



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

COMMAND FUNCTION #4 – STRATEGY & INCIDENT ACTION PLANNING

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I. MATCHING STANDARD CONDITIONS TO STANDARD ACTIONS FOR A STANDARD OUTCOME

This is the core of the command system and the launching pad for all operations. Standard conditions are identified as the incident's current critical factors (Function 3 Size-Up). We must:

- Identify the incident's critical factors before taking any action.
- Our initial and ongoing size-up of the incident's critical factors must produce the information that becomes the basis for the current incident strategy and incident action plan (IAP).
- Current, accurate and relevant information provides the informational foundation for effective initial and ongoing action.

This systematic evaluation process continually produces standard, safe, well-managed incident outcomes.

II. STRATEGIC DECISION-MAKING MODEL

The strategic decision-making model gives the entire organization an evaluation/action system that takes the mystery out of initial emergency operations. This model brings the decision-making process into a standard sequence: First we identify the incident's significant critical factors, and then we base all actions on our evaluation of those factors. By continually evaluating those factors, we keep the plan current and the workers safe.

We must use a standard evaluation approach and incident-management system to develop and conduct our operations around the incident's critical factors. Critical factor management is detailed in Command Function 3 – Situation Evaluation (size-up).

III. RISK MANAGEMENT PLAN (RMP)

Fireground operations will fall in one of two strategies, Offensive or Defensive. These two strategies are based on a standard Risk Management Plan that is to be employed on ALL IDLH hazard zones.

The following Risk Management Plan (RMP) will be used at all times whenever a hazard zone exists:



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

- We will risk our lives a lot, to save savable lives
- We will risk our lives a little, to save savable property
- We will NOT risk our lives, at all, for lives or property that are already lost

The above three levels of risk can only be assumed in a highly calculated and controlled manner. Highly calculated and controlled refers to effective application of department MOPs, training, and the safety systems (PPE, radios, apparatus, water, etc.) that must be used/followed at all times, in order to take any level of risk.

We must always begin our operational response with the assumption that we can make a difference for our customers by conducting standard incident operations. Our risk-management approach is based on us always conducting operations within standard operational and safety SOPs.

Rescue operations in the hot zone are the only place where, based on the possibility of saving a threatened customer, the RMP allows workers to take a significantly higher level of risk. High rescue mode operations are based on a deliberate situation evaluation, a conscious decision by the IC, and the continual application of the MOPs.

The offensive/defensive strategy should again be re-evaluated and re-declared after an “all clear” has been achieved. Both are critical decision points for the IC.

IV. DETERMINE THE OVERALL INCIDENT STRATEGY

An IC properly managing the incident’s strategy has the #1 – GREATEST overall impact on responder safety.

Overall operational strategy is divided into only two categories: Offensive or Defensive.

- Offensive operations are conducted inside a hazard zone
- Defensive operations are conducted outside of the hazard zone - in safe locations

The two separate strategies create a simple, understandable plan that describes in primitive terms how close the emergency responders will get to the incident’s hazards.

The incident’s overall strategic decision is based on the incident’s critical factors weighed against the RMP.



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

IC's must avoid taking unnecessary risks to save property when our members are the only life safety threat in the hazard zone.

Do NOT combine Offensive & Defensive operations in the same fire area.

V. DECLARE THE INCIDENT'S STRATEGY AS PART OF THE INITIAL RADIO REPORT (IRR)

Declaring the incident strategy up front, as part of the initial radio report will:

- Announce to everybody the overall incident strategy.
- Eliminates any question on where we will be operating on the incident scene (inside or outside the hazard zone).

VI. USE THE INCIDENT ORGANIZATION & COMMUNICATIONS TO IMPLEMENT THE STRATEGY/IAP

Incident operations begin under control and stay under control when everyone operates within the incident management system and the overall strategy.

The IC uses the radio to manage incident operations. This starts with the initial radio report where the initial strategy is declared. Subsequent arriving units who Level 1 stage are given specific task, location and objectives in their assignments. Once in place, these units will report back to command the conditions in their assigned area. These actions connect everyone together on the incident site and help the IC manage the proper strategy based on the current conditions.

