

SUBJECT: FIREGROUND FACTORS**SECTION:** 301.02**REVISED:** FEBRUARY 12, 2008**PAGE(S):** 3

PURPOSE

- A. Fireground factors offer a standard list of basic items Command must consider in the evaluation of tactical situations. This list should provide Command with a "checklist" of the basic items that are involved in size-up, decision making, initiating action, review and revision on the fireground.
- B. The effective Command Officer can only deal with a limited number of factors of any kind on the fireground. Within the framework of that limitation, the identification of critical factors is extremely important. All the factors are not critical in any one tactical situation. Command must identify the critical fireground factors that are significant in each tactical situation -- the list of factors offers a framework for that process.
- C. Fireground factors represent an array of items that are dynamic during the entire fireground process. The relative importance of each factor necessarily changes throughout that time frame. Command must continually deal with these changes and base decisions on factor information that is timely and current. Beware of developing an initial plan of attack and sticking to that same initial plan throughout the fire, even though conditions continue to change. Effective fire operations require attack plan revisions that continually reconsider fireground factors based upon information feedback.

The following are fireground factors which should be evaluated by Command as they pertain to each tactical situation. They can be obtained by using the above information management factors.

BUILDING

- A. Size
- B. Roof type (Bow string, bar joist, etc.), and condition
- C. Interior arrangement/access (stairs, halls, elevators)
- D. Construction type
- E. Age
- F. Condition--faults/weaknesses
- G. Value
- H. Compartmentation/separation
- I. Vertical-horizontal openings, shafts, channels
- J. Outside openings--doors and windows/degree of security

- K. Utility characteristics (hazards/controls)
- L. Concealed spaces/attic characteristics
- M. Exterior access
- N. Effect the fire has had on the structure (at this point)
- O. Time projection on continuing fire effect on building

FIRE

- A. Size
- B. Extent (% of structure involved)
- C. Location
- D. Stage (inception--flashover)
- E. Direction of travel (most dangerous)
- F. Time of involvement
- G. Type and amount of material involved - structure/interior finish/contents/everything
- H. Type and amount of material left to burn
- I. Product of combustion liberation

OCCUPANCY

- A. Specific occupancy
- B. Type--group (business, mercantile, public assembly, institutional, residential, hazardous, industrial, storage, school)
- C. Value characteristics associated with occupancy
- D. Fire load (size, nature)
- E. Status (open, closed, occupied, vacant, abandoned, under construction)
- F. Occupancy associated characteristics/hazards
- G. Type of contents (based on occupancy)
- H. Time--as it affects occupancy use
- I. Loss Control profile/susceptibility of contents to damage/specific loss control needs (computers, business records)

LIFE HAZARD

- A. Number of occupants
- B. Location of occupants (in relation to the fire)
- C. Condition of occupants (by virtue of fire exposure)
- D. Incapacities of occupants
- E. Commitment required for search and rescue (personnel, equipment, and Command)
- F. Fire control required for search and rescue
- G. Needs for EMS
- H. Time estimate of fire effect on victims
- I. Exposure of spectators/control of spectators

- J. Hazards to fire personnel
- K. Access rescue forces have to victims
- L. Characteristics of escape routes/avenues of escape (type, safety, fire conditions, etc.)

ARRANGEMENT

- A. Access, arrangement, and distance of external exposure
- B. Combustibility of exposures
- C. Access, arrangement, and nature of internal exposures
- D. Severity and urgency of exposures (fire effect)
- E. Value of exposures
- F. Most dangerous direction--avenue of spread
- G. Time estimate of fire effect on exposures (internal and external)
- H. Obstructions to operations
- I. Capability/limitations on apparatus movement and use

RESOURCES

- A. Personnel and equipment on-scene
- B. Personnel and equipment responding
- C. Personnel and equipment available in reserve or in Staging
- D. Estimate of response time additional resources
- E. Condition of personnel
- F. Capability and willingness of personnel
- G. Capability of Command personnel
- H. Availability of hydrants
- I. Supplemental water sources
- J. Adequacy of water supply
- K. Built-in private fire protection (sprinkler, standpipe, alarms)
- L. Outside agency resource and response time

OTHER FACTORS/CONDITIONS

- A. Time of day/night
- B. Day of week
- C. Season
- D. Special hazards by virtue of holidays and special events
- E. Weather (wind, rain, heat, cold, humid, visibility)
- F. Traffic conditions
- G. Social conditions (strike, riot, mob, rock festival)