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## Campus Fire Safety Forum II

#### Forum II is on its way!

The lineup for this forum has been finalized. The program will be held on Monday, November 13 from 1:00 to 5:00 p.m. at the NFPA Fall Education Conference in Orlando, Florida.

Ed Comeau, the publisher of Campus Firewatch, has been asked again to put together the program for Forum II, just as he did for Forum I.

### **Fire Protection Improving**

Ed Comeau, writer-tech.com

The face of fire protection in schools across the country is changing rapidly. Governor Whitman signed into law a requirement that all dormitories, fraternities and sororities in the state of New Jersey be equipped with fire sprinkler systems within four years. However, there are a number of schools that weren't waiting for the legislation, but were moving ahead on their own.

Rowan University in Glassboro is one of these. In an interview with Campus Firewatch, Rich Wadleigh, the associate director of public safety, outlined how the installations were done over the summer.

"This project was in response to the Seton Hall tragedy and was placed on a priority issued by vice president of finance and administration," said Wadleigh. "It was placed on a fast track." Between May 15 and July 30, sprinklers were installed in 14 buildings, covering 355,437 square feet at a cost of \$1.9 million, or approximately \$5.35 per square foot.

#### How was this done in such a short timeframe?

"We used a design-build contract to speed up installation," reported Wadleigh. "Normally we would have to go for multiple bids," which could take more time. By using the design-build route, they were able to accelerate the process and get the work moving faster. However, there are still steps that must always be taken in any project, and one of them included the permitting process.

"The permit process did not go away, but they (permit authorities) were more cooperative..." according to Wadleigh. "The agency was expecting it to come in and we were able to proceed with the work with pending approval. They were very cooperative."

One of the concerns that have been voiced by university officials in the past is the issue of sprinklering occupied dormitories and the disruption that the work may cause. The work at Rowan started during the 2000 spring semester, while students were still living in the dormitory. During this phase of the project, it was necessary to evaluate the buildings and confirm that the blueprints were accurate. This entailed entering every room in the building. "We are no different than any other landlord, and we have to maintain our property," said Wadleigh.

To accomplish this, the university sent out notices to all of the students advising them that they would be undertaking this work. As the contractor inspected the building, they were accompanied by a representative from residence life because they would be entering rooms that contained student's personal belongings.

When the installation work started, some techniques were used to help accelerate the installation process. Bare sprinkler pipe was installed throughout, except in public areas where it was painted. When the facilities are repainted on their normal painting schedule,

## FR0Editor

The school year has started, and unfortunately so have the tragic fires. In Berkeley, a senior and both of her parents were killed in an off-campus fire. In one moment, a young man was left without parents and a sister. His entire family was gone, in a fire that was preventable. In a house without a smoke detector that could have made the difference between life and death.

Unfortunately, it takes tragedies such as Chapel Hill, Murray State, Seton Hall, Bloomsburg, Millikin, and Berkeley to provide the "wake up" call. Now that people are paying attention to this issue, it is incumbent upon all of us to keep the momentum going, to not let it fade. New Jersey has taken a strong lead in implementing an aggressive law requiring sprinkler installations. Throughout the country, colleges and universities are improving their fire protection, realizing the risk that exists, and the impact that a fire can have upon their institutions.

Several state legislators are considering introducing legislation this fall, and have contacted Campus Firewatch looking for information. We cannot let this golden moment pass us by, this "teachable moment" as Chief Dan Jones calls it. We all have to seize this opportunity and provide them with the support and guidance that they need in putting forth the best legislation possible.

Politically, the focus is on the presidential election right now. Once that has passed in November, it will be time for Congress to get back to work, and we need to be ready. There are several pieces of federal legislation that are, in all probability, not going to pass during this session of Congress. However, we should be poised to begin lobbying to have them reintroduced in the next session, and to support their passage.

Unfortunately, there will be more deaths across the country at schools that will provide further proof of the need for improved fire safety. For sprinklers. For fire alarms. For fire prevention. Let's make it happen now.

Ed Comeau, the editor of Campus Firewatch, is the former chief fire investigator for the National Fire Protection Association. He began his involvement in campus fire safety as a fire fighter with the Amherst, Massachusetts, fire department while pursuing his degree in civil engineering. He can be reached at publisher@campus-firewatch.com.

## Firewatch

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Campus fire safety is a complex issue. The information in this newsletter is provided to help you in your efforts to provide as fire-safe a community as possible. However, it is no replacement for professional advice. For further assistance, contact your local fire department.

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### **Arson on Campus**

According to statistics from the National Fire Protection Association, incendiary or suspicious fires are the leading cause of fires in dormitories and Greek housing. Almost one-third of the fires in these occupancies from 1993 to 1997 caused an average of \$1.4 million in damage each year.

While some of these fires might be attributed to vandalism, and do not cause serious damage or injury, there are a number that can have very serious consequences. For example, during the 2000 spring semester, there were several fires in fraternities in Pullman, Washington. One of them was an arson fire that was set in a stairway that could have had disastrous results if it had not been detected.

At the University of Utah in Salt Lake City, there were a series of arson fires that plagued the campus for several months in 1996. According to Mike Halligan, the university's fire marshal, "The typical scenario was that the arsonist would go into a bathroom and stuff them with every piece of combustible material in there...they would empty the towel and toilet paper dispensers. If they were equipped with the fabric towel dispensers, he would place a can underneath them and light it on fire."

The fires were occurring over a 20-day period and were initially occurring in public spaces. However, partway through they saw a change in the pattern of the fires, and they started occurring in custodial closets and classrooms. "We believe that the custodian who worked in that building saw the attention that the person was getting in the papers, so he started lighting fires. We caught the custodian, through some surveillance, lighting one of the fires. When we made that arrest, the fires stopped."

