This month's *Working Fire...*

Volume 00-11: November 2000
Approx. Program Length: 53:20

FIRELINE

Deaf Occupant/Vehicle Rescue — Approx. length: 7:33
Wilmington, DE

A hearing-impaired man's automobile was struck broadside, pushing the vehicle up against a curb on it's side. After cribbing the vehicle and supporting it in it's upturned position, responders decided to extricate the man by cutting the front roof posts and bending the roof back and then removing him through the opening. Fortunately, the deaf man was not seriously injured, though he was extremely agitated. A rescuer did his best to communicate with the man, reassuring him during the extrication. The rescue proceeded without difficulty. For more information, contact Chief George B. Giles, Elsmere Fire Company, 1107 New Road, Wilmington, DE 19805 or call him at 302-999-0183.

Dog/Well Rescue — Approx. length: 10:13
Lawnside, NJ

A dog visiting with its owners fell into a well shaft under a deck. Part of the deck had to be removed so rescuers could access the well; then a tripod was rigged to lower a rescuer into the well. Two lift lines were set up using rescuers as lifters. Air was pumped into the shaft to raise oxygen levels to within OSHA standards. The dog had wedged itself into a part of the well that narrowed, reducing the area in which rescuers could work. It was difficult to work with the animal as she was below the rescuer's feet. During successive rescue attempts, the dog shifted its position allowing a rescuer to slide in behind the dog. Straps were put around the dog, now muzzled, who was lifted to the level of the rescuer. He cradled the dog and they were lifted out together. Amazingly, the dog was unhurt. For more information, contact Dennis Reilly, Batallion Chief, Cherry Hill Fire Department, 301 Burnt Mill Road, Cherry Hill, MO 08003 or call him at 856-795-9805.

HANDS-ON

Cause & Origin/Arson Basics — Approx. length: 10:54

A fire science class uses an old house about to be razed as a classroom. Certain parts of the house are rigged to simulate fires of different types: a bedroom, living room, kitchen, etc. Fires are then set in each of these areas and then extinguished. Inspection of the damage then follows, observing the pour and burn patterns of accelerants and the various materials that were set on fire. For more information, contact Andy Wrinn, Fire Investigator, Pittsfield Fire Department, 74 Columbus Avenue, Pittsfield, MA 01201 or call him at 413-448-9764.

This month's *Working Fire...*

HANDS-ON (cont.)

International Extrication Competition 2000 **Approx. length: 9:24**
Part I

Extrication teams from fire departments all over the world convened in Louisville, Kentucky for the International Extrication Competition 200 held annually in different cities. Teams are judged on performance in "unlimited" and "limited" scenarios (with and without the use of hydraulic tools), based on time and a point system. This includes observation of one of the departments in action and information on how the competition is put on. Next month, we'll be featuring part of the training symposium that was part of the competition. For more information, contact Chairman Kyle Rieber, Jefferson County Fire Instructors Association, c/o McMann Fire Department, Louisville, KY 40220 or call him at 502-491-4745.

FIRE MEDICS

PHTLS: Spinal Skills **Approx. length: 12:24**
Part I

Maryland Heights and the Pattonville Fire Protection Districts train jointly and review annually the Prehospital Trauma Life Support (PHTLS) refresher course provided by the National Association of Emergency Medical Technicians. This month, we present the first of a two-part, hands-on module on handling patients with spinal injuries with Deputy Chief Steve Spiegel instructing. You may contact him at Pattonville Fire Protection District, 13900 St. Charles Rock Road, St. Louis, MO 63044 or call him at 314-739-3118. For more information on the PHTLS refresher course curriculum, contact Corinne Curd at 800-94-PHTLS or PHTLS Chairman Will Chapleau at wchapleau@aol.com.

EVOLUTIONS 2000

Kramer vs. Kramer **Approx. length: 2:30**
Animal Rescues: Pros & Cons

Working Fire and Professor/Chief Bill Kramer present our Continuing Education segment that's worth one credit from the University of Cincinnati. Looking at this month's *Fireline* dog rescue incident, Bill debates whether fire department resources should be committed and rescuers should be put in jeopardy in animal 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!

