

CHAPTER II Operations
SUBJECT 3 Emergency Operations
TOPIC 1 Structure Fires

A. SCOPE

To establish standard operations to be used at all structure fires unless specifically addressed in another topic. Pre-plans take precedence over this procedure.

B. PRIORITIES

Priorities will be rescue, fire control, and property conservation.

C. STRATEGY & RISK MANAGEMENT

The following procedure outlines the fire ground strategy to be employed at structure fires.

1. Fire ground operations will fall in one of two strategies, OFFENSIVE OR DEFENSIVE. The two strategies are based on a standard Risk Management Plan that is to be employed at ALL structure fires. This is the basis for this procedure.
 - a. Activities that present a significant risk to the safety of members shall be limited to situations where there is a potential to save endangered lives.
 - b. Activities that are routinely employed to protect property shall be recognized as inherent risks to the safety of members, and actions shall be taken to reduce or avoid these risks.
 - c. No risk to the safety of members shall be acceptable when there is no possibility to save lives or property.
 - d. In situations where the risk to fire department members is excessive, activities shall be limited to defensive operations
2. Considering the level of risk, the Incident Commander will choose the proper strategy to be used at the fire scene. The strategy can change with conditions or because certain benchmarks (i.e. ALL CLEAR) are obtained. The strategic mode will be based on:
 - a. The building (type of construction, condition, age, etc)

- b. Structural integrity of the building (contents vs. structural involvement)
 - c. The fire load (what type of fuel is burning and what's left to burn)
 - d. The fire and/or smoke conditions (extent, location, etc.)
 - e. The rescue profile (savable occupants/survivability profile)
 - f. Treat all buildings as if made from light-weight construction until proven otherwise.
3. The Incident Commander is responsible for determining the appropriate fire ground strategy. Once the appropriate strategy is initiated, it becomes the Incident Commander's job to ensure that all personnel are operating within the strategy. By controlling the fire ground strategy, the Incident Commander is providing overall incident scene safety. The proper strategy will be determined based on the following:
- a. Avoiding simultaneous OFFENSIVE and DEFENSIVE strategies in the **same fire area**. This typically happens by first committing personnel to interior positions, then operating master streams from exterior positions. This places interior crews in danger of injury or death. Darkening down a fire from the exterior while companies are in a protected area away from the fire area is acceptable.
 - b. Matching the appropriate strategy to the fire conditions of the structure, and minimizing risk to fire fighters.
4. Managing fire ground strategy should start with the arrival of the first unit and be constantly monitored and evaluated throughout the entire incident. The initial Incident Commander (usually a Company Officer) will include the fire ground strategy in the on-scene report. As Command is transferred to later arriving officers, these officers assuming Command should evaluate the fire ground strategy based on the Risk Management Plan.
5. Fire ground strategy provides a starting point for fire ground operations. Once the strategy is announced, all fire fighters know whether to operate on the interior or exterior of the building. The fire ground strategy cannot be a mystery to anyone, everyone operating on the fire ground should be operating in the same strategic mode; Offensive *or* Defensive.

6. OFFENSIVE STRATEGY

Within the framework of the Risk Management Plan, the structure should first be determined to be safe to enter. Once determined safe, an Offensive Fire Attack is centered around RESCUE. *When safe to do so*, the Cincinnati Fire Department will initiate offensive operations at the scene of structure fires. The following are guidelines for offensive fire attacks:

- a. Ensure a RAT team is on the scene or one is responding
- b. Initial attack efforts should be directed toward supporting a primary search -- the first attack line should go between the victims and the fire to protect avenues of rescue and escape.
- c. Determine fire conditions and extent before starting fire operations (as far as possible).
- d. Attack the fire from the interior of the building, however an aggressive interior attack can begin with a stream operating from the exterior of the building prior to attack lines entering. This is called “Quick Water” or Transitional Attack.
- e. Command should consider the most critical direction and avenues of fire extension, plus its speed, particularly as they affect:
 - Rescue activities
 - Level of risk to fire fighters
 - Confinement efforts
 - Exposure protection

Confining the fire is the number one priority; everything else gets better when “water is put on the fire”.

- f. Command should allocate personnel and resources based upon this fire-spread evaluation.
- g. Command should consider the 7 sides of the fire: front, rear, both sides, top, bottom, and interior. Fires cannot be considered under control until all 7 sides are addressed. Failure to do so frequently results in fire extension.
- h. Where the fire involves concealed spaces (attics, ceiling areas, construction voids, etc.), it becomes paramount that companies open up and operate fire streams into such areas. Early identification and response to concealed space

fires will save the building. Officers who hesitate to open up because they don't want to beat up the building may lose the entire structure.

- i. Ventilation is a major support item that should be carefully addressed during fire attack. Ventilation should be well coordinated with the fire attack line. Communication should occur between the ventilation crew and the fire attack line to ensure water is ready to be flowed on the fire prior to the ventilation occurring. This is called "Controlling the Flow Path of the Fire". Ventilation openings should be made in the fire area. Ventilation that is not coordinated and occurs too early, will cause increase in fire intensity and fire spread. This also decreases the time prior to flashover. Controlling the doors is also a method of controlling the fire flow path.
- j. *WRITE-OFF PROPERTY THAT IS ALREADY LOST* and go on to protect exposed property based on the most dangerous direction of fire spread. Do not continue to operate in positions that are essentially lost.
- k. Command should balance and integrate attack size and position with fire conditions, risk and resources. Many times offensive/defensive conditions are clear cut and Command can quickly determine the appropriate strategy. In other cases, the situation is MARGINAL and Command should initiate an offensive interior attack, while setting up defensive positions on the exterior. *THE ONLY REASON TO OPERATE IN MARGINAL SITUATIONS IS RESCUE.*
- l. The effect of the interior attack should be constantly evaluated, and the attack abandoned if necessary. Strategy changes can develop almost instantly or can take considerable time. Command should match the strategy with the conditions. The Incident Commander controls overall incident scene safety by determining the proper strategy to be used.
- m. The Incident Commander should continuously evaluate the structural stability of the fire building so as to change strategy before the building becomes structurally unsafe.
- n. Command should abandon marginal attacks when:
 - A primary search all clear is obtained and the situation is still marginal.
 - The roof is unsafe or untenable. Especially working fires in large unsupported, or lightweight truss attic spaces.
 - Interior forces encounter heavy heat and cannot locate the fire or cannot make any progress on the fire.
 - Heavy smoke is being forced from the building under pressure and is increasing.

- Command needs to constantly evaluate conditions while operating in marginal situations. This requires frequent and detailed reports from Division/Group Supervisors.
- o. It is imperative that Command assign a Roof Division as early as possible during marginal situations for rapid evaluation of roof conditions. In certain situations Command should strongly consider not committing crews to the interior of a structure unless he/she receives a report from Roof Division that the roof of the structure is safe to operate on and under. It is better to go from an offensive to a defensive strategy too soon rather than too late.

