



Rogers Fire Department Standard Operating Procedures

Policy Title:	Fire Stream Management		
Policy Number:	504	Volume:	Tactics
Approved By:	Tom Jenkins	Last Updated:	January 2017
CFAI Reference:	5A.4	CAAS Reference:	N/A
Revision Summary:	Created – August 2009 Formatted – May 2012 Edit – August 2012 (Clarity, Grammar) Revised – October 2013 (Tactical Procedures) Updated – January 2017 (Purpose, Nozzle discussion)		

PURPOSE

The purpose of this policy is to provide information regarding fire suppression and the associated modes of operations to company officers and incident commanders.

POLICY

Selecting appropriate sized fire streams is critical to fire containment and extinguishment. Generally, hose lines should be advanced to the area that allows for quickest water application. Fire should be suppressed in the quickest manner possible. This may be through interior water application or exterior application through a window serving to “knock down” the fire and limit its growth and energy. An offensive fire attack may often start on the exterior of the structure. Regardless of where the attack of the fire starts, hose lines should be advanced inside the fire building in order to control access to halls, stairways, or other vertical and horizontal channels through which people and fire may travel. The RFD adopts the following guidelines on hose line placement:

- The first hose line is placed between the fire and persons endangered by it.
- When no life is endangered, the first stream is placed between the fire and the most severe exposure.
- The second line is taken to protect either the primary or secondary means of egress (always bearing in mind the presence of personnel operating in opposing positions).
- Whenever possible, position hose lines in a manner and direction that supports rescue activities, confines the fire, and protects exposures.

It is the responsibility of the second-in engine company to structural fires to provide and/or address adequate water supply according to SOP 409, Standing

Fireground Orders. Even with this standing order, each company should still be prepared to provide its own water supply, if necessary. Being prepared for individual water supply is particularly important in large, defensive fires where multiple master streams may be operating.

The initial attack hose line and stretch is essential to overall success of the incident. Firefighters should use a size hose line that is appropriate for the size and complexity of the incident. If there is any doubt on the correct size hose line, firefighters should choose the larger option. If a small line is used for a fast attack, consider backing it up with a larger line. Exercise caution when choosing a hose line of complacency, the hose line size you use the most often may not be the most appropriate.

The RFD has several options for fire suppression. Members must be familiar and competent on all nozzle varieties and know hose line characteristics. Choose the proper nozzle and stream for the task:

- SOLID STREAM – more penetration, reach, and striking power; less steam conversion.
- FOG – more gross head absorption/expansion; shorter reach, significant air entrainment
- 1 ¾" LINES – speed, mobility, and variable volume, depending on pump pressure with automatic nozzle
- 2 ½" LINES – higher volume for knockdown; slow/difficult to move
- PORTABLE GROUND MONITOR – higher volume, mobile but time consuming to move around, quick set up
- MASTER STREAM – mostly stationary, slow to set up; maximum water

Offensive attack activities must be highly mobile. Group and Division supervisors must guard against stationary fire attack positions, unless the fire is defensive in nature. As crew movement slows down, the incident may continue to escalate and become more defensive. Effective offensive operations are aggressive and agile.

Offensive attack positions should achieve an effect on the fire quickly. Consequently, back-up judgments should also be developed quickly. If firefighters are actively fighting fire from an offensive attack position and the desired result (fire extinguishment or containment) is not occurring, two options are available: 1) firefighters may either back out and take a defensive approach or, 2) redeploy hose lines in another offensive position.

When offensive crews are committed to the interior of a building, exterior streams should not be operated onto their specific positions. However, application of water from the outside while crews are on the inside may be necessary to control the fire and keep firefighters safe.

Company officers must assume responsibility for the effectiveness of their fire streams. Such officers must maintain an awareness of where fire streams are going, their effectiveness, and then report the general operational characteristics back to the Division/Group Supervisor or Command. Company officers must be aware that nozzle diameter adjustment or nozzle tip reduction may be necessary in order to produce an effective stream.

Ladder-based master streams should be the primary means of fire suppression on defensive fires that are large and self-ventilated. All companies operating on the fireground should be advised before ladder-based master streams go into operation.

Water should not be applied to the exterior, intact surface of a roof. If part of the roof is intact, it will shed water just like it was built to do and will prevent water from reaching the seat of the fire.