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| **BLANK FIRE DEPARTMENT Standard Operating Guideline X-X**  **Structure Fires: Incident Command, Accountability, Mayday**  **Effective Date: XX-XX-XXXX Revised: XX-XX-XXXX** |

**PURPOSE:** This SOG provides incident command, accountability, and mayday operational guidance for structure fires and attempts to strike the balance between firefighter safety and operational effectiveness.

**RESPONSIBILITY:** All members that operate at incidents are responsible for understanding and following this SOG. Incident commanders, command team members, and company officers must operate in accordance with this SOG and ensure appropriate supervision and enforcement.

**Risk vs. Benefit. Speak up. Do not assume. Supervise members. Enforce SOGs.**

PERFORM PRE-ARRIVAL SIZE-UP

* Gather information from dispatch, verify mapping & water sources, check pre-plans, etc.
* Evaluate current response capabilities and needs.
* Request resources (fire, police, EMS, utilities, support) as appropriate.

PERFORM INITIAL ON SCENE SIZE-UP AND PROVIDE INITIAL RADIO REPORT

* Officer of first arriving unit is incident commander (IC) until transfer/termination of command.
* Initial radio report: building address & description, problem, initial actions, assume & name command.
  + Consider S.H.O.P.S model: Size, Height, Occupancy, Problem, Strategy.
* Request resources (fire, police, EMS, utilities, support) as appropriate.

CONTINUE COMPREHENSIVE SIZE-UP

* Unless there is a visible victim in danger, slow down, gather, and understand critical information.
* Ask building occupants or witnesses about life safety status, what happened, building layout/hazards.
* Perform/obtain 360 (if possible) to look for victims, observe conditions & hazards, check for basement.

REVIEW PRIORITIES AND DYNAMICALLY ASSESS RISK

LIFE SAFETY → Incident Stabilization → Environmental Protection/Property Preservation

RESCUE → Exposures → Confinement → Extinguishment → Overhaul Ventilation/Salvage

* Is the risk to firefighters entering the building worth the benefit? If not, go defensive.
* Presume there is a basement (fire) until proven otherwise (**DANGER**: risk of floor collapse).
* Identify situations/occupancies requiring special tactics & considerations (Appendix A).

PROVIDE FOLLOW-UP RADIO REPORT AND IMPLEMENT ACTION PLAN

* Follow up radio report: 360/no 360, occupant status, basement status, declare mode (offensive/defensive), assignments, fireground radio channel, staging location, command post location.
* Request resources (fire, police, EMS, utilities, support) as appropriate.

**UTILIZE COMMAND BOARD OR TACTICAL WORKSHEET**

BUILD COMMAND TEAM BASED INCIDENT SIZE AND COMPLEXITY

* Provide command team role card to members as assigned (Appendix B).
* Until filled, the IC must perform these roles.
  + Command Support: Provides direct support to IC and restricts access to IC.
  + Accountability: Tracks accountability for members in hot (hazard) zone.
  + Safety: Proactively supervises, enhances situational awareness for IC, mitigates hazards.
  + Division: Assigned as necessary for geographical expansion of command system.
  + Group: Assigned as necessary for functional expansion of command system.
  + Staging: Assigned as necessary for management of staging area.
  + Tactical Advisor: Optional advisory role for special hazards and situations.
  + Senior Advisor: Optional advisory role that allows a more experienced officer to mentor the IC.

TRACK ACCOUNTABILITY OF MEMBERS IN HOT (HAZARD) ZONE

* Members entering & exiting the hot (hazard) zone are tracked on accountability board using individual accountability devices collected & returned by the member assigned to track accountability.
* If an incident requires multiple entry points, Division Leaders shall track accountability.

**ASSEMBLE AND BRIEF TEAM FOR INTERIOR OPERATIONS**

* Command team member briefs team on occupant status, hazards, assignment, radio check.
* Two members enter together, stay in visual or voice contact at all times, exit together (**legal minimum**).
* Two members remain outside, able to assist or rescue the interior team (**legal minimum**).
* Member(s) outside establish and maintain communications with team(s) inside (**legal minimum**).

ESTABLISH RAPID INTERVENTION TEAM (RIT)

* Establish team of SCBA-equipped members dedicated to RIT.
* One member is assigned to provide emergency breathing air.
* RIT deploys ladders for secondary egress, continuous scene size-up, stages equipment.

