Payson Fire Department
Standard Operating Procedures

Section: Fire Operations **Subject: Hazard Zone Management**	**SOP # 2.7.4** **Date: 12/17** **Revision Hx: 11/18**

PURPOSE

The purpose of this policy is to provide standard operating procedures for Payson Fire Department and Alarm Room personnel to apply to hazard zone management with the goal of ensuring the safety of our members in the hazard zone to the greatest degree possible with the resources we have.

POLICY

It is the policy of the Payson Fire Department to always operate in a way that does not compromise the safety of our employees on the fireground.

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Hazard Zone Management Blue Card SOP Introduction:

Public safety agencies (Police and Fire) are many times the agency of last resort. We get called because something in our community has gone wrong, and it is now jeopardizing people and/or property. We must always start out all of our emergency responses in a standard manner, where we will base our actions on a standard set of critical factors, in order to achieve a standard incident outcome. Every incident we respond to is different in some way. The things that protect us from these different, every time incident elements, is the command system that we use to manage our hazard zone operations. It must be used and applied the same way, for every incident we respond to. This prevents the incident from managing us. When we operate within our SOP's, we can effectively manage the incident while we protect our members operating inside of a hazard zone.

1.0 - COMMAND FUNCTION #1 – DEPLOYMENT

The major goal of Command Function 1 is to provide and manage a steady, adequate, and timely stream of appropriate resources. This Standard Operational Procedure (SOP) describes the standard deployment process used in the Blue Card hazard zone management system.

1.1 - Company Status

How responders are dispatched and put to work when they arrive on the scene is an essential component of our Incident Management System (IMS). When this front-end deployment management occurs in a regular, orderly manner, the hazard-zone workers become part of the IC's overall plan. This creates a safe and standard operational beginning.

The essence of incident control is the ability of every IC to create, manage, and—if necessary—move the position and function of all the resources operating in the hazard zone.

The IC is the resource allocator for the incident, and is responsible for managing all assigned resources work cycles on the strategic level. The standard deployment management that an IC must manage on every incident is the following items:

- Dispatch
- Standard incident response
- Staging
- Assignments to the incident scene by the IC
- Accountability in a hazard zone
- Work/Rest Cycle
- On-Deck
- Recycling
- Rehabbing
- Ready for reassignment
- Placing companies back into service

This creates a resource delivery system that allows the IC to deploy resources according to his/her IAP and it also provides a system that allows the IC to manage accountability on the strategic level.

1.2 – Dispatch Center

The major goal of the local dispatch center is to dispatch the appropriate amount and type of resource(s) to the scene of an emergency immediately after the receipt of the appropriate information.

The call taker must make an initial determination of the appropriate Nature Code, based on the information received from the caller.

Structural fire alarms, Hazardous Materials incidents, Serious MVA's, and MCI incidents should be dispatched using pre-determined dispatch packages. These standard dispatch packages should also include the command support required to manage the different amounts and types of resource responding.

Requests for additional alarms from the IC should also come in the form of pre-determined dispatch packages. This takes a great deal of stress off of the IC when calling for additional resource and it will also greatly reduce the overall amount of incident radio traffic.

The staffing of the dispatch center is fluid. For this reason, the dispatcher will make every attempt to fulfill all of these needs to support the safety of hazard zone workers. When the dispatch center is incapable of fulfilling a need that is required by this SOP, the dispatch center must communicate that to the IC immediately to allow the IC to make necessary adjustments to the IAP.

1.2.1 – Rim Country Regional Standard Structural Fire Dispatch Packages

Still Assignment: A one (1) unit Engine Company response to a reported fire that poses no significant danger/threat to people or property.

1st Alarm Assignment: A full multi-unit response dispatched to a reported fire in a residential, commercial, or high life safety structure. A 1st Alarm assignment consists of:

- 4 engine companies or 3 engines and a ladder company (if a ladder company is in-service)
- 3 total Response Chiefs, Safety Officers, Training personnel, or Staff Officers (a combination of 3)
- Larger Command Vehicle (CV) if available
- 1 Medic/Ambulance

Balancing a 1st alarm from a still assignment: Initial arriving Officer's of a dispatched still assignment must fill out, or balance, the 1st Alarm before requesting more resources greater than the 1st Alarm. This will ensure that all dispatched 1st Alarm resource will respond directly to Level 1 Staging positions, while operating on the incident's assigned tactical radio frequency.

Greater Alarms: Additional alarms should somewhat reflect the resources of a full 1st alarm assignment, but because enough Chief Officers or additional command help was sent on the 1st Alarm, the need for the same amount of Chief Officers will vary from incident to incident and should be specified when calling for additional alarms. This could also be the same case for Ladder companies.

1.2.2 - Working fire policy

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. Dispatch will monitor radio traffic on all incidents to anticipate the needs of Command.

Working Fire Upgrade: If not already done, when the IC declares a “Working” Incident, the dispatch center will automatically dispatch a 4th Engine Company and a Rehab Unit fill out a first alarm assignment. For a 1st Alarm “Working” fire declaration, Alarm will automatically dispatch one ALS ambulance (or more if requested by Command), local gas and electric utility companies, a rehab unit, and initiate staff officer and off-duty notifications to all needed support personnel.

When notified of a Working First Alarm, dispatch will:

1. Upgrade the dispatch to a Working Fire assignment
2. Isolate a tactical channel
3. Dispatch R111 and an additional ALS ambulance
4. Dispatch PD for traffic and crowd control
5. Dispatch gas and electric companies
6. Document progress reports, Division/Group assignments, emergency traffic, and elapsed time notifications.
7. Change the status to a Working Fire, which starts elapsed time notifications.
8. Document progress reports, divisions, groups, assignments, emergency traffic, and elapsed time notifications.
9. Be prepared to assign additional dispatchers to monitor/work Staging and other Division/Groups created by the IC.
10. Be prepared to dispatch further assistance.
11. Be prepared to dispatch any special agencies or equipment when the need is indicated.
12. Make notifications to pertinent personnel.

Elapsed Time Notifications (ETN): When an offensive Working Fire or Haz-Mat incident is declared, it will prompt the assigned dispatcher to begin elapsed time notifications (an IC can also request ETN’s whenever they feel it is necessary). The assigned dispatcher will announce over the tactical frequency an elapsed time notification every five (5) minutes until the incident is placed under control, or until command requests to discontinue or restructure the ETN’s.

The IC must verbally acknowledge each 5-minute notification by re-announcing the incident’s strategy over the assigned tactical radio frequency until the incident is placed under control, or until command requests to discontinue or restructure the notifications.

Move ups, back fills, and maintaining system-wide service coverage: IC’s must keep the dispatch center aware of the amount of resource(s) needed and a predicted length of time the resource will be required to control the situation. The chief officer assigned to managing the rest of the Payson Fire Department response area during a working incident is addressed as Battalion 10 and has the responsibility to back fill critical areas of the community in order to continue to deliver core services to the department’s customers with reasonable response times. These units may also be needed in the future to quickly respond to the current working incident.

1.2.3 – Dispatching Incidents

Channel 1: All emergency incidents will be dispatched on Channel 1. Each incident dispatched will be assigned a tactical radio frequency that is different than Channel 1 by the initial arriving IC. At no time should an incident be run on a main dispatch channel where subsequent dispatches could cover critical hazard zone communications.

One tactical radio frequency can host several EMS incidents at once, but for incidents that are declared working, the assigned tactical radio channel should be cleared of other incidents, or, if there is credible call information, the call should be assigned on its own separate tactical radio channel upon dispatch if available.

All hazard zone transmissions shall be carried out on one (1) tactical radio frequency.

Some incidents may require the use of multiple radio frequencies in order to support operations outside of the hazard zone (Level 1 & 2 staging, Rehab, Safety, Planning, Logistics, etc.). Each additional channel activated for the incident must have a dedicated person assigned to manage that channel at all times. The IC must only be responsible for the operation of one (1) tactical radio frequency while an active hazard zone exists.

The Tactical Radio Operator (TRO): Handles all communications between units assigned to an incident and the dispatch center on the incident's assigned tactical radio frequency.

Dispatched acknowledgement: All units responding to an incident shall acknowledge dispatch by radio on the assigned tactical channel or by Mobile Computer Terminal (MCT) if equipped. If dispatch does not receive an acknowledgment within one (1) minute, the TRO will request acknowledgment by radio on all channels (starting with the assigned tactical channel) and via the MCT if equipped. Dispatch should send a cover assignment if no reply is received within a two (2) minutes of the original dispatch.

Dispatch should continue to attempt to make contact with the original company while the cover unit is responding. If unable to contact the original unit, the company will be placed unavailable and the appropriate battalion chief should be notified of the circumstances.

Self Dispatch: There are many times when units are making standard, non-emergency apparatus movements where they will witness or see something that requires an emergency response and some type of mitigation. In these situations, the officer or member initiating the incident will contact the dispatch center on the appropriate main dispatch repeater channel and will give the following information:

- Nature of the incident
- Exact location of the incident
- Resource request required to control the incident

Once reported, the Channel 1 operator will assign a separate tactical frequency for the incident and dispatch any additional resource required on Channel 1. Because the requesting unit is typically close to the scene, they should give the recently dispatched responders (if any) at least 1 minute to start their response out before transmitting a standard Initial Radio Report (IRR) on the assigned tactical radio frequency. This time lag will give everybody who is dispatched the needed time to get into a responding status in order to receive the IRR information.

Adding an additional Unit to a dispatched incident: Unit's may add themselves to a dispatched incident by contacting the TRO on the incident's assigned channel. Companies adding on to an assignment must advise the TRO if they are substituting for another unit or responding in addition to the original assignment.

Units while responding:

- The TRO will act as the initial IC until the 1st unit or member arrives to the scene and transmits a standard Initial Radio Report.
- All fire and EMS responses will be Code-3 unless otherwise indicated by dispatch or Command.
- Minor medical incidents and some service calls may be dispatched Code-2.
- Company officer's may make the decision based on the dispatch information to respond Code 2 on a dispatched Code-3 incident. When this occurs, the officer must advise his/her TRO of the status change on the assigned tactical channel.
- Similarly, if the company officer makes the decision to respond Code 3 on a dispatched Code 2 call, he/she must advise his/her TRO on the assigned tactical channel.
- While responding, companies may communicate with one another if radio traffic permits. Effective communications during this period can set the stage for effective action and improve the overall rescue and fire attack effort. Factors such as occupancy hazards, access, traffic conditions and response routes should be communicated when necessary.
- Company officers should review tactical information on their MCT, map books and any pre-fire planning info if available while enroute.
- Subsequent arriving units must monitor all radio traffic on the assigned channel to be fully informed of the situation based on the reports of the first arriving units.

Additional Incident Information: The TRO will relay any additional critical information gained from subsequent callers as soon as possible. Critical information and/or updates must be transmitted via radio on the assigned tactical frequency to all dispatched units.

Companies needing specific additional information shall send these requests through the TRO.

1.3 - Response and general scene safety

A prompt, safe response shall be attained in the following standard manner:

- All members must maintain the ability to respond quickly to dispatched incidents (always stay close to the truck).
- All personnel shall be mounted on board, properly attired for the call, and seated with seat belts securely fastened before the truck moves.
- All radios are set to the assigned channel.
- Station doors fully open.
- Follow all emergency response SOP's.