7. DEFENSIVE STRATEGY

- a. The decision to operate in a defensive strategy indicates that the offensive attack strategy, or the potential for one, has been discontinued for reasons of personnel safety, and the involved structure has been conceded as lost (the Incident Commander made a conscious decision to write the structure off).
- b. The announcement of a change to a defensive strategy will be made as Emergency Traffic and all personnel will withdraw from the structure AND MAINTAIN A SAFE DISTANCE FROM THE BUILDING outside the collapse zone which is at least 1 ½ times the distance of the highest point of the building. Officers will account for their crews and advise their Division/Group Supervisor on the status of their crew. Division/Group Supervisors will notify Command of the status of the crews assigned to their Division/Group. **A PAR (Personnel Accountability Report) shall be obtained after any switch from offensive to defensive strategy.**
- c. Interior lines will be withdrawn and repositioned when changing to a defensive strategy. Crews should retreat with their hose lines if safe to do so. If retreat is being delayed because of hose lines, and it's unsafe to stay in the building, hose lines should be abandoned.
- d. All exposures, both immediate and anticipated, should be identified and protected. The first priority in defensive operations is personnel safety; the second is exposure protection.
- e. The next priority may be to knock down the main body of fire. This may assist in protection of exposures but does not replace it as a higher priority.
- f. Master streams are generally the most effective tactic to be employed in defensive operations. For tactical purposes, a standard master stream flow of greater than 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.

- g. When the exposure is severe and water is limited, the most effective tactic is to put water on the exposure and, if need be, from the interior of the exposure.
- h. Once exposure protection 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.
- i. 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 the fire is completely out. When the fire is brought under control, Command will notify dispatch utilizing the standard radio report of "FIRE UNDER CONTROL." Dispatch will record the time of this report. Command should initiate a PAR report from all on scene resources.
- j. If defensive operations are conducted from the onset of the incident, Command will notify dispatch that there will not be a primary search completed for the affected structure(s).

8. CHANGING FROM DEFENSIVE TO OFFENSIVE STRATEGY

Refer to Procedures 203.25 – Changing from Defensive to Offensive Strategy.

D. BENCHMARKS

Throughout the incident, in an effort to track completion of tasks officers and incident commanders should announce tactical benchmarks. The following benchmarks should be utilized:

1. **On Scene**
 - a. Every company arriving on the scene shall announce “on scene” on the fire ground channel and announce any deviation from established procedure. This will ensure those operating remotely know other companies are on scene and ready to operate. (example: “Engine 1 on scene”)
2. **Light-weight Construction or Dimensional Lumber**
 - a. Announced by the first in Heavy Rescue Company when examining inspection hole inside front door or other area.
3. **Water on the Fire**
 - a. Announced by the first Engine applying water to the fire (example: “Engine 1 putting water on the fire”)
4. **Primary Search – All Clear**
 - a. Announced for each area where a primary search is completed (fire area, fire floor, floor above, etc). (example: “Ladder 1 – primary search all clear on fire floor”)
 - b. Also announced by the Incident Commander on status updates.
5. **Fire Under Control**
 - a. Announced by the Engine Co. officer when the fire is under control
 - b. Also announced by the Incident Commander on status updates.

6. **Secondary Search – All Clear**

- a. Announced by companies performing these tasks
- b. Also announced by the Incident Commander on status updates.

7. **Fire Out**

- a. Announced by the Incident Commander during status updates

8. **PAR**

- a. Requested each time the fire is under control and as indicated in Accountability Procedures

9. **All Clear – Remove SCBA**

- a. Announced on the fire ground channel by the incident commander when it is safe to remove SCBA after air monitoring is complete

E. **PRE-PLANNING**

Will identify major problems and prescribe what is needed to meet them, without going too deeply into step by step actions. Pre-plans may also include apparatus placement for first alarm companies. Pre-plans may modify this topic, but should not otherwise address procedures. Pre-plans are required for buildings equipped with Fire Suppression systems, industrial complexes, or any high hazard building. Pre-plans shall include important information in outline form, and appropriate drawings. Also, see 202.02 Pre-planning.

F. **WATER SUPPLY**

1. A source of water supply shall be secured by the first-in Engine Company unless the pre-plan preempts this requirement.
2. The water supply should preferably be a 5" supply line, or soft suction. The more pumped water, the higher the overall attack capability.
3. When laying a supply line, do not lay a line or position the Engine company to block access by the ladder company. Preferably lay hose to one side of the street or access road.
 - a. On narrow or dead-end streets where access will be limited, Engine Companies should consider utilizing a reverse lay (Crossfire) to a hydrant past the address to allow unimpeded access for the first arriving ladder company.
4. It is the responsibility of each Engine company to provide its own uninterrupted, adequate supply of water. "Provide" in this case does not mean they should necessarily lay the line or that they should pump it. If there is any doubt, lay your own supply line.
 - a. If the first Engine is unexpectedly without a supply line, ensure second arriving companies are aware of the situation prior to arrival and can provide a water supply.
5. For each supply hose lay over 1000 feet an Engine company shall be placed to boost pressure and relay water to the initial attack Engine company. An Engine company should be placed every 1000 feet for supply line stretches over 1000 feet.
6. For Defensive or Large GPM operations, FAO's should attempt to connect the 5" supply directly into the side intake to provide maximum GPM flow into the fire pump

and avoid any friction loss from the front intake piping.

G. SAFETY

1. Full protective clothing including SCBA, shall be worn at the scene of all structure fires until the Incident Commander directs otherwise. However, members raising ladders, operating lines outside a building, or other external activities, are not mandated to use respiratory protective equipment as long as they are in a clear atmosphere. (*Refer to Section 203.01.01 Post Fire Air Monitoring*)
2. Members responding to working fires, or multiple alarm fires, will be wearing full protective equipment, including SCBA when reporting to the Incident Commander.
3. All units will work under the direction of "Command", no free-lancing.
4. If an immediate evacuation of the structure by operating forces becomes necessary, an emergency message calling for retreat will be transmitted on all radio channels in use at the scene (Fire ground and Dispatch).

The Radio message transmitted shall state "Emergency, All Units at (location) Retreat". This message shall be repeated five times. In addition, an apparatus located near the building will signal the retreat by sounding ten (10) three (3) second blast on the apparatus air horn.

Upon hearing this retreat message and/or signal, members shall immediately leave the structure and reassemble outside the fire perimeter.

The MSA SCBA Monitoring System evacuation signal shall be activated by the Accountability Officer. This system will send a message to all activated ICM's on the fire ground to evacuate the structure. All members shall acknowledge this message via the ICM on the SCBA.