The IC controls evolving operations by decentralizing the hazard-zone when assigning S/D responsibilities. S/D officers operating in forward positions give the IC the following strategic advantages:

- They control access into and out of the hazard zone based on the current strategy.
- They usually have a better view of conditions in their SDG than the IC.
- They are in a much better position to directly manage the safety in their SDG.

The IC provides the sector/division (S/D) officers with the overall strategy and objectives for their area. This becomes the starting point for conducting operations within that S/D. As progress is made, objectives are met or conditions change (good or bad), the S/D officer reports this information to the IC.

The IC must process reports from all the operating S/D's to continually manage both the overall incident strategy and the corresponding IAP.



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

VII. STANDARD COMPANY FUNCTIONS

Standard company operations assign basic fireground functions and activities to companies based upon the capability and characteristics of each type of unit.

Standard company operations assign fireground functions to the particular company who can best accomplish the task/operation.

Standard company operations integrate the efforts of Engine and Ladder companies to effectively complete the chosen strategy's tactical priorities.

Standard company operations should reduce the amount of detail in the orders from the IC that is required to get companies into action on the fireground. This greatly reduces radio traffic.

The following items represent the standard operations that will typically be performed by Engine and Ladder. These basic functions will provide the framework for field assignments for these companies:

Standard Engine Company Functions:

- Establish a water supply
- Stretch hoselines
- Operate nozzles
- Search, rescue, and treatment
- Open up concealed spaces
- Deploy ground ladders
- Pump supply lines
- Supply master streams
- Loss control activities

Standard Ladder Company Functions:

- Search, rescue, and treatment
- Ventilate
- Forcible entry
- Raise ladders
- Provide access/check fire extension
- Utility control
- Provide lighting



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

- Deploy aerial devices
- Operate ladder pipes (aerials and platforms only)
- Perform overhaul
- Extrication
- Loss control activities

Every company will be expected to perform all basic functions safely within the limits of their capability, and it will be the on-going responsibility of Command to integrate company tasks and objectives as required with the on-scene units.

VIII. STRATEGIC LEVEL WATER SUPPLY CONSIDERATIONS

Command is ultimately responsible for managing attack positions in either offensive or defensive locations. The key to effective attack positioning is WATER. Water not only extinguishes the fire, it protects firefighters from the lethal products of combustion.

The IC must have an acute awareness of the following water supply factors:

- The required fire flows for the incident
- What are the projected fire flows we can actually produce
- Do we have enough water to safely extinguish the fire
- Where is the water supply coming from
- Are the key tactical areas adequately supplied with water
- What units have/need a water supply
- How many handlines can the supplied pumper(s) charge and pump
- How many large diameter openings can the supplied pumper(s) charge and pump
- Is there a need for pumped supply lines

When assigning an Engine Co. (pumper) to deploy and operate a handline(s) in the hazard zone, it is very important for the IC to specify what to do with the units apparatus and where their handline and/or water supply comes from. This manages attack positioning and prevents un-necessary congestion around the incident scene.

IX. FORWARD & KEY PUMPERS

A Forward Pumper is defined as: A pumper that is located in one of the primary, forward attack positions on the fireground where equipment, hose and water are deployed off of the pumper, directly into or around the hazard zone.



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

*Note: The Forward Pumper reference is geographic and functional in nature and DOES NOT imply that the attack position has an uninterrupted water source. IC's must maintain an awareness of all Forward Pumpers water supply status.

A Key Pumper is defined as: A pumper that makes a direct hydrant connection into the Key Pumper's intake valve and then "pumps" the Forward Pumper's supply line. This overcomes all of the friction loss in the supply hose (up to 1,000 ft) and it delivers the max GPM possible from the hydrant to the forward pumper (up to 2,000 GPM using 5" LDH).