- Drive defensively and professionally at all times.
- Know where you are going.
- Use warning devices to move around traffic and to request the right-of-way in a safe and predictable manner.
- All responding apparatus should have 2 members in the front seats of the apparatus whenever possible. The driver is responsible for operating the vehicle safely.
- The Co-driver (the officer or other person riding in the right front seat) is responsible for being a second set of eyes and ears anytime a unit is responding to or returning from a response.
- Driver and Co-drivers must be focused on intersection management any time their response vehicle enters into an intersection.
- The unique hazards of driving on or adjacent to the fire ground requires the driver and co-driver to use extreme caution and to be alert and prepared to react to the unexpected.
- Drivers must consider the dangers their moving vehicle poses to fire ground personnel and spectators who may be preoccupied and focused on the emergency scene, and may inadvertently step in front of or behind a moving vehicle.
- When stopped at the scene of an incident, vehicles should be placed to protect personnel who may be working in the street and warning lights shall be properly used to make approaching traffic aware of the incident.
- No personnel may exit a vehicle or piece of apparatus until it comes to a complete stop.
- Personnel dismounting the apparatus must look both ways and verify the outside surroundings before stepping off of the apparatus.
- When waiting for personnel to return to the truck before repositioning closer to the scene, the driver/operator shall keep the apparatus at a full stop at all times.
- At night, vehicle mounted floodlights and any other lighting available shall be properly used to illuminate the scene.
- All personnel working in or near traffic lanes shall wear high visibility vests.
- Drivers shall avoid backing whenever possible: Where backing is unavoidable, spotters shall be used. If no spotter is available, the driver shall dismount and walk completely around apparatus to determine if obstructions are present before backing.

1.3.1 - Emergency Response Driving Procedures

“Code 2” shall be defined as normal roadway driving, following all local driving rules and regulations.

“Code 3” shall be defined as an emergency response. When responding Code 3, warning lights must be on and sirens must be sounded to warn drivers of other vehicles, as required by the Local Motor Vehicle Code.

The use of sirens and warning lights does not automatically give the right-of-way to the emergency vehicle. These devices simply request the right-of-way from other drivers, based on their awareness of the emergency vehicle presence. Emergency vehicle drivers must make every possible effort to make their presence and intended actions known to other drivers, and must drive defensively to be prepared for the unexpected, inappropriate actions of others.

- All department employees are required to use seat belts at all times when operating a vehicle. Anyone riding as a passenger/attendant in a vehicle is also required to use seat belt at all times when in a moving vehicle.
- The Company Officer or senior person in charge of the vehicle will confirm that all personnel and riders are on-board, properly attired, with seat belts on, before the vehicle is permitted to move.
- The officer in charge (or driver in a single occupant vehicle) of the vehicle is responsible for the safety of all vehicle operations and managing compliance of this procedure.
- Fire Department vehicles are authorized to exceed posted speed limits only when responding Code 3 under favorable conditions. This applies only with light traffic, good roads, good visibility and dry pavement. Under these conditions a maximum of 10 mph over the posted speed limit is authorized.
- Under less than favorable conditions, the posted speed limit is the absolute maximum permissible.
- When emergency vehicles must travel in center or oncoming traffic lanes, the maximum permissible speed shall be 20 mph.
- Intersections present the greatest potential danger to emergency vehicles. When approaching and crossing an intersection with the right-of-way, drivers shall not exceed the posted speed limit.
- When emergency vehicles must use center or oncoming traffic lanes to approach controlled intersections, (traffic light or stop sign) they must come to a **complete stop** before proceeding through the intersection, including occasions when the emergency vehicle has green traffic lights.
- When approaching a negative right-of-way intersection (red light, stop sign) the vehicle shall come to a **complete stop** and may proceed only when the driver can account for all oncoming traffic in all lanes yielding the right-of-way.
- Units responding to calls using a freeway for access only, will precede Code-2 while on the freeway unless otherwise ordered by command or dispatch.
- For incidents that are located directly on a freeway or divided highway such as Highways 87 or 260, company officers must use their best judgment on the proper response (Code 2 or 3) based on the critical factors present.

Code 3 response is authorized only in conjunction with emergency incidents. Unnecessary emergency response shall be avoided. In order to avoid any unnecessary emergency response, the following rules shall apply:

- When the first unit reports on the scene with "nothing showing" or an equivalent report, any additional units shall continue into the scene using a Code 2 response.
- The first arriving unit will advise additional units to respond Code 2 whenever appropriate (EMS runs after the pt(s). has been triaged and downgraded).

1.4 - Establishing Command (Function #2)

Command shall be formally declared on all incidents where two (2) or more units are dispatched. The first unit or member to arrive to the scene of a multi-unit dispatched incident should assume command of the incident by transmitting a standard IRR (there are few exceptions to this procedure that will be covered in Function #2).

Once command has been established, all routine communication between dispatch and the incident will be directed through Command.

1.5 - Calling for additional resources

The IC is the person that has to match (and manage) the work that must take place at the incident scene to the people and equipment that will be doing the work. Matching these two constants (tasks and workers) requires that the IC have a good grasp of the available area personnel, equipment, apparatus and the systems used to activate and manage those resources.

The IC will need to connect the profile of the incident to the profile of the local deployment process by quickly answering a set of closely connected questions that create a basic response profile for the incident:

- What resources are on the scene?
- When will the responding resources arrive on the scene?
- How much work can the responders on the initial assignment do and for how long?
- How much work is there beyond the capability of the initial assignment?
- How many geographic/functional points need resources assigned to them to cover the incident and get ahead of the power curve?
- What is the profile of the additional resources that will be required?
- What type of command support do I need to manage the dispatched resource?

The IC must automatically, instinctively, and quickly develop and compare these two profiles (**event vs. response**) and then call for the additional resources that will be required to bring the response model up to effectively engage and (hopefully) overpower the problem the event is creating.

Alarm upgrades and additional structural fire alarms, Hazardous Materials requests, and EMS manpower requests should be dispatched using pre-determined dispatch packages. These standard dispatch packages should also include the command support required to manage the different amounts and types of resource responding.

1.6 - Staging Procedures

The IC is the resource allocator for the incident, and is responsible for managing all assigned resources work cycles on the strategic level.

Level 1 and 2 staging procedures place resources into positions where the IC can assign them based on his or her incident action plan. When the IC identifies a task that needs to be done, they choose the proper resource, confirm their availability, and then order them into action. Managing incident operations in this fashion is how we coordinate and incorporate all of the efforts of multiple units into a single, cohesive operation. If you don’t have and follow SOP driven staging procedures, you can’t apply IMS to the incident scene.

This creates a resource delivery method that allows the IC to deploy resources according to his/her IAP and provides a system that allows the IC to manage accountability on the strategic level. If companies do not stage when they get to the scene they will not be assigned according to the IC's plan.

Units that disregard Staging procedures and "auto-assign" themselves in a hazard zone do nothing but make the scene unsafe for everybody else who followed the Staging procedures. Therefore, officers or members who disregard the staging procedures will be dealt with in a corrective, progressive, and lawful manner.

1.6.1 - Level 1Staging

Effective utilization of the Level 1 Staging procedure will:

- Prevent excessive apparatus congestion at the scene.
- Allows time for Command to evaluate conditions prior to assigning companies.
- Places apparatus in uncommitted locations close to the immediate scene to facilitate a more effective assignment by Command.
- Reduces radio traffic during the critical initial stages of the incident.
- Facilitates fireground accountability
- Allows Command to formulate and implement an IAP without undue confusion and pressure.

Level 1 staging procedures are in effect for all units dispatched on the 1st and 2nd alarm assignment.

Level 1 staging procedures are automatically activated when the officer of the initial arriving unit clears dispatch to give their initial radio report and assumes command.

This action causes all later arriving resources to Level 1 stage in an uncommitted position one block from the scene, and announces that they are Level 1 staged in a direction related to the scene over the tactical radio channel, ("Engine 311 North, Ladder 211 South").
For engine companies this means that they don't pass their last water source (in a hydranted area). Ladder/Truck companies don't pass their last access point into the incident site. All Level 1 Staged units must wait for an assignment from the IC before proceeding out of their Level 1 staging location.

- Applies to all initial responders on the 1st Alarm
- 1st Engine, Ladder Co. & BC respond directly to the scene
- Immediately goes into effect with Initial Radio Report from IC #1
- All subsequent arriving units stage 1 block away in their direction of travel while not passing their last tactical option
- Each unit Level 1 staging will simply state their unit is level 1 staged, "E-111 is Level 1." At times it may be appropriate to say the direction of the staging location in relation to the incident "E111 level 1 North."

There will be occasions where a fast attacking IC has placed themselves inside the hazard zone and they are unaware of a significant critical factor that needs to be addressed. Company officers can make a conscious, deliberate decision to address a critical, tactical need that they see while driving their response vehicle or while Level 1 staged in these circumstances. It is important to note that these

situations are rare and generally involve some type of severe life safety issue. At no time however, will a unit auto assign themselves into the hazard area without notifying the IC- that is defined as freelancing and it is absolutely prohibited.

1.6.2 - Level 2 Staging

Level 2 staging procedures in our system go in to effect for 3rd alarm and greater assignments. Level 2 staging is defined as: a centralized staging location, adjacent to the incident scene where later arriving resources will assemble. Level 2 staging should be close enough to the incident scene to provide timely access, but is located in an area that is out of the way and not exposed to the incident's hazards.

Dispatched greater Alarm units should be dispatched to a level 2 staging location on a different radio frequency from the hazard zone frequency. This frees up available airtime on the tactical radio channel. It also allows the IC to focus on the units that are assigned to the hazard zone, helping to eliminate radio distractions from later arriving resources that are not yet part of the hazard zone IAP.

When requesting additional alarms, the IC should designate a Level 2 staging location and put companies responding to Level 2 on a separate radio frequency.

- The dispatch center will notify additional units dispatched to the incident that Level 2 staging is in effect and the location of the Level 2 staging area.
- The dispatch center will notify greater alarm Units of the tactical frequency of Level 2 staging
- Units dispatched to the Level 2 staging area will report in person to the Level 2 Staging Officer and will make no radio transmissions while in Level 2 staging (face to face).

Command may designate a Level 2 Staging officer who will be responsible for the activities outlined in this procedure. In the absence of such an assignment, the first fire department officer to arrive at the staging area will automatically become the Level 2 Staging Officer and will notify Command upon their arrival to the Level 2 Staging area. The arrival notification will be made to Command on the assigned Level 2 Staging channel. This responsibility can be transferred to a later arriving chief, or staff officer if needed.

If the first arriving unit to the Level 2 staging location is an engine company, the engine company officer has the following options for their crew:

- They can assist the company officer with Level 2 staging operations until relieved.
- Assigned them as manpower to another company in Level 2 staging.
- The crew can be moved up to form a minimum of a 2-person company and they can be assigned into the hazard zone as a unit.

Once Level 2 staging is implemented, all communications involving staging will be between Staging and Command or Logistics.

The Level 2 Staging Officer will perform the following duties.