Company Officers shall account for all members and report evacuation status to their division/group Supervisor if the fire ground is divided. If divisions and/or groups have not been organized, company officers shall report their evacuation status to the Incident Commander.

5. Critical Events
 - a. All members operating at structure fire scenes should be aware of dangerous situations that may occur during a fire. Any member who witnesses signs of these events shall notify their supervisor immediately. Supervisors shall notify command and take appropriate action to protect personnel. Transmissions involving critical events would fall under "emergency" communications. (*Refer to Procedure 202.08 Mayday & Emergency Condition Declaration at Emergency Incidents*)
 - b. Critical events to be aware are Backdraft, Flashover, and Collapse.
6. Two In and Two Out
 - a. Fire fighters will not enter an Immediately Dangerous To Life (IDLH) atmosphere unless:
 - (1) At least two fire fighters, using a buddy system, enter an IDLH atmosphere and remain in visual and voice contact with one another at all

times.

- (2) At least two fire fighters are located outside as initial back-up and the conditions for entry into an IDLH atmosphere listed below are met.
 - b. Nothing in this procedure is meant to prohibit fire fighters from performing emergency, LIFE SAVING RESCUE activities before an entire team has assembled. When victims' lives are at stake, we will take a higher risk to save lives. We will **NOT** take extreme risks for property. This exemption is for true life saving situations **ONLY**.
 - c. In order to ensure safe operations, these procedures may require an initial delay prior to entry especially for outlying companies. The first fire company on the scene in this situation should use this time to prepare for a safe and efficient interior attack into an IDLH atmosphere.
 - d. Members shall never make an interior attack on a fire beyond the incipient stage **without at least 2 fire fighters dressed in full PPE with SCBA on the scene as BACKUP**
7. Companies should use discipline not to overcrowd stairways, hallways and fire areas in the event rapid egress is needed. This is particularly important when committing resources into upper floors of residential buildings via narrow stairways. Personnel shouldn't stage on the stairway, either be up or down. Don't block the means of egress.
 8. Exclusion Zones, Fire Zones and Fire Perimeters will be established as necessary (See 202.06 Fire Zones/ Perimeters).

H. RESCUE

A primary search will be conducted at all structural fires, where it is possible to enter. Primary search means that companies have quickly gone through all affected areas and verified the removal and/or safety of all occupants. Time is the critical factor in the primary search process. Officers should keep the Incident Commander updated on the progress of the Primary Search

Initial efforts should be directed toward supporting rescue efforts and hose lines should be placed in a manner to:

- i. Control interior access
- ii. Confine the fire
- iii. Protect avenues of escape, until the primary search is complete.

Hose line placement becomes a critical factor in rescue operations and all operating companies should realize that the operation is in a rescue mode. Normal means of interior access should be used to remove victims whenever possible. The most urgent reason for calling additional alarms is life safety.

I. SEARCH

1. A primary search will be conducted at all structural fires, where it is possible to enter. Primary search means that companies have quickly gone through all affected areas and

- verified the removal and/or safety of all occupants. Time is the critical factor in the primary search process.
2. Danger to occupants is most acute on the fire floor, the floor immediately above the fire, the top floor, and then intermediate floors, in that order. In High-Rise Fires, smoke may not always rise to the top of the structure. See 203.10 High Rise Fires.
 - a. If met with fire at the main entrance of a residential building, the inside ladder team will not wait to advance in behind the fire line. Rather, they will seek another means of access to rooms not yet involved in fire. This deviation from standard procedures shall be communicated to command including entry point and intended location.
 - b. Time of day play a critical role in search priorities. During sleeping hours a heavy emphasis should be placed on bedroom search. Limited time shall be spent in Living Rooms, Dining Rooms, Kitchens and Utility Areas. Consideration should be given to first floor bedrooms (if any).
 - c. When search of the first floor is complete, search teams shall make a rapid advance to the upper floors to search via the interior stairs.
 3. Secondary search will be part of lengthy fire control activities and means that companies thoroughly search the interior of the fire area after initial fire control and ventilation activities have been completed. Secondary search should preferably be conducted by different companies than those involved in primary search activities. Thoroughness, rather than time, is the critical factor in secondary search.
 4. Companies assigned to search operations shall report their progress to command. All clear benchmarks shall be announced as indicated in Section D of this procedure
 5. When it becomes necessary to evacuate an entire building or area, the chalk marking system will be utilized to identify areas searched. Every member shall carry a piece of dry chalk in their turnout coat pocket. When an entire apartment or other area has been searched, an "X" will be placed on the door or the wall next to the door at eye level. Once an entire floor has been searched an "X" will be placed on doors leading from stairways to the floor, and on the wall opposite elevators.

J. ENGINE COMPANY OPERATIONS

1. Engine Companies assigned to the first alarm assignment – not including the Safety Engine - shall secure a source of water supply. Each company shall ensure they provide their own, uninterrupted source of water supply as indicated in Section D of this procedure.
 - a. Engines arriving on the second alarm or greater shall be directed by command prior to laying supply lines.
2. Rapid and appropriate placement of the first attack line will often dictate the success of the overall operation. Initial efforts should focus on getting at least one line in operation as quickly as possible. This may require placing a stream from the exterior into the building prior to entering or while the interior attack lines are being deployed.
3. What is not burning is usually more important than what is actually on fire. The unburned portion represents where the fire is going and should establish the framework for fire control operations. What the fire has already done is not as important as what it is about to do. The key to successful fire fighting is anticipation.
4. Determine fire location and extent before starting fire operations (as far as possible).
5. Do not operate fire streams into smoke unless you are encountering extreme levels of heat or suspect unseen rollover or black fire, which will lead to a flashover, or rapid fire spread event.

- a. The nozzle person can check heat levels by operating the stream briefly above his/her head. If water comes back down, its not too hot, if no water comes down, its extremely hot and the atmosphere should be cooled with a water stream operated into the smoke
 - b. The thermal imaging camera is extremely beneficial in this situation to recognize high heat situations, determine heat levels and visualize rollover in an otherwise dark environment.
6. The main observable factors that influence choice of tactics are:
- a. Location of fire; determine life hazard and probable extension.
 - b. Extension probability; protect all places fire may spread to.
 - c. Type of fire; tactics should suit the situation.
 - d. Size of fire

