# Halifax Fire Department

August 19, 2003

#### STANDARD OPERATING GUIDELINE

### **Structure Fires**

## 7.01 PURPOSE

- A. To provide a means of suppressing fires when they occur within a structure.
- B. To establish guidelines so that all personnel shall have a clear understanding of their responsibilities at the scene of a structure fire.

#### 7.02 POLICY

These guidelines shall be followed whenever a fire occurs within a structure.

#### 7.03 PROCEDURES

### A. UPON ARRIVAL

- 1. The first in officer shall give a Brief Initial Report.
  - a. Number of stories.
  - b. Type of structure.
  - c. What is showing (smoke, fire, or nothing).
  - d. What side the problem is showing (A, B, C, D).
  - e. Report on exposures.
  - f. Who is in command.
- 2. Conduct an initial size-up.
  - a. What have I got?
  - b. What is burning?
  - c. Where is it going?
  - d. What (and who) is in it's way?
  - e. Do I need additional help?
- 3. The first arriving officer or senior firefighter shall assume command. Unless conditions warrant passing command ex. Room fire, immediate rescue, etc.

#### B. COMMUNICATIONS AND COORDINATION

Good communications and proper coordination are essential at structure fires.

- 1. The Incident Commander must provide the necessary coordination of the various fire ground activities.
- 2. The Incident Commander must communicate all instructions and vital information clearly to those who he/she is supervising.

## C. TACTICAL CONSIDERATIONS

The Tactical objectives in fighting a structure fire shall be in order of priority as follows:

Rescue

**E**xposure protection

**C**onfinement

**E**xtinguishment

**O**verhaul

**V**entilation

**S**alvage

#### 1. Rescue

- a. Human life is the most important consideration at a fire or other emergency.
- b. Rescue of humans override all other strategic considerations at a fire.
- c. The primary functions of the Ladder Company shall be rescue.
- d. A primary and secondary search shall be conducted at all structure fires.

#### 2. Exposure Protection

- a. Exposure protection is the strategy of preventing a fire from spreading to the uninvolved building(s) or in involved parts of the fire building.
- b. The Incident Commander shall assign the appropriate personnel and apparatus for the protection of exposures.

### 3. Confinement

a. The strategy of confinement means preventing the fire from extending to uninvolved sections of the building.

- b. Whenever possible, the most effective method of confining fire spread is a direct attack on the fire.
- c. The Incident Commander shall decide whether to deploy an offensive approach (aggressive interior attack) or a defensive approach (attacking the fire from the exterior). There may be situations where both approaches could be used.

#### AT NO TIME SHOULD THEY BE USED SIMULTANEOUSLY!

- d. All avenues of fire spread must be considered example: shafts, openings, utility raceways, cocklofts, ducts etc.
- e. Where fires involve concealed spaces (attic, ceilings, construction voids, etc.) it becomes very important that the ladder company open up the area and engine companies operate fire streams into such areas.

### 4. Extinguishment

- a. In most fire situations a quick and aggressive attack on the seat of the fire will take care of rescue, exposures, and confinement at the same time.
- b. The size-up will provide information as to techniques, equipment and manpower needs to mitigate the incident.

#### 5. Overhaul

- a. The purpose of overhaul is to make sure the fire is completely out.
- b. Overhaul operations must be properly coordinated with fire investigation efforts.
- c. Unsafe conditions should be identified early in the overhaul process and definite efforts made to avoid the possible problems associated with the same.
- d. During overhaul most firefighters are more relaxed, tired, perhaps less alert and thus more apt to get injured.
- e. Personnel should not remove their breathing apparatus until the area is completely cleared of toxic gases.
- f. When available, a fresh crew should perform overhaul.
- g. Particular attention should be given to hidden areas during overhaul.

h. During overhaul care should be given to protect personnel from exposure to carbon monoxide and other by products of combustion. The Carbon Monoxide Detector should be placed in the work area to monitor the CO Level until it drops below 35 parts per million.

#### 6. Ventilation

- a. Based upon the situation, ventilation may need to occur anytime during the operation.
- b. The ladder company will assume initial responsibility for ventilation.
- c. Ventilation shall be employed to:
  - 1. Channel heat, smoke and flames from potential victims.
  - 2. To prevent backdraft and flashover.
  - 3. To remove heat and smoke from the building so to reduce property damage.
  - 4. To allow the interior of the structure to be more tenable and safer for firefighting operations.

# 7. Salvage

- a. Salvage may need to begin at various points during a fire operation.
- b. Salvage is those operations required to safe guard personal property, furnishings, and the unaffected portions of a structure from the effects of heat, smoke, fire and the weather.
- c. Salvage shall include:
  - 1. The use of salvage covers.
  - 2. Removing water from the structure.
  - 3. Removing furniture and personal belongings to a safer location.
  - 4. Debris removal.
  - 5. Removal of valuables from debris.
  - 6. Covering openings to keep weather out and to secure the building.
- d. All members are expected to perform in a manner that continually reduces loss during fire operations.

### 8. UTILITY CONTROL

a. Utilities should be shut down and brought under control to insure that they will not contribute to the fires spread, overall damage or create any type of safety hazard.

- b. At structure fires where electrical involvement or damage has occurred, request the response of the proper electric company.
- c. If the electric company is not available in time, fire personnel may shutdown the main power switch. At no time should a member of the Halifax Fire Department pull the meter.
- d. If necessary, shut down gas lines at the meter and have the Gas Company notified.
- e. If necessary, shut down water supplies to the structure at the valve closest to the point of usage.

#### 9. SAFETY

- a. Safety is an important aspect of all fire ground operations. Accomplishing fire ground objectives in a safe manner helps reduce fire fighter injuries and deaths.
- b. Members involved at structure fires shall wear appropriate protective clothing and self-contained breathing apparatus.(SOG 2)
- c. Fire ground operations should not be carried out in a rush, but rather they should be accomplished at a reasonable pace, which allows for operations to be completed in a safe and efficient manner.
- d. Fire Officers must constantly be aware of both fire and structural conditions, which may deteriorate at a point which places fire fighters in jeopardy.
- e. Indications of the possibility of structural collapse and/or other life threatening occurrences shall be communicated to all personnel within the incidents perimeter and appropriate actions taken.

#### 10. LIFE SAFETY TO THE OCCUPANTS

- a. Is the number one priority.
- b. Fire ground operations shall be coordinated and conducted in such a manner as to support life safety operations which may be currently under way.
- c. Hose line placement and ventilation shall be coordinated so as affect safe and efficient rescue operations.
- d. Use normal means of egress first e.g. halls, stairs.

- e. Aerial ladders, ground ladders, fire escapes are considered to be secondary means of egress.
- f. Provide for the care and medical needs of victims who have been removed from the fire building.

# 11. ON-SITE FIRE EQUIPMENT AND SYSTEMS

a. Utilize on-site fire protection equipment and systems to the best advantage in accordance with the type of system and the fire situations. (SOG 10 + 11)