

This month's *Working Fire*...

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Volume 00-7: July 2000
Approx. Program Length: 57:50

FIRELINE

Residential House Fire Jacksonville, FL

Approx. length: 9:12

A home, nearly 80 years old, caught fire (presumably an electrical cause) and burned to the ground. It was located in an exclusive area, developed nearly 200 years ago. However, there were no hydrants in close proximity to the area (residents had resisted constructing mains due to the pristine nature of the enclave) so firefighters had to shuttle water via tanker. They nearly had the initial fire under control until the first arriving water ran out. In the time it took to set up the shuttle, the fire regrew out of control. A good segment for firefighters waging the battle for better fire protection. For more information, contact Capt. Rob Sorensen, Jacksonville Fire Rescue, 2700 Firefighter Memorial Drive, Jacksonville, FL 32246-7625 or call 904-645-0124.

Trash Truck Rescue Wilmington, DE

Approx. length: 9:59

A trash truck which lost its brakes rolled twice over a retaining wall, ending mostly upright up in a pond twenty feet below the road surface. One occupant freed himself while his partner was trapped under a piece of the wall. Nearby workers removed the rock as EMS began treatment. Rescuers removed the occupant through the windshield on a stokes basket and then across a ladder to the shore. From there the basket was lifted by a winch on an aerial ladder over the wall. He was then airlifted to the hospital. Good combination water/high-angle rescue. For more information, contact Assistant Chief Rick Catalano, Talleyville Fire Department, 3919 Concord Pike, Wilmington, DE 19803 or call 302-478-9911.

HANDS-ON

Hospital Fire Simulation/Drill

Approx. length: 23:15

In a special Hands-On segment, *Working Fire* presents an expanded training simulation of a hospital fire. This was done in joint cooperation with the Belton, Missouri Fire Department and Research Belton Hospital, part of Health Midwest. The hospital must do disaster drills to maintain its hospital accreditation and invited the local fire department to join them in a combined simulated drill. This allowed the hospital to realistically execute its internal disaster plan and the Belton Fire Department (and its automatic aid partner, South Metro Fire Department) to work through its preplan of the building and test its effectiveness. This segment involves pre-interviews with all the parties involved as to how the drill was formulated and the objec-

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HANDS-ON (cont.)

tives they were hoping to achieve. The simulation itself is extremely realistic, using theatrical smoke and internal hospital alarms and communications. Analysis and review follows the drill with suggestions for improvement. This would be an excellent segment to show to local hospital officials in your jurisdiction for planning a similar simulation. For more information, contact Capt. Sam Schneider, Training Officer, Belton Fire Department, 223 Main Street, Belton, MO 64012 or call him at 816-331-7857. Or contact Doug Todd or Carol Creek, Research Belton Hospital, 17065 South 71 Highway, Belton, MO 64012 or call them at 816-348-1200.

FIRE MEDICS

EMS Bikes Part II

Approx. length: 9:38

This month we present Part Two of our EMS on Bikes segment begun last month. This segment covers bike handling and maneuverability exercises and appropriate BLS and ALS equipment that might be carried aboard. For more information, contact J. D. Hebert, Paramedic, County Ambulance Service, 175 Wahconah St., Pittsfield, MA 01201 or call him at 413-499-2528.

EVOLUTIONS 2000

Kramer vs. Kramer Rescues by Untrained Personnel

Approx. length: 2:46

Working Fire and Professor/Chief Bill Kramer present our Continuing Education segment that's worth one credit from the University of Cincinnati. Picking up on this month's Hands-On segment covering the hospital fire simulation and drill, Bill debates whether or not it's a good idea to allow valuable hospital personnel to risk attempting untrained and unprotected patient rescues. For more information, contact Professor Bill Kramer at the Open Learning Fire Service Program, College of Applied Science, 2220 Victory Parkway, ML #103, Cincinnati, Ohio 45206 or call 513-556-6583.

This month's *Working Fire*...

From the Departments Involved...

DISCUSSION QUESTIONS FOR THIS MONTH'S INCIDENTS

The departments involved in this month's incidents pose some discussion questions that you can use as discussion-starters in your own department's training sessions. Let's kick it around!

Residential House Fire/Jacksonville, FL Captain Rob Sorensen/Jacksonville Fire Department

1. If yours is primarily an urban department, are you prepared, in terms of training and apparatus, to operate in a water drafting/shuttling mode?
2. Do you ever conduct "town meetings" with residents in under-served areas of your jurisdiction (in terms of low water supply) about different options in fire prevention? These could include the realities of water response time due to shuttling, using swimming pools for drafting, the prospect of installing new or closer hydrants, etc.
3. Is your municipal or city management receptive to recommendations from the fire department about the need for hydrant installation in low water areas of your jurisdiction? NOTE: A known but constantly ignored low water situation can become a public relations negative for fire departments and municipalities!