7. An aggressive interior attack (Offensive Strategy) will be initiated whenever possible. The first line should go between the victims and the fire to protect the avenues of escape.
 - a. The best tactic is to place a hose line capable of delivering a large quantity of water (GPM) on the fire rapidly to achieve knockdown. All nozzles used in the solid or smooth bore mode in the CFD do not push fire.
 - b. Companies should remember that the interior stairs are the most important means of egress to protect. The stairs allow for ladder company personnel to rapidly get above a fire and allows for easier removal of occupants. Engine companies should initiate an attack with the intent to protect the means of egress and place their hose line between the fire and victim while protecting this vital means of egress.
8. If positioning an interior hose line to the seat of the fire is going to take a considerable length of time and the fire is venting to the exterior through a window – consider darkening down the fire from the exterior by deflecting a **straight** or **solid** stream off of the ceiling for no more than 10 seconds and then reposition the line into the building to complete extinguishment. Never use a fog stream for this tactic.
9. During defensive operations – utilize large fire lines (2-1/2” or larger) and if fires are on upper floors, fire streams should be directed at the ceiling space through openings to break up the streams into the fire compartment.
10. Master Streams
 - a. Engine Mounted Master Streams offer very large GPM flows (500 to 1,000 GPM), quick operation, reach and penetration. A solid bore tip offers greater reach, penetration, with a more intact stream than a variable stream nozzle that is set on straight stream.
 - b. Utilize the largest smooth bore tip sizes possible on master stream devices while accounting for reach. If reach is a concern, smaller tip sizes allow for greater reach. The largest tip size should be utilized initially on the mounted master stream device, preferably the 2-inch tip.
 - c. Engine Mounted Master Streams should be considered for structures that are well involved, beyond rapid reach of attack lines, for exposure protection, and situations that pose an unusual safety risk to firefighters.
 - (1) Engine companies should be positioned to utilize their apparatus mounted master stream for well involved fires or exposure protection as they are capable of providing the most rapid high GPM stream at such incidents.
 - (2) Care should be taken not to directly impact an unsupported chimney with the master stream.
11. Early recognition of, and response to, concealed-space fires can save the structure. Failure to open up may cause loss of the structure.
12. Attack Hose Line Choice
 - a. The objective of the attack hose line choice is to provide enough GPM flow to overcome the volume of fire being produced, or adequate flow to effectively cool and protect exposures.

- b. The 1-3/4 inch attack line can be used for most small fires (i.e., one or two rooms in a residential fire). The company officer however should order 2-1/2 inch attack lines for a larger volume of fire.
 - 1. If an offensive attack is being undertaken in a residential occupancy, then a 1-3/4" fire line is an appropriate choice due the compartmentalization of the structure, small room size and to increase speed and mobility.
 - c. For fires in Commercial, Industrial or High Rise Occupancies, companies shall utilize 2-1/2" fire lines for initial fire attack. These attack lines shall be fitted with a Vindicator, 1-1/8" or 1-1/4" tip. When initial attack line is 2-1/2" for offensive operations, the second arriving Engine company shall assist the first due Engine company in advancement.
13. Basic Attack Hose Line /Placement
- a. When operating in the offensive attack mode, attack hose lines of adequate volume should be advanced inside the fire building in order to put water on the fire and to control access to halls, stairways, or other vertical and horizontal channels through which people and fire may travel.
 - b. The first hose line should be placed between the fire and persons endangered by it.
 - c. When no life is endangered, the first hose line should be placed between the fire and the most severe exposure or unburned areas.
 - d. A second hose line should backup the initial hose line.
 - e. Additional hose lines should cover other critical areas. (See Section 15 B)
 - f. Whenever possible, crews should position hose lines in a manner and direction that supports rescue activities, begins confinement, protects exposures, and controls loss.
 - g. When placing a fire line to protect an exterior exposure, it should be positioned so that the stream can be used alternately between operating on the exposure and the fire. Apply water directly to the exposed building.
 - h. When a change from offensive to a defensive operation occurs, crews should pull hand lines out of the fire building only if safe to do so. Do not delay exit from the building for the sake of salvaging a few feet of hose and a nozzle if conditions are deteriorating rapidly, unless the line is needed for crew protection during exit operations.
 - i. If fire lines need to be placed on upper floors and there are already 2 fire lines in place on the stairs, companies stretching the third fire line should consider utilizing other means (ladder, fire escape, or rope stretch). **DO NOT OVERCROWD STAIRS.**

14. Fire Stream Considerations

- a. An offensive attack mode should achieve an effect on the fire quickly--consequently, backup judgments should also be developed quickly. If you apply water to an offensive attack position and the fire does not go out--React! Back it up or Re-deploy. Think ahead! Predict where the fire is going to go and put crews in position ahead of the fire.
- b. Beware of hose lines that have been operated in the same place for long periods. Fire conditions change during the course of fire operations (most things will only burn for a limited time) and the effect of hose line operation should be continually evaluated. If the operation of such lines becomes ineffective, move, adjust, or redeploy them.
- c. Beware of the limitations of operating nozzles through holes. The mobility of such streams is necessarily limited and it is generally difficult to evaluate their effectiveness. Sometimes you should breach walls, floors, etc. to operate--realize the limitations of such situations.
- d. Have attack lines ready during forcible entry operations. Attack crews should be fully protected and supervised before forcible entry is initiated. Door control is essential in well-involved fires.
- e. Company officers and Division/Group Supervisors should assume responsibility for the effectiveness of their fire streams. These officers should 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 should be aware that nozzle diameter adjustment or nozzle tip reduction may be necessary in order to produce an effective stream.
- f. Fire streams should be pumped effectively. Refer to the CFD Pump Chart in the Drivers Manual for detailed data. Do not under pump fire lines, as limp hose and kinks will develop.

1-3/4" Fire Lines – goal 200 gpm

<u>Nozzle</u>	<u>Hose Lengths</u>	<u>Pressure</u>
15/16"	5 sections	177 psi
Vindicator	5 sections	183 psi
Orange Chief 250@50	5 sections	183 psi
Blue Chief 200@75	5 sections	183 psi

1-3/4" Fire Lines with 2-1/2" Prior – goal 200 gpm

<u>Nozzle</u>	<u>Hose Lengths</u>	<u>Pressure</u>
15/16"	5 sections 1.75" and 2 sect. 2.5"	183 psi
Vindicator	5 sections 1.75" and 2 sect. 2.5"	191 psi
Orange Chief 250@50	5 sections 1.75" and 2 sect. 2.5"	191 psi
Blue Chief 200@75	5 sections 1.75" and 2 sect. 2.5"	191 psi

2-1/2" Fire Line – goal 300 gpm

<u>Nozzle</u>	<u>Hose Lengths</u>	<u>Pressure</u>
1-1/8" Tip	5 sections 2-1/2"	107 psi
1-1/4" Tip	5 sections 2-1/2"	117 psi

- g. Ladder pipes are particularly useful and effective when operated on large open-type fires. A good general rule is that you have written off the building (or portion) when you initiate ladder pipe operations and you are essentially in a defensive mode. Ground crews should be advised before ladder pipes go into operation.
- h. When positioning ladder pipes to protect adjacent exposures (common walls) during defensive operations, the ladders turntable should be lined up with the wall to be protected, to permit the most effective operation.
- i. Do not apply water to the outside of a roof and think you are extinguishing the fire. Such water application may offer effective exposure protection; but, 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. This is particularly true of ladder pipe operations.
- j. Do not operate fire streams down ventilation holes during offensive operations. This reduces the effect of ventilation and may seriously endanger interior attack crews.
- k. Once offensive operations change to a defensive mode, Command should prioritize hand line operations. Most often, hand lines will need to be shut down to provide adequate water supply for master streams.
- l. Do not wait for the hydrant to be started to initiate water flow into fire lines. On 1-3/4" at 200 gpm, the operator has over 2 minutes of constant flow time to make supply connections. For 2-1/2" the operator will have about 1-1/2 minutes of water supply and for the deck mounted master stream the operator will have 40-50 seconds of water supply.