X. PRESSURIZED WATER SUPPLY

Lines must be laid with consideration for the access problems they can create. Always lay supply lines along the side of the roadway that the hydrant is located on and cross over at the fire scene if necessary.

Max speed when laying supply lines is 10 mph. Faster speeds result in excess hose on the roadway and the possibility of hanging up a supply coupling in the hose bed. Slower speeds also provide several advantages:

- Reduces the risk of striking pedestrians, spectators, vehicles or other apparatus and firefighters working at the scene
- Provides time for the Company Officer to size-up and evaluate the critical fire ground factors
- Provides time for the Engineer to safely and appropriately spot the apparatus into forward/key positions

First due companies approaching the scene with any evidence of a working fire in a structure should consider laying their own supply line in an area containing hydrants whenever possible. Exceptions to this guideline may include:

- Obvious critical rescue requiring a full crew
- Unsure of actual fire location in multi-unit building complex
- Hydrant within 200 feet of the fire
- Booster tanks over 1,000 gallons

Key tactical positions should be identified and Forward Pumpers should be placed into those locations early on in the operation with a strong water supply. The Forward Pumpers can then distribute this water supply to a variety of hand lines, appliances, master streams or FDC's.



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

Fire hose soon limits the general access as the fireground operation gets older. Command must direct apparatus to important positions as early as possible. Take full advantage of the hydrants closest to the fire area before laying additional supply lines from distant hydrants.

Secondary hydrants should be used to obtain additional supply if the demand exceeds the capability of the closest hydrants. Shared mains must also be considered when opening up secondary hydrants. These actions could reduce the water available to the Forward Pumpers in good tactical positions. Many times, pumped water is the best option to increase flows.

Take advantage of the equipment on apparatus already in forward attack positions instead of bringing in more apparatus. Connect extra attack lines and appliances to forward pumpers which already have a good water supply instead of making "daisy chain" supply line connections which congest the scene.

Do not hook up to hydrants located so close to the fire building that structural failure or fire extension will jeopardize the water supply or the apparatus.

XI. STRATEGIC LEVEL ATTACK LINE CONSIDERATIONS

When operating in the offensive strategy, attack hose lines of adequate volume should be used to put water on the fire, to control access to through doors, halls, stairways, or other vertical and horizontal channels through which people and fire may travel.

- All initial efforts must be directed towards controlling the fire.
- These actions must support rescue efforts and hose lines must be placed in a manner to control interior access, confine/control the fire, and protect avenues of escape.
- Water should be applied to the fire as quickly as possible. Many times it is much quicker and safer to apply water on the fire through outside horizontal openings using a straight stream or smooth bore nozzle. This is especial true for fires that are visible on upper floors or higher elevations.
- Additional hose lines should cover other critical areas or when covered, back up in place hose lines if requested.
- In situations involving larger structures, additional hose lines should be deployed to protect secondary means of egress (always consider the presence of personnel operating in opposing positions).



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

- No uncharged hoselines past the entry point of the structure. All hoselines entering the hazard zone must be charged and have an adequate enough stream to protect entry crews.

An offensive attack should achieve an effect on the fire very quickly once it's in place and operating. Consequently, backup plans should be developed quickly. If you apply water to an offensive attack position and the fire does not go out – react quickly. Back it up or re-deploy to a more effective position.

Predict where the fire is going to go and put crews in positions ahead of the fire. This is especially true when fighting fires in compartmentalized structures such as strip malls, apartments or any compartmentized structure with a common attic.

Beware of hose lines that have been operated in the same place for long periods. Fire conditions should change during the course of fire operations (better or worse) and the effect of hose line operations must be continually evaluated by the IC. If the operation of such lines becomes ineffective, move, adjust, or redeploy them.

A well placed IC is in the best position to evaluate the overall effectiveness of the fire attack, while interior crews are sometimes in the worst position to evaluate their effect on the fire. Command must continually compare interior control reports to what they can see from the command post (CP). Whatever the IC sees with their own eyes from the CP must trump all other interior reports of “we’re getting it,” when fire conditions haven’t changed for the better.