The fires were relatively small, except for one that did occur in a classroom. "The bathroom ones were tiled walls, so the extent of the damage was generally the towel racks and the walls," which resulted in two to three hundred dollars in damage. However, the one that did occur in the classroom damaged a lecture stand with a lot of high-tech equipment in it. The fire was controlled by the sprinkler system, but resulted in about \$35,000 in damage.

When discussing the motivation for the original arsonist, Halligan said they had theorized that the person was possibly a disgruntled student that had not been admitted to a program, or had done poorly.

The college environment is not one where a serial arsonist will generally be found, according to Ronald Tunkel, a special agent with the Bureau of Alcohol. Tobacco and Firearms, whose

present assignment is as a criminal profiler at the National Center for the Analysis of Violent Crime at the FBI Academy in Quantico. "Based on research, a very small percentage of serial arsonists made it to college," said Tunkel. "The kind of personality traits that drive serial crimes are not consistent with those that can thrive in an academic environment."

What is serial arson? According to a study published by the NCAVC, "serial arson is an offense committed by fire setters who set three or more fires with a significant cooling off period between the fires." "The cooling-off period should be at least a day. Usually they span over a number of months," said Tunkel.

Many of the arsonists that Tunkel has encountered, or that have been studied, are classified as having "disorganized" personalities, which is not consistent with college. "The kind of personality traits that drive serial crimes are not consistent with those that can thrive in an academic environment."

When considering the motivation of the arsonists, there are six motives associated with this crime, as listed in the study "A Motive-Based Offender Analysis of Serial Arsonists" published by the FBI, the Department of Justice and the Federal Emergency Management Agency. They include:

- Vandalism-malicious or mischievous fire setting that results in damage to property.
- Excitement-seekers of thrills, attention, recognition, and rarely, but importantly, sexual gratification. (The stereotypical arsonist who sets fires for sexual gratification is quite rare).
- Revenge-fires set in retaliation for some injustice, real or imagined as perceived by the offender. This can include personal, societal, institutional or group retaliation.
- Crime Concealment-Arson is the secondary criminal activity in this motivational category.
- Profit-Arsonists expect to profit either directly or indirectly from the fire.
- Extremist-Arsonists set fires to further social, political or religious causes.

If there is a pattern of arson fires occurring within a short timeframe, then this type of arsonist may be classified as a "spree" arsonist, said Tunkel. Patterns are key indicators as to whether it is a true serial arsonist or not. For example, if a fire is set every Thursday night following a basketball game, this could be considered "spree" arson because it does not have the necessary cooling off period in between.

However, determining if a fire is the result of a serial arsonist, and then developing a profile of this person is a task that requires looking at the totality of the incidents. It involves a temporal analysis (time of day, day of week) to develop an idea about the offender's habits. "We try to learn the offenders comfort zone by doing some geographic analysis and analyzing his hunting pattern and target selection...how much risk are they taking and the type of target," explains Tunkel.

Arson tends to be a "young man's" crime. According to statistics from the FBI, 52% of the arson arrests in 1998 were juveniles under the age of 18 and 85% of those arrested were male. For all arson fires, estimates by the NFPA show that there is only a 2% conviction rate for arson and suspected arson fires.

While students would tend to fall into the "young man's" classification, there have been incidents where arson fires at colleges and universities have been set by employees. In addition to the one already described in Utah, there were multiple fires at a college in Massachusetts where the offender was a security guard. According to Robert Corry, who was a Massachusetts state fire marshal investigator at the time of the fires, the female guard was convicted, received counseling and was placed on probation. Unfortunately, she is a suspect in multiple fires, one involving fatalities, in Connecticut where she is currently employed as a security guard.

At the University of Maine, an arson fire caused \$500,000 in damage. The fire occurred on May 7, 1999 and forced 200 students to be displaced for the remaining two weeks of the semester. The university is offering a \$10,000 reward for information leading to the arrest of those responsible for the fire.

Arson is a problem that must be addressed as part of the fire safety strategy at colleges and universities. As part of the Cleary Act, which requires colleges and universities to report crime statistics, arson incidents must now be reported.

More information on arson and arson control can be found at the following web sites:

The Bureau of Alcohol, Tobacco and Firearms www.atf.treas.gov

The US Fire Administration www.usfa.fema.gov interFIRE VR www.interfire.org

#### IAFC University and College Fire Chief's Forum

By Chief Larry Donner, Boulder Fire Department

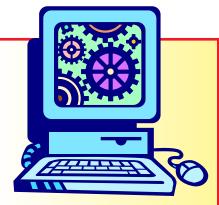
The annual University and College Fire Chiefs' Forum assembled at Fire-Rescue International in Dallas, Texas on August 27, 2000. This forum was established six years ago to provide fire chiefs serving in university and college communities opportunities to share information and insights. We all know "college towns" and universities are different, but this annual gathering builds on the similarities between these "different" communities. The forum was attended by 55 chiefs from around the country despite an oversight that left the meeting out of this year's official program.

The main presenter was Chief David Giordano from College Station, Texas, home to Texas A & M University. Chief Giordano discussed the November 19, 1999 bonfire collapse that left 12 students dead and 27 others injured. His presentation underscored the value of working with students, university officials, and neighboring jurisdictions before an incident in order to be prepared for emergencies when they do occur. Despite the magnitude of a col-

lapse involving approximately 35 students working on a stack of over 5,000 logs standing 45 feet high, all of the injured students were extricated and transported to hospitals within in 1 hour and 24 minutes. Without common disaster plans and pre-established relationships among responding agencies and the University, the successful extrication of the survivors from this oversized stack of "pick-up sticks" would have presented even more problems.

Other issues discussed included common fire problems, code enforcement (or lack thereof), and targeted safety programs for students.