15. Basement Fires

- a. The **best** route to attack a basement fire is an exterior door.
- b. If **no** exterior stairs or exterior door to access the basement, “knock down” **visible** fire from an exterior window prior to attempting to enter from interior steps.
- c. If the first line in a basement proceeds through a basement door or is operated through the basement window, the second line should protect the first floor from fire extension by placing a fire line in service on the first floor. (use caution on the floor as you advance)
- d. Crews should not use fog streams when operating in basement fires. Steam production will be extensive, straight streams should be used.

16. Fire Fighting Foam – Class A Foam

- a. All Engine companies are equipped with Class A- Fire fighting foam
- b. Class A foam shall be used on all offensive, interior attack lines unless specifically instructed to not use the foam by the Company officer or Incident Commander.
- c. Class A foam shall not be utilized for defensive or master stream operations.

17. Engine Company Assignments

- a. **1st arriving Engine:**
 - (1) Secure a water supply
 - (2) Size Up the Fire (look at least 3 sides, preferably all 4)
 - (3) Position Engine as to not impede access to the structure for the Ladder Company. This is usually accomplished by pulling past the structure. Unless the apparatus mounted master stream is needed due to large fire volume or immediate exposure protection.
 - (4) Evaluate Exposures – Place exposure line if necessary or place apparatus mounted deck gun into service to protect exposures.
 - (5) Deploy the initial hose line to the seat of the fire
 - (6) Officer equipped with TIC and forcible entry tool if possible
- b. **2nd arriving Engine:**
 - (1) Secure a water supply independent of the first arriving Engine.

(2) Ensure efficient and timely stretch of the first fire line. Assure the initial hose line is properly deployed, without kinks and advancing to the seat of the fire. Assist the first Engine company if needed to get the initial hose line on the fire. **THIS IS THE MOST IMPORTANT INITIAL TASK.** During this mode of operation, cohesiveness is essential to success. Members should spread out and the company officers of both companies should communicate to ensure smooth and speedy advance.

- Generally an advance using 1-3/4" fire lines to the 1st or 2nd floor does not require the 2nd Engine company to assist; however, they should still ensure success of the first fire line before committing to other activities.
- If a 2-1/2" fire line is deployed by the initial company (due to fire volume or occupancy) then the 2nd Engine is mandated to assist the 1st Engine and remain a cohesive part of that fire attack crew.

(3) Deploy a backup hose line from the second Engine whenever possible. This will provide two independent hose lines and water supplies in the event of mechanical failure of the first Engine or hydrant. The backup hose line should usually be deployed through the same entrance as the initial attack hose line.

- Backup line should be same size or greater than the initial attack line.

(4) If the initial attack line is containing and extinguishing the fire the backup hose line may be repositioned to the floor above the fire to cut off vertical fire extension. The second due Engine company officer should communicate with the first due Engine Company Officer when going above the fire. Ensure the second hose line is of adequate length to stretch above the fire.

(5) Officer equipped with TIC and forcible entry tool if possible.

c. First and Second Engine Arrival & Assignments:

Generally the box order dictates 1st and 2nd due assignments; however if both companies arrive simultaneously and are stretching simultaneously, the first Engine with a working fire line shall be considered the 1st Engine and the 2nd Engine shall take actions according to the above procedure. (ie: assisting the 1st Engine, provide back-up, etc).

d. 3rd Arriving Engine: (For Occupancies with 3rd Engine assigned)

- (1) Lay supply line for water supply, unless ordered otherwise.
- (2) If 2nd Engine company is assisting and committed to first attack line, deploy a back-up line. Do this from the 2nd Engine or your Engine. This will provide two independent hose lines and water supplies in the event of mechanical failure of the first Engine or hydrant. The backup hose line should usually be deployed through the same entrance as the initial attack hose line.
 - Backup line should be same size or greater than the initial attack line.
- (3) If 1st fire line is in operation on the fire and 2nd Engine is in position with a back-up line, report to command on the “A” side of the building and await orders from the Incident Commander.
- (4) If ordered to, provide third attack line in one of the following modes:
 - To move past the initial attack line if its falls short
 - To move to another area of the building as directed
 - To protect search crews
 - To cover secondary exposures
 - Protect persons trapped at windows or fire escapes above the fire.
 - Protect exposures
 - Prevent vertical extension.
- (5) Officer equipped with TIC, handy line and hose strap

K. LADDER COMPANY OPERATIONS

Forcible entry, search, rescue, ventilation, salvage, and overhaul are all part of ladder company operations. Engine companies do their work with hose lines; ladder companies do their work with tools.

1. First arriving Ladder Company tasks include:

- a. Team A – Officer and Firefighter 1 (and Firefighter 3 if riding with 5)
 - (1) Force entry.
 - 1. Equipped with TIC, Halligan, Striking Tool and hooks at a minimum.
 - (2) Search fire floor for endangered persons.
 - 1. Time of day plays a critical role in search priorities. During sleeping hours a heavy emphasis should be placed on bedroom search. Limited time shall be spent in Living Rooms, Dining Rooms, Kitchens and Utility Areas. Consideration should be given to first floor bedrooms (if any). Any deviation from standard search priorities shall be communicated to command to include entry point and intended location.
 - (3) Open up and expose hidden fire after primary fire has been knocked down.
 - (4) When a Chief Officer arrives, the Officer shall advise him of conditions discovered and work performed.
- b. Team B – FAO and Firefighter 2
 - (1) Remove obviously endangered persons.
 - (2) Ventilate at roof where appropriate and only when the fire attack line is in position to put water on the fire. Ventilation should be closely coordinated with fire attack. The ventilation crew shall communicate with the fire attack line prior to venting the structure to assure the line is in position.
 - (3) Perform exterior horizontal ventilation only when the fire attack line is in position to put water on the fire. Ventilation should be closely coordinated with fire attack. The ventilation crew shall communicate with the fire attack line prior to venting the structure to assure the line is in position.
 - (4) Open up and expose hidden fire.
 - (5) Check sides and rear for endangered persons and fire extension.
 - (6) Raise ladders as needed with priority to structures with front porch roofs for second floor egress.
- c. Variance – The Ladder Company Officers should use good judgment when ordering roof ventilation by Team B. When fires are located multiple floors below the roof line in multi-level buildings, it is usually beneficial to perform other tasks or assist Team A.