Company Officers and S/D Officers must assume responsibility for the effectiveness of their fire streams. These officers must maintain an awareness of where fire streams are going, their effectiveness and then report the general operational characteristics back to the S/D Officer or Command.

Command must avoid backing up handlines that are already in place when operating crews don't request back-up when providing CAN reports. Always ask a company if they require back-up before backing them up.

XII. FIRE STREAM CONSIDERATIONS

Fire control forces must consider the characteristics of fire streams and choose the most effective nozzle/stream for the task:



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

- Smooth bore nozzles: Greater penetration, reach and striking power. Less steam conversion.
- Fog nozzles: Increased heat absorption/expansion. Shorter reach. Most effective in confined spaces and protecting exposures.

Choose the proper sized attack line:

- 1-3/4" Lines: Fast, mobile, good volume, 150-200 GPM
- 2-1/2" Lines: Slow and difficult to advance and move once charged and flowing, 200 – 300 GPM
- Elevated Master Stream: Slow to set up – maximum water, 500 to 1,000 GPM
- Engine Mounted Master Streams: Fast to set up, large volume, great reach and penetration, 500 to 1,000 GPM

Offensive attack activities must be highly mobile—as mobility is slowed, attack activities begin to become more defensive in nature and effect.

XIII. TACTICAL PRIORITIES

Once the overall incident strategy has been determined, the IC must manage the completion of the tactical priorities for the chosen strategy. Each strategy has a different set of tactical priorities to complete.

Tactical priorities provide the IC with a simple, short list of major categories that act as a practical 1-2-3 guide during the difficult initial stages of fireground planning. The IAP must be short and simple; complicated IAP's tend to break down during this critical time.

Generally, the IC tries to achieve the same basic objectives from one incident to the next. Tactical priorities offer a regular set of "hooks" on which the IC can hang tactical activities in order to develop a standard approach to solving incident problems. With this standard approach, the IC can manage the basic work sequence at every incident, in the same manner. This creates consistency the troops can understand and dependability that continually creates standard actions to the current conditions.

XIV. OFFENSIVE INCIDENT ACTION PLANNING

When an incident's critical factors and the risk-management plan indicate the offensive strategy, firefighting forces will enter the structure (hazard zone) to attempt to control the incident hazards. An offensive IAP is based on the standard offensive tactical priorities.



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

Offensive Strategy Tactical Priorities and their corresponding completion benchmarks:

- Fire Control (F/C) – “Under Control”
- Life Safety – Primary and Secondary “All Clear(s)” (A/C)
- Property Conservation – “Loss Stopped” (L/S)
- Customer Stabilization – Short term

The offensive tactical priorities establish the major operational activities required for a complete, integrated effort, and they identify the three major functions we must complete to establish the overall incident response.

XV. OFFENSIVE SEARCH AND RESCUE OPERATIONS

One of the major tactical priorities to accomplish as early as possible in the event is to search for and remove any savable, endangered occupants in the hazard zone, and to protect any customers exposed to the incident’s hazards.

For offensive structural fires, we achieve the life-safety priority by performing primary and secondary searches in the fire occupancy and in any exposures threatened by the fire.

Primary All-Clear is defined as: a quick search and clearing of all affected areas of the structure(s).

Secondary All-Clear is defined as: a much more thorough, methodical search of the affected areas of the structure(s) once the conditions in the structure have been completely controlled.

The IC uses the standard rescue order to prioritize and manage these searches. The rescue order is the standard order that we use to search a hazard zone:

1. The most endangered
2. The largest group
3. The remainder of the fire area/structure
4. The exposures

We initiate the completion of the offensive tactical priorities by companies advancing attack lines to the interior of burning structures. This fulfills the Rescue Order by:

- Advancing initial lines directly to the most hazardous area of the building—the burning part – places crews in the same area as to the most endangered group.