- Notify the IC or Logistics upon their arrival at the staging area on the assigned channel.
- Verify the companies available at the staging location

- Determine from the IC or Logistics the minimum complement of units to be maintained in the Level 2 staging area
- Contact the IC or Logistics for additional resources when the number of companies in the staging area falls below the established minimum
- Maintain a current list of available companies in the staging area
- Organize the apparatus so it can be easily deployed out of the staging area if necessary
- Maintain a list of companies that have been deployed to the incident site and their initial assignments from the Level 2 staging area
- Relay the assignment of units from the IC/Logistics face-to-face to the staged companies
- Relay to companies the following information when they are assigned out of Level 2 staging
    1. Any tasks, the location and the objectives assigned to the unit
    2. The area where to report to, or the D/G boss to whom they are to report to
    3. The tactical channel on which they are to operate on

Once dispatched, all greater alarm companies responding to a Level 2 staging location will stay off the air unless contacted by dispatch, the Level 2 staging officer, or Command,. Once arriving to Level 2 staging, the company officer of the unit will report in person to the Level 2 Staging Officer. The crew will then standby with their unit, with the crew intact, with apparatus warning lights turned off until they are assigned to incident site duties, or released from the scene.

When assigned to on-site duties, companies leaving staging will communicate directly with Command or their assigned D/G officer for further instructions (if needed).

There will be incidents where the IC will need to quickly assign response chiefs hazard zone management roles. In these circumstances, the IC will need to make a determination when calling for additional resources on whether the Response Chiefs on greater alarms should Level 1 or Level 2 stage.

The arrival of staff chief officers and captains (no IDLH work) can enhance the command organization and incident management. These later arriving officers should assume or transfer Level 2 Staging duties from any Company officers who are filling the role. This will allow them to be available to be assigned into a hazard zone with their unit.

Because there are so few Ladder companies in the response system, when they arrive in Level staging first, they will assume Level 2 staging and start performing the roles of the Level 2 staging officer. Once the first engine company or staff chief has arrived to the Level 2 staging location, they will transfer Level 2 staging duties from the Ladder so they can be assigned to the incident site.

Vehicle parking at the incident site can be very limited. Un-needed, subsequent arriving apparatus should be left out of the way in the Level 2 staging area. Many times, companies will need to manually transport all of the needed tools and equipment to the hazard zone when they are assigned out of Level 2 staging.

IC’s must maintain an awareness of in transit times when these types of assignments are made. Long in transit times from a Level 2 staging area should be concluded with the company notifying the IC that they have arrived at their assigned work location.

Staff officers should also leave their vehicles in the Level 2 staging in a manner that does not block access if their vehicle is not needed at the scene.

Apparatus in the Level 2 staging area must be arranged in manner that allows for easy access in and out of the staging area. Apparatus not needed at the scene site, which is left in the Level 2 staging location, should be positioned/parked in a manner that does not congest or compromise access in or out of the Level 2 staging area.

1.7 - IC assigning Units into a hazard zone

Incident operations are conducted around the completion of the tactical priorities. Incident communications should mirror this simple concept. When the IC assigns companies based on a well thought out IAP, everything seems to naturally fall into place and companies will base their progress reports on the original orders the IC gave them. This keeps the operation focused on what we showed up to do – make sure everyone is out and okay, elimination of the incident problem, and reducing the harm/damage/loss to the customers' property.
IC's will need to use the following structure when assigning any unit into the hazard zone:

- Tasks
- The Location of those tasks
- The Objectives of the tasks

One of the IC's major objectives is to control both the position/location and function of all resource assigned to the hazard zone. Being very specific about the location and the objectives of the tasks that need to be performed goes a long way in helping the IC (and the rest of the team) know where everybody is and what they are doing. Much more on assigning units in Command Function #5 – Communications.

1.8 - Hazard Zone Accountability

Each level of the incident organization has its own accountability responsibility. No organizational level can do the accountability responsibilities for another level.

1.8.1 - Company/Task level accountability responsibilities

Companies working on the task level have the greatest stake in the accountability system because they operate inside the hazard zone. No hazard zone management system can outperform unsafe behaviors on the task level.

Task level responsibilities include:

- Following all Staging procedures
- Being properly assigned into the hazard zone
- Properly using the passport accountability system
- Staying together as a company
- All members attached to a hose line
- Always maintaining an adequate air supply to safely exit the hazard zone,
- Maximum depth into a structure – 175 feet – based on air supply

- No freelancing.

The following rules will be adhered to at all times on the task level:

The minimum number of personnel assigned to a crew or a team operating in a hazard zone shall be two firefighters with a least one portable radio.

Crews or teams always go in and come out together.

All personnel shall be in contact with their Company Officer by either:
- Voice (radio)
- Vision (TIC),
- Touch (hose line)

Company officers shall give an accountability report upon exiting the hazard zone to either the IC or their assigned D/G boss.

Any member whose job assignment is to operate outside of the hazard area is NOT to enter the hazard area without the express permission of the member's company officer.

NO member shall operate in the hazard zone alone.

1.8.2 - Tactical level accountability responsibilities

Whenever two (2) or more units are assigned to one geographical area, a tactical level boss must be designated for the area. Before a 3rd unit can be assigned to the same geographic area, supervision should be upgrade with a command level, entry point D/G supervisor before the 3rd unit is assigned.

The hazard zone tactical level of the incident organization is managed by D/G supervisors (no groups inside the hazard zone). 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 area.

In many cases, the initial tactical level responsibility may be assigned to the first company officer assigned to the area. As the span of control and or the risk increases, a command level officer should be used to replace the initial company officer D/G supervisor.

Here is the list of the responsibilities for a Chief Officer assigned as a D/G boss:

- Division/Group Plan matches IC Plan
- Risk Management in the Division/Group
- Complete Tactical Priorities in the Division/Group
- Positions always match conditions in the Division/Group
- Implement and manage the Division/Group IAP
- Coordinate w/ other Division/Groups when needed
- Manage the Passport Accountability System
- Assist with Division/Group Air Management
- Manages Work-Rest Cycles
- Manages On-Deck crews

- Manages Recycle & Rehab

Much more on the tactical level accountability/management responsibilities in Command Function #6 - Organization.

1.8.3 - Strategic level accountability responsibilities

The IC manages strategic level accountability 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, and ensuring that frequent CAN and situational awareness reports are delivered from the key tactical areas of the operation.

The key to strategic level accountability for escalated incident operations is to build an effective incident organization. It is the IC's responsibility to account for all resources until delegated to tactical level supervisors. The IC does this by assigning division/group responsibilities to company officers and/or command officers. These officers physically position themselves in their assigned area and manage their piece of the incident operation. This places strong supervision, management and leadership in forward positions where the hazards are present. Organizing in this fashion greatly enhances firefighter safety and is the most significant tool at the IC's disposal to increase his/her strategic level capability, especially for escalating incident operations.

Unit accountability must be maintained throughout the incident. The IC must be able to ascertain the accountability status, the location and the tasks being performed for each company operating in the hazard zone. This can be done by either direct contact with each individual company or by delegating these responsibilities as required to division/group officers assigned around the incident site.

1.8.4 - Tactical worksheets: The best way to remember something is to write it down. This is particularly true when you're managing something as dynamic and dangerous as a fire. The strategically placed IC (working out of command post) has a continual deployment-management challenge to somehow keep track of what is happening. As more responders show up, go to work, and the incident starts to "move fast and spread out," these dynamic conditions can quickly exceed the IC's mental capability to maintain a current awareness of "who's where, doing what."

A major deployment-management function involves the IC performing the on-scene "bookkeeping" activities required to keep track of all the responders assigned to the incident and their ongoing operational status. The system also must account for the work in progress, the work still to be completed, and everyone's safety. A tactical work sheet is the best, basic form that the IC typically uses to record resource details and work activities. Newer, tablet or iPad based applications can help for resource tracking in longer-term incidents and can be used interchangeably with the paper tactical worksheet if it is started early in the incident.

1.8.5 - PAR's and Roll-Calls

PAR: A Personnel Accountability Report (PAR) involves a roll call and confirmation that all personnel assigned to a crew, or multiple crews assigned to one (1) geographic area of the hazard zone working under the supervision of one (1) tactical boss, are accounted for and have an adequate air supply to safely exit the hazard zone.

Reports of PAR's should be conducted face-to-face within the division/group or company and transmitted as one entire report whenever possible.

Roll-Calls: A Roll Call is an accountability report from all company officers of an individual crew assigned to the hazard zone, or division/group supervisors reporting on all personnel working in a specific geographic area of the hazard zone at one specified area in the incident.

When the IC makes a general announcement to all units on the fireground to initiate a roll call, all individuals, units, and/or division/groups shall.

- Notify their company officer of their condition and location.
- Notify the supervisor of their assigned division/group of their condition and location.
- S/D supervisors shall be responsible for the count and location of all personnel assigned under their command who are located in the hazard zone.
- After all companies or division/groups have been accounted for, the IC shall transmit a PAR to the dispatch center for the entire incident.

The IC must drive the roll call to avoid multiple units contacting him/her first. Unless a Unit DOES NOT have a PAR, they should maintain radio silence until contacted by the IC to report their PAR.

A formal roll call should be conducted for the following circumstance:

- Changing from an offensive to a defensive operation

Other situations that may require a roll call include:

- Missing or unaccounted for members.
- Sudden, unexpected events in the hazard zone.
- A mayday (depending on the circumstances).
- Anytime the IC feels it is necessary.

1.8.6 - Passport Accountability System

When properly used, the passport accountability system will increase firefighter safety and provide the Initial Accountability Officer and D/G Supervisors with a means to track the location and function of all firefighters working in a hazard zone.

The hazard zone will be defined as: **Any area that requires the use of an SCBA to operate in**.

Accountability Hardware

Accountability equipment for each piece of apparatus shall consist of:

- Passport (including members name tags)
- Helmet ID stickers
- Hose ID tags (1 permanently marked with the company ID – 1 blank)

- Grease pencils
- Passport pouch
- All response chiefs carry a division/group management board in their RIC bag

Passports are colored tags, which measure approximately 3 by 4 inches that are permanently marked with the company identification. Name tags of the crewmembers assigned to each apparatus are affixed to the passport, which is placed in the passport pouch.

The passport, passport pouch, and company hose line ID tag are kept together as a unit on the apparatus dash at the company officer position or passenger side. A Velcro strip will allow the passport / pouch to be affixed to the dash and be easily removed. Extra helmet ID stickers should also be placed in the passport pouch.

Each individual in a riding position is issued individual nametags. One nametag for each member presently assigned to the company is required to be placed on the passport. Extra individual nametags should be kept on the underside of the member’s helmet.

All helmets shall always reflect the ID of the company the member is presently assigned to. All personnel, including rovers, are required to keep their helmet IDs accurate. Extra helmet ID stickers are kept with the passport in the passport pouch.

Passport Application and Use

Each Company officer will be responsible for ensuring that the passport and MCT roster reflects only the members presently assigned to the company. Passports shall reflect only those crewmembers who are about to enter the hot zone. When entering the hot zone with a partial crew, such as when an engineer remains at the engine to pump lines, the Company officer must remove the nametags of those members not entering the hot zone. The nametags of these members may be returned to the member, placed on the Company officer's helmet Velcro strip or placed in his/her coat pocket.