The University and College Chiefs' Forum is an annual event held in conjunction with Fire-Rescue International, which is sponsored by the International Association of Fire Chiefs (IAFC). The Forum is open to anyone interested in fire protection on- or off-campus in university and college communities. If you are interested in more information or are interested in presenting at the forum in 2001, please contact Chief Larry Donner at DonnerL@ci.boulder.co.us.



## Campus Firewatch Website

The value of this newsletter doesn't stop with just this copy. Visit its companion website at www.campus-firewatch.com, where you will find a wealth of information relating to campus fire safety. Included on the site is....

- Model legislation from Chapel Hill, North Carolina
- Lesson plans
- Pending federal and state legislation
- · Testimony given before state legislatures
- · Breaking news
- · Fire facts
- ...and more!

If you have something that you would like to contribute, please send it to us at publisher@campus-firewatch.com

See you there!

#### **Arson on Campus**

#### What are arsonists igniting?

Two of the leading materials ignited in arson fires in dormitory, fraternity and sorority fires are reading materials and rubbish. Combined, these fires account for over a third of the property damage attributable to incendiary and suspicious fires.

#### Incendiary and Suspicious Fires School Dormitory, Fraternity and Sorority Structure Fires 1993 to 1997 Annual Averages

Form of material first ignited Fires Direct Property Damage Magazine, Newspaper or writing paper 148 (28%) \$83,000 (6.%) Rubbish, trash or waste 127 (24%) \$400,000 (29%)

Source: Prepared for Campus Firewatch by NFPA's Fire Analysis and Research Division.

Fire Protection Improving - continued from page 1

the piping will then be painted.

Rowan University is certainly not the only institution that is rapidly moving forward with upgrading their fire protection. As described elsewhere in this issue, Seton Hall has now sprinklered all of its residence halls. In the media, it was reported that William Paterson University in Wayne, NJ spent \$1.9 million to install sprinklers in a 1,000-bed dormitory.

At Millikin University in Decatur, Illinois, a fraternity fire in June claimed the life of one student. Following this fire, the university installed sprinklers in the remaining four dormitories that were not sprinklered. According to John Mickler, the director of safety and security, these projects were already in the works before Seton Hall. "Seton Hall, to some degree, accelerated it, and the tragedy (the fraternity fire) accelerated it even more."

Much of the interior work in three of the four dormitories at Millikin was done over the summer while they were vacant. The outside work that involved running the water lines was saved for last, to minimize the disruption to the students. In the fourth dormitory, they informed the students as to the work that was being done. The contractors were primarily working in the building while the students were in class, which helped to reduce the disruption.

Since the fire in June happened in an off-campus fraternity, it was not under the direct control of the University. However, the school is taking steps to work with the fraternities this year to help their fire prevention efforts. The university safety manager has requested meetings with the president or safety manager of each house and is making the university resources available to them. Some of the Greek houses, however, are already taking measures on their own.

In Lexington, Kentucky, a 19-year old male was killed in a 1998 fire that was later determined to be incendiary. Following this fire, it is reported that a statewide effort is underway to improve the level of fire safety in dormitories. According to press reports, over \$25 million is being spent over four years to equip all dormitories with sprinklers at the state's public universities.

In Amherst, Massachusetts, the fire chief is requiring that all fraternities and sororities have fire alarm systems that are centrally monitored. The Greek houses were advised of this requirement in June, and given until September 1 to have these upgrades in place.

In Lawrence, Kansas, an ordinance was passed on April 6, 1993 that gave the Greek houses seven years to install sprinklers in their properties. The fire department had first tried to get this ordinance passed in 1987, but was not successful.

However, by 1993, they had accumulated enough information, history of incidents and inspections to convince the city that this should be done. According to Richard Barr, fire marshal for the Lawrence-

Douglas County Fire and Medical Department, "We showed them that statistically we were having a fire in one out of three houses over the years. We also were finding 21 or 22 violations, on average, in each house." This helped to convince the city of the need for increased fire protection.

The deadline for implementation was June 1, 2000. When the fire department conducted an inspection of the 32 Greek houses, a majority of the properties had complied. However, eight did not meet the requirement by the deadline. They were immediately closed down, and the occupants that were living in them were forced to move out by the end of the day.

These efforts, and others, should serve as models and catalysts for similar efforts across the country to continue to improve the level of fire safety for our nation's students.

#### Seen Elsewhere....

The following were taken from wire service news stories.

Pennsylvania State University - University Park, Pennsylvania

It was reported that the Pennsylvania State University has banned smoking and the possession of candles in their dormitories.

University of Vermont - Burlington, Vermont

The University of Vermont is reportedly requiring that the wood used in loft beds in the dormitories be treated to make them more fire resistant. They have also banned smoking in their dormitories.

Michigan State University - East Lansing, Michigan

Following a fire on New Year's Eve the university has increased security at its research laboratories. The ecoterrorist group the Earth Liberation Front (ELF) has claimed responsibility for the fire.

West Virginia University - Morgantown, West Virginia

Following two fires that were believed to be set by students, the city council has given three more fire fighters the title of deputy fire marshal and the ability to issue fire safety citations. One of the fires was in a sofa that had been stuffed with aerosol cans. The other involved three mattresses that had been doused with lighter fluid. It was reported that between September 1999 and June 2000 the fire department handled 135 street fires, 95 of which occurred in a student-dominated portion of the city. On three of the fires, propane cylinders had been stuffed inside of the furniture, and 16 of the fires involved aerosol cans.

# LEGISLATION Update

#### Legislation

#### S 2100

College Fire Prevention Act

#### Jurisdiction

Federal

#### **Sponsor**

Sen. John Edwards (D-NC) United States Senate 225 Dirksen Office Building Washington, DC 20510 202-224-3154 senator@edwards.senate.gov

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#### **Funding**

\$100,000,000

#### **Facilities**

Dormitories, fraternities or sororities

#### Status

Referred to the Senate Committee on Health, Education, Labor and Pensions on 2/24/00. Still in committee and no action has been taken.

