



Rogers Fire Department Standard Operating Procedures

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PURPOSE

The purpose of this policy is to provide assistance to incident commanders in fireground size-up and scene assessment.

POLICY

Fireground factors are a standard list of basic items that an incident commander (IC) must consider in the evaluation of tactical situations. This list should provide the IC with a “checklist” of the basic items that are involved in size-up, decision making, initiating action, review, and revision on the fireground.

An effective IC can only deal with a limited number of factors of any kind on the emergency incident scene. Within the framework of that limitation, the identification of critical factors is extremely important. The IC must identify the critical fireground factors that are significant in each tactical situation, knowing that the criticality of individual factors varies from incident to incident.

The identification of critical factors should occur during scene size-up. Size-up is a conscious process involving the very rapid, but deliberate, consideration of the critical factors and the development of a rational incident action plan (IAP) based on those conditions. For fires, the most typical IAP is normally an action-oriented process that involves taking the shortest and quickest route directly to the fire. Action should be balanced with an adequate analysis of risk, severity, location, and extent of a fire. It is imperative that officers on the fireground make quick and deliberate decisions regarding appropriate fire suppression techniques.

Fireground factors represent an array of variables that are dynamic during the entire fireground process. The relative importance of each factor changes throughout the incident. The IC must continually deal with these changes and base decisions on information that is timely and relevant. Beware of developing an IAP and sticking to that same initial plan throughout the incident, even though conditions continue to change in a negative context. Effective fire operations

require IAP revisions that continually reconsider fireground factors based upon information feedback.

In critical fire situations, the IC may develop an IAP and initiate an attack based on an incomplete evaluation of fireground factors. In such cases, efforts must continue throughout the operation to improve the information on which those decisions are based. The IC will seldom operate with complete information during initial operations.

Emergency incidents present a complex situation and require a careful analysis. The factors analyzed when developing the plan often occur from the IC's position outside the structure. Other factors can only be determined from other operating positions – both outside and inside the structure. Fireground intelligence available to the IC is developed utilizing an overlapping variety of information management. These forms of information management revolve around the three basic information categories:

1. VISUAL FACTORS – These factors included those obvious to visual observation and those absorbed subconsciously. This visual information is categorized as the type that can normally be gained by actually looking at a tactical situation from the outside. This form of intelligence involves the perceptive capability of the IC.
2. RECONNAISSANCE FACTORS – These factors include information that is not visually available to the IC from the command post location and must be communicated by a crew assigned to the incident.
3. PREPLANNING AND FAMILIARITY FACTORS – These factors include the intelligence that is gained from formal pre-incident planning and from general informal familiarization activities. Such intelligence increases the information initially available to the IC from the OUTSIDE of a tactical situation.

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

BUILDING

- ◆ size
- ◆ roof type (bow string, bar joist, etc) and condition
- ◆ interior arrangement/access (stairs, halls, elevators)
- ◆ construction type
- ◆ age
- ◆ condition – faults/weaknesses
- ◆ value
- ◆ compartmentation/separation
- ◆ vertical/horizontal openings, shafts, channels

- ◆ outside openings – doors, windows/degree of security
- ◆ utility characteristics (hazards/controls)
- ◆ concealed spaces/attic characteristics
- ◆ exterior access
- ◆ effect the fire has had on the structure (at this point)
- ◆ time projection on continuing fire effect on building

FIRE

- ◆ size
- ◆ extent (% of structure involved)
- ◆ location
- ◆ stage (incipient, flashover, etc)
- ◆ direction of travel
- ◆ time of involvement
- ◆ type and amount of material involved – structure/interior/finish/contents
- ◆ type and amount of material left to burn
- ◆ product of combustion liberation
- ◆ Flow path
- ◆ Ventilation limit condition

OCCUPANCY

- ◆ specific occupancy
- ◆ type of group (business, mercantile, public assembly, institutional, residential, hazardous, industrial, storage, school)
- ◆ value characteristics associated with occupancy
- ◆ fire load (size, nature)
- ◆ status (open, closed, occupied, vacant, abandoned, under construction)
- ◆ occupancy associated characteristics/hazards
- ◆ type of contents (based on occupancy)
- ◆ property conservation profile/susceptibility of contents to damage, need for salvage

LIFE HAZARD

- ◆ number of occupants
- ◆ location of occupants (in relation to the fire)
- ◆ condition of occupants (by virtue of fire exposure)
- ◆ incapacities of occupants
- ◆ commitment required for search and rescue
- ◆ fire control required for search and rescue
- ◆ time estimate of fire effect on victims
- ◆ exposure of spectators; control of spectators
- ◆ hazards to fire personnel
- ◆ access rescue forces have to victims
- ◆ characteristics of escape routes/avenues of escape (type, safety, fire conditions, etc.)

ARRANGEMENT

- ◆ access, arrangement, and distance of external exposures
- ◆ combustibility of exposures
- ◆ access, arrangement, and nature of internal exposures
- ◆ severity and urgency of exposures (fire effect)
- ◆ value of exposures
- ◆ most dangerous direction/avenue of spread
- ◆ time estimate of fire effect on exposures (internal and external)
- ◆ obstructions to operations
- ◆ capability/limitations on apparatus movement and use

RESOURCES

- ◆ personnel and equipment on scene
- ◆ personnel and equipment responding
- ◆ personnel and equipment available in reserve or in staging
- ◆ estimate of response time for additional resources
- ◆ condition of personnel
- ◆ capability and willingness of personnel
- ◆ capability of Command personnel
- ◆ availability of hydrants
- ◆ supplemental water resource
- ◆ adequacy of water supply
- ◆ built-in private fire protection (sprinkler, standpipe, alarms)
- ◆ outside agency resource and response time

OTHER FACTORS/CONDITIONS

- ◆ time of day/night
- ◆ day of week
- ◆ season
- ◆ special hazards by virtue of holidays and special events
- ◆ weather (wind, rain, heat, cold, humid, visibility)
- ◆ social conditions