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

- Initial interior crews will be searching and protecting the same corridors that the occupants in the building would use to evacuate.
- The hand line protects FF's, it starts to control the problem, and it gives the search operation an "anchor point" to clear the rest of the structure from.
- All initial attack efforts must be directed toward supporting rescue efforts and hose lines must be placed in a manner to control interior access, confine/control the fire, and protect avenues of escape.

The IC is responsible for assigning all incident resources in order to achieve a quick and effective primary search of the affected structure(s). The IC must assign companies to search specific geographical areas of structure. This eliminates searching the same area multiple times, while other critical areas remain unsearched.

The most urgent reason for calling additional alarms is for the purpose of covering life safety. Command must develop a realistic (and pessimistic) rescue size-up as early as possible.

When encountering larger, high density, compartmentized, multi-unit/room residential structures, it is often more effective to implement a "protect in place" life safety operation as opposed to removing multiple people from a structure who are not directly exposed to the incident hazards. These actions should:

- Secure and protect normal means of egress
- Search and clear the immediate areas of involvement
- Contain, control and eliminate the incident problem
- Remove the products of combustion
- Systematically clear the remainder of the fire area/exposures

When primary search companies encounter and remove victims, Command must assign other companies to continue to cover the interior search positions vacated by those companies. Command must also request and provide the necessary medical resources to treat any patients encountered on the incident site.

Command must obtain Secondary All Clears of all affected areas once the first 3 tactical priorities have been achieved.

Completed Primary and Secondary searches of the entire structure shall be announced over the tactical channel using the order model to Novi Dispatch.



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

IC's shall avoid giving piece meal primary all clear reports over the tactical channel when multiple areas of a structure require a search.

Many time, occupancy type will drive the IC's search priorities. Residential occupancy types must have a high life safety focus because these structures can be occupied 24/7/365. Strip mall, commercial and big box fires have a much lower life safety hazard and all initial actions should be directed towards putting water on the fire unless there is credible information of survivable occupants inside of the hazard zone.

Primary All Clears should not be given on large, wide area commercial structures where search operations would require the efforts of several companies on the initial alarm. Again, all initial actions should be directed towards putting water on the fire and ventilating the structure unless there is credible information of survivable occupants trapped inside the hazard zone.

Search and Rescue rules of thumb:

- The 1st handline should put water directly to the fire for firefighter safety and to support completing primary and secondary searches.
- In working situations, "All-clears" must be obtained for all residential occupancy types.
- Smaller sized occupancies will accommodate a more rapid search.
- Larger sized commercial occupancies – all initial efforts directed towards fire control.
- A TIC's primary use is for S&R and crew accountability – use it every time.
- All personnel working in the hazard zone must either bring in their own handline or work under the protection of a handline located in their same geographic location while performing search operations.
- Once "All-Clears" have been gained in operational areas, the IC must constantly consider that we are the only life safety threat in the hazard zone.

XVI. OFFENSIVE FIRE CONTROL OPERATIONS

The IC manages this tactical priority by getting companies around all 7 sides of the fire and overwhelming it with water. The 7 sides of the fire are:

- The interior/inside
- The top (includes ceilings, joist spaces, attics, and floors above)
- The bottom (includes the floor below, crawl spaces, joist spaces and basements)



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

- All four sides (includes adjacent rooms, occupancies, or other buildings) and the concealed spaces of all those sides (includes walls, joists, attics, utility chases, void spaces, build-over's, etc.).

The term "Working Fire" indicates a situation that will at least require the commitment of all responding companies. This report advises dispatch that the companies will be engaged in tactical activities and will be held at the scene for an extended period of time.

When the forward progress of the fire is stopped and no other resource is required for fire control, the IC will transmit an "Under Control" radio report signifying that the fire control tactical benchmark has been obtained and no further resource will be required to mitigate the problem.

Rules of thumb to apply when addressing the fire-control tactical priority:

Always establish an early, uninterrupted water supply for interior fire-suppression activities.