#### **Summary**

Authorizes appropriations for competitive grants to help provide fire sprinkler systems in student housing and dormitories.

Authorizes the Secretary of Education to award such grants to States, private or public colleges or universities, fraternities, or sororities to assist them in providing such systems.

Requires grant recipients to provide matching funds equal to at least one-half of project costs.

Directs the Comptroller General to gather, and report to Congress, data on the number of college and university housing facilities and dormitories that have and do not have fire sprinkler systems and other forms of built-in fire protection mechanisms.

#### Legislation

#### S 2178

HR 3831

Fire Safe Dorm Act of 2000

#### Jurisdiction

Federal

#### Sponsors

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Representative Carolyn Maloney 2430 Rayburn House Office Building Washington, DC 20515 (202) 225-7944 (tel) (202) 225-4709 (fax) rep.carolyn.maloney@mail.house.gov http://www.house.gov/maloney/

#### **Funding**

N/A

#### **Facilities**

Campuses nationwide

#### Status

Referred to the Senate Committee on Health, Education, Labor and Pensions on 3/2/00. Still in committee and no action has been taken.

#### Summary

The objective of this bill is to amend the Higher Education Act of 1965 to require colleges and universities to disclose to students and their parents the incidents of fires in dormitories, and their plans to reduce fire safety hazards in dormitories, to require the United States Fire Administration to establish fire safety standards for dormitories, and for other purposes.

#### Legislation

#### HR 4504

Higher Education Technical Amendments of 2000

#### Jurisdiction

Federal

#### Sponsor

Representative Buck McKeon 2242 Rayburn HOB Washington D.C. 20515 (202) 225-1956 (tel) (202) 226-0683 (fax) tellbuck@mail.house.gov http://www.house.gov/mckeon/

#### **Funding**

N/A

#### **Facilities**

Campuses nationwide

#### **Status**

Referred to the Senate Committee on Health, Education, Labor and Pensions on 6/13/00. Still in committee and no action has been taken.

#### Summary

This legislation has several amendments attached to it pertaining to campus fire safety. They include providing a description of campus fire safety features, reports on the number of fires and false alarms, and an analysis of current fire safety systems and plans for upgrading fire protection.

#### Legislation

#### HB 2458

Dormitory Automatic Sprinkler Act

#### Jurisdiction

Pennsylvania

#### **Sponsors**

Representative Michael McGeehan 221B South Office Harrisburg, PA 17120 (717) 772-4029 (tel) mcgeehan@pahouse.net www.pahouse.net/McGeehan/index.htm

#### **Funding**

\$100,000,000

#### **Facilities**

**Dormitories** 

#### Status

A hearing was held before the House Labor Relations Committee on July 20, 2000. A third hearing may possibly be scheduled for September. Following the hearing, the committee chairman indicated that he is going to propose that the committee recommend that fraternities be included in the legislation. The legislature will recess for the year on November 30, 2000. Further information on this hearing can be found elsewhere in this issue of Campus Firewatch.

#### Summary

Representative Michael McGeehan introduced House Bill 2458, the Dormitory Automatic Sprinkler Act, on April 11, 2000. This bill calls for the installation of sprinklers in all new dormitories, and in existing dormitories within five years. It proposes the appropriation of \$100,000,000 to fund a sprinkler loan fund for low interest loans.

NFPA Fall Meeting - continued from page 1

#### Speakers at Campus Fire Safety Forum II include...

**Rich Barr**, fire marshal for the Lawrence-Douglas County Fire & Medical Department will speak on implementing a mandatory sprinkler ordinance, which took effect in June, 2000.

**Randy Hormann**, fire marshal for the University of Miami (Ohio) will talk about how they have implemented the acclaimed NFPA program Fire Drills, The Great Escape on his campus.

**George Miller**, the New Jersey state fire marshal, will give a presentation on how the state is implementing the mandatory sprinkler legislation that was signed into law.

Jerry Naylis from the New Jersey Fire Safety Commission was heavily involved in the development and passage of the landmark legislation in New Jersey that requires the installation of sprinklers in all dormitories, fraternities and sororities in the state within four years. Jerry will talk on how a coalition was forged to make this landmark legislation a success.

**Anthony O'Neill**, NFPA Vice President, Government Affairs, will talk about the process for moving legislation through the federal government.

**Jeff Rinck**, Assistant Director of Administration, Kappa Alpha Theta Sorority, will discuss the mandate that Kappa Alpha Theta has adopted to require all of their properties across the country be sprinklered. Jeff will speak about the funding mechanisms they are pursuing to make this mandate a reality.

One of the real values of this session is going to be the opportunity to network with other professionals from across the country who are involved in the everchanging world of campus fire safety. Along with Forum II, the NFPA Education Section is sponsoring a session on Sunday, November 12 called "Student Housing Fire Safety."

A special web site has been set up just for this forum. To get the latest updates, visit www.campus-firewatch.com/forum.htm.

See you in Florida!

# Fire Log

The following are brief summaries of incidents that have occurred in college occupancies. Unless noted otherwise, they have been taken from press accounts and have not been verified for accuracy. Several of these incidents will be profiled in future issues of Campus Firewatch.

If you have an incident that you would like to contribute for this column, please contact us at publisher@campusfirewatch.com.

August 7, 2000

#### **University of Michigan**

#### Ann Arbor, Michigan

Campus Firewatch obtained the following information from media reports, official sources and interviews.

A fire in a residence hall damaged the roof and caused water damage inside of the building. According to university officials, work was being done on replacing the roof of the five-story structure when the fire broke out. The building was being occupied by summer camps at the time of the fire, but there were not many people in the building at the time of the fire. Damage was estimated to be approximately \$100,000.

