

# TOWNSHIP FIRE DEPARTMENT

## CHAPTER 2: SUGGESTED OPERATING GUIDELINES

Part 8: Strategic Guidelines

Subject: Commercial - Common Attic

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Section: 2-8-2

Effective Date: 07-01-95

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- 2.01 Purpose. To identify items concerning commercial occupancy fires which impact on fire response strategy.
- 2.02 Goal. Develop response strategies which recognize hazards and conditions associated with commercial occupancies which possess a common attic.
- 2.03 Commercial Occupancies - General.
- A) Commercial occupancies will vary in appearance to project identity of the business. However, there are common fire problems which extend beyond color, shape or other outward appearance of the building.
- B) Examples of occupancies which fall within this category include.
- 1) Retail stores.
  - 2) One/ two story offices.
  - 3) Strip malls.
- 2.04 Special Problems.
- A) Common Attic. Space above two or more occupancies can be a common, undivided area.
- 1) Walls visible at floor level extend to just above ceiling.
  - 2) Exterior appearance will not identify common attic.
- B) Roof Construction.
- 1) Types of supporting system.
    - a) Wood I-beam.
    - b) Gusset plate connected, wooden truss.
    - c) Open web.
  - 2) Collapse potential with heavy fire involvement.

C) Ceilings.

- 1) Common components.
  - a) T-bar framing.
  - b) Tiles - little or no fire rating.
  - c) Wire supports.
- 2) Can easily collapse after exposure to heat.
- 3) Firefighters can become entangled in collapse of metal framing.

D) Contents.

- 1) Expect large load of normal combustibles (paper, etc.).
- 2) Flammable liquids may be found in small containers (stock, processing fluids, etc.).
- 3) Compressed gases may be present.
  - a) Anhydrous Ammonia (blue print processing).
  - b) Carbon Dioxide (beverage dispensers).
- 4) Anticipate high toxic level in fire gases (example: fires involving pharmaceuticals).

E) Security Measures.

- 1) Door security - especially at rear of building can slow down access.
- 2) Illegal locks (key operated from inside) can create firefighter hazard.
- 3) Windowless side and rear walls - limits access and ventilation potential.

F) Improper Storage Practices.

- 1) Unstable high storage can fall during fire operations.
- 2) Stock may block exit passageways.
- 3) Combustible items stored too close to heat sources.

G) Personnel Practices.

- 1) Few businesses train personnel in proper action when fire occurs.
- 2) Personnel may attempt to control fire before calling fire department (delayed alarm potential).

2.05 Strategic Considerations.

A) Pre-Planning.

- 1) Identify occupancies having common attics/basements.
  - a) Owner/property record.
  - b) Computer-aided dispatch file.
- 2) Identify occupancies with special hazards.
  - a) Truss supported roof and truss supported ceiling and floor joists in multi-storied building.
  - b) Content hazards (compressed gases, etc.).

B) Inter-Agency.

- 1) EMS is responsible for triage, treatment and transportation of injured persons.
- 2) Law Enforcement is responsible for crowd control, traffic control, and security of salvaged contents and currency.
- 3) Regulatory agencies will be involved depending upon type of business.
  - a) Taxation - liquor sales.
  - b) Department of Agriculture - food sales.
  - c) DNR - HAZ-MAT spill.

C) Command Function.

- 1) Activate only those functions and staff positions needed to manage the incident.
- 2) Management structure for fire within this type of occupancy may resemble the following.

	Command		
Staging	Operations	Safety	EMS
Division	Ventilation Group		

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- 3) Safety.
  - a) Roof, truss ceiling and floor joists collapse potential.
  - b) Use of SCBA.
  - c) Personnel contamination - building contents.
  - d) Test for CO<sup>2</sup> before removing SCBA.

D) Operations Function.

- 1) Rescue Evacuation.
  - a) Primary Search.
  - b) Secondary Search.
  - c) Evacuate all buildings that share the common attic.
- 2) Ventilation.
  - a) Cut a hole above the seat of the fire as close as safety permits.
  - b) Trench Cut/Strip Cut - In a long narrow structure with a common attic, cut an opening in the roof from outside wall to outside wall. This opening should be at least four (4) inches wide and well ahead of the fire. In some fires, a trench cut/strip cut may have to be made on both sides of the fire.
- 3) Fire Control - cut off fire - stop horizontal spread.
  - a) Protect area of most value.
  - b) Consider wind effect on fire spread.
  - c) Quick aggressive attack at seat of fire.
  - d) Pull ceilings to get into attic from below.
  - e) Strip ventilate (isolate - trench cut).
  - f) Push fire back into involved areas.
  - g) Place exposure lines on opposite sides of attack.
- 4) Salvage.
  - a) Start salvage operations in businesses that experienced the fire.
  - b) Start salvage operations in the businesses to each side of the fire.
    - 1) Remove goods.
    - 2) Salvage covers.
    - 3) Floor runners.
    - 4) Plastic sheeting.
  - c) Pressurize each business individually to reduce smoke damage.

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E) Logistics Function.

- 1) Establish REHAB area early.
  - a) Breathing air supply.
  - b) Medical monitoring of personnel.
- 2) Supplies for salvage activity.
  - a) Covers, plastic, etc.
  - b) Plywood for securing windows, etc.

F) Planning Function.

- 1) Use tactical worksheet to maintain situation and resource status.  
Expand to tactical board as needed.

G) Finance Function. It is unlikely that function will be fully activated.