- Consider mobility vs. gpm when selecting the properly sized hose line.
- The highest priority during initial operations is putting water on the fire
- Water should be applied to the fire as quickly as possible.
- The initial interior hoseline should be placed between the fire and the most severe exposure (people or property).
- In most instances, the fire should be cut off and contained/knocked down to facilitate search and rescue activities and firefighter safety.
- All members in the hazard zone must be working under the protection of a hoseline in their immediate geographical area.
- Interior work times must be tied to SCBA air supplies, and the decision to exit the structure must be based on exiting with an air reserve of 25%.

Command must not focus only on what is on fire. 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 activities and requirements.

Command must consider the most critical direction and avenues of fire extension, plus the estimated speed of a standard fire progression, particularly as they affect:

- Rescue activities
- Level of risk to fire fighters



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

- Confinement efforts
- The concealed spaces that house the structures support elements
- Exposures

Command must request and allocate adequate personnel and resources based upon this fire spread evaluation.

Command must direct whatever operations are required to get water on the fire as early as possible in the event. The rescue/fire control-extension/exposure problem is solved in the majority of cases by a fast, strong, well-placed attack that puts water on the fire as soon as possible.

Command must make critical decisions that relate to cutoff points and the development of a pessimistic fire control strategy that must also consider where the fire will be when attack efforts are ready to actually go into operation. It takes a certain amount of time to get water to a location, and the fire will continue to eat up property while the attack is being set up.

Don't play "catch up" with a fire that is burning through a building. Project your set-up time, write off lost property and get ahead of the fire to adequately overpower it.

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.

Command must balance and integrate attack size and position with fire conditions, risk and resources. All initial attack efforts must be directed toward putting water on the fire and supporting rescue efforts. Interior hose lines must be placed in a manner to control interior access, confine and put out the fire, and to protect avenues of escape.

Normal means of egress most often times will give control forces the fastest access possible to apply water on the fire while protecting these avenues of escape for occupants and firefighters.



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

In some instances (upper floor occupancies with long handline stretches) it may be faster using alternate means of egress to apply water on the fire (ground ladders, aerial devices, fire escapes, drop bags, etc.). When using alternate means of egress to quickly put water on the fire, command as soon as possible, must cover and protect the normal means of egress for both the occupants and firefighters to safely utilize.

XVII. OFFENSIVE LOSS CONTROL OPERATIONS

All loss control operations start with putting the fire out. All three organizational levels must constantly remain aware that all of our actions are designed to protect savable property and control loss (from response to leaving the scene).

After achieving fire control, we must direct all efforts on the incident scene toward controlling and preventing any unnecessary property damage. These efforts fall into 2 categories:

- Overhaul
- Salvage

Once the fire is controlled and knocked down, a loss-control plan should be developed to describe how salvage and overhaul will be performed for the specific incident.

Overhaul

The goal of overhaul is to reduce the incidence of secondary fires, control loss, and stabilize the incident scene while providing for firefighter safety. Overhaul activities include thoroughly searching the fire scene to detect and extinguish any hidden fires or "hot spots".

Effective overhaul activities reduce the potential for secondary fires. When addressing overhaul operations, the IC should:

- Insure overhaul is conducted safely.
- Insure proper PPE is worn for the conditions
- Ensure allied overhaul and salvage equipment are utilized when necessary.
- Insure all fire is extinguished by addressing the 7 sides
- Ensure at least two firefighters with a charged hoseline remain in the fire area to detect any possible hidden fire and re-ignition during the overhaul phase of the operation.
- Use early and continuing positive pressure ventilation when appropriate to maintain an acceptable working environment and reduce loss.



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

- Fire companies must evaluate and monitor conditions when operating fans.
- Meet with the property owner/occupant concerning overhaul operations.
- Closely coordinate overhaul with fire investigators.

Suppression crews should open up as many of the construction voids that were exposed to fire as possible.

Floor, wall or ceiling areas showing evidence of extensive decomposition due to fire exposure should be thoroughly examined during overhaul.

Plenum spaces, soffits and pipe chases should receive careful inspection as they provide possible routes for fire to spread throughout a structure.