#### August 7, 2000

#### **University of Michigan**

#### Ann Arbor, MI

Campus Firewatch obtained the following information from media reports, official sources and interviews.

A fire occurred in a biophysics laboratory that was caused by hot works. The room was unoccupied at the time of the fire, which was caused by a hot work operation on the exterior wall of the laboratory.

The sprinkler system activated and controlled the fire, which caused \$50,000 in damage.

#### August 17, 2000

#### **University of Michigan**

#### Ann Arbor, MI

Campus Firewatch obtained the following information from media reports, official sources and interviews.

A thirty-foot bus was being serviced in the campus maintenance building when it caught fire and severely damaged the building. The mechanic had stopped working on the bus at approximately 12:30 a.m., and within 20 minutes a campus police officer observed flames coming from the structure.

The cause of the fire was determined to be electrical, and the area of origin was the bus.

The fire did approximately \$1 million to \$2 million in damage. The bus services wing of the building, which is made up of four bays, was destroyed. The entire parts department for the university fleet, which is made up of about 900 vehicles, was destroyed.

There was no sprinkler system or fire alarm system in the building.

#### August 18, 2000

#### Oklahoma State University

#### Stillwater, Oklahoma

Between 7:30 and 7:45 p.m., a fire was detected in a fraternity. A resident found papers on fire on top of a mantel and reported smelling lighter fluid. The fire was extinguished before significant damage was caused.

#### August 18, 2000

#### **University of South Carolina**

#### Columbia, South Carolina

A graduate student received second and third degree burns when a fire occurred while he was mixing some chemicals. The fire was extinguished by a sprinkler and the building was evacuated for less than one hour. The fire caused approximately \$12,000 in damage.

#### August 20, 2000

#### **Berkeley University**

#### Berkeley, California

Campus Firewatch obtained the following information from media reports, official sources and interviews.

A 21-year-old senior from the University of California-Berkeley was moving into an off-campus house before the start of the fall semester and was being assisted by her parents. At 6:42 a.m., the fire department responded to a fire in the two-story house. Upon arrival, they reported heavy smoke and fire conditions on the first and second floor of the building.

Continued on page 9

#### Campus Fire Log - continued from page 8

One occupant was rescued by neighbors from a second floor window before the arrival of the fire department. Unfortunately, the senior and her parents were unable to escape the fire and were killed. The cause of death, according to press reports, was smoke inhalation. The fire was reported to be started when moving boxes were placed on top of a furnace.

Three other girls were also reported to be moving in, yet not all were in the house at the time of the fire.

It was reported that fire officials could not find any evidence of a smoke detector in the house, which is required.

#### August 21, 2000

#### **Auburn University**

#### Auburn, Alabama

A fire that started in a deep-fat fryer caused the evacuation of the university's largest building. Haley Center has 142 classrooms and houses the university's bookstore.

#### August 26, 2000

#### **University of New Orleans**

#### New Orleans, Louisiana

A fire that broke out at 8:00 p.m. on the sixth floor of an eight-story residence hall was started by a discarded cigar. A bed was reported to be the area of origin. The fire was contained to one room by the activation of a sprinkler system. Water damage occurred to areas on the fourth, fifth and sixth floors, but students were able to return to the building by 10:30 p.m.

#### August 27, 2000

#### **University of Colorado**

#### Boulder, Colorado

Early Sunday morning students in an area known as University Hills rioted. About 1,000 people gathered and set fires in the street and threw bottles, bricks and other objects. This was reported to be the fifth riot in the area since 1997.

#### August 31, 2000

#### **University of Michigan**

#### Ann Arbor, Michigan

Campus Firewatch obtained the following information from media reports, official sources and interviews.

A fan in a dormitory tipped over and ignited, causing approximately \$500 to \$1,000 in damage. The room was equipped with a single station, hardwired smoke detector that activated. A passerby heard this alarm and activated the building fire alarm system, which transmitted a signal to the university's public safety department.

#### August 31, 2000

#### **Kansas State University**

#### Manhattan, Kansas

Campus Firewatch obtained the following information from media reports, official sources and interviews.

A fire at the Tau Kappa Epsilon fraternity caused serious damage to the building. The building was a three and one-half story, ordinary construction structure. It was equipped with a fire alarm system that was comprised of system smoke detectors in common areas and single station smoke detectors in the bedrooms. The building had an occupancy of 67 people. At the time of the fire, there were 65 people, and a housemother, in the structure.

At 4:44 a.m., the Manhattan Fire Department received a call of a fire in the building. Upon arrival, the first units reported that there was smoke showing from the south and east sides of the building, with occupants exiting from all three floors. The occupants were not able to verify if everyone was out of the building, so crews immediately began search and rescue operations on all three floors.

The fire department extinguished the fire. Fire damage was limited to the room of origin, with moderate to heavy smoke damage throughout the third floor.

According to official sources, the room of origin was occupied by three individuals. Two of the occupants were asleep when the third went to bed at 3:30 a.m. At approximately 4:40 a.m., this individual reported

that he was having trouble breathing and he awoke to get a drink of water. When he returned to the room he observed a fire in the far corner of with heavy smoke in the room. He woke the occupants, one of whom attempted to unsuccessfully fight the fire with a fire extinguisher. They then exited the room and began knocking on doors to alert the other building occupants.

The building fire alarm system was activated by a manual pull station. The fraternity president silenced the fire alarm three times.

During the fire investigation, the fire department was unable to find evidence of a battery for the smoke detector. When they checked an adjacent room, the smoke detector in that room was missing its battery.