Trash Truck Rescue/Wilmington, DE Assistant Chief Rick Catalano/Talleyville Fire Department

1. Do you ever train on a water rescue and a high-angle rescue in the same evolution? Do you ever combine other types of rescues in the same evolution?
2. Does your rescue truck or apparatus that carries rescue equipment carry sufficient equipment to execute any rescue or do you have to call multiple apparatus to get what you need?
2. Do you have protocols requiring rescuers to wear Personal Floatation Devices (PFDs) when working around water? Do your vehicles carry sufficient PFDs for all personnel? Do you wear them when you train?

Enhanced Training

Hospital Fire Simulation/Drill

Objectives

After watching this program, the student shall understand:

1. the planning and coordination aspects of planning such a drill.
2. the logistical details and problems of executing such a drill.

Standards & Regulations

This training is consistent with NFPA 1500 and appropriate OSHA regulations. Theatrical smoke is a non-hazardous substance

Training Outline

I. PLANNING THE SIMULATION

A. Hospital Objectives — Research Belton Hospital, Belton, MO

1. Annual accreditation requirement by the Joint Commission for Accreditation of Hospitals Organization (JCAHO) to perform safety and disaster drills.
 - a. The JCAHO requirement is one fire drill per shift per quarter.
 - b. Health Midwest (Research Belton Hospital's parent organization) conducts a drill on every shift every month.
2. Research Belton Hospital wanted to stage a more realistic drill involving the fire department in order to give its staff a better idea of what a real fire would be like.
3. The hospital sought to achieve a full and complete turnout from hospital staff.
4. Health Midwest has been trying to standardized its fire drill and disaster alert procedures among its member hospitals so that staff transferred between hospitals would already be familiar with disaster protocols.

B. Hospital Fire Drill Plan

1. Upon hearing the fire alarm, all hospital personnel not currently engaged in active patient care are to assemble at the site of the emergency — in this case, Room 220 on the second floor — with a fire extinguisher, if possible. Staffers have had previous training in using fire extinguishers.
2. A designated staff position, usually a manager of plant operations, takes charge at the drill site or the alarm response location and will decide the next steps: alerting the local fire department, patient rescues, fire extinguisher utilization, etc.
3. For this drill, a currently underutilized wing of the hospital was used. This area could be smoked up without inconveniencing hospital patients

Hospital Fire Simulation/Drill

C. Fire Department Objectives

1. Belton Fire Department had preplanned Research Belton Hospital along with other high hazard locations in its jurisdiction.
2. Execute the simulated drill three times, once for each shift
3. Practice coordination and execution of plan among Belton's members and those of its automatic aid partner, Metro South Fire Department.
4. An evaluation of the preplan based on its effectiveness in actual use.
5. For this drill, a theatrical smoke machine would be utilized to simulate realistic, smoky conditions.

D. Fire Department Preplan

1. Two initial crews arrive from Belton, taking positions in the front (south) and on the east sides of the building.
2. A crew from South Metro takes a position on the back (north) side of the building and hook up to a standpipe there.
3. An two-person investigation team enters through the main entrance in front and makes its way to the scene of the "fire," Room 220. It conducts a size-up and radios its results to Incident Command which was also set up in front.
4. The engine company on the east side of the building lays a hose line into the east stairwell of the hospital, then awaits further commands.
5. Based on the results of the size-up, Incident Command would respond accordingly.
- 6.. Additional units take a staging position nearby.

II. RUNNING THE SIMULATION

A. Actual Drill/Simulation

1. A patient in Room 220 calls the nurses' station, alerting them to smoke in the room. Nurses check and find smoke. The hospital fire alarm is sounded and the fire department is called.
2. A hospital plan operations person and a lead nurse enter the room and rescue the patient in the first bed, laying her on a blanket and pulling her out of the room. The patients in adjacent rooms are subsequently evacuated.
3. Simultaneously, hospital staff arrive with extinguishers and are told to stand by.
 - a. For the purposes of this simulation, it was deemed that the room was too smoky for hospital personnel to rescue the second patient, leaving her for fire department responders.

Hospital Fire Simulation/Drill

4. The fire department is met by a hospital staffer (a member of plant operations) who briefs a responding officer of what's going on.
5. An investigation team makes its way to the second floor and is met by the lead nurse who tells them a patient is still trapped in the fire room.
6. The investigation team affects the rescue by wheeling the patient out of the room in her bed. Had the investigation team found real flames, Step 7 would have occurred first.
7. The hose crew had advanced its hose line to the second floor, just before the fire doors near Room 220. They waited for a command to enter the room to knockdown the "flames."
8. Firefighters conduct a search of the other rooms on the floor looking for possible traces of fire.
9. The drill is concluded. A post-drill critique was immediately conducted with hospital personnel and the firefighters involved.