2. The second arriving Ladder Company shall:

- a. Team A – Officer and Firefighter 1 (and Firefighter 3 if riding with 5)
 - (1) Equipped with TIC, Halligan, Striking Tool and hooks at a minimum.
 - (2) Search all floors above the fire for occupants and fire extension.
 - (3) Assist the first due ladder with primary search.
- b. Team B – FAO and Firefighter 2
 - (1) Remove obviously endangered persons.
 - (2) Raise Aerial to ensure alternate escape route for companies operating or potential victims.
 - (3) Assist with vertical ventilation as needed and only when the fire attack line is in position to put water on the fire. Ventilation should be closely coordinated with fire attack. The ventilation crew shall communicate with the fire attack line prior to venting the structure to assure the line is in position.
 - (1) Perform exterior horizontal ventilation only when the fire attack line is in position to put water on the fire. Ventilation should be closely coordinated with fire attack. The ventilation crew shall communicate with the fire attack line prior to venting the structure to assure the line is in position.
 - (2) Position the positive pressure ventilation (PPV) fan. The fan shall only be turned on at the direction of the IC.
 - (3) Check sides and rear for endangered persons and fire extension.
 - (4) Provide interior lighting as soon as possible
- c. Variance – The Ladder Company Officers should use good judgment when ordering roof ventilation by Team B. When fires are located multiple floors below the roof line in multi-level buildings, it is usually beneficial to perform other tasks or assist Team A.

Ladder company members should be trained to be observant and to exercise initiative. They should be encouraged to use good judgment and allowed to take actions they think necessary. However, they should remain within the Incident Organizational Structure.

- 1. **Vent Enter Isolate Search (VEIS)**- is when a Fire Company, usually a Ladder Company or Heavy Rescue Company, enters a room above or adjacent to the seat of the fire without the protection of a fire line. This is a quick search of **one (1)** room. You have approximately 60 seconds to perform this task before conditions can worsen. NOTE: Going into a structure without the protection of a hose line is extremely dangerous, especially above the fire. VEIS is the back-up plan to rescue someone when entering through a door is not an option. VEIS is most effective when pre-determined positions with specific functions have been established. The procedure requires a minimum of two (2) firefighters to be effective.
 - A. Signs and conditions found during the 360 degree walk around that would indicate the need to perform VEIS:
 - 1. There is no access to the search area from a ground floor door or stairway due to the fire conditions.
 - 2. And one of the following is observed:
 - a. Cries for help from an area.
 - b. Bystanders telling you “someone is in that room”.

- c. Moving Blinds
- d. Handprints through soot on a window.
- e. There is a reasonable high suspicion that someone is trapped in that area.

NOTE: If window is already broken from heat, the room is often too hot for someone to survive in it.

B. Identifying the VEIS positions and their responsibilities:

1. Searcher- Advances up the ladder, breaks and clears the glass from the window, enters the room, isolates the door and performs the search. The searcher should only enter the room if room conditions indicate that a victim could survive. (Note: human skin is instantly destroyed at 162 degrees F.)
 2. Point Person- Responsible for continuously communicating with the searcher while he is inside the room. Should use a TIC to monitor conditions inside the room and communicate pertinent information to the Searcher. May need to enter the room to assist in extricating the victim.
- NOTE: One or both of these Firefighters raise and place the ladder at the sill.

The procedure is as follows:

1. Perform a 360-degree walk around size-up of the building and determine that VEIS is indicated.
2. Notify Command on the fireground channel that VEIS will be implemented and the exact location the VEIS is to be performed.
3. Place ladder at the sill not through the window (don't break window yet)
4. Searcher and Point Person both "Mask-up"
5. The Searcher climbs ladder, when at sill breaks window and clears glass.
6. Observe conditions and determine survivability of a victim.
7. Clear floor below window to determine if a victim is present below the window.
8. Sound floor for stability.
9. Enter room (avoid shock loading floor).
10. Once Searcher enters room, the Point Person climbs ladder and remains at the window with a TIC. The Point Person must remain in contact at all times with the Searcher.
11. The Searcher attempts to look below the smoke at floor level, observing general floor layout and determine the location of the door.
12. Find the door and close the door (controlling the fire flow path - ISOLATE)
13. Search only this room then exit the building out the window.
14. If a victim is found; Notify Command immediately so additional personnel can assist in the extrication of the victim(s).
 - i. At this time the Point Person may need to enter the room to assist in extricating the victim.

Remember when you break the window, you have created a fire flow path. Shutting the door controls this. **Do not** attempt to leave this room and search other areas of the building

unless the fire has been extinguished. If other rooms need to be searched by VEIS then exit the building and repeat this procedure from the exterior of next room.

3. General Information for all Ladder Companies:

When holes for ventilation are made in a floor, they should be cut near a window, if possible, so that the smoke can exit through the window.

Interior lighting is imperative. Lighting can be set up by any of the Ladder Companies at any time, however the sooner the better. The RAT Company needs to consider lighting all egress routes.

Salvage should begin with the arrival of the fire fighting force. Washing down is frequently overdone. It seems incongruous that fire fighters will endure extreme punishment in getting close to a fire to extinguish it with a minimum of water, then later use much more water to wash down an area that has been overhauled. The judicious use of water provides a salvage function without a need for additional personnel.

Overhauling is a thorough examination used to make certain that a fire is completely extinguished; it begins as soon as visible fire is extinguished. Whenever possible, overhauling should be done from the interior of the building considering its structural stability. The public relations aspect of overhauling is very important to the Fire Department.

L. **Heavy Rescue Company Operations**

3. **One-Alarm Fire**

- (1) Report to Incident Commander for Assignment
- (2) If a stationary Command has not been established perform search and rescue of areas not currently searched by other companies. Update location and progress of search to avoid duplication of search efforts. Search efforts shall be focused above the fire.
As soon as practical - Make an inspection hole in the ceiling inside the building to determine type of construction, “Light-Weight” or “Dimensional Lumber”. Notify Command of findings, Benchmark #2. This should be completed while performing first assigned duties.
- (3) If needed, assist with deployment of fire attack lines.
- (4) Work with the Incident Commander to determine structural stability for overhaul activities.
- (5) Shall not be assigned as the incident Rapid Assistance Team
- (6) Assist with overhaul operations as directed by the Incident Commander
- (7) Assist with placing other companies back in service.

4. **Two-Alarm or Greater Fire**

- (1) Report to Incident Commander for assignment.
- (2) Second Heavy Rescue Company should be utilized as a RAT Assist Team on the exterior of the building if possible.
- (3) The Second Heavy Rescue Company shall position the apparatus in a manner to facilitate a rapid exit from the scene should another response become necessary.
- (4) All equipment should be procured from the first arriving Heavy Rescue Company leaving the second Heavy Rescue intact for future response.