Following the fire the fire chief asked that the members of the fraternity's alumni board visit the house to view the damage. Acting Fire Chief Tannehill stated that he attempts to use this type of incident as an opportunity to educate them regarding the need for operating smoke detectors and other fire prevention measures.

#### August 31, 2000

#### **Penn State University**

#### State College, PA

Campus Firewatch obtained the following information from media reports, official sources and interviews.

A fire broke out on the fourth floor of an offcampus, seven-story apartment complex, causing heavy smoke and fire damage to the apartment of origin. It was reported that the building contained about 100 apartments, many of which are occupied by students.

The fire occurred at approximately 6:22 p.m. It was reported that the apartment was occupied at the time of the fire. When police arrived on the scene, they reported that there was a working fire with heavy smoke showing. Reportedly, a maintenance person who lived in the building attempted to extinguish the fire using a fire extinguisher, but was unable to enter the apartment because of the heavy fire.



PHOTO PROVIDED BY TIM KNISELY

The cause of the fire was determined to have been a candle. The fire damage was contained to one bedroom with heavy smoke damage throughout the apartment and the hallway outside of the apartment.

It was reported that when the fire department attempted to evacuate the building, some of the occupants refused to leave.

The complex is comprised of three 7-story buildings that are predominantly occupied by students. The building where the fire occurred contains 125 one- and two-bedroom apartments. It is equipped with single station smoke detectors, with system detectors in the common areas.

#### August 31, 2000

#### **University of Southern Maine**

#### Portland, Maine

Campus Firewatch obtained the following information from media reports, official sources and interviews.

A fire in an off-campus apartment building killed one person. The fire occurred in a wood frame, three-story building that had six apartments. There were a total of 13 occupants, some of whom were students from the university.

The fire was reported to have started in the first floor apartment in a couch at approximately 4:50 a.m. The fire was reported to the fire department by neighbors from across the street.

Fire officials reported that the cause of the fire was tentatively being identified as careless disposal of smoking materials. The occupant of this apartment, a fifty-year old male, died in the fire. He was not a student.

The fire spread out of the apartment to the upper stories, causing significant damage. According to fire officials, the building was equipped with single station smoke detectors that were operating upon the arrival of the fire department.

#### September 7, 2000

#### **University of Maine at Machias**

#### Machias, Maine

A fire in an off-campus building completely destroyed the structure. The fire was reported to have been started by a cigarette in a bar on the ground floor. Four students in an apartment on the upper floor were able to escape without injuries.

#### September 12, 2000

#### Johnson and Wales University

#### Charleston, South Carolina

A fire in a Johnson and Wales apartment complex destroyed the unit's kitchen and living room. Eighteen students were displaced because of the fire. Five other apartments received smoke damage from the fire.

#### September 12, 2000

#### **University of Minnesota**

#### Minneapolis, Minnesota

A fire that was started by a candle was contained to one room by fire fighters. The fire, which started after 11:00 p.m., forced the evacuation of 128 students.

#### Campus Firewatch Listsery

Campus Firewatch monitors the fire activity in the nation's colleges and universities by checking the wire services on a daily basis. When we learn of an incident, we'll send out a notice through our listsery.

This listserv also provides an opportunity for you to post questions to be answered by others involved in campus fire safety. Subscribers to the list include campus fire safety officials, fire chiefs and university administrators, among others.

If you would like to join the growing number of people that are using this valuable free service, you can subscribe through the Campus Firewatch website at www.campus-firewatch.com.

## **Great Escape on Campus**

By Randy Hormann, Fire/Safety Specialist, Miami University

OXFORD, Ohio --Stay low because heat and smoke rise. Stop, drop and roll, keep fresh batteries in the smoke detector, and feel doors for heat. These adages of fire safety are easy to take for granted.

That is until you are in a residence hall corridor filled with smoke, relying on the walls for balance and direction. You extend an arm and realize your hand has disappeared. Disorientation sets in as a thick haze swirls in the hallway and a blaring smoke alarm makes it difficult to think.

You get low and it is still nearly impossible to see. Exit signs are invisible so you cannot find a door, let alone feel if it is warm. You are wandering blindly in search of an escape route and the smoke continues to thicken.

Yet there is little sense of urgency among these students--only a smattering of giggles and a string of comments about the potency of the enveloping shroud of fog.

This was the experience for residents at Miami University this year. All first year students living on campus are required to attend a fire safety training program called "The Great Escape On Campus." The recent fires and fire related deaths involving college and university students prompted the need to develop a training program that would educate the students while making it fun and exciting.

The program, developed at Miami University, was modeled on the successful NFPA fire safety program. By using "safe smoke," which is the same chemical fog used in fire training programs, dance halls and haunted houses, the disorienting aspects of a smoke-filled corridor that would be experienced in an actual fire was simulated.

The program opened with a presentation discussing the dangers of false alarms, tampering with fire protection and detection systems, halogen lamps, incense and candles. The video "Get Out and Stay Alive," which was produced by the United States Fire Administration, was shown to the students to underscore the potential dangers that exist in a residence hall.

While the lecture was taking place, university fire safety staff members were filling a corridor with smoke using a smoke generator. Students then walked to the smoke-filled corridor where they tentatively tried to move through a usually familiar hallway, quickly becoming lost, disoriented, and confused in the hallway of the building they call home.

After the students went through the smoke-filled corridor, they regrouped and discussed what they experienced and learned. Most of the students who go through the program stated that it would be beneficial for all first-year students to attend.

Miami University administration has made a strong commitment to fire prevention and safety programs and is very supportive in the creation of this "state of the art" college education program. A presentation on the Great Escape on Campus will be made at the Campus Fire Safety Forum II at the NFPA Fall Education Conference in November in Orlando, Florida.