Implementation of the passport system will occur at any incident that requires the use of an SCBA. The use of the accountability system will commence as the first unit arrives on the scene. The first arriving company will give an IRR and assume command. In the follow up report, their accountability unit identification and geographic location will be announced, "E-111 will be the Alpha side accountability location".
As staged units are assigned, Command will give assignments, which will include their respective accountability unit identification and geographic location. Each crew/unit will deliver their passport to the engineer of the accountability engine where they deployed a handline from.

When the engineer charges the stretched hose line with water, their unit’s passport, passport pouch, and hose line ID tag are placed on the discharge gate at the pump panel (or accountability board located nearby the Engineer). The passports on the discharge gates identifies crews and crew members on each hose line and makes the pump panel the initial accountability location for that geographic area.

Hose line ID tags are removed from the passport pouch at the discharge gate and placed on each respective hose line. These hose line ID tags provide a means to identify the individual hose lines that

crews entered the building on, providing a reference point if there is a need to find lost or trapped firefighters.

As additional companies arrive to the accountability location, their passports/pouches are delivered to the engineer, and the process is repeated.

Ladder crews will leave their passport on the apparatus dash when going to the roof to perform ventilation. When going to the interior of the structure, each ladder crew will deliver their passport to the accountability location at their point of entry.

Once a passport is delivered to the pump operator, the passport will remain on the designated discharge gate indicating the "point of entry" to the hazard zone until supervision is upgraded in the area with a chief/safety officer.

Upon exit, the Company Officer must retrieve their passport. Both the company officer, engineer and division/group Officer will be responsible to see that passports are retrieved.

Crews exiting at a different location other than the original point of entry must immediately notify their original division/group and/or accountability officer of their changed status. Their passport must also be retrieved.

Tactical Level Passport Accountability

When division/group supervision is transferred from a company officer to a command officer, it elevates division/group management with a true tactical level boss vs. a working boss. This greatly facilitates the completion of the division/group objectives, it enhances the accountability process and it increases firefighter safety in the division/group.

Command officers assigned to manage a division/group, will need to be fully turned-out, then transport and place the BC RIC bag close to the entry point of your assigned area. The BC RIC bag contains a division/group accountability and air management board to assist in running the accountability process and managing the work/rest cycle of the companies assigned to your work location.

Once the accountability board is retrieved, go to the initial accountability engine where the passports are located and place them on the accountability/air management board.

Interview the engineer to roughly determine the current interior work times of your assigned units in the hazard zone. Estimate the exit times required for the units assigned to your area. Write them on the board.

Return to the entry point and start performing the standard responsibilities of a division/group officer described in Command Function #6 – Organization.

A company being assigned to a location that already has a chief officer in place in the division/group, will report to the division/group officer face to face, give him/her the company passport, and await an assignment from the division/group officer while remaining intact as a crew.

The division/group officer will need to help manage the air supply of the Units assigned to their area. This is one of the main functions of the accountability/air management board. The board is set up to enter Unit's entry times, the standard on air working times, and the expected exit times of the Unit's assigned to the division/group.

The rule of thumb for managing the work/rest cycle of a hazard zone Unit is to contact that Unit about 2 minutes before they have reached their estimated air safety margin, and remind them they are getting close to their work cycle ending, and they will need to exit the hazard zone soon.

Division/group officers assisting assigned units with their air management times in no way takes away or diminishes the company officer's responsibility for managing his/her crews air supply.

Companies exiting the hazard zone will perform a face to face with the Division/group officer. One item to cover in the face to face communication is the physical condition of the crew exiting the hazard zone. Division/group and company officers are responsible to monitor the welfare of their personnel at all times and determine if division/group recycling or a formal rehab is appropriate.

If the company is able to recycle, they will retain their assignment to the division/group, and the division/group officer will retain the unit's passport on their accountability board, noting the company is recycling.

If the company is sent to rehab, the division/group officer will return the passport to the unit being sent to rehab and they will notify command of the status change of the company ("Charlie to Command, I'm sending E-211 to Rehab and I need another engine company to replace them").

Terminating the passport system

Passport accountability will be maintained throughout the entire incident. Accountability will be terminated once the last passport is returned to the last company exiting the hazard zone.
Upon termination and release from the incident, company officers and crewmembers will ensure that the passport / pouch are accurate and returned to the dash of their apparatus.

General passport rules:

- Passports will be delivered to the assigned accountability location prior to entering the hazard zone.
- Passports will reflect only those personnel presently assigned to the Unit who are ready to make entry into the hazard zone.
- Passports will be maintained at the point of entry in the warm zone.
- Passports never enter the hazard zone.
- Passports will be retrieved by crews upon exiting the hazard zone.
- Initial passport accountability location is the 1st engine to a geographic location where crews deployed hose lines.
- When division/group management is bumped up to a command officer, all passports are managed by the division/group officers who are responsible for the Units in that work location.
- No Passports in the Command Post

1.9 - Managing the Work/Rest Cycle

Members are totally dependent on the air that they bring with them into the hazard zone. We must base our operations around the realistic working times of our SCBA's. Company officers must maintain an awareness of their crew's air levels and the decision to exit the hazard zone must be governed by maintaining an adequate enough air reserve to deal with any sudden or unplanned events while exiting.

It is the IC's responsibility to allocate sufficient amounts of resource to key tactical areas early on in the event to prevent companies from working past safe air reserve times. This type of proactive deployment management prevents maydays from occurring.

IC's, division/group officers, and company officers must all agree to realistic SCBA work times in the hazard zone. These work times must give the workers a margin of safety in case something goes wrong while exiting. Company officers must manage this on the task level and keep the IC or division/group officer informed of their air supply and projected work times.

Company officers must base their decision to exit the hazard zone on their air supply. This decision cannot be based on being relieved, or if problems still exist in their division/group.

Division/group officers need to use the accountability system hardware tools to assist them in managing their assigned company's work/rest cycle, air supply, and division/group accountability.

Division/group officers assisting assigned unit's with their air management times in no way takes away or diminishes the Company officer's responsibility for managing his/her crews air supply.

1.9.1 – Two in – Two out / Immediate Rapid Intervention Crew (IRIC)

In January of 1998, OSHA implemented the two in two out regulations to the Occupational Safety and Health Standard (PART 1910) - section 1910.134(g)(4). The link to the standard is below.

There are many critical factors to meeting the two in two out standard on a local level. Our departments considers several variables when complying with the standard that could include:

- Is your department in an OSHA state?
- Overall resource levels of the department
- Company staffing levels of the department
- Response times and order of arrival times of the department
- Volunteer vs. part time vs. career deployment practices

Click on the link to view 1910.134(g)(4) - OSHA Procedures for interior structural firefighting.

1.10 - The 3-Deep Deployment Model

The IC must always provide a steady, adequate stream of resources. 3-deep is the concept where an IC always has a steady stream of workers for the required tasks based on the incident's critical factors.

The 3-Deep Deployment process starts out with the initial arriving workers who have been assigned into and are working in the hazard zone – the first layer.

After these key tactical positions have been covered, subsequent arriving units are assigned to On-Deck positions (described shortly) at the entry points already utilized by initial arriving Unit's. This gives the IC a rapidly assignable resource and division/group support in the form of On-Deck companies – the second layer.

Once all of the critical tactical areas are adequately backed up with On-Deck Units, subsequent arriving units will either Level 1 or 2 Stage. These staged Units now give the IC the tactical reserve needed to replace companies or to back fill any companies addressing a sudden incident problem.

This model gives you workers "**3 Deep**". Workers working in the hazard zone, workers ready to go to work right outside of the hazard zone and having replacement workers waiting for an assignment in staged positions.

This involves the IC first requesting/acquiring and then effectively and proactively assigning later arriving units to On-Deck positions while keeping a tactical reserve in staged positions.

1.11 - In Transit

"In Transit" is defined as: the time it takes for a company to reach their assigned work area after receiving an order. It often varies due to:

- Distance between staging and the incident
- Size of the incident perimeter
- Amount of equipment the company needs to assemble

The IC or division/group officer will lose direct accountability of these companies while they're In Transit. It is the responsibility of the company officer to monitor the tactical radio channel while In Transit. For long in transit times (over 5 minutes or more) upon arrival to the assigned work area, the company officer should provide a radio announcement to the IC that the company is intact and in the assigned work area.

1.12 - On Deck

"On Deck" is defined as; a forward staging position located just outside the immediate hazard zone, safely distanced from the entrance of a tactical position/S/D. ***Once a crew is assigned to an On-Deck position, they are first and foremost a Rapid Intervention Crew until they are given an assignment into the hazard zone.*** The On Deck deployment model greatly assists an IC with managing hazard zone units' work/rest cycles and their air supplies.

On Deck crews will be supervised either by the division/group officer or the company officer and they will remain On Deck until assigned by the IC or division/group officer. The most likely assignments for On Deck companies are:

- Reinforce a position within an assigned sector
- Crew relief within an assigned sector
- Any other tactical position assigned by the IC
- Deploy as a RIC unit

Once the IC has deployed units to the critical division/groups around the incident scene, the IC must then take a proactive aggressive approach to assigning additional resources to those division/groups. This is best achieved by assigning staged resources as On Deck crews to those areas as soon as they arrive in staged positions. Layering On Deck crews around the fire ground will also provide the IC with the tactical reserves to manage the standard work cycle or sudden and unexpected incident events.

Assigning On Deck crews is done simply by contacting a staged company and directing them to go On Deck in a specific division/group. The order would sound like this: “Command to Engine 511, go On Deck on the Charlie side of the structure, Engine 111 is your accountability and resource location, you are assigned to Charlie sector”.

A crew assigned to an On Deck position will need to park their apparatus in a manner that doesn’t block access to the scene. Crews must be intact with full PPE, forecast the need for and collect all the necessary tools/equipment and report directly to their assigned location. Upon arrival, the On Deck company must contact the IC or their division/group officer and inform them that they are in position and ready to go to work.

On Deck crews must remain intact, in a ready state and monitor the tactical channel at all times. On deck crews must also size up the area that they are assigned to, this size up should include:

- Locating the structures entrance/exit points in their assigned area
- Interior and exterior conditions
- Unit ID of crews operating inside the structure
- Approximate location of interior crews
- Identify which crews are operating each hose line

When an on deck crew is used as a relief crew, the company officer should do a face to face and transfer information with the officer exiting the structure. The information transferred should include:

- Interior conditions
- Routing instructions to the work area
- Interior obstructions
- Additional tools/resources required
- Division/group objectives

1.13 - Company Recycling

Companies operating within a division/group will require the refilling of air and fluid replacement in predictable time frames. At large scale incidents Command should establish at least 1 Rehab location. Most of the time, crews that are assigned to rehab will be placed back in service after rehabbing. The rehab area may be located quite a distance from the work area and this distance creates the potential for:

- Command losing direct accountability of companies in transit to rehab
- Difficulty reassembling and reassigning crews in a timely manner from rehab

Recycling is defined as: a timely and efficient means of air replacement and re-hydration of companies while maintaining their division/group assignment. If conditions permit, a company's work cycle could be up to 2 to 3 air cylinders. In order to maintain a steady stream of resource in critical division/group, crews being relieved and exiting their S/D should recycle themselves in a timely manner. Companies being relieved and recycled will remain in their assigned division/group, refill their air supply, re-hydrate, then report back to their division/group officer or the IC that they are ready to go back to work.

Command/division/group officers have the option of assigning/requesting an Air/Light unit to geographic divisions. Air/Light Units assigned to geographic areas on the fire ground will help expedite the recycle of companies within the division/group.