M. **Rapid Assistance Team**

Refer to procedure 202.09 Rapid Assistance Teams

N. **District Fire Chiefs**

1. **First Arriving District Chief:**

- a. Place District vehicle to view two sides of the structure if possible
- b. Assume Command – Communicate to Dispatch
- c. Perform Size Up – include 360° survey of building if possible
- d. Assess current strategy and tactics
- e. Return to vehicle and establish a stationary Command Post at the rear of the vehicle when possible
- f. Ensure Accountability has been established and located at command
- g. Efficiently and effectively manage the incident

The Initial arriving District Chief should utilize the provided radio headset on the fire ground channel.

2. **Second Arriving District Chief:**

- a. Report to the Incident Commander to offer assistance or to receive assignment.
- b. Typical assignment of the second arriving District Chief is to manage the opposite corners or sides of the building from the initial District Chief.
- c. If the initial arriving District is a Captain riding above grade as the District Chief, the second arriving District Chief shall assume the role of the Incident Commander and reassign the Captain as the Operations Section Chief or as a Division supervisor.

O. **Medic Units:**

The primary mission of the Medic Units on the scene of a structure fire is to provide medical care for fire fighters and civilians. If there is not an immediate need upon the Medic Unit arrival to care for a firefighter or civilian injury the Medic Unit personnel shall follow the procedures below.

1. **First Arriving Medic Unit:**

- a. Place backboard, Oxygen, drug box and SCBA's on the cot and report in close proximity to the command post.
- b. Deliver Accountability Passport to the Accountability Officer
- c. Standby at the cot for assignment.
- d. Stage apparatus for rapid egress from the scene away from fire apparatus. Don't get blocked in.

2. If the Incident Commander chooses to use the Medic Unit personnel for firefighting or other duties, the IC shall immediately request another Medic Unit through Dispatch. The incident commander may utilize the Medic Unit personnel for fire ground assignments under the following conditions:
 - a. The IC has an urgent fire ground task to assign and the Medic Unit personnel are available
 - b. The second Medic Unit or ALS Supervisor is on the scene
 - c. The assigned Medic Unit may function as a single resource or be assigned to combine with another operating fire company.
 - d. Exception: If a company is working by themselves and secondary companies aren't on scene the company officer may assign the Medic Unit to fire fighting tasks if they are urgently needed to stabilize the incident, such as:
 - (1) Search for known trapped occupants and no one else is on scene or delayed.
 - (2) Protect exposures with a second fire line if no one else is on scene or delayed.
 - (3) **If deployed notify the responding District Chief on the fire ground channel and request an additional medic unit.**
3. Second Arriving Medic Unit:
 - a. Stage unit so as not to impede responding companies
 - b. Members assigned to be fully dressed in firefighting PPE. (Fire helmet shall have the Medic Unit Helmet Identifiers in place)
 - c. Place backboard, Oxygen, drug box and SCBA's on the cot and report in close proximity to the command post.
 - d. Deliver accountability passport to Accountability Officer
 - e. Standby at the cot for assignment
 - f. Stage apparatus for rapid egress from the scene away from fire apparatus. Don't get blocked in.

P. **ALS Supervisor**

The ALS Supervisor shall be responsible for the overall medical treatment and transport of all medical injuries on the fire ground.

1. Report to the Incident Commander
2. Establish the Medical Branch under the Operations Section Chief or IC
3. Deliver Accountability Passport to the Accountability Officer
4. Communicate with the responding Medic Units and establish a treatment area
5. Establish a rehab area if needed
6. Keep the IC updated with incident injuries

Q. **Incident Safety Officers (SO-1 and/or SO-2)**

The Incident Safety Officers shall be responsible for assisting the Incident Commander with overall scene safety.

1. Monitor each fire environment, post extinguishment, to advise IC of Carbon Monoxide (CO) and Hydrogen Cyanide (HCN) levels for SCBA removal. Safety and structural integrity for salvage, overhaul and investigation activities.
2. Command should be kept aware of any adjustments that affect operations, or the strategic plan, via frequent and timely progress reports.
3. The incident safety officer shall ensure that a rapid assistance team is available and ready for deployment.
4. Where fire has involved a building(s) the incident safety officer shall advise the incident commander of hazards, collapse potential, and any fire extension in such building(s).
5. The incident safety officer shall evaluate visible smoke and fire conditions and advise the incident commander on the potential for flashover, back-draft, explosion, or other events that could pose a threat to operating teams.
6. The incident safety officer shall monitor the accessibility of entry and egress of structures and its effect on the safety of members conducting interior operations
7. The incident safety officer shall monitor radio transmissions and stay alert to transmission barriers that could result in missed, unclear, or incomplete communication.
8. Ensure that the IC establishes the incident scene rehabilitation, tactical level management component during the emergency operation
9. Establishing control zones and no-entry zones and ensures that established zones are communicated to all members present on the scene.
10. The safety officer shall have the authority to cause immediate correction of situations that create an imminent hazard to personnel
11. At an emergency incident, when activities are judged by the safety officer to be unsafe and to involve an imminent hazard, the safety officer shall have the authority to alter, suspend, or terminate those activities
12. SO2 shall communicate to the IC the need for additional safety officers and/or tactical specialists due to the need, size, complexity or duration of the incident
13. SO2 monitors the Incident Action Plan, conditions, activities and operations to determine whether they fall within the criteria as defined in the department's risk management plan.
14. Shall ensure the Fire Department accountability system is being utilized.

R. Safety Engine:

The Safety Engine will be the 3rd Engine on the 1-alarm assignment and shall be responsible for establishing Accountability and assisting with RAT Operations. Dispatch will designate the 3rd Engine as the Safety Engine on dispatch. The only variance to this assignment is at the order of the Incident Commander.

1. Stage apparatus and don't commit to operations with water supply or fire lines, unless ordered to by command.
2. The Officer of the Safety Engine shall assume the duties of the Accountability Officer. (See accountability procedures 202.07)
3. One firefighter from the Safety Engine shall assist the Accountability Officer for the duration of the Incident or until relieved.
4. The Officer and Firefighter assigned to accountability shall manage the accountability board and the SCBA Air monitoring system at the District Vehicle.
5. The remainder of the individuals assigned to the Safety Engine will immediately report to the RAT Team Officer to increase the size of the RAT Team. They shall remain part of the RAT Team and under the direction of the RAT Officer for the duration of the incident. (Refer to procedure 202.09 Rapid Assistance Teams)
6. RAT Officer should consider having the additional crew members of the COMBINED RAT TEAM stage a fire line for protection and assistance with rescue efforts if needed.