Randy Hormann, a professional fire fighter of 15 years, joined Miami's environmental health and safety office in 1997, after spending many years in fire safety with the University of Cincinnati. Randy is also the chair and founder of the email discussion group "International Association of Campus Fire Safety Officials". He can be reached at hormant@muohio.edu.

More information on topics discussed in this article can be found at the following website:

Campus Fire Safety Forum II www.campus-firewatch.com/forum.htm

Get Out and Stay Alive video and brochures www.campusfirewatch.com/resource.htm Miami University www.muohio.edu National Fire Protection Association

United States Fire Administration www.usfa.fema.gov

www.nfpa.org

## **Seton Hall**

On January 19, 2000, three students were killed in a fire at Seton Hall. Just as with other college fires, this one has served as a catalyst for change. Because of this fire, the New Jersey legislation has passed a law requiring that all dormitories and sprinklers within the state be sprinklered within four years.

What effect has this fire had on Seton Hall? Campus Firewatch spoke with representatives from Seton Hall to find out what changes have occurred.

"Education for the students began over the summer with us updating publications such as the student handbook," said Craig Allen, the director for the Department of Housing and Residence Life at Seton Hall. These updates included items such as the evacuation procedures, which really hadn't changed much. The South Orange Fire Department reviewed the handbook as part of the process, too.

This handbook was sent to all students, along with an explanatory letter and a brochure that outlined the procedures, policies and the sanctions that would be imposed for violating any of the policies.

When the semester started, the residential staff held floor meetings with the students and reviewed this material. They also pointed out where the exits were located, and reinforced the penalties that would be imposed for violating the policies. They are distributing the brochure "Get Out and Stay Alive" to all of the students, and the campus television station is running fire safety material.

When we started talking about the training that the residential staff had gone through during the summer, Allen said that they had done something different. "We went to the Middlesex Fire Academy and had presentations by the South

Orange Fire Department and some of the trainers at the academy. We also had a chance to practice using a fire extinguisher, and we saw a controlled burn and saw how a fire acts and spreads." According to Allen, the academy staff believed that Seton Hall was the only institution to ever provide this level of training to its residential staff.

As a result, Allen stated "we now feel well armed to help educate our students."

#### What was the reaction from the students?

"What I expected," said Allen. Because of the high profile that the fire had received, the students were expecting a higher level of fire safety and awareness when they returned. "Unfortunately, there are some students that seem unaffected...they seem to still have the attitude that it won't happen to me." This is a small minority, however, said Allen.

#### What are some of the policies?

If the building fire alarm is activated, everyone must leave. "Anyone found in the building will be fined \$250.00 and placed on residential probation, in addition to any fines from the fire department," said Allen. Other policies include a ban on candles and incense, no holiday lights and no Halogen lamps. The university has also banned the use of extension cords unless they are power strips with circuit breakers.

#### How has the year gone so far?

"School opened last Tuesday (September 5). We've done the fire drills and have had a few students cited for violations already...things are going well so far,"

reported Allen. The students have heard the message, he said, and they know what is expected of them.

The reaction from the parents has been very positive, too. "Many of the parents told me that they feel Seton Hall is one of the safest schools in the country because all that we are doing and that we are giving it (fire safety) more attention than ever," said Allen. In talking with his colleagues across the country, he stated that Seton Hall is not alone in their efforts. "Everyone is doing something."

#### **Fixed Fire Protection**

Because of the fire, there was an aggressive program to upgrade the fixed fire protection systems in all of the residence halls at Seton Hall. According to information provided by Seton Hall, all of the residence halls are now fully sprinklered. Furthermore, the fire alarm system was upgraded to include addressable system smoke detectors in every residence's room. Audible alarm devices have also been installed in each room, as well as in the building's common areas.

All six on-campus dormitories are sprinklered, as well as an off-campus apartment building that is operated by the University. Twenty-one hundred students are housed in these seven buildings.

#### Contents

Scrutiny is also being given to the contents of the rooms. As mentioned, the extension cords must be equipped with a circuit breaker. Microwaves are not allowed, and any furniture brought in by the students must meet the flammability requirements of California Technical Bulletin 133.

#### Citations

Because of the January fire, the Occupational Safety and Health Administration (OSHA) conducted an inspection of Boland Hall. In August,

#### Seton Hall, continued

Seton Hall was fined \$12,000 for three violations. (The full text of these citations, provided to Campus Firewatch by OSHA, can be found in this issue.)

One of the citations was for failing to "implement a procedure that would properly protect employees from fire and smoke who are required to investigate the cause of fire alarms. According to Margaret Horsefield, from Seton Hall, this related to when RA's would re-enter a building where a fire alarm had been activated to verify that all of the occupants had evacuated. The current policy, according to Horsefield, is for all RA's to evacuate the building promptly, and to verify that the rooms along their path of travel have been evacuated by knocking on the doors. They are not permitted to reenter the building or to check areas that are not along the route that they would normally take to evacuate.

One of the recommendations that OSHA made was that all fire alarms be connected to the South Orange Fire Department. According to Horsefield, this has been done.

Another citation was for failing to "asses the workplace to determine if hazards were present, or were likely to be present, which necessitated the use of personal protective equipment (PPE)." This is related to the issue of employees investigating fire alarms without any protective equipment.

A third citation was related to exposure determination. According to Horsefield, the university's health service was located in Boland Hall, and therefore was inspected by OSHA as part of its investigation. It was found that there were some shortcomings in how the university handled medical waste and the potential exposure that employees might have to this waste.

The efforts that Seton Hall is undertaking are being mirrored at institutions across the country. This incident has served as a warning to the potential fire dangers that exist in campus housing, and a new

emphasis has been placed upon improving the level of fire safety in these occupancies.

The following are Seton Hall's policies on fire safety, taken from the Seton Hall website, www.shu.edu.