III. REVIEWING THE SIMULATION

A. Simulation/Drill Review - Hospital Perspective

1. The drill went very smoothly. The initial alarm and staff response to the fire room was executed quickly.
2. The initial patient rescue was done quickly. Since the decision to leave the second patient was a conscious one, the door to the fire room must be closed. THIS IS VERY IMPORTANT! This may be a difficult decision for staff to make, knowing that a patient is still inside, but the health and safety of the entire hospital must be maintained.
3. Secondary staff members arrived in a timely fashion (approximately 23 people with about 16 fire extinguisher). They reacted quickly to orders to stand by.
4. Hospital personnel directed firefighters to the fire room when they arrived on the floor. Staff thought too much time elapsed before the firefighter rescue began.

B. Simulation/Drill Review - Fire Department Perspective

1. Firefighters made a timely response; approximately six minutes to their arrival at the hospital. Crews and apparatus took their preplanned positions.
2. The investigation team made its entry into the building and headed for the second floor while the hose crew began laying hose up the stairwell to the second floor. It then advanced to a point just before the fire doors near Room 220.
3. Both crews should have donned SCBA before entering the fire floor.
 - a. The investigation crew lost time by having to don in the smoke outside the fire room. The hose crew should have donned at the top of the stairwell just off the fire floor.

Answers to the questions on Page 8:

1. False 2. True 3. True
4. c. 5. e.

Hospital Fire Simulation/Drill

- b. Firefighters should always remember to be in SCBA on a smoky fire scene. This is an NFPA directive and not to comply is an OSHA violation as well. Had an oxygen bottle exploded, for example, wearing SCBA might have been crucial to firefighter survival
4. There was some confusion as to the proper radio frequency that responders should have been using. This delayed the hose crew from getting an earlier command to charge the hose line and enter the fire room.
5. Additional ventilation considerations were also learned from the drill. In a subsequent drill with another shift the following evening, a ladder truck took a position in the front, extending a ladder to the fire room window. This window was opened by the investigation crew.

IV. OVERVIEW

A. Lessons learned

1. Much was learned from the drill by all participants. Hospital staff members had a chance to really understand what true fire emergencies are all about and the difficulty of negotiating in a smoky environment.
2. The fire department realized that the execution of their preplan needed improvement; specifically, using correct radio frequencies and the need to be in SCBA upon arrival on the fire floor.
3. Additional ventilation considerations were also learned from the drill. In a subsequent drill with another shift the following evening, a ladder truck took a position in the front, extending a ladder to the fire room window which was opened by the investigation crew.

B. Staging Your Own Drill

1. Find a hospital who shares your desire for a realistic simulation for both hospital personnel and firefighters. Work with them in successive meetings to blend disaster plans and preplans and to resolve the logistical difficulties —be prepared; there could be many.
2. A simulated drill using smoke might be difficult for many hospitals because of the inability to free up patient space. Keep in mind that the drill could be staged in another part of the hospital such as a library, rec room, staff lounge or executive offices. Though not exactly similar, the realistic conditions could be created so that personnel can get a feeling for the environment.

Hospital Fire Simulation/Drill: Quiz

Date _____

Chief/T.O. _____

Firefighter (print) _____

Education Credits/
Hours/Units _____

Signature _____

Select the best answer:

1. True or False It's okay if mutual aid companies use their own frequency on a mutual aid response.
2. True or False Make sure the hospital's fire drill plan and the fire department's preplan work together.
3. True or False Someone from the hospital should be designated to meet the fire department upon arrival and give them further directions.
4. Something that is not an important consideration in a simulated drill is:
 - a. clear communications
 - b. responders "buying into" the reality of the drill
 - c. whether or not you run the sirens and horns on the way to the drill.
 - d. being prepared to change the preplan based on what you learn in the drill
 - e. knowing the preplan extremely well
5. The importance of SCBA is evident because:
 - a. it's an NFPA regulation
 - b. it's an OSHA regulation
 - c. it will extend your career as a firefighter
 - d. it may save your life
 - e. all of the above.

(See answers at the top of page 7)

Evolutions 2000

University of Cincinnati Continuing Education Program

Untrained Personnel Rescues

If you're enrolled in the **Open Learning Fire Service Program** at the **University of Cincinnati**, here's your opportunity this month to earn one college credit hour for watching *Working Fire*.

VOLUME 00-7

Kramer vs. Kramer: Should rescues be attempted by untrained personnel?

Complete written responses to the following three essay questions:

1. List key factors to be considered in joint drills conducted between fire departments and hospitals or other care facilities.
2. How would you draw the line between encouraging initial lifesaving efforts by hospital personnel and discouraging unnecessary risk.
3. Outline a simple scenario for a joint drill between your fire department and a hospital or care facility in your jurisdiction.

Send your responses to:

**Mr. Bill Kramer
University of Cincinnati
College of Applied Science
2220 Victory Parkway, ML #103
Cincinnati, OH 45206**

ENROLLMENT INFORMATION:

For more information on enrolling in the Open Learning program to gain college credit, call *Working Fire* at 800-516-3473 for a brochure or, to register directly, call the University of Cincinnati at 513-556-6583. Associates and Bachelors programs are available. Call to have your transcripts evaluated.