Company officers should forecast the length of time they will be working in an assigned division/group and should bring spare air cylinders if necessary. This will enable a company to recycle close their division/group in a timely manner when a utility truck is not available in their division/group or area. The division/group officer may need to request additional resources to replace on deck crews or have recycled crews assume vacated on deck positions.

Division/group officers and company officers are responsible to monitor the welfare of their personnel at all times and determine if division/group recycling or a formal rehab is appropriate.

1.14 - Rehab

Companies operating within a division/group will require the refilling of air and fluid replacement in predictable time frames. At working incidents, Command should establish at least 1 Rehab location.

Rehab will operate on the staging/logistics channel and will inform the command post when they are close to the scene. The IC or logistics officer will inform the rehab unit where to set up on the incident site.

Units assigned to rehab must do a face to face with the rehab officer when arriving to rehab and deliver the company's passport.

The rehab officer will notify the CP when each individual unit arrives to the rehab location. This will prevent the IC from losing accountability of a company in-transit to the rehab location.

Most of the time, crews that are assigned to rehab will be placed back in service after rehabbing. If this is the case, the Rehab officer will confirm with the CP that company is being placed back into service and will return the company's passport when they are leaving the rehab area.

In the rare instances when a company will be re-assigned back to an active division/group, the rehab officer will take on the role similar to a Level 2 staging officer, returning the unit's passport, and giving them the following information:

1. Any tasks, the location and objectives assigned to the unit
2. The area where to report to, or the division/group boss to whom they are to report to
3. The tactical channel on which they are to operate on

2.0 - COMMAND FUNCTION #2 – ASSUME, CONFIRM AND THE POSITIONING OF COMMAND

Major Goal: To quickly establish and confirm a single IC and to place that IC in the most effective command position as long as the hazard zone exists.

The Assumption of Command must be a natural, automatic and regular occurring organizational event. Command Function #2 is designed to create a standard process for the initial command assumption to occur and then place/upgrade that IC in the most effective command position based on a standard set of conditions.

2.1 - Establishing Command

Command shall be formally declared on all incidents where two (2) or more Fire Department units are dispatched.

One or two company responses that are not going to escalate beyond the commitment of these companies do not require the first arriving unit or officer to assume command. The first arriving unit or officer will remain responsible for any needed command when required. Examples would include:

- Single unit response check welfare
- Check hazard
- Any EMS call requiring only two companies

The first Unit or member to arrive to the scene of a multi-unit dispatched incident will assume command of the incident by transmitting a standard Initial Radio Report (IRR), (Function 5 – Communications).

The confirmation of Command occurs when the Dispatch Center uses the Order Model to repeat the IRR back to all responding units, confirming that the initial arriving Unit is in Command of the Incident.

Assuming command causes the first-arriving Unit or member (the IC) to size up the incident, determine the incident's strategy and formulate an incident action plan (IAP). All of this is executed and shared with all the incident participants when the IC transmits an IRR.

When the incident begins with an in-place IC, all later-arriving units will be assigned based on the IC's IAP. This puts all the incident players on the same page. Everyone knows what the problem is and what action is being taken to solve it.

The absence of an effective IC is the most common reason for ragged incident beginnings and unsafe endings. Effective (and coordinated) action is the result of beginning (and ongoing) incident operations with an in-place and in-charge IC.

Once command has been established, all routine communication between the dispatch center and the incident will be directed through Command.

The initial Incident Commander shall remain in Command until Command is transferred or the incident is stabilized and Command is terminated.
A formal IC must be in place, performing the functions of command, whenever a hazard zone exists.

2.2 - Naming Command - Radio Designation

The radio designation **"COMMAND"** will be used along with the major cross road, or the specific occupancy name of the incident site (i.e. "Main Street Command", "St. Joe's Hospital Command"). This designation will not change throughout the duration of the incident.

The designation of "Command" will remain with the IC throughout the duration of the entire incident.

One tactical radio frequency can host several EMS incidents at once, but for incidents that are declared working, the assigned tactical radio channel should be cleared of other incidents, or, if there is credible call information, the call should be assigned on its own separate tactical radio channel upon dispatch if available. This will avoid having multiple “Commands’” operating on 1 (one) tactical channel.

2.3 - Command Positioning

The IC’s position will greatly affect their ability to control the incident scene. Typically, the Company Officer of the first arriving Engine Company will become the initial IC for the incident, IC #1.

There are three command positions that a Company Officer can place themselves in, depending on the situation. These three command positions are:

- Investigating Command position
- Fast-Attacking Command position – Inside the hazard zone
- "Command” position - Stationary, inside of a Command Post (CP).

2.3.1- Investigative Command Position (Nothing Showing)

This is a mobile IC on a portable radio, moving around and evaluating conditions while trying to identify the incident problem. The company officer should remain with their company to investigate while utilizing a portable radio to command the incident.

When the initial IC reports "nothing showing" or an equivalent report, any additional units to the incident shall continue into the scene using a Code 2 response (normal driving).

2.3.2 - Fast Attacking Command Position

Many times, the strength of our local IMS is the fast-attacking IC, who directly supervises the use of quick force at the beginning of the event. That action is reinforced and upgraded by response chiefs who come in behind the initial fast attacking IC to quickly establish a stationary, exterior command post that supports and expands on the fast-attacking IC’s initial actions. The fast-attacking command position provides the front-end command structure for that capability.
The Fast Attacking Command position is defined as: IC #1 enters the hazard zone (when in the offensive strategy) in full PPE, with a portable radio, supervising and assisting their crew in the attack.
The advantages of a Fast Attacking IC:

- Enhances crew safety and accountability
- Gives the IC another set of critical factors to evaluate and base unit assignments on (interior conditions)
- Usually solves the problem quickly

The disadvantages of a Fast Attacking IC:

- Combining action and command is tough to do
- Difficult communication position (full PPE in a hazard zone)
- Limited field of vision
- Reduces strategic span of control

The entire response team coming in behind a fast attacking IC must realize that the initial IC is in an attack position, not a command position. We trade off this position disadvantage because many times this initial front end “hit” is enough to stabilize the incidents problems.

When the front-end assault doesn’t stabilize the situation, the fast-attacking IC is not in the best position to continue command; they are in the worst position. The Fast Attacking Command position should end in one of three (3) ways:

1. Situation is quickly stabilized.
2. Command is transferred from the Fast Attacking Company Officer IC (#1) to a subsequent arriving Command Officer (IC #2).
3. If the situation is not stabilized and there is a delay in the arrival of a command officer, the Fast Attacking Company Officer IC must move to an exterior (stationary) command position and operate in the Command position. When this happens, the Company Officer has the following crew options:

    - Move up one of your crew members to Company Officer. Minimum 2-person Company in a hazard zone
    - Assign your crew member(s) to another Company in the hazard zone. This must be acknowledged by both the original and the receiving officer and by their inclusion in the accountability system.
    - Have crew exit with the IC and perform IC support roles
    - No crew will remain in a hazard zone without radio communications

2.3.3 - Company Officer IC’s

There are 3 operational levels that function at the scene of a hazard zone. They are:

- Strategic level
- Tactical level
- Task level

Each of these levels is distinct and has their own set of responsibilities.

For the majority of the incidents we respond to, the initial responsibility for managing all 3 organizational levels is handled by IC#1, when they are a Company Officer.

The first arriving Company Officer IC will size up the incident’s critical factors, declare the incident strategy and assume command. IC #1 has initial command and control responsibility for the entire incident operation on the strategic level until command is transferred or terminated.

On the tactical level, the fast attacking IC will implement and execute an incident action plan that addresses the incidents critical factors in order to facilitate the completion of the tactical priorities.

A fast attacking company officer IC will also directly supervise and assist their crew members with the tasks required to bring the incident’s problems under control.

In most cases, this initial attack wave eliminates the incident hazards. For incidents that are not quickly controlled, are escalating, or are significant in scope and size upon our arrival, the strategic and tactical operational levels must be upgraded with Chief Officers as required.

The strategic level of command on these types of incidents will be the 1st operational level that is upgraded. This command transfer significantly improves the IC's position and ability to perform and manage the 8 functions of command and the corresponding strategic safety requirements for the entire incident operation. Placing the IC in a standard Command Post (CP) position where they can exclusively focus on incident management, enhances and facilitates both the completion of the tactical priorities and firefighter task level safety.

2.3.4 - Command Position - Company Officer

The Command Position is defined as: a command position that is stationary, remote, outside of the hazard zone and inside of a vehicle (Command Post – CP). The most effective command position is inside a CP, not inside a burning building.

Certain incidents, by virtue of their size, complexity, or potential for rapid expansion, demand early, strong, stationary command from the outset of the incident. In these cases, the first arriving Company Officer (IC #1) will assume command and, from the beginning of the event, stay out of the hazard zone in a stationary exterior CP (most of these situations present as larger, defensive fires). A tactical worksheet shall be initiated and utilized to assist in managing these types of incidents.

If the Company Officer assumes a Command position from the onset of the Incident, the following options are available to assign of the remaining crew members on the IC's Unit.

A. "Move up" an acting officer within the Company. This is determined by the individual and collective capabilities and experience of the crew.
B. Assign the crew members to perform staff functions to assist the IC. Staff functions include recon/reporting, communications assistance; help with tactical worksheet tracking etc.
C. Assign company personnel to another Company. This must be acknowledged by both the original and the receiving officer and by their inclusion in the accountability system.

"Passing Command" to a unit that is not on the scene creates a gap in the Command process and compromises incident management and safety. To prevent this command and control gap, command shall not be transferred to any officer who is not physically located on the scene.

When a chief officer arrives at the scene first or at the same time as the initial arriving company, the chief officer should assume Command of the incident.

2.3.5 - Command Position – Chief Officer

A stationary Command Post (CP) allows the IC to begin packaging command for the on-going operation and escalation of that incident. Physically locating the IC in the Command position puts the IC in the strongest possible position to carry out the functions of command, accomplish the incident's tactical objectives, and ensure the safety of all members working on the fireground.

Responding Command Officers should to do the following, if/when possible, while enroute to the scene to set themselves up for success and to make the command-transfer process as seamless as possible:

- Initiate filling out a tactical worksheet with the dispatched assignment (if not driving)
- Reference any pre-plan info, access aerial views and hydrant locations [MCT] (if not driving)
- Listen critically to all radio traffic
- Log assigned companies onto the tactical worksheet (if not driving)

If a battalion chief is the initial-arriving unit to the same structure fire, they will operate in the Command position. Chief Officers can only operate in the command position when they are the IC.

2.4 - Transferring Command

To a major extent, command effectiveness is directly connected to regular command positioning; the entire command system revolves around the rapid establishment of a stationary, remote IC, operating in a standard CP.

By setting up and staying in a CP, the IC is in the ideal position to maintain on-line control; remain continuously available to communicate; and monitor and evaluate responders' changing welfare and survival needs while they are operating within the hazard zone.