#### Fire Systems

The fire safety systems are in place for your protection. Misuse or abuse of these systems is an act of blatant disregard of your own safety and the safety of others and will be treated as a disciplinary matter.

Some of these systems are sensitive and can be inadvertently activated.

Consequently, the following restrictions apply:

- Smoking in a hallway or lounge is prohibited. Smoking under a smoke detector will cause it to activate.
- Physical activities, such as hockey and basketball, are prohibited in lounges and hallways, because they can activate systems sensitive to banging and jarring.
- Throwing water or other liquids is prohibited because it greatly endangers others and can activate the fire alarm system.
- Spraying paint or water is prohibited because moisture can activate the system.

#### Fire Evacuation-All Students

It is expected you will attend your respective floor/wing meetings concerning fire procedures. If an alarm is activated, the following procedures should be followed at all times:

- Put on shoes
- Take room key, SHU ID card or guest pass with you.
- Close and lock room door.
- DO NOT use elevators.
- Once outside the building, stay 50 feet away.

 Only re-enter the building once the "all clear" signal has been given by Housing and Residence Life staff.

Before leaving your room:

- From inside the room, check for smoke seepage around the door cracks.
- Feel the inside door surface with back of your hand. If it is hot, DO NOT OPEN!
- Seal up the cracks around the door using sheets, pieces of clothing, tape or whatever is handy. The door can hold back killing heat and smoke.
- Hang a sheet out the window to signal rescuers. DO NOT JUMP.
- Open the windows slightly, to let in fresh air and let out bad air.
- Grab a wet towel. Place this over your head and face (nose and mouth) if smoke is heavy.

Fire Evacuation-Residents with Disabilities

It is expected that a Housing and Residence Life staff member knows of your immobility, whether it is temporary or permanent.

Prior to an emergency evacuation of any kind, a partner should be assigned or be chosen to accompany and remain with the resident in such cases.

#### **Smoke Detectors**

Your room is equipped with a smoke detector to alert you in case of a fire. It may be activated by cigarette smoke and clearing the area of the smoke will silence the unit. Should you hear the detector sounding in another room, contact the residents or any staff member. If your detector begins to beep periodically, it may need a new battery so please inform a staff member immediately.

Disconnecting, vandalizing or tampering with your smoke detector is considered misuse of safety or fire equipment. The minimum sanction is \$50 and replacement costs.

## **OSHA Citations, Seton Hall**

The following are the citations issued against Seton Hall University following the fire on January 19, 2000 that killed three students. This information was provided by OSHA to Campus Firewatch. While every effort was made to faithfully reproduce the citations accurately, this is not an official copy of the citations.

#### US Department of Labor Occupational Safety and Health Administration

Inspection Number 303263743

Inspection Dates: 01/19/2000-07/10/2000

Issuance Date: 07/10/2000

#### Citation and Notification of Penalty

Company Name: Seton Hall University

Inspection Site: 400 South Orange Avenue, South Orange, NJ

07079

#### Citation 1 Item 1 Type of Violation: Serious

Section 5(a)(1) of the Occupational Safety and Health Act of 1970: The employer did not furnish employment (sic) and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees in that employees were exposed to fire and smoke inhalation.

a) Seton Hall Dormitories: Employer failed to implement a procedure that would properly protect employees from fire and smoke who were required to investigate the cause of fire alarms.

Violation observed on or about 4/17/00.

Among other methods, feasible and acceptable methods to correct this hazard include the following:

- 1. Have all fire alarms in student dorms connected directly to the South Orange Fire Department, eliminating the need to have the Resident Assistants (RA's) with the (stick) (sic) determine the cause of the alarm, allowing occupants of the dormitory, including any employees, to evacuate safely.
- 2. Fully evaluate and take appropriate actions to eliminate the risks and hazards associated with the fire alarm verifing (sic) procedure. Particular attention must focus on communications of employees during the fire alarm verification process with other emergency personnel and must focus on training employees fully and specifically and describe limitations of employee action to be taken by employees required to verify fire alarms.

Abatement certification and documentation required. Date By Which Violation Must be Abated: 8/14/2000 Proposed Penalty: \$6300.00

#### US Department of Labor Occupational Safety and Health Administration

Inspection Number 303263743

Inspection Dates: 01/19/2000-07/10/2000

Issuance Date: 07/10/2000

#### Citation and Notification of Penalty

Company Name: Seton Hall University

Inspection Site: 400 South Orange Avenue, South Orange, NJ

07079

#### Citation 1 Item 2 Type of Violation: Serious

29 CFR 1910.132(d)(1): The employer did not assess the workplace to determine if hazards were present, or were likely to be present, which necessitated the use of personal protective equipment (PPE):

 a) Boland Hall: Employer did not assess the workplace (Dormitories) to determine what PPE would be necessary for employees investigating fire alarms.

Violation observed on or about 4/17/00 Abatement certification and documentation required. Date By Which Violation Must Be Abated: 08/14/2000

Proposed Penalty: \$6,300.00

#### US Department of Labor Occupational Safety and Health Administration

Inspection Number 303263743

Inspection Dates: 01/19/2000-07/10/2000

Issuance Date: 07/10/2000

#### Citation and Notification of Penalty

Company Name: Seton Hall University

Inspection Site: 400 South Orange Avenue, South Orange, NJ

07079

#### Citation 2 Item 1 Type of Violation: Other

29 CFR 1910.1030 (c) (2) (i): The employer having employees with occupationally (sic) exposure did not prepare an exposure determination:

a) Seton Hall University

The employer did not prepare an exposure determination which would include all employees with occupational exposure as defined by the standard. Employees with occupational exposure included, but was not limited to doctor(s), nurses, student aids (sic), and housekeeping staff.

Violation observed on or about 4/14/00 Date By Which Violation Must Be Abated: 7/13/00 Proposed Penalty: \$0.00