consortium of libraries with significant collections of fire literature. It is also a full member of Lincoln Trail Libraries System and has close interlibrary loan relationship with National Emergency Training Center Library. Interlibrary loan of information and materials gives you access to a wealth of information.

**BUT YOU HAVE TO ASK.**

Whenever you need quick help or materials that may only be found in a special collection like ours, please feel free to contact the Library.

FSI staff use of the library materials is a priority, but items can be loaned and mailed to you. A 3-week loan period is for all the library materials except designated reference materials.

**LINCOLN TRAIL LIBRARIES SYSTEM (LTLS) & STATE-WIDE INTERLIBRARY LOAN DELIVERY SERVICE:**

The FSI Library has been granted full membership of Lincoln Trail Libraries System (LTLS) in Nov. 1998, which made it become eligible for using the state-wide interlibrary loan delivery system.

There are 12 regional libraries systems with about 2,700 libraries covering the whole state of Illinois. To take full advantage of this FREE service, you have to have a valid local library card. If you want to borrow materials from the FSI Library, you go to your local library, either public, school or college/university, as long as it belongs to one of the regional libraries systems. To make a request, please contact the FSI Library first (1-800-437-6790) to have a full citation on the material. You should receive it within a week.

There is no fee to borrow all types of materials through this interlibrary loan delivery system, including videotapes.

If you have any questions about this service, please contact the FSI Library for more information.

We continue offering direct delivery service from the FSI library to your location if it is an urgent request. There will be a small postage/handling fee for video tapes only. If you need assistance in obtaining a library card from your local library, contact the FSI Library, or your local library.

**REFERENCE MATERIALS:**

All reference materials are restricted for use within the Library or the FSI Building. Reference materials CANNOT be taken out the Library. The Library provides publisher information for the reference materials if requested.

**COMPUTERIZED DATA SEARCHES:**

The Library is able to produce lists of books and audiovisual materials on specific topics. All periodical articles received since January 1987 have been entered into the Library's database, which contains 20,000 records from major fire journals.

A bibliography can be prepared in a specific interest area, which is tailored to your needs.

**FSI LIBRARY PUBLICATIONS:**

A current copy of FSI Library Catalog, which is published semi-annually in Jan. and June, is available upon request.

The Library also publishes two electronic newsletters through its Listserv (fsilib-l@listserv.uiuc.edu):

- FSI Library Update posts news purely from the FSI Library.
- FSI Library Digest posts fire-related information we receive from other fire organizations throughout the world. To have a free subscription, send an e-mail to L-ruan@uiuc.edu.

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THE LIBRARY HAS INFORMATION ON:
Breathing Apparatus
Bldg. Design & Construction
Certification
Extrication
EMS
Fire and Arson Investigation
Fire Apparatus
Fire Company Officers
Fire Dept. Management
Fire Dept. Training
Fire Prevention
Fire Safety
Firefighting Operations
Hazardous Materials
Instructors
Public Fire Education
Rescue Operations
Industrial Fires

THE LIBRARY'S COLLECTION INCLUDES:
Periodicals
Standards
Books
Technical Reports
Videotapes
Films
Slide Programs
Overheads
Building Codes
Fire Codes
Annual Reports
Pamphlets
Legislation
Bulletins
Newsletters
Course Manuals
Equipment & Product Catalogs
Course Catalogs

The library's collection includes 2,000+ books, 700+ videotapes, 90+ films, 100+ slide programs, 50+ overheads, 100+ vertical files, 10,000+ records in fire article database, and 200+ periodicals & newsletters titles.

PERIODICALS OF SPECIAL INTEREST
(partial list)
American Fire Journal
Fire and Arson Investigation
Fire Chief
Fire Engineering
Fire Findings
Fire News
Fire Rescue
Fire Technology
Firefighter's News
Firehouse
Firewatch
The GONG
Journal of Fire Protection Engineering
NFPA Journal
National Fire & Arson Report
OSHA Week
Occupational Health & Safety
Record
Sprinkler Age
Training
The Voice
WFS Quarterly (Women in the Fire Service)

More materials are being catalogued and added to the collection on regularly basis.