**ESTABLISH AND COMMUNICATE CONTROL ZONES**

* DANGER: No-entry, Hot: operational hazard zone, Warm: responders only, Cold: responders and public.

ACHIEVE, ANNOUNCE, AND TRACK INCIDENT BENCHMARKS

* Primary search complete – quick search in hazardous conditions (civilian life safety)
* Secondary search complete – deliberate search to assure with 100% accuracy no victims remain (civilian life safety)
* Final search complete – a final search for victims with members and command officer.
* Under control – Hazards may remain, but the incident is not at risk of expanding (incident stabilization)
* Secure – fire area has been made safe from the fire hazard (environmental protection/property preservation)

ENSURE EFFECTIVE, STANDARD, CLOSED-LOOP RADIO COMMUNICATIONS

* Arriving units and members are notified of fireground radio channel.
* Request status reports (Conditions, Actions, Needs) from teams operating in the hot (hazard) zone.
* MAYDAY: An emergency call used for fire service personnel requiring immediate assistance due to being injured, trapped, lost, or unable to get out of a hazardous situation.
* Emergency Traffic: Designator to clear radio for an emergency that can be declared by any member.
* Tactical Withdrawal Message: Teams exit hot (hazard) zone in a controlled manner. Declare a defensive mode and conduct a personnel accountability report.

**CONDUCT PERSONNEL ACCOUNTABILITY REPORTS (PAR)**

Conduct every 20 minutes when members are operating in the hot (hazard) zone and when:

* A mayday, tactical withdrawal, emergency evacuation, or strategy change is declared.
* A building collapse, or significant/rapid fire event occurs.
* Any member on scene requests a PAR.

Announce PAR and then wait 1-2 minutes before roll call. Each team reports 100% individual accountability. Two or more command team members must verbally agree that all members are “PAR.” If a team/individual does not report after three calls, declare a mayday.

DECLARE/CONFIRM AND RESPOND TO MAYDAY

* Declare/confirm a mayday if:
  + You hear a mayday, you think you hear a mayday, or someone tells you they heard a mayday.
  + Information (or lack of) supports the mayday.
  + MAYDAY/emergency radio button (EAB) is activated.
  + An unidentified PASS alarm is in full alarm in the hot zone.
  + If a team/individual does not report after being called three times.
* Announce the mayday as MAYDAY and clear the radio.
* Mayday operations remain on current fireground radio channel, other operations should switch to alternate channel if possible.
* Assign a Mayday Group Leader and provide them the MAYDAY card (Appendix C).
* Do not terminate mayday until IC makes physical contact with caller and a successful PAR.

CONTINUALLY SIZE-UP, DYNAMICALLY ASSESS RISK, UPDATE ACTION PLAN

* **DANGER:** Assess potential for collapse based on time, fire conditions, building construction, etc.
* Ask yourself: **Why** are we doing this? **What** do I expect to happen? **Does the benefit justify the risk**?
* Encourage members to speak up, report unsafe practices and conditions.
* Ensure supervision and compliance with SOGs, add additional hazard controls.
* Update and revise the action plan and mode based on increase/decrease in risk, benchmarks, conditions, etc.

RECOGNIZE CONDITIONS PROMPTING CHANGE TO DEFENSIVE MODE

* The risks no longer justify members in the hot (hazard) zone.
* Orderly evacuation, rapid evacuation, or mayday declared.
* Collapse occurs, or there are indicators of imminent collapse.
* Significant/rapid fire event occurs, or there are indicators of an imminent fire event.
* Additional members are not available for assignment.
* Elapsed time, fire has transitioned to structural fire, report of soft/sagging floors (potential for collapse).
* Unoccupied or no longer occupied building (only life safety risk is to firefighters).
* Conditions do not improve or get worse despite efforts (current plan is not working).
* Reports of high heat/no change/deteriorating conditions despite efforts (current plan is not working).
* Team(s) cannot locate fire after several minutes (situational awareness is low).
* Loss in communications with interior team(s) (situational awareness is low).
* Basement identified, basement involved in fire (potential for collapse or entrapment).
* Hoarder homes (potential for entrapment, rapid fire development).
* Buildings with bars or security features (potential for entrapment).
* Based on your observations and experience something does not feel right.

