

FIRE CONTROL

Purpose:

The purpose of this guideline is to provide a safe and effective guide to control a fire.

Policy:

It is standard operating procedure to attempt to stabilize fire conditions by extending **WHEREVER POSSIBLE** an aggressive well placed and adequate offensive interior fire attack effort and to support that aggressive attack with whatever resource and action is required to reduce fire extension and to bring the fire under control.

A critical Command decision (*both initial and on-going*) relates to the offensive/defensive mode of the situation:

- **Offensive Strategy** - Interior attack and related support directed toward quickly bringing the fire under control.
- **Defensive Strategy** - Exterior attack directed to first reduce fire extension and then bring the fire under control.

Command must define offensive/defensive mode based upon:

Fire extent
Structural conditions
Entry capability
Ventilation profile
Rescue ability of occupants Resources

Remember Priorities

R – Rescue
E – Exposure
C – Confinement
E – Extinguish
O - Overhaul

BASIC OFFENSIVE-PLAN:

Take Command
First line - fast, aggressive interior attack
Provide support activities
Do primary search
Second line - back up first/cover rear
Pump water
Quickly evaluate success and react

BASIC DEFENSIVE-PLAN:

Take Command
Evaluate fire spread/write-off lost property
Identify key tactical positions
Prioritize fire streams
Provide big, well placed streams
Pump water
Quick.-determination on additional resources
Surround and drown

Guideline:

OFFENSIVE MODE OPERATIONS:

Many times offensive/defensive conditions are clear cut and Command can quickly develop a decision that relates to that mode. In other cases, the situation is marginal and Command must initiate an offensive interior attack, while setting up defensive positions on the exterior. The effect of the interior attack must be evaluated and the attack abandoned if necessary. Mode changes can develop almost instantly or can take virtually all night; Command must be aware and responsive to such mode changes.

Command must consider the most dangerous direction and avenues of fire extension particularly as it affects rescue activities, confinement efforts, and exposure protection. He must then allocate resource based upon this fire spread evaluation.

In some cases, the most effective tactical analysis involves an evaluation of what is not burning rather than what is actually on fire. The unburned portion represents where the fire is going and should establish the framework for fire control requirements.

Offensive fires should be fought from the **INTERIOR-UNBURNED SIDE** (*interior capability is the principal offensive strategy factor*)

Initial attack efforts must be directed toward supporting primary search - first attack must go between the victims and the fire and protect avenues of escape.

Determine fire location and extent before starting fire operations (*as far as possible*). Do not operate fire streams into smoke.

Command cannot lose sight of the very simple and basic fireground reality that. at some point the fire forces must engage the fire and fight. Command must structure whatever operations are required to **PUT WATER ON THE FIRE**. The. rescue/fire control/extension/exposure problem is solved in the majority of cases by a fast, strong, well-placed attack.

Effective fire control requires that water is applied directly on the fire or directly into the fire area .(*Fire streams can be bounced off. roofs and operated into smoke all night and the fire*

will progress until it runs out of fuel.) Command must establish an attack plan that overpowers the fire with actual water application .

Where fires involve concealed spaces (*attics, ceiling areas, construction voids, etc.*) it becomes very important that ladder companies open-up and engine companies operate fire streams into such areas .Early identification and response to concealed-space fires can save the structure. Officers who hesitate to open up because they don't want to beat up the building many times must attempt an hour later to hold the fire to the neighborhood of origin.

Command must consider 7 sides (*or sectors*) of the fire: front, back, sides , top, bottom, and interior.

Where the fire is sizeable, establish a safe and remote position to begin operations from, then move in on the fire.

The basic variables relating -to attack operations involve:

- Location/position of attack Size of attack
- Support functions
- Command develops an effective attack through the management of these factors .
- Time becomes an extremely important factor with regard to attack operations. The bigger the attack, the longer it takes to get it going; the more interior the attack is positioned, the longer it takes .Command must balance and integrate attack size and position with fire conditions and his resources.
- Tactical realities many times require that pure placement principles are violated. Such violations generally relate to the factor of time vs. pure placement. . When such principles are violated, Command must implement back-up action to cover the "uncovered" area(s).
- Lacking direction, when fire is showing, companies will many times lay hose and put water on the fire utilizing the fastest, shortest, most direct route. This process is called the "candle moth" syndrome - everyone wants to go to the flame.
- Attack from the burned side generally will drive the fire, smoke and heat back into the building and the interior fire control forces out of the building.
- The fastest place to put water on the fire is generally from the outside at the point where the fire is burning out of the building - the very worst application point most of the time.
- When fire is burning out of a building and not affecting exposures, let it burn out and extend an interior attack from the unburned side. It is usually venting in the proper direction. It requires discipline on the part of control forces to do so and not submit to "candle moth " temptations.
- Command must develop a fire control plan of attack that first stops the forward progress of the fire and then brings the fire under control. In large complex fires, Command will not immediately have adequate resources to accomplish all of the attack needs he faces -

at that point, he must prioritize attack efforts, act as a resource allocator and determine the response he will eventually require. Accurate forecasting of conditions by Command becomes critical during this initial evaluation process.

- Command must develop critical decisions that relate to cut-off points and must approach fire spread determinations with pessimism. It takes a certain amount of time to "get water" and the fire continues to burn while the attack gets set up. Command must consider where the fire will be when attack efforts are ready to actually go into operation; if he misjudges, the fire may burn past his attack/cut-off position: Don't play "catch up" with a fire that is burning through a building:

- Project your set-up time
- Write-off lost property
- Get ahead of the fire
- Set up adequately- and overpower it.

Don't put water into burned property, particularly where there is unburned property left to burn. Many fire streams are directed into property that is already lost, many times at the expense of exposed unburned property. Write-off property that is already lost and go on to protect exposed property based on the most dangerous direction of spread. Do not continue to operate in positions that are essentially lost.

DEFENSIVE MODE OPERATIONS

The decision to operate in a defensive mode indicates that the offensive attack strategy has been abandoned for reasons of personnel safety, and the involved structure has been conceded as lost (*written off*).

- The announcement of a change to a defensive mode will be made as Emergency Traffic and all personnel will withdraw from the structure and maintain a safe perimeter. Staff Officers will account for the safety of all personnel.
- Interior lines will be withdrawn (*or abandoned if necessary*) and repositioned when changing to a defensive mode. Lines should not be operated directly into doorways or windows but should be backed away to positions that will protect exposures.
- All exposures, both immediate and anticipated, must be identified and covered. The first priority in defensive operations is to protect exposures.
- The second priority may be to knock down the main body of fire. This may assist in the protection of exposures but does not replace it as a first priority.
- Master streams are generally the most effective tactic to be employed in defensive operations. For tactical purposes, a standard master stream flow of **750 GPM** should be the guideline. Adjustments may be made upward or downward from this figure but it is very significant in the initial deployment of master streams.
- When the exposure is severe and water is limited, the most effective tactic is to put the water on the exposure.
- Once exposure coverage is established, attention may be directed to knocking down the main body of fire and thermal-column cooling. The same principles of large volume procedures should be employed.

- The completion of bringing the fire under control is reported utilizing the standard radio reporting term: "**FIRE UNDER CONTROL**". It is the responsibility of Command to transmit this report to Alarm. This time will be recorded by Dispatch.

Fire under control means the forward progress of the fire has been stopped and the remaining fire can be extinguished with the on-scene resources; **it does not mean that the fire is completely extinguished.**