Deaf Occupant/Vehicle Rescue/Wilmington, DE
Chief George B. Giles, Elsmere Fire Company

1. Is your department prepared for dealing with hearing-impaired individuals or others with similar disabilities? Do you have someone on staff who knows American Sign Language (ASL)?

2. Are you prepared to deal with patients in accidents who might become violent?

3. Do you have relations established with various public service agencies who could assist your department in such an incident? Do incident commanders have their phone numbers?

Dog/Well Rescue/Lawnside, NJ
Batallion Chief Dennis Reilly, Cherry Hill Fire Department

1. Animal rescues are difficult in that departments rarely if ever train for them. How would you improvise using normal rescue rigging and equipment for the typical animal rescue (dogs and cats)?

2. Do your rescue team members have their tetanus vaccinations up-to-date? Are you prepared for being attacked by the animal in question? Are you prepared to muzzle the animal?

3. Not all responders may be animal-lovers and may be reluctant to be involved in such rescuers. How do you handle this? Does your department have a policy about what (as opposed to who) will be rescued? Dog and cats may be okay, but about pet snakes? And what about certain breeds of dogs? Would your department rescue a pit bull, which history has proved may be dangerous?

Enhanced Training

Cause & Origin/Arson Investigation

Objectives

After watching this program, the student shall understand:

1. the various burn and pour patterns which result from various accelerants and fire ignition, and
2. whether or not arson might be involved.

Standards & Regulations

This training is consistent with NFPA 1500 and appropriate OSHA regulations. Appropriate fire arson techniques should be followed.

Training Outline

I. FIRE EVOLUTIONS: SETUP

A. Pour/Burn Pattern
1. Accelerant poured on floor.
2. Observe spread and burn pattern resulting.

B. Office Fire
1. Simulate fire in the mechanical operation of a computer or similar machine.

C. Bedroom Fire
1. Curling iron fire
2. Electrical box short-circuit using trailers
3. Mattress & clothing

D. Kitchen Fire
1. Trash can fire

E. Living Room Fire
1. Smoldering chairs
2. Hardwood floor with trailers

Answers to the questions on Page 6:

1. True 2. False 3. False

4. d.. 5. b.

Cause & Origin/Arson Investigation

II. FIRE EVOLUTIONS: ANALYSIS

A. Pour/Burn Pattern

1. A cone pattern will start high on the walls and narrow down to the point of origin on the floor. Investigation will usually find a cigarette, a candle, a curling iron, or other source at the tip of the cone.
2. Often lab analysis will reveal a fire's origin from a sample taken from between the boards of a wooden floor.

B. Shorted-Computer Fire

1. Mechanical components will melt rather than burn toward the point of origin of the fire.
2. Charring of the table will fan out from the point of origin.
3. The smoke stain on the ceiling is always deeper and darker over the point of origin.

C. Curling Iron in a Drawer

1. A fire in the drawer started by a curling iron will burn up through the countertop.
2. Had the fire started on top and burned down, the char pattern would have been greater on top, rather than just around where the burn holes occurred.

D. Accelerant on Mattress

1. The mattress was wet but still gave a pour pattern example.
2. Always check under the mattress for depth of burn.

E. Mattress with Clothing on Top

1. Observe the general char pattern; look for evidence of arson, especially if there are no light fixtures overhead or natural fire starters around.
2. Look for specific evidence such as wine bottles or cigarette lighters which may indicate reckless behavior.

F. Fire in Closet

1. An intentionally-set fire with accelerant may "wick up" into the clothes and hanger. A lab analysis would reveal its presence.
2. A set fire often starts in inconspicuous, out-of-the-way places while a naturally-occurring fire will occur in obvious, open areas.

G. Messages

1. Messages on walls and ceilings will often indicate whether or not it's an arson or suicide fire.

Cause & Origin/Arson Investigation: Quiz

Date_____ **Chief/T.O.**_____

Firefighter (print)_____ **Education Credits/ Hours/Units**_____

Signature_____

Select the best answer:

1. True or False Often, evidence indicating reckless behavior may lead to an arson fire origin.

2. True or False Through lab analysis, clothes lying on the floor may reveal the use of an accelerant through "wicking up."

3. True or False Messages insulting firefighters found on the walls in a condemned structure are usually left by the Department of Public Works.