ESTABLISH FIREFIGHTER DECONTAMINATION & REHABILITATION PROCESS

* Refer to appropriate SOGs.

CONDUCT TRANSFER OF COMMAND (IF APPLICABLE)

* Conduct face-to-face.
* Current IC provides: Size-up, actions taken, current mode (offensive/defensive), benchmark status, accountability status, communications information, and outstanding issues & objectives.
* New IC provides a radio report assuming command and confirms/updates action plan and mode.

CONDUCT ON SCENE DEBRIEF

* Conduct a quick on-scene debrief to identify what went well and what could be improved.

**TERMINATE COMMAND**

* Terminate command when benchmarks are achieved, members are out of the hot (hazard) zone, and accounted for.

**APPENDIX A Special Tactics & Considerations**

**Note: This is designed to be printed “two-sided” and laminated for use on-scene.**

**Risk vs. Benefit. Speak up. Do not assume. Supervise members. Enforce SOGs.**

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| **Basement fires**   * Gather & understand information: construction type, finished/unfinished basement; duration, size of fire. * Anticipate a developed basement fire will result in partial collapse of 1st floor. * Do not commit teams to the 1st floor without assessing structural integrity. Sounding the floor is often ineffective and can provide a false sense of security. * Use exterior openings, or create openings, to suppress the fire. Coordinating ventilation is critical. * Weigh risk vs. benefit of placing teams in the basement. * If an exterior entrance is available, use this as an entry and exit point. * All basement entries should be made with a hose line and TIC. |

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| **Hoarder fires**   * Request additional resources early. Decrease working time and increase rehab time. * Due to the large fuel load, the fire could become ventilation-limited. Ensure coordinated ventilation. * Potential for collapse is increased due to amount of stored belongings and additional weight of water. * Ability to locate seat of the fire and apply water to the seat can be challenging due to severe clutter. * Due to height of stacked contents, room flashover time is reduced. * If an offensive mode is justified, interior firefighters can easily get disoriented, trapped, or have difficulty advancing hose lines. Ensure interior teams use a TIC and stay with the hose line. * Ensure appropriate post fire attack resources, salvage and overhaul will be intensive. * Consider requesting heavy equipment for overhaul and salvage. |

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| **Balloon frame construction**   * Rapid fire spread due to absence of horizontal fire stops and void spaces can outpace suppression capabilities and incident action plan. Call early for additional resources. * Use a TIC and open voids to locate fire. * A basement fire can quickly spread into walls of upper floors and attic. * Fire can present itself in multiple locations and floors so firefighters must determine the location of the fire by checking the lowest level first. Never advance to the upper levels/floors without confirming that the fire is not below you. * Consider a defensive strategy if the fire has spread throughout the walls, void spaces, and attic. |

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| **“Main Street USA taxpayer” mixed occupancy**   * Ground level is often a business while floor above is often a residential apartment. * Assess structural integrity during initial and ongoing size up. * Older construction is type III “ordinary” masonry brick. The front parapet wall is often minimally supported. Roof failure can lead to wall collapse. Wood floor beams are designed to fail during a fire to prevent wall collapse but result in floor collapse. * Common void spaces (basement, cockloft, roof) lead to hidden, rapid fire spread. * Voids can contribute to increased chance of a hostile fire event (backdraft, smoke explosion) and subsequent collapse. * Business occupancies will often have a drop ceiling(s) that can conceal fire. * Renovations performed without regard to fire safety over the years can result in complex floorplans. |

**Risk vs. Benefit. Speak up. Do not assume. Supervise members. Enforce SOGs.**

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| **Bowstring truss roofs**   * Known as a “firefighter killer.” * Weigh risk vs. benefit of placing teams inside building or on roof. * Keep trusses and truss space cool to reduce risk of collapse. * Establish and enforce collapse zones 1.5 times the height of the parapet. * Expect a violent collapse if bowstring truss fails. Locate personnel and apparatus at building corners. * Brick parapet walls/facades are prone to collapse. * Susceptible to downward collapse and outward collapse of load-bearing walls. * Roof loading (firefighters, snow, ice, equipment) can lead to early truss collapse. * Large open space in the overhead of the building allows accumulation of smoke and heat leaving floor level relatively cool and smoke-free. This gives firefighters a false sense of conditions above them. |