The 1st arriving Chief Officer will respond directly to the scene. If an active hazard zone still exists, or if there are still tactical benchmarks to coordinate, command should be upgraded into the Command position. When arriving to the scene, IC #2 must transfer command in the following manner:

1. Size-Up - Verify that all operating positions match the current incident conditions
2. Transmit that your unit is On-Scene ("Battalion 1 On-Scene")
3. Contact IC #1 and announce that you'll be transferring command: "taking it from out here"
4. Verify the position & function of all hazard zone resource with IC#1
5. Contact and Confirm the command transfer with Dispatch, announce the current strategy, and make a resource determination

Command transfers should be short and sweet. When IC #1 (usually a fast-attacking IC) transmits a concise, clear initial radio report, unit assignments and condition reports, it ensures that IC #2 (usually a command officer working out of an SUV) will have quality information to quickly facilitate the command transfer.

2.5 - Package Command for ongoing operation and escalation

The following bullet points put an effective IC in charge of the incident:

- Strong standard command
- Sectors/Divisions
- SOPs
- Clear communications
- Standard strategy/action planning

Once in the Command position, the IC can now use the "standard" pieces of the incident management system to control incident operations. This comes down to the IC always being in a position where they can control where the workers are while matching their actions to the current incident conditions.

When the IC assumes a standard Command position inside a vehicle, the CP becomes the IC's "field office." Based on the size and design of the command vehicle (typically a response chief's SUV), it will give the IC the following advantages:

- A stationary, remote and quiet place to listen, analyze and make decisions
- A superior communication position (better radios, no PPE, quiet)
- More radio channels available
- A place to write and record
- Protection from the elements
- Better Intel equipment (MCTs, reference materials)

2. 6 - Upgrading the Command Post (CP)

Here are some of the disadvantages to working in an SUV CP:

- Sometimes you have a poor view of the hazard area
- It's very hard to manage more than one radio channel
- A Support Officer is needed for a true, Strategic advantage
- Not much room for more than 2 people to effectively operate in
- People keep banging on your door

Once the SUV-CP has reached its command limit (the end of a 2nd Alarm), it should be upgraded to a larger command vehicle (CV) so the CP and the command staff can keep pace with the event.

As the incident's requirements continue to grow, so must the command capability used to manage those resources. The IC's position must be upgraded and supported for these large-scale, fast-moving operations. Larger command vehicles (CVs) give command teams a place where they can keep pace with the incident requirements.

2.7 - Command Teams

For incidents that are complex or will require a larger amount of resource (up to about a 5th Alarm/Box) a Command Team should be quickly formed to manage the incident. Command Teams are a quick and effective way to manage the swift influx of resources needed to bring local incidents under control. Larger command vehicles (CV) also provide the command staff a position and place for this to happen on a consistent, standard basis. Here are the advantages of working from a dedicated CV:

- Provides a place for several command partners (SO, SA, Section & Branch positions)
- You can manage several radio channels at once
- Allows the IC to focus solely on the hazard zone
- Offers access to data, video feeds, phones, weather, reference materials, etc.

If available, larger CV's should be dispatched on all multiple-alarm incidents.

While these vehicles make it easier for the IC to perform the functions of command, they are not absolutely necessary. Parking a number of regular response-chief vehicles in close proximity to each other forms a "command village" and is an effective way to accomplish the same thing.

Supporting an IC at an incident out of a larger, dedicated command vehicle will be covered in greater detail in Function 8—Continue, Support & Terminate Command.

3.0 - COMMAND FUNCTION #3 – SITUATION EVALUATION

Major Goal of Command Function 3 is to develop a regular approach to size-up using standard information-management forms that identify the incident's major critical factors.

The information-management phase, known as *size-up*, involves the systematic, yet rapid and deliberate consideration of all the incident's critical incident factors. This standard size-up approach must begin at the very start of every incident operation. This insures that we will develop a rational incident strategy and corresponding action plan based on the current conditions.

3.1 - Matching standard conditions to standard actions

Standard conditions are identified as the incident's **Critical Factors**. We must identify the incident's critical factors before taking any action. Our initial size-up produces the information that becomes the basis for the incident strategy and the corresponding incident action plan (IAP). Investing a small amount of time evaluating the critical factors is extremely important to both beginning and on-going command and operational success, as well as firefighter safety.

The current, accurate and relevant information the IC obtains at the front end of the event will generally provide the informational foundation for effective initial and on-going action. This systematic evaluation process continually produces standard, safe, well-managed incident outcomes.

3.2 - 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 conforms 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, continually evaluating those factors, we keep the plan current and the workers safe.

3.3 - Information management

Information management presents complex challenges during most working incident operations. Information must be quickly received, processed, interpreted and acted upon. In some case, certain factors can be observed from the command post, while others can only be determined from different locations inside and outside of the structure/incident area.

Obtaining critical information requires the IC to develop, refine and practice a standard system of incident-intelligence management that is applied to actual on-line incident operations.

The IC uses a combination of the following four basic information forms to help manage and process information on the emergency scene:

- Previous experience
- Visual information
- Reported Info/Reconnaissance
- Pre-incident planning and familiarity

3.3.1 - Previous experience

Previous experiences and lessons learned are major incident-management resources and offer a practical way to evaluate where the incident is now and anticipate where it is heading. If we have seen the actual conditions in the past and developed an action plan to meet and match those conditions, we can anticipate the outcome of those actions if we were to apply them again (been there, done that).

A major decision-making capability involves quickly accessing the memory files that, over time, get loaded into a responder's brain when they encounter actual incident situations. A seasoned IC will relate past experiences to present conditions in order to evaluate where the incident is and anticipate which way the incident is headed.

3.3.2 - Visual observation

Visual observation and inspection are one of the most important ways we gain information. This information form requires a critical, perceptive eye and is the most common way the IC gathers information during initial and ongoing incident evaluation.

While enroute, the IC should observe the weather conditions (wind speed and direction) and the horizon for any smoke or fire conditions.

As the IC approaches the scene, they should take a route that shows 3 sides of the structure, or when possible, completely circle the incident (later arriving Command Officers). A drive-around can reveal a great deal of information, such as the layout of the incident area; access or obstruction issues; the extent and severity of the incident problem(s); potential structural failures; or rescue situations.

An important note on visual information as a size-up tool: **Whatever the IC sees from the command post trumps what all others see and report** (e.g. interior reports of "We're getting it!" when the IC can see a 10-foot fireball coming from the roofline).

3.3.3 - Recon information

Information the IC can't gather visually from their fast-action or command-post position is typically acquired from personnel assigned to standard geographic and functional positions. Information can come from divisions/groups dealing with specific problems and locations who then transmit their information reports to the IC. It also can come from other sources, such as owners/occupants, technical representatives, other agencies, law enforcement or media video feeds.

When the IC assigns companies and division/groups to key operating positions, they must report back regarding the conditions in their assigned areas. With this information, the IC builds a strategic picture of what is happening around the entire incident site. The IC uses this "big picture" to keep the strategy and attack plans current and to keep all hazard-zone workers connected.

The IC is responsible for understanding the overall situation, incident resources, and organizational and operational statuses. Division/group officers concentrate on information that supports tactical operations, integration and coordination. Companies must deal with the details required for direct task-level effectiveness. Simply, the level of required information (details) gets cut into smaller pieces as it moves toward the task level.

3.3.4 - Pre-planning information

Pre-incident planning arms the IC and the response team with facts and details almost impossible to acquire during an actual event. This is because pre-incident planning is conducted in ideal situations,

during the daytime under non-emergency conditions. By physically visiting these tactically significant occupancies during these information-gathering visits, we increase the awareness and knowledge of responders who might have to operate at (and in) these locations under critical conditions.

Even though the task-level workers operating at an incident aren't in the position to review the actual plan during an event, they retain the familiarity gained during the preplanning process. An IC working in the command position is generally in the best position to look at, manipulate and manage the plans, and they can relay pertinent information to the decentralized operating D/Gs and companies.

3.4 - Critical Factors

Virtually every incident factor has a related set of consequences ranging from minor to fatal. This is what makes critical factors *critical*. A major function of IC information management is to identify the factors with the most severe consequences and then concentrate on reducing, stabilizing, eliminating or avoiding the possible outcomes of those critical factors. This requires the IC to develop a standard approach of sorting and prioritizing critical factors.

The IC needs a simple system to deal with all basic incident information. Critical factors offer such a system. There 8 basic Critical Factor categories:

1. Building Type
2. Fire
3. Occupancy
4. Life safety
5. Arrangement
6. Resource
7. Action
8. Special circumstances

3.4.1 – Critical Factor Category – Building

- Size—area and height
- Interior arrangement/access (lobbies, stairs, halls, elevators)
- Construction type—ability to resist fire effect
- Age
- Condition—faults/weaknesses
- Value
- Interior compartmentation/separation
- Interior arrangement / Basement profile
- Vertical—horizontal openings, shafts, channels
- Outside openings/access—doors and windows/degree of security
- Utility characteristics (hazards/controls)
- Concealed spaces/attack characteristics
- Effect the fire has had on the structure (at this point)
- Time projection on continuing fire effect on building
- How much of the building is left to burn?

3.4.2 – Critical Factor Category – Fire

- Size
- Extent (percent of structure involved)
- Location
- Stage (inception to flashover)

- Direction of travel (most dangerous)
- Avenue of travel
- Time of involvement
- Type and amount of material involved—structure/interior/finish/contents/everything
- Product of combustion liberation (smoke, heat, flame, gas, etc.)
- What is perimeter of fire?
- How widespread is the fire area?
- Fire access—ability to operate directly on fire

3.4.3 – Critical Factor Category – Occupancy

- Specific occupancy Type—group (business, mercantile, public assembly, institutional, hazardous, industrial, storage, school)
- Value characteristics associated with occupancy
- Fire load (size, nature)
- Status (open, closed, occupied, vacant, abandoned, under construction)
- Occupancy—associated characteristics/hazards
- Type of contents (based on occupancy)
- Time—as it affects occupancy use
- Property conservation profile/susceptibility of contents to damage/need for salvage

3.4.4 – Critical Factor Category – Life Safety

- Location of occupants (in relation to the fire)
- Number of occupants
- Condition of occupants (by virtue of fire exposure)
- Incapacities of occupants
- Commitment required for search and rescue (firefighters, equipment, and command)
- Fire control required for search and rescue
- EMS needs
- Time estimate of fire effect on victims
- Exposure/control of spectators
- Hazards to fire personnel
- Access rescue forces have to victims
- Characteristics of escape routes/avenues of escape (type, safety, fire conditions, etc.)

3.4.5 – Critical Factor Category – Arrangement

- Access, arrangement, and distance of external exposures
- Combustibility of exposures
- Access, arrangement and nature of internal exposures
- Severity and urgency of exposures (fire effect)
- Value of exposures
- Most dangerous direction—avenue of spread
- Time estimate of fire effect on exposures (internal and external)
- Barriers or obstruction to operations
- Capability/limitations on apparatus movement and use
- Multiple buildings

3.4.6 – Critical Factor Category – Resource

- Staffing and equipment on scene
- Staffing and equipment responding
- Staffing and equipment available in reserve
- Estimate of response time for personnel and equipment
- Condition of responders and equipment
- Capability and willingness of personnel
- Ability of responders to fit into an IMS
- Number and location of hydrants
- Supplemental water sources
- Adequacy of water supply
- Built-in private fire protection (sprinkler, standpipe, alarms, protected spaces, smoke removal, etc.)