Attic fires can pose a special hazard for secondary fires where insulation has been exposed to heat and fire. Large areas can receive fire damage and can be located in difficult to reach areas. In some cases, all exposed insulation must be removed to extinguish all remnants of any possible fire. This is especially true with cellulose insulation.

Removing insulation in many cases means the removal of large sections of the ceiling. If possible, areas unaffected by fire should have their contents covered or completely removed from the area before pulling the ceilings down to overhaul the attic fire.

Salvage

Salvage includes the activities required to stop direct and indirect fire damage in addition to those required to minimize the effects of firefighting operations. This includes losses from water, smoke and firefighting efforts.

Salvage operations must be aimed at aggressively controlling loss by the most expedient means. Salvage objectives are:

- Stop or reduce the source of damage
- Protect or remove contents

Command will provide for salvage at all fires or other incidents posing potential damage to property.



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

Salvage operations most often involve early smoke removal and covering building contents with salvage covers or plastic. In some cases, the contents of threatened areas, where appropriate, can be removed to a safe location. When removal is not practical, contents should be grouped in the center of rooms, raised off of the floor and covered to provide maximum practical protection.

The following items should be considered when addressing salvage:

- Type, value and location of contents
- The extent and location of the fire
- Recognition of existing and potential damage sources
- Estimate of required resource

Salvage efforts should begin in areas most severely threatened by damage. In most cases that will be areas directly adjacent to or below the fire area. Additional salvage activities should expand outward until all areas of potential loss are secured.

All firefighting activities have the potential to damage property and contents. The key to successful salvage is to distinguish between excessive damage, and damage that is required to reduce potential fire damage. All members must avoid creating excessive damage to the structure. The best philosophy to follow is to treat every home you respond to as if it is your home. Only do what's necessary to stop loss.

XVIII. DEFENSIVE INCIDENT ACTION PLANNING

A defensive situation is where the incident problem has evolved to the point that lives and property are no longer savable, and offensive tactics are no longer effective or safe. The entire defensive strategy is based on protecting firefighters.

Firefighter safety is the No. 1 defensive priority. No firefighter should be injured on a defensive fire.

Defensive Strategy Tactical Priorities and their corresponding completion benchmarks:

- Define the Hazard Zone
- Establish Cut-offs – Forward progress stopped
- Search exposures - Primary and Secondary “All Clears” – A/C’s
- Protect exposures - “Fire Control” - Loss Stopped



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

Defensive operations represent a standard organizational response to situations that cannot be controlled with offensive tactics. When conditions go beyond the safety systems required for interior operations, the IC must conduct defensive operations from outside of the hazard area. The IC must write off lost property and decide where the cut-off will take place (if there are exposures).

If defensive operations are conducted from the onset of the incident, Command must notify Novi Dispatch that there will not be a primary search completed for the involved structure(s).

During defensive campaign operations, the IC will coordinate the rotation of crews through Dispatch & Deployment.

Basic Defensive IAP

- Identify critical fireground factors
- Quick determination on additional resource
- Evaluate fire spread/write-off lost property
- Search exposures
- Protect exposures
- Prioritize fire streams, provide big, well placed streams, pumped water
- Surround and drown

XIX. TRANSITIONING FROM AN OFFENSIVE STRATEGY TO A DEFENSIVE STRATEGY

When the offensive strategy is chosen on our initial arrival, most of the time, a well placed initial attack solves the incident's problem. But there are many times (for many reasons) that our initial, and sometimes re-enforced attack efforts, do not solve the incidents problems and conditions continue to deteriorate to the point where the critical factors indicate switching from an offensive to a defensive strategy.

IC's must be very pessimistic in these types of situations, especially if the structure has a primary "All Clear". Command must change strategies before the building is disassembling itself due to structural damage. When this happens, Command is very late in the strategy shift and on the receiving end of the building's decision governing the new strategy. The IC must be the single person to make the defensive decision, NOT the building coming apart.