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| **“Big Box” stores and warehouses**   * Perform a detailed size-up and risk assessment prior to executing an incident action plan. Gather information from building personnel. * Weigh risk vs. benefit of offensive operations in a very large building. Civilian fatality rate in these occupancies is very small. * Request additional resources early, including MABAS ventilation unit. * Automatic sprinklers alone do not guarantee fire control. Pump into fire department connection (FDC) as soon as possible to provide additional water flow. * Tilt-up concrete wall construction is common. Once the roof is compromised expect wall collapse. * Assign a water supply group leader early. * Building contents can generate an extremely high heat release rate. * Firefighters can expect “cold smoke” at the front door. * Due to building size and sprinkler activation, locating the seat of the fire may be difficult. * Entry teams use 2.5” line, always stay with hose line, use a TIC, and actively monitor air supply. * Potential for large roof-mounted HVAC units to fall through roof. * No common warehouse roof can be considered fire resistive. * Older construction roofs may have gypsum decking prone to failure. Do not operate on or under a gypsum deck roof exposed to fire conditions. * Newer construction roofs likely have corrugated metal decks supported by unprotected steel girders and bar joists that can fail in minutes if exposed to flame and/or high heat. |

**General Fireground Factors**

Building: size, roof type & covering, interior layout, construction type, age, condition, value, vertical/horizontal openings, outside openings, utilities, exterior access, Fire: current & continuing effect, location, stage, direction of travel, material involved.

Occupancy: type/group, fire load, status (open, closed, occupied, vacant, construction, renovation), characteristics of occupancy type, contents, loss control.

Life hazard: occupants: number, location, condition, ability. Commitment required for fire control plus search and rescue, need for EMS, time estimate of effect on victims, escape routes.

Arrangement: capabilities of personnel, water supply, building fire protection systems, obstructions to operations, apparatus access, resources on scene, responding and in reserve, Exposures: access, arrangement, distance to, combustibility of, value.

Other: time of day, day of week, seasons, holidays/events, weather, traffic, social considerations

**APPENDIX B Command Team Card (provide to members on scene as assigned)**

**Note: This is designed to be printed “two-sided” and laminated for use on-scene.**

**Risk vs. Benefit. Speak up. Do not assume. Supervise members. Enforce SOGs.**

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| **Safety Officer**  Follows SOGs and works within the incident action plan.  Zero tolerance for members operating alone in hot (hazard) zone.  Proactively supervises the incident scene.  Ensures SOGs are followed, and members are working within the incident action plan.  Establishes, identifies, and enforces control zones.  Marks no-entry DANGER zones if possible.  Performs spot PPE and radio checks.  Prompts IC for PAR.  Enhances situational awareness for the IC through information gathering and understanding.  Performs periodic 360s to identify and mitigate hazards and risks.  Continually assesses risk/benefit of individual assignments, incident action plan, and mode.  Provides recommendations to the IC.  Recognizes signs of fatigue, task saturation, miscommunication involving responders.  Serves as Mayday Group Leader, if applicable. |

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| **Command Support Officer**  Follows SOGs and works within the incident action plan.  Zero tolerance for members operating alone in hot (hazard) zone.  Takes over external radio & phone communications so the IC can focus on the incident.  Keeps a log of event times, decisions, benchmarks, and other significant observations.  Serves as “co-pilot” for IC to verify actions and prompt the IC based on time, conditions, events, and benchmarks.  Serve as a “bouncer” to control who talks to the IC.  Provides recommendations to the IC.  Identifies and calls out hazards and risks.  Recognizes signs of fatigue, task saturation, miscommunication involving IC. |

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| **Accountability Officer**  Follows SOGs and works within the incident action plan.  Zero tolerance for members operating alone in hot (hazard) zone.  Maintains individual accountability of all members in the hot (hazard) zone.  Tracks entry & exit (on-air) times and status of all interior teams on the accountability board.  Conducts personnel accountability reports.  Prompts IC for PAR.  Prompts IC about on-air time.  Supervises Division Leader accountability tracking if incident expands.  Provides recommendations to the IC.  Identifies and calls out hazards and risks. |