S. Staff Officer Response:**1. Fire Chief and Assistant Fire Chiefs:**

The Assistant Chief on call is the Duty Chief. The Duty Chief shall monitor all special operations incidents (hazmat, river operations, mass casualty incidents, confined space, etc.) and 2 alarm fires. While monitoring, the Duty Chief will decide based on incident severity or potential incident severity whether or not to respond to the incident scene. The Duty Chief shall respond to all 3 alarm fires or greater, and/or as requested by an Incident Commander

The Fire Chief and/or Assistant Fire Chiefs shall assume one of the following positions:

- a. Senior Advisor – Allowing the Incident Commander to remain in Command of the incident and offering assistance as necessary. If the Senior Advisor outranks the Incident Commander, the Senior Advisor is still responsible for the outcome of the incident.
- b. Incident Commander –
 - (1) Assumes Command and responsibility of the incident and can assign the previous Incident Commander as the Operations Section Chief. All communications with operating Companies on the fire ground will then be channeled through Operations. The Incident Commander will monitor the Dispatch Channel.
 - (2) Assumes Command and responsibility of the incident and retains the Operations Section and reassigns the previous Incident Commander to a

Division/Group Supervisor or to another General Staff position (Planning, Logistics, and Administration).

- c. Command or General Staff position, Branch Director or Division/Group Supervisor as assigned by the Incident Commander (In this case, the IC should be an Assistant Chief or the Fire Chief)

2. District Chiefs, Captains and Lieutenants:

- a. Responding staff District Chiefs, Captains and Lieutenants shall report directly to the Incident Commander for assignment.
- b. Shall deliver Accountability Passport to the Accountability Officer.

T. APPARATUS PLACEMENT

- 5. Apparatus function should regulate placement. Effective placement should begin with the arrival of the first units, based on initial size up, pre fire plans, and general conditions upon arrival.
- 6. In large, complex, and lengthy fire ground operations additional alarm Companies should be staged.
- 7. Think of fire apparatus as an expensive exposure. Beware of putting apparatus in places where it cannot be repositioned easily and quickly. Beware of overhead power lines that may fall on apparatus.
- 8. Medic units should be placed in a safe position that will provide the most effective treatment of fire victims and firefighting personnel, while not blocking movement of other apparatus or interfering with firefighting operations. Medic Units should not get blocked in.
- 9. Engine companies should not block ladder company access, or place pumper in position that hinders removal of ground ladders.
 - a. Engines should not be placed in front of the fire building, unless the layout of the street or parking areas allows for easy access of ladder companies.
 - b. Consideration should be taken when laying supply lines to not block access for other apparatus if possible.
 - c. Engine companies should be positioned to utilize their apparatus mounted master stream for well involved fires or exposure protection as they are capable of providing the most rapid high GPM stream at such incidents.
 - d. On narrow or dead-end streets where access will be limited, Engine Companies should consider utilizing a reverse lay (Crossfire) to a hydrant past the address to allow unimpeded access for the first arriving ladder company.
 - e. The first in Engine should generally pull past the structure.
 - f. The second arriving Engine should consider approaching the scene from an opposite direction than the first due Engine to secure a water supply and then attempt to get as close as possible to the first in Engine – remaining on the same side of the street.
- 10. Truck Company Placement
 - (1) The first arriving truck company should generally position the apparatus in the front of the fire building or in a position to take greatest advantage of the

aerial ladder for rescue, ventilation or eventual ladder pipe operations.

- (2) The second arriving truck company shall place the apparatus in the best position to utilize the aerial ladder for rescue or as a secondary exit from the roof. This may require positioning the aerial on the opposite side of the building from the first arriving truck company.

11. Heavy Rescue

- (1) The Heavy Rescue should be positioned in a manner to not impede access to the scene for the first alarm Engines or trucks
- (2) Position the apparatus at the nearest cross street or on the fire street as far to one side as possible.

12. District Vehicle

- (1) The District vehicle shall be placed as close to the fire building as possible without impeding the placement of the first arriving Engine or Truck.
- (2) Good placement of the District vehicle will allow a view of two sides of the building.
- (3) Positioning the District vehicle may require parking in a driveway of a house on the opposite side of the street from the fire building.

13. First arriving companies should approach in a manner to allow visualization of at least 2 sides of the building.

U. STAGING

Level 1 Staging – First alarm companies shall position the apparatus as described in Section T – Apparatus Placement for all one alarm fires or fire protection system alarms. When no signs of fire are apparent the first arriving Engine and Truck shall investigate and later arriving companies shall remain with their apparatus.

Level 2 Staging – An area away from the incident scene to position apparatus until requested to respond into the emergency scene by the Incident Commander. The Staging Area shall be far enough away from the incident as to not impede fire operations. All Companies responding on the Second Alarm or greater will first respond to Level 2 Staging unless otherwise directed by the Incident Commander. The Officer of the first arriving Company in Staging shall assume the role of the Staging Officer until relieved of these duties usually by a responding staff officer.

Staging Officer Duties:

1. Determine suitable location for staging area
2. Notify Command Staging has been established
3. Position apparatus in a conspicuous location and keep all warning lights on to designate the location of the staging officer.
4. Determine configuration to efficiently position incoming apparatus.
5. Maintain the staging area worksheet
6. The staging officer shall determine which companies respond from staging to the scene.

Companies arriving in Level 2 Staging:

1. Turn all emergency lights off.
2. Company officer ONLY shall report to the staging officer to notify the staging officer of the company's arrival. All other fire fighters shall remain with the apparatus at all times. Do not wander away from the apparatus.
3. All companies to communicate on the staging channel

V. Communications:

Depending on the size of the emergency, several tactical radio channels may be in use. Incident Commanders should consider utilizing a fire company to monitor each tactical channel in use on the emergency scene. Each member of the company can monitor a separate radio channel and relay pertinent information to the Incident Commander.

X. THE HEALTH DEPARTMENT SHALL BE NOTIFIED BY THE OFFICER IN CHARGE WHEN FIRES OCCUR IN THE FOLLOWING ESTABLISHMENTS:

Dairies
Ice Cream Plants
Food Processing Plants
Day Care Centers
Groceries, Meat Markets, and other food establishments
Food Warehouses
Restaurants
Bars
Homes for Adjustment (Halfway Houses)
Marinas
Nursing Homes
Schools

The Fire Alarm Office should be told by radio that the fire is in an establishment regulated by the Health Department and to notify them of same, giving as much information as possible regarding the fire and its impact on the food serving/selling capabilities of the establishment.

It is the responsibility of the Health Department representative to decide if he/she will respond to the scene or follow up the next working day, if the fire occurs after regular business hours.

The Fire Alarm Office has twenty-four (24) hour call up numbers for Health Department representatives.

It is not necessary to remain on the scene once notification has been made to the Fire Alarm Office. The Health Department representative may call you by telephone at the scene or upon return to quarters for details of the fire, if necessary.