3.4.7 – Critical Factor Category – Action

- Effect current action is having
- Things that need to be done
- Stage of operation (rescue, fire control, property conservation, customer stabilization)
- Effect of the command function—is command established and working?
- Is there an effective organization?
- Has the IC forecasted effectively?
- Is the incident in the proper Strategy with the corresponding IAP?
- Tactical priority questions: Are victims okay? Is fire out? Is loss stopped?
- What is the worst thing that can happen?
- Are operating positions effective?
- Are there enough resources? (Personnel, apparatus/equipment, logistics/support, command, water, SCBA air)
- Are troops operating safely?
- Is there a safety plan/organization (On-Deck, tactical supervision, etc.) in place that can react in case someone gets in to trouble?
- Situation status: from out of, to under control

3.4.8 – Critical Factor Category – Special Circumstances

- Time of day/night
- Day of week
- Season
- Special hazards by virtue of holidays and special events
- Weather (wind, rain, snow, heat, cold, humidity, visibility)
- Social unrest (riots, terrorism, etc.)

3.5 – Managing Critical Factors

The incident critical factors are the basic items an IC must consider when evaluating tactical situations. They constitute a checklist of major elements associated with size-up, decision-making, initiating operations, and review and revision. It's important for the entire team to agree upon what the critical incident factors are, as well as the standard organizational reaction to those factors.

Command deals with these incident factors through a systematic management process that:

1. Includes a rapid overall evaluation
2. Sorts the critical factors in order of priority
3. Seeks more information about each of those factors
4. Focus on the major factors effecting the incident (fire)
5. Quickly and properly react to visual observation and CAN reports

Critical incident factors represent an array of items that remain dynamic throughout the event. Therefore, the relative importance of each factor changes over time. Command must deal continuously with these changes and base decisions on current information relating to the most important factor.

The effective IC does not stick with the initial plan of action after conditions change—for better or for worse. Successful incident operations require the IC to revise the IAP as needed by constantly reconsidering the incident's major critical factors based on feedback from the information forms.

When IC#1 (the company officer) chooses the offensive strategy and the fast-attack mode, they make their initial size-up from an exterior position. The IC sees the effect the incident problem is having outside the hazard zone. The fast attacking IC then moves to the interior and begins collecting information about how the incident problem is affecting the inside of the structure. These conditions, such as the problem location and the amount of smoke and heat, are utilized in the decision-making process to assign subsequent arriving units.

When an IC is operating in a strategic command position, they usually have a good view of the incident scene. As the IC assigns units to the different operational positions around the inside and outside of the incident scene, they will receive size-up information in the form of progress/CAN reports from these different positions. The IC must consider these reports along with what they are actually seeing. Whatever the IC sees, trumps all other reports.

3.5.1 - Consider fixed factors – manage variable factors

Fixed factors pertain to the things that can't be change, such as the way a building sits on a piece of property, the occupancy type or the distance of an exposure. These fixed factors present certain realities that the IC must plug into their incident action plan. If something that normally takes 3 minutes is going to take 20 minutes because of a fixed factor, the IC must react, plan and manage accordingly

Fixed Factors:

- Building
- Occupancy Type
- Arrangement
- Special Circumstances

Variable factors are things the IC can change. If a building is full of smoke, the IC can order ventilation. If the building is heavily secured, a ladder company can force entry. Engine crews manage the fire by applying a sufficient amount of water to extinguishing it. When we don't (or can't) control the variable factors, we should be in safe locations, away from the factors that may harm us.

Variable Factors

- Life
- Fire
- Resource
- Action

3.5.2 - Critical Unknowns

During most critical incident situations, command must develop an initial action plan based only on the critical factors they can see at the beginning of operations. Most of the time, the initial information is very incomplete. The ability to identify the “knowns” and the “unknowns” emerges when the IC uses the standard inventory of the critical factors. The IC must:

- Quickly size up what they know and what they don’t know
- Identify and address critical “unknowns” during incident operations
- Some unknowns must be addressed immediately, especially in situations that involve firefighter safety and survival, before the problem can even be engaged (such as basement fires)
- Some forecasted critical unknowns are so critical that they may drive the initial or current Strategy choice.

3.5.3 - Quickly Identify & React to Safety “Red Flags”

Red flags are pieces of information that we must address because they can end up injuring or killing us. The IC must always take a pessimistic approach when sizing-up, assuming the worst until determining otherwise.

A red flag will not necessarily change the overall incident strategy or incident action plan, but it must be identified and addressed by the IC and the rest of the hazard zone team. This is a big part of how the IC ensures everyone goes home when the event is over. Some examples of red flags include:

- Fire in the attic space
- Fire in a basement
- Operating above a fire (basements, floor above the fire)
- Zero visibility
- Encountering high heat
- Reports of, “We can’t find the fire”, beyond the normal discovery time
- More than one (1) request to back up an attack position
- Reports that state “fire control,” but you can still see active fire conditions from the command post
- Victim(s) located
- Wind-driven fires
- Smoke/fire showing from cracks in walls.

3.5.4 - Maintain a Realistic Awareness of the Elapsed Incident Time

One constant for structure fires is that the building will last a very short period of time when exposed to flame. Another severe time constraint is the length of time an SCBA will supply air to its wearer.

In many systems, the Communications Center provides the IC with elapsed-time reminders. These reminders serve as cues for the IC to re-evaluate conditions, the current strategy and to consider the length of time firefighters have been operating in the hazard zone.

3.5.5 - Structure & Time Information around the Tactical Priorities

Tactical priorities provide a job list for incident operations; they are the reason our customers call us. For structural firefighting, these tactical priorities are:

- Search/rescue
- Fire control
- Property conservation

- Customer stabilization.

Effective incident communications focus on completing the tactical priorities (within the parameters of the critical incident factors and firefighter safety). This approach requires a simple, standard communications game plan (SOP) for the entire organization.

3.5.6 - Continually Reconsider Conditions; Stay Current & Stay Connected to Resources

The IC develops their strategy and the IAP based on the initial size-up of the incident's critical factors. These critical factors are very dynamic; they are either getting better, or they are getting worse, but they never stay the same. The current and forecasted incident conditions must drive the strategy, the IAP and our risk-management plan.

4.0 - COMMAND FUNCTION #4 – STRATEGY & INCIDENT ACTION PLANNING

To quickly determine the most effective, correct action, the IC must "cut through" a lot of confusion along with evaluating all of the incident hazards. What we do at the very beginning of the event generally sets the stage for what happens throughout the incident.

Command Function 4 describes how the IC develops and uses the incident strategy and incident action plan (IAP) to take the correct actions that matches and takes control of the incident conditions—all within the overall incident strategy.

4.1 - Matching standard conditions to standard actions for a standard outcome

This is the core of the command system and is 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.

4.2 - 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.

4.3 - Use the Critical Factors to Develop the Incident Strategy & the IAP

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.

4.4 - 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. Reference PFD SOP 2.5.1 for more information.

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

- 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 SOPs, 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 safety SOPs.

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.

4.5 - Determine the overall incident Strategy

A hazard zone consists of the overall zones identified which determine the level of risk to civilians and emergency workers in relationship to the incident's problems. The hazard zone is divided up into three (3) separate, distinct areas:

1. Hot zone - An IDLH environment due to heat, lack of oxygen, and/or the presence of the products of combustion. Workers inside of the hot zone must be in the proper PPE for the hazards identified
2. Warm zone - A defined area just outside of the hot zone that has the potential to become IDLH contaminated with the incident’s products. Workers inside of the warm zone must also be in the proper PPE for the hazards identified (same as hot zone workers)
3. Cold zone - A safe area outside of the warm zone that has little or no chance of becoming IDLH contaminated with the incident’s hazards. Workers in the cold zone require no PPE. The cold zone typically contains the strategically positioned command post, staging, rehab, logistical support, etc.

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

- Offensive operations are conducted inside the hot zone to control the incident’s problems
- Defensive operations are conducted outside of the hot zone - in safe locations - to control the incident’s problems

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

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

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

The IC 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.

4.6 - 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).

4.7 - Confirm Ongoing Strategy as part of the Elapsed-Time Notifications (ETN)

When an offensive Working Fire or Has-Mat incident is declared, it will prompt the TRO to begin Elapsed Time Notifications (an IC can also request ETN's whenever they feel it is necessary).

The TRO will announce over the tactical frequency an elapsed time notification every five (5) minutes until the incident is placed under control, or until command requests to discontinue or restructure the ETN's.

The IC must verbally acknowledge each 5-minute notification by re-announcing the incident's strategy over the assigned tactical radio frequency until the incident is placed under control, or until command requests to discontinue or restructure the notifications.

4.8 - 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 decentralizes the hazard-zone by assigning D/G responsibility to later arriving officers. D/G 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 have a better view of conditions in their D/G than the IC.
- They are in a much better position to directly manage the tactics, safety, and accountability of assigned personnel in their D/G.
- These officers are in the strongest position to manage and supervise expanding incident operations.

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

The IC must process reports from all the operating divisions/groups to continually manage both the overall incident strategy and the corresponding IAP.

4.9 - 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 companies. These basic functions will provide the framework for field assignments for these companies:

It is important to understand that with modern fire attack, it is less about pre-designated or pre-assigned company functions and more about arrival sequence that will determine what functions a given company might be assigned to do.

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
- Ventilation (Post fire control)
- Forcible entry
- Raise ladders
- Provide access/check fire extension
- Utility control
- Provide lighting
- Deploy aerial devises
- Operate ladder pipes (aerials and platforms only)
- Perform overhaul
- Extrication
- Loss control activities
- Provide roof reports on smaller commercial and strip mall occupancies

Each 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.

4.10 – 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 and 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 unit's apparatus and where their handline and/or water supply comes from. This manages attack positioning and prevents un-necessary congestion around the incident scene.

4.10.1 - 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.

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 fiction 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).

4.10.2 - 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 lay 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
- 2-person staffing on a responding fire apparatus
- Water tender service areas

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.

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.

4.10.3 - Pumped Water

After initial arriving companies have established an adequate water supply, newly arriving companies should stage on those hydrants providing the ability to pump the hydrant. Staging key pumpers on hydrants enhances fire ground safety in several ways:

- Ensures an uninterrupted water supply
- Provides max hydrant volume when needed
- Reduces forward scene congestion
- Ability to pump water through the forward pumper in the event of mechanical failure

A pumped water supply is necessary when large volumes of water are required on the fire ground. This normally occurs later in the attack operation when Engine mounted master streams, ladder pipes, or multiple high GPM attack lines are in operation.

Whenever possible, first alarm companies should lay their own supply lines to cover all critical tactical positions before pumped water is considered.

Supply line lays of any length (over 200 ft.) should be pumped when supplying aerial devices, large bore master streams, or several handlines at once. A single 5-inch hose can deliver the entire volume of the hydrant (1200 – 2000 GPM depending on main and supply hose size) when being pumped by a key pumper. This often times makes it unnecessary to lay additional supply lines to Forward Pumpers in large volume water operations.

4.10.4 - Water Shuttle Operations

If the IC forecasts/predicts that more than a standard sized booster tank of water (500 gallons) will be required to properly control and overhaul the fire, they should establish a water supply using a fire hydrant or a portable water tank shuttle supply operation.

Whenever possible, departments should try to utilize a water supply from a fire hydrant as opposed to using a drafting/water shuttle operation. When a hydrant is not located close enough to the scene to provide a pressurized water source, a water shuttle operation should be set up and utilized as soon as possible.