**Risk vs. Benefit. Speak up. Do not assume. Supervise members. Enforce SOGs.**

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| **Division Leader (Geographical)**  Follows SOGs and works within the incident action plan.  Zero tolerance for members operating alone in hot (hazard) zone.  Proactively supervises the incident scene.  Prompts IC for PAR.  Ensures SOGs are followed, and members are working within the incident action plan.  Maintains span of control for assigned division (alpha, bravo, charlie, delta, 1st floor, 2nd floor, etc.).  Serves as an accountability officer if their area has an entry point into the hot (hazard) zone.  Establishes and maintains communications with team(s) under their control.  Serves as a safety officer for their area.  Recognizes signs of fatigue, task saturation, miscommunication involving responders. |

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| **Group Leader (Functional)**  Follows SOGs and works within the incident action plan.  Zero tolerance for members operating alone in hot (hazard) zone.  Proactively supervises the incident scene.  Prompts IC for PAR.  Ensures SOGs are followed, and members are working within the incident action plan.  Maintains span of control for assigned function (water supply, EMS, rehab, decon, mayday, evacuation, etc.).  Establishes and maintains communication with team(s) under their control.  Serves as safety officer for their group.  Recognizes signs of fatigue, task saturation, miscommunication involving responders. |

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| **Staging Officer**  Follows SOGs and works within the incident action plan.  Communicates with dispatch and arriving resources on designated radio channel.  Proactively supervises and maintains safe staging area.  Verifies capabilities of resources as they arrive.  Verifies accountability devices.  Organizes incoming resources into teams available for assignment.  Briefs resources deploying to scene on fireground radio channel, IC, who to report to.  Provides IC with updates on resources available for deployment to scene.  Advises IC on need for additional resources in staging.  Assesses and reports readiness of teams cycling from rehab back to staging.  Serves as safety officer for staging area. |

**APPENDIX C Mayday Card (provide to Mayday Group Leader)**

**Note: This is designed to be printed for use on-scene.**

**Risk vs. Benefit. Speak up. Do not assume. Supervise members. Enforce SOGs.**

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| **MAYDAY Group Leader**  □ Clear radio. MAYDAY ops remain on current channel, other ops should switch to alternate channel.  □ Identify MAYDAY caller, location, problem, air status, and needs. Maintain contact with caller.  □ Request additional resources including ambulance.  □ Deploy intervention & rescue resources with emergency breathing air based on risk vs. benefit.  □ Deploy resources to establish additional egress points from the structure.  □ Coordinate intervention & rescue resources with fire suppression resources.  □ Assemble reserve resources for additional mayday assignments.  □ Develop alternate intervention & rescue plans.  □ Prompt IC for PAR.  □ Provide and receive status updates to and from IC.  □ Verifies emergency breathing air established and maintained during rescue.  □ Do not terminate mayday until IC makes physical contact with caller and a successful PAR. |

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| **Notes and information** |

**APPENDIX D Definitions**

Briefing (interior teams) – A quick face-to-face discussion between a command team member and a team preparing to make entry to enhance the team’s situational awareness. Example: *“You are Engine 33. Building is evacuated. Fire started in a 2nd floor bedroom. Basement and 1st floor do not appear involved. Electric is on. Fire may be in the attic. Enter on Alpha side, go upstairs with a 1 ¾” line for fire control in the bedroom on the right. Radio check MABAS Red. Accountability tag check. Stay together.”*

Cold Zone – The area immediately outside the boundary of the established warm zone where responders are safe from adverse effects of a fire, toxic chemicals, carcinogens, etc. The cold zone typically contains the command post and such other support functions as are deemed necessary to control the incident.

Conditions, Actions, Needs (CAN) Report – Units assigned to working positions should structure all communications to the IC as a CAN report. Example: *“Engine 33 is on the 2nd floor in the hallway; making good progress knocking down the fire. We need about 20 more feet of line to advance.”*

Division – A supervisory level established to divide an incident into geographic areas of operation lead by a Division (Supervisor) Leader. The first division leader assignment is typically the Charlie side.

Emergency Traffic (ET) – "Emergency traffic" shall be used as a designator to clear the radio for an emergency affecting the incident and can be declared by any member who becomes aware of an emergency. When a member declares “emergency traffic” that person shall use clear text to identify the type of emergency, change in conditions, or tactical operations. Once the emergency is concluded, the IC shall transmit the message "all clear, resume radio traffic" to end the emergency situation or to re-open the radio channels to communication.