CHECKING OUT LIBRARY MATERIALS:
ALL LIBRARY MATERIALS MUST BE SIGNED OUT BEFORE LEAVING THE LIBRARY FOR A 3-WEEK LOAN PERIOD.

1. Locate the card in the front or the back of the item.
2. Record the date, your name, your organization, and phone number on the card.
3. Give the card to the Librarian or drop it to the Card Drop Box.
4. If you are not present to sign out the materials, the Librarian will sign out for you in your name.

RETURNING LIBRARY MATERIALS:
When returning library materials to the Library:
1. Rewind the videotapes before returning.
2. Secure the packing envelopes with staples.
3. Return the library materials to the Library before or on the due date.
4. If you can't return by the due date, please contact the Library to renew.

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RESERVING LIBRARY MATERIALS:

Reservations for future training sessions can be made in advance. The earlier we receive the reservation, the better chances you will have to obtain your first choice of materials. One-week advance notice is required when you reserve certain library materials. This allows us to have your requested materials available when needed. If your first choice is already reserved by another organization, we will try to contact you to make necessary arrangements.

REPLACING LOST OR DAMAGED LIBRARY MATERIALS:

You are responsible for the library materials you borrow or rent. You are required to pay for any library items that are lost, damage, or destroyed, based on the current market value of the item.

YOUR HELP IS NEEDED:

The FSI Library is YOUR library. Help build this library into the largest Fire Library and Information Center in the State of Illinois and make it a quality resource center available for the fire service communities. Any help you can offer in finding grants, or locating free materials, is welcome.

The Library is always happy to accept donations, gifts, memorials, and etc. Please contact the Library for details.

We'd always like to hear from you. Please let us know your comments/suggestions on our services and programs.

FOR MORE INFORMATION OR HELP, PLEASE CONTACT LIAN RUAN, THE LIBRARIAN:

Phone (217) 333-8925
Toll free 1-800-437-6790
Fax (217) 244-6790
E-mail L-ruan@uiuc.edu
Home page http://www.uiuc.edu/unit/FSI/

Bone Fragments
By Brad Bone

You may or may not be aware that the Fire Service Institute has made the decision to begin training for EMS personnel. There are a number of rumors already starting in relation to the intent and scope of this program. As Coordinator of EMS Programs, I can assure you that the number one mission of the Institute will always be a priority, training firefighters to fight fire. However, it was the opinion of the staff that we would be negligent if we did not address EMS since sixty to seventy percent of what we do in the fire service is EMS. This is not intended to replace the very important fire service training a firefighter should have, but it is intended to supplement the programs we already offer.

I have received a number of ideas and offers for help in developing new programs. This is much appreciated. The initial path I thought we should take will be covered in segments. First, the institute has opened a limited number of its current programs to non-fire EMS personnel. Hopefully, the additional enrollment will help to fill classes that are being canceled. Secondly, I am working on developing a series of classes that will make up a sixteen-hour awareness series for EMS personnel. The intent of these classes is to introduce EMS personnel to certain fire department operations so they can be a more usable resource. The third part will be up to you. I am hoping that instructors can identify topics or issues in their region and assist in developing workshops to address those issues.

I am including a flyer that includes some of the above information. It would be helpful if you could get this information to your EMS systems. I am also in desperate need of EMS System addresses. If you could get any of this information to me, it would be much appreciated. Send information or questions to b-bone@uiuc.edu or address to me at the institute.
Administration
Richard L. Jaehne 217 / 333-8926
Director or 217/333-3801
E-mail: jaehne@uiuc.edu

James B. Straseske 217 / 333-3801
Associate Director For Administration & Research
E-mail: jstrases@uiuc.edu

David F. Clark 217 / 244-9674
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Howard D. Eskridge 217 / 333-5108
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E-mail: g-smith@uiuc.edu

Terry Sutphen 217 / 333-8927
Rescue Training
E-mail: t-sutphen@uiuc.edu

Bill Farnum 217 / 333-9027
Fire Officer Training
E-mail: w-farnum@uiuc.edu

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E-mail: kberbaum@uiuc.edu

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E-mail: aslaughter@uiuc.edu

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E-mail: v-stahl@uiuc.edu

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E-mail: b-wagner@uiuc.edu