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

The announcement of a change to a defensive strategy will be made as follows:

- Announce to all hazard zone units:
 - Shifting to the Defensive Strategy
 - All Unit's "Exit" or "Abandon" the structure
 - All Units report PAR's upon exit

"Exit the Structure" will be defined as: an orderly withdrawal where interior lines and equipment will be withdrawn and repositioned when changing to a defensive strategy.

"Abandon the Structure" will be defined as: an emergency retreat where all hoselines and heavy equipment will be left in place and all members in the hazard zone will exit the structure as quickly and as safely as possible.

A PAR (Personnel Accountability Report) shall be obtained for all units exiting the hazard zone after any switch from an offensive to a defensive strategy.

Commands greatest priority once a strategic shift has been initiated is the safe exit of all units located in the hazard zone. Level 1 Staged units and other units working outside of the hazard zone shall maintain radio silence until all PAR's have been tallied (unless they have emergency or high priority traffic).

Company officers will account for their crews and advise their S/D Officer or Command on the status of their crew upon exiting.

S/D Officers will notify Command of the status of the individual crews assigned to their S/D upon their exit.

XX. EXPOSURE PROTECTION – STRATEGIC SEPARATION

Arrangement becomes a major critical factor with defensive fires. The way the main fire compartment/area is arranged to its neighboring exposures will dictate our operating positions on a defensive emergency scene.

All exposures, both immediate and anticipated, must be identified and protected. The first priority in defensive operations is personnel safety; the second is exposure protection.

Stand alone buildings with no significant exposures must have the collapse zone identified and all operating units will remain behind those defined boundaries —this perimeter must not be crossed.



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

One thing that greatly reduces firefighters' "creeping" toward the fire area is shutting down all small-diameter handlines (unless they are being used to directly protect exposures). This also diverts that water into master-stream devices that can apply large amounts of water directly on the fire and the exposures.

Many times, a defensive fire area will threaten exposures. These can be immediate exposures that directly connect to the fire area (apartments and strip malls) or they can be located in very close proximity to the fire area with little separation.

All direct exposures not in the defensive fire area must be searched and protected whenever possible. This exposure protection involves:

- Advancing handlines into the exposure(s).
- Clearing the exposure(s).
- Opening up and verifying the concealed spaces directly exposed to the defensive fire conditions.
- In some cases, direct water application to stop the lateral spread of fire.
- In some cases, once extension is verified, write off and move to the next exposure to get ahead of the fire.
- In some cases it will be necessary to write off the entire exposure(s) due to rapid fire extension through common concealed spaces.

Command must be very specific on separating the two (2) operating positions (Defensive vs. Offensive). The IC's radio traffic when operating in the overall defensive strategy, while being offensive in the exposures, should sound like this; "Command to all units; we will be operating in the defensive strategy on the main fire occupancy and we'll be offensive in the Bravo 1 and Delta 1 exposures".

XXI. DEFENSIVE WATER APPLICATION

Rules of thumb for defensive water application:

- Master streams are generally the most effective tactic to be employed in defensive operations.
- Command must consider the effectiveness of aerial water application vs. ground operated master stream devices.
- A standard master stream flow of 750 GPM should be the guideline for all master stream flows.
- Small diameter handlines not directly protecting exposures should be shut down.



SOUTH LYON FIRE DEPARTMENT

Manual of Procedures 428

- When the exposures are severe and water is limited, the most effective tactic is to put water directly on the exposure.
- Once exposure protection is established, attention may be directed to knocking down the main body of fire and thermal-column cooling.
- In the defensive strategy, fire under control means the forward progress of the fire has been stopped and the remaining fire can be extinguished with the current on-scene resources; it does not mean the fire is completely out.

XXII. DEFENSIVE LOSS CONTROL

No member shall enter the hazard zone of a defensive fire. Any structure that has defensive fire conditions over a short period of time shall not be entered by any personnel to perform any overhaul or loss control of any kind.

Loss control activities in the offensive exposures of a defensive fire will follow the same procedures as offensive loss control activities.

Chief Mike Kennedy

Approved by

Rescinds:

Manual of Procedures, 406 Incident Command System (February 19, 2012)