Follow-up Report – A radio report that follows the initial radio report (IRR) that includes the result of the 360, other size-up aspects, and declaration of an operational mode. Example: *“360 complete, building evacuated, has a basement, lightweight construction. Fire on the 2nd floor. Offensive strategy. Engine 33, go to the Alpha side for exterior knock down, then interior attack. Engine 34, establish water supply for Engine 33, then report back. Engine 255, assist Engine 33 with interior attack. Engine 123, ladder the building for emergency egress and establish RIT. Fireground will be MABAS Red. Responding units come direct to scene. Request electric and gas company to secure utilities.”*

Group – A supervisory level established to divide the incident into functional areas of responsibility lead by a Group (Supervisor) Leader.

Hazard Zone/Hot Zone – The area immediately surrounding the physical location of a fire, hazardous area, etc., having a boundary that extends far enough away to protect responders outside the hot zone from being directly exposed to the harmful effects of a fire, toxic chemicals, carcinogens, etc.

Immediately Dangerous to Life and Health (IDLH) – An atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair and individual’s ability to escape from a dangerous atmosphere.

Incident Action Plan (IAP) – The objectives reflecting the overall incident strategy, tactics, risk management, and responder safety that are developed by the incident commander. Incident action plans are updated throughout the incident.

Incident Commander (IC) – The person with the overall responsibility of managing the entire incident scene.

Initial Radio Report (IRR) – The initial IC begins the command, control, and communication process with an IRR. This report provides dispatch, as well as everyone else responding to the scene, with a standard size-up of the conditions seen from the initial command position. Example: *“On scene 303 Mayberry, we have a medium two-story residential, working fire on the Alpha side 2nd floor. Continuing size-up, establishing Mayberry Command. Upgrade to a residential box alarm.”*

MAYDAY – “MAYDAY” shall be used as the designator to identify when a firefighter is in a life-threatening situation and in need of immediate assistance and can be declared by any member. The incident commander shall conclude the “MAYDAY” by transmitting “MAYDAY cleared, resume normal radio traffic.”

No-entry zone (DANGER) – A control area designated to keep out responders, due to the presence of dangers such as imminent hazard(s), potential collapse, or the need to preserve the scene.

Personnel Accountability Report (PAR) – Involves a roll call with the confirmation that all personnel in the Hazard Zone are individually accounted for and have an adequate air supply to safely exit the Hazard Zone.

Search (Civilian Life Safety)

* Primary Search– A benchmark implemented before or during fire control by first-arriving units. It is quick and systematic and aimed towards locations where victims likely to be located.
* Secondary Search– A benchmark implemented during fire control or after fire control has been achieved and interior conditions are relatively improved. It is very thorough and not speedy. It should be assigned to a company other than one who performed primary search to ensure it is complete and thorough.
* Final Search – a final search for victims with fire companies and a command level officer before the scene is released.

Secure (environmental protection/property preservation) – Emergency response activities are largely over. Incident has been mitigated and IC is preparing to turn over the scene to the appropriate party.

Size-up – An initial and on-going evaluation of the incident scene for the purpose of determining the scope and nature of operational activities to determine mitigation strategies.

Strategic level – The IC manages the strategic level by strict command & control; deploying resources to specific tasks locations and objectives; maintaining the whereabouts of all resources in the Hazard Zone; maintaining an accurate tactical worksheet/command board, and ensuring that frequent CAN and situational awareness reports are delivered from the key tactical areas of the operation.

Tactical Level – This level of the incident organization is managed by Division Supervisors. When the IC assigns companies to an operational area, the Officer-in-Charge of that area is responsible for managing the companies assigned to the Division and completing the Division’s tactical priorities.

Task Level – This level of the incident organization performs the actual work that solves the incident’s problems. At a structure fire, this work is typically performed in an IDLH environment.

Under Control (incident stabilization) – The fire is under control of the fire department. No additional resources are needed.

Warm Zone – The control area immediately outside the boundary of the hot zone having a boundary that extends far enough from the hot zone to protect responders inside the warm zone from the adverse effects of a fire, toxic chemicals, carcinogens, etc. The warm zone typically is where responder and equipment decontamination and hot zone support take place.