

Chapter 10-1

Effective 01-25-05

Standard Operating Policy for General Fire Strategy & Tactics

rev. 11/14/04

1. Purpose

This SOP details the general principles of strategy and tactics to be used to control fire incidents.

2. Scope

This SOP applies to all PVFD firefighters and officers.

3. Introduction

In order to put out fires in the most efficient and safe way possible, all firefighters must know how and why fireground decisions are made. All fire incidents are different in their exact details, but they share general behaviors. Therefore, a standardized approach to organizing a fire scene is helpful to make sure all necessary details are addressed, and all firefighters and officers know what will be expected of them.

4. Size-Up

Size-up is the first step in determining how to control a fire. It is the process of obtaining as much information as possible about the incident - before the run, during the response, and when you first arrive at the fire scene. When the first officer arrives on scene, a report is given that summarizes what is known about the incident up to that point. The size-up provides a starting point to determining strategy and tactics, and provides everyone else with a picture of what is going on.

The size-up report of the first arriving officer (who may be the officer riding the first arriving fire apparatus) should contain the following details.

- Address of the incident
- Brief description of the building including: number of stories, construction type, occupancy
- Brief description of fire conditions
- Statement of first actions to be taken
- Who is in command

5. Incident Command Considerations

Command of the incident shall be governed by the principles of the Incident Command System. Initial command will begin with the officer of the first arriving company. It shall automatically pass to the first arriving command officer, if the command officer arrives first, or soon after the first fire company. If the first command officer will be significantly delayed, the officer of the first arriving company shall identify their self as Command and begin making assignments to other companies. All further transfers of command shall be done after a briefing between the officers involved. The transfer of command shall then be communicated to all personnel.

6. Scene Survey

The first unit to arrive will begin a scene survey based on the nature of the dispatch and conditions seen when arriving on scene. The purpose of the survey is to gather as much detail about the scene as possible for determining the best way to handle the incident. One of the following three modes of operation will be selected, and the survey made accordingly.

1. Investigation mode: If there is nothing showing on arrival, check the scene

based on the nature of the dispatch. Be prepared in case the situation escalates.

2. Offensive mode: This is where a working fire is evident or strongly suspected.
 - Look at the whole scene, including making a walk around the building, if possible. Identify pertinent construction features and access points. Identify immediate hazards to firefighters and civilians on the scene.
 - Determine the possibility of a rescue. If people are trapped in multiple areas, determine the priority for their rescue.
 - Identify other knowns and unknowns: fire type, extent, and location; resources needed; potential for hazardous materials to be involved.
 - Form an action plan (strategy), set up a formal ICS structure, then assign tactical tasks to FD crews.
3. Defensive mode: This is where the fire is too advanced to allow interior firefighting.
 - Survey the same as if in Offensive mode, then include the following:
 - Evaluate the potential for exposure problems or collapse.
 - Evaluate the need for additional water supplies.
 - Determine a location where the fire can be stopped.

7. Strategy and Tactics

It is impossible to condense all the possibilities for different strategies and tactics into one SOP. Strategy is a broad, overall goal to be accomplished. Tactics are the measurable steps taken to accomplish a strategy. For all fires, the strategy shall be based on accomplishing the following priorities in their order:

1. Life Safety (of all people on the scene)
2. Incident Stabilization
3. Property Conservation

Once a basic strategy is decided, tactics are implemented to accomplish the strategy. Tactics shall be based on the following list of priorities, in their order:

1. Rescue/Evacuation
 2. Exposure control
 3. Confinement of fire
 4. Extinguishment
 5. Overhaul
- *Ventilation and Salvage may occur at different times, based on the incident. They should always occur as soon as practical.

8. Pre-assigned Tasks

Some of the common tactics and tasks necessary to control a fire can be determined before the incident occurs. Some of these can be performed without waiting for a direct command to do so. These are referred to as *automatic actions*, since fire crews know to do them without being told to do so. Automatic actions must only be taken if the following conditions are met:

- It is an obviously needed action
- You are the crew in the best position to do it
- Performing the action automatically will not pose a safety concern
- You communicate your action to the Incident Commander

The following statements are automatic actions that have been pre-planned as part of PVFD's normal fire control strategy and tactics.