4. A cone burn pattern will indicate fire's _____.
   a. heat
   b. speed
   c. extinguishment
   d. origin
   e. all of the above

5. Plastic components don't burn; they _____.
   a. combust
   b. melt
   c. fry
   d. sizzle
   e. None of the above

*(See answers at the top of page 5***)**

Enhanced Training

Extrication Competition, Pt. I

Objectives

After watching this program, the student shall learn:

1. background about the International Extrication Competition
2. extrication techniques via a specific scenario.

Standards & Regulations

This training is consistent with NFPA 1500 and appropriate OSHA regulations.

Training Outline

I. HOW THE COMPETITION IS RUN

A. Background

1. Begun in 1984, the International Extrication Competition was sponsored this year by the Jefferson County, Kentucky Fire Instructors Association and the Transportation Emergency Rescue Committee (TERC) of the International Association of Fire Chiefs.

B. Qualification

1. Departments qualify for the International Competition by winning regional events or their national competition in the case of a foreign country.

C. Competition

1. Teams are judged on limited (use of non-hydraulic tools only) and unlimited scenarios.
2. They are judged on time and total point accumulation on “blind” scenarios.
3. Many new extrication techniques emerge from the competition.

II. A TYPICAL COMPETITION SCENARIO

A. Scenario Encountered

1. A pickup truck is found up against a concrete highway barrier with a utility pole on top of it. There is one victim inside.

Answers to the questions on Page 9:

1. True 2. False 3. True

4. c. 5. b.

Extrication Competition, Pt. I

B. Strategy

1. Plan A: Roof removal.
2. Plan B: Enter through the rear window of the pickup, use shears to lower seat, and remove patient through the rear window.

C. Team Procedure

1. Safety first.
2. Two-person size-up
3. Vehicle stabilization
   a. Cribbing
   b. Relieve tire pressure for increased vehicle stability
4. Patient Extrication
   a. Remove utility pole (the team assures the judges that the power to the pole has been cut off or that a utility crew would have been summoned to do it)
   b. Remove the windshield and roof
   c. All debris and car parts removed are safely stowed under the vehicle
   d. Begin EMS during extrication if necessary
   e. Removal of steering column to avoid catching patient's knees upon removal; this is done to keep the patient's spine straight.
   f. All interior plastics and obstructions are removed with shears to avoid contact with patient upon removal.
   g. Secure patient to backboard by any means necessary; even duct tape.

III. JUDGING CRITERIA

1. Command/squad control
2. Size-up and evaluation
3. Knowledge of vehicles
4. Patient extrication release
5. Casualty handling and removal

IV. FOR MORE INFORMATION

Contact Kyle Rieber of the Jefferson County Fire Instructors Association at 502-491-4745 or visit the Transportation Emergency Rescue Committee at www.terc.org.

Extrication Competition, Pt. I: Quiz

Date_____ **Chief/T.O.**_____

Firefighter (print)_____ **Education Credits/ Hours/Units**_____

Signature_____

Select the best answer:

1. True or False The International Extrication Competition has been going on for over 15 years.

2. True or False Teams are judged on time, points accumulation and on how good they look in their uniforms.

3. True or False Safety first is always a team's initial concern.

4. As you view the extrication scenario, consider these events:
   (1) crib (2) patient removal (3) size-up (4) remove hazards (5) formulate strategy

   Which would be the best order?
   a. 1 - 4 - 2 - 3 - 5
   b. 2 - 4 - 5 - 1 - 3
   c. 3 - 5 - 1 - 4 - 2
   d. 5 - 1- 3 - 2 - 4
   e. 3 - 2 - 4 - 1 - 5

5. Which of the following is an important on-scene command decision made before the evolution begins?
   a. Decision to extricate based on patient condition
   b. Plan B
   c. Enough cribbing material is in place
   d. Appropriate training in vehicle construction
   e. Whether two or three rescuers should do the size-up
   f. None of the above

(See answers at the top of page 8

Evolutions 2000

University of Cincinnati Continuing Education Program

Animal Rescue Pros and Cons

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 00-11

Kramer vs. Kramer: Animal Rescue Pros and Cons

Complete written responses to the following three essay questions:

1. Should fire departments respond to animal rescue calls. Why or why not?

2. What are the similarities and differences between animal rescue runs and human rescue runs?

3. What is the policy of your fire department regarding animal rescues and would you advocate any changes?

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.