1. The first engine company to arrive at a fire scene will position itself to be the attack pumper. This is usually just past the front of smaller structures. This also means leaving room for an aerial truck at its most usable location. On large structures with nothing showing, the first engine will go to the front door, where the crew will begin their investigation. The driver should prepare to move the engine if necessary for better line placement.
2. The second engine company will go to the closest hydrant, or siamese connection if the building has one. This company will stand prepared to lay a supply line or supply the building fire protection system. If a working fire is evident, this company should connect to the siamese, then notify the IC when they are ready to charge it.
The second engine should also pay attention to selecting a supply line route that is the shortest, with minimum traffic disruption. This may mean approaching the scene from an alternate direction.
3. The third engine company will go to the second closest hydrant and stand by to lay another supply line if necessary. On sprinklered buildings, this will usually mean laying a supply line to the attack engine. Quite often this engine will be moved up to the scene to perform other functions if a second supply line won't be necessary.

9. Standard Tactics

The following statements define standard tactics that will be used by PVFD to control structure fires.

1. Interior fire attack will not begin until there is a staffed safety line deployed. The safety line must be of equal or greater length and flow capacity than the line it protects. The safety line may be left dry, for mobility, or charged if needed. The only exceptions to this rule are as follows:
 - There is a confirmed rescue, where the time needed to deploy the safety line will hamper the rescue attempt
 - The fire is still in the incipient stage, and SCBA are not yet neededThe crew staffing the safety line will serve as the level 1 RIT team until relieved of this responsibility by another crew (see PVFD RIT SOP).
2. Positive Pressure Ventilation (PPV) will be the method of choice for ventilating smoke from structures. PPV shall not be used if it will hamper fire attack or potentially cause a backdraft explosion or unwanted fire spread. PPV shall be established at the same entrance used by the attack crews, with a vent exit established ahead of the attack crew in the previously burned area of the structure.
3. Fires shall be approached and attacked from the unburned area of the structure, in order to push fire and smoke back toward the burned area, thus minimizing further damage. However, some real world factors will affect the possibility of doing this.
If any of the following situations occur, the best option for entering the structure is to go in the front door.
 - Heavy smoke throughout the building, with no obvious indication of the fire's location
 - Obstacles blocking immediate access to the door at the unburned side
4. The combination direct-indirect attack method will be the preferred method of extinguishing fires. This means utilizing a modified fog stream to control flame spread above the base of the fire without upsetting the thermal balance, then switching to a straight stream to attack the base of the fire.

5. The indirect method of fire attack shall only be used when there is adequate ventilation established ahead of the attack crew, and the steam and air currents created from the indirect attack will not harm the attack crew or fire victims, push the fire into unburned areas, or upset the thermal balance in the fire area.

6. All attack lines shall enter the structure from the same side, to prevent opposing hose lines from pushing smoke and flames toward other crews. There are only 2 exceptions to this rule:

- Crews on opposite sides of the fire are working in areas with adequate ventilation, and can use hoselines without risk of harming the crews on the other side of the fire. This usually occurs with exterior defensive attack.

- Crews approach the fire from different locations (usually at right angles to each other), but push the fire toward a common location. This is called a "flanking attack".

7. Interior search in smoke filled areas shall only be done by crews that have a charged hoseline or a search rope with them. Areas likely to have fire involvement must have a hoseline. Areas remote from the fire area may be searched with the search rope.

8. Roof ventilation shall be done using a crew of at least 2 people in full gear and SCBA. The work will be done while within reach of a roof ladder laid on the roof, and with a staffed protection line nearby on the ground (or on the roof if it is a flat roof). The protection line shall not be directed into the vent hole unless necessary for firefighter rescue.