Because a water shuttle operation takes place outside of the hazard zone, pumping engineers and water shuttle apparatus operators should be placed on a separate radio channel that is managed by a water supply group supervisor. This will greatly reduce radio traffic on the hazard zone tactical channel.

The key to a successful water shuttle operation is the initial portable water tank set up location and minimizing the idle time of water shuttling apparatus. The proper initial set up of the water supply operation is essential for two reasons; (1) the water supply requirements are most critical during the first few minutes of the attack, and (2) it is difficult or impossible to build on or maneuver around a poor set up.

A water shuttle specific 1st alarm response should be able to provide a continuous flow of 400+ GPM if the water supply source is located a reasonable distance from the scene and the dump site has been properly set up.

The following formula should shall be used to determine the number of water tenders needed. Examples of a 400 GPM flow operation are provided:

GPM flow required (400) x turnaround time (typical time of 30 minutes) / Capacity in gallons of available water tenders (2000) = Number of water tenders required for operation (6)

There are 3 main components to a water shuttle operation:

- **Dump Site**; using portable water tanks at the scene
- **Travel Time**: the time it takes to travel between a dump site to a fill site, and back
- **Fill Site**; utilizing a fire hydrant, a well pumping station, or a draft location away from the scene to fill water shuttle apparatus

Dump Site - On most offensive working fires in areas without hydrants, the initial arriving Engine Company will respond directly to the scene and begin their fire attack using tank water. Once the initial arriving pump operator has their pump panel set up, they will assist a subsequent arriving Engine or Tanker driver with setting up a portable water tank and start a drafting operation.

Members must spot their apparatus and set-up the portable water tanks in a manner that maximizes water shuttle apparatus access in, out, and around the water tanks and the emergency scene in general.

Travel Time – Can be the biggest factor in producing adequate fire flows. The IC must consider the travel times to and from the fill site as they relate to supplying adequate fire flows. This is especially critical in long-term offensive firefighting (two or more work cycles).

Fill Site - The closer the fill site is to the dump site will greatly increase the water flows that can be achieved. Fill sites should be selected in the following order:

- Hydrants that are located closest to the scene
- Well pumping stations that are located closest to the scene
- Drafting location

Once a pressurized supply site has been initially set-up, leave all supply hose, valves and accessories attached and in place until the operation is concluded. This will great speed up turnaround times at the fill site.

If shuttled water has to be drafted out of a static water source, Command should dedicate one drafting pumper at the source to supply/fill water shuttling apparatus. This will provide for the quickest turn-around times at the fill site.

4.11 – Managing 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 incident current conditions.

4.12 - 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 (hot zone), in the appropriate PPE, to attempt to control the incident hazards inside of the hot zone. An offensive IAP is based on the standard offensive tactical priorities.

Standard offensive strategy tactical priorities and their corresponding completion benchmarks:

- Fire Control – "Fire Control" (F/C)
- Life Safety – Primary and Secondary "All Clear(s)" (A/C)
- Loss Control/Property Conservation – "Loss Stopped" (L/S)

- Post Fire Control Firefighter Decontamination (Decon)
- Customer Stabilization – Short term

The offensive tactical priorities establish the major operational activities, in the order they should be addressed, when selecting the offensive strategy.

4.13 - *Blue Card – Fire Research

Blue Card Command SOPs are focused primarily on the strategic aspects of IDLH, hazard zone management. Whenever presenting on strategy, tactics must also be presented on (side by side) because you use the strategic part of the system to facilitate the completion of the tactical part of the system (completing the chosen strategy's "tactical" priorities).

The Blue Card SOPs are based on and support the fire research performed by highly qualified engineers. This evidence-based, critical factor data provides the fire service with the information to adjust "best practice" tactics to employ when fighting modern day structure fires.

4.14 - Offensive apparatus placement

Customers request our service when a building is on fire. Our primary goal must be to eliminate/minimize the fire as quickly and as safely as possible. The most effective action to take when something is on fire, is to put water on the fire. To facilitate this, apparatus on offensive fires should be placed around the hazard zone using the following guidelines:

- Engines establish initial attack positions by establishing an uninterrupted supply of water. This should be done as early as possible.
- Avoid placing non-pumper type apparatus (Rescues, Water Tenders, andTruck Companies, etc.) in key tactical offensive attack positions
- Place Engines as close to what's burning as safely as possible (30 ft. rule). This greatly facilitates applying water onto a fire as quickly as possible
- The further the attack position is from the fire area, the longer it will take to put water on the fire. Command must account for these longer water "in-transit" times as they relate to the continued fire effect on civilians and the building's structural components
- Units assigned to an incident where their apparatus will not be utilized in a key tactical position (only used for: man-power, hand tools, small equipment, etc.) should be directed to "spot out of the way" when being assigned, minimizing scene congestion

4.15 – Offensive Attack Positioning and Performing 360's

When arriving to the scene, the initial size-up is usually performed and then transmitted (via the Initial Radio Report (IRR) - Function 5 - Communications) from inside the cab of the apparatus. The initial size-up and strategic decision made on the IRR is NOT an affidavit of the overall incident conditions. Whenever possible, prior to making entry into a structure fire, a fast attacking IC shall perform a 360-degree assessment of the fire building/area to further determine:

1. The fire's size, location, and extent
2. Verify basement type (if present) and the stories from the Charlie side
3. The ventilation profile of the structure (the identification of flow paths – or potential flow paths)
4. Identify the safest, most appropriate attack position
5. Life safety profile of the incident
6. Confirmation of the initial Strategy and IAP

A thermal imaging camera (TIC) is an essential tool for sizing up a structures fire conditions. If available, a TIC should be used during the entire 360-degree assessment. TIC readings of the interior of the fire compartment should also be obtained prior to committing crews to entry.

Some fire area arrangements prohibit fast attacking IC's from performing a full 360-degree assessment of the structure (larger buildings, long apartment/row house/town house complexes, large strip malls, etc.). The IC must announce on the Follow-Up Report when a 360-degree assessment of the structure cannot be performed on the initial size-up (i.e.; "360 not performed due to the buildings size/arrangement").

Incidents where a 360-degree assessment cannot be performed by the initial IC, Command must insure that a unit be assigned to assess any unviewed sides of the structure as soon as possible into the incident (usually the "Charlie" side). This is especially critical for structures that have any type of basements or sloping grade elevations in their overall arrangement.

4.15.1 – 360-degree assessments and verifying the fire's size, extent, and location

One of the most critical size-up items when performing a 360-degree assessment is determining the fire's size, extent, and location.

When visible fire is located (observed), water should be applied onto it as quickly and as safely as possible. All fire research indicates that putting water into a compartment that is hosting a fire makes everything better. Water application onto to visible flames and/or hot smoke prior to final extinguishment of the actual burning fuels does nothing but IMPROVE interior conditions for the:

- Civilians
- Firefighters
- Building's contents
- Building's structural components

The thickness, density, and pressure (or Volume, Velocity, Density, and Color-VVDC) of the smoke should also be assessed and are good indicators of the fires stage and location. High pressure smoke escaping a structure usually indicates the fire has enough oxygen to continue to build pressure. Entry crews can expect higher interior temperatures when these conditions are visible from the exterior.

Fires that have entered into a ventilation controlled state (due to consuming all of the available oxygen in the compartment) can present themselves with light smoke or nothing showing conditions upon arrival. Ventilation controlled fires can rapidly accelerate to extreme fire behavior conditions (temps over 1,800 F) when enough oxygen is introduced into the fire area with the absence of water being applied to control the fire and/or to reduce interior temperatures. Providing any tactical ventilation prior to obtaining fire control at this stage in fire control operations will intensify the fire and MUST be avoided.

4.15.2 – 360-degree assessments and verifying the basement type (if present) and stories from the Charlie side

Fast attacking ICs must verify the basement type (if present) of the structure and the stories that are present from the Charlie side. The number of stories from the Charlie side of the structure will need to be announced in the follow-up report if the stories don't match up to side Alpha. This does not include the basement.

Basement type and conditions must be identified before entering the structure whenever possible. Local basement type descriptions must be agreed upon by the entire response team.

Basement involvement must be considered and validated whenever there are smoke/fire conditions presenting from upper floors (in response areas that have basements). The initial IC **MUST confirm** the conditions in the basement prior to making entry into the structure whenever possible.

When the 360 size-up identifies/confirms basement involvement, the IAP must be re-adjusted to make the attack directly on the basement fire. **Firefighters shall NOT make entry on a floor above a working basement fire. Always fight a basement fire on the same level of where the basement is located. This most often requires exterior water application through one of the basements horizontal openings.** If no horizontal openings are present (with a confirmed basement fire) penetrating nozzles should be used to apply water into the basement.

4.15.3 – Assess the ventilation profile of the structure (the identification of flow paths – or potential flow paths) during the 360-degree assessment

An assessment of the outside openings and determining the overall ventilation profile of the structure shall be made prior to any offensive entry whenever possible. Critical items to size-up when assessing a structure's ventilation profile are:

- 100% High pressure exhaust vent(s) – very hot, convection heat currents. Worst place to be in a burning structure
- 100% Low pressure inlet vent(s) – cool air inlet. Best place to be in a burning structure
- Bi-direction vent – Upper portion of the opening is the high-pressure exhaust vent; lower portion of the opening is the low-pressure inlet vent. These two (2) layers separate themselves at the "neutral plane". A well-defined neutral plane usually indicates the fire is located on that level of the structure
- Puffing/alternating exhaust/inlet vent – usually caused when the pressure of the fire gasses cannot escape the opening/compartment because high pressure is impacting the opening (possibly caused by high winds or PPV on the opening)
- The ventilation profile will change throughout the incident based on; changes to wind direction and speed, changes in fire conditions, water application, as well any "tactical" ventilation performed by operating units

4.15.4 – Use the 360-degree assessment to identify the safest, most appropriate attack position

A major element of the IC's IAP is determining the safest location(s) for making an offensive attack (the physical location where firefighters will initiate flowing water onto the fire). Whenever possible, attack offensive fires in the following manner:

- Perform quick hits (exterior water application) to improve interior conditions whenever possible prior to making offensive entry into the fire area/structure
- Always avoid entering into an exhaust (high pressure) vent or flow path
- Always attempt to make an offensive entry from an inlet (low pressure) vent of the structure (or a neutral opening)
- Always attempt to operate from the upwind side of the structure (critical with wind speeds over 6-8 mph)
- Always operate on the same level or below the fire WHENEVER possible
- ALWAYS AVOID working above a working fire

4.15.5 – Use the 360-degree assessment to size-up the life safety profile of the incident

Immediate life safety issues are one of the primary reasons 360-degree assessments are performed. If there are any rescue issues during the 360-degree assessment, the IC will need to announce the situation during the follow-up repot and re-adjustment the IAP as necessary to address the life safety issue(s) present.

4.15.6 - Confirmation of the initial Strategy after performing a 360-degree assessment:

Performing a 360-degree assessment provides the initial fast attacking IC a view of all sides of the structure prior to transmitting the Follow-Up report and making entry into the structure. Most of the time, the initial strategy reported on the IRR won't change. But there are some incidents where the 360-degree assessment will require a change to the incident's overall strategy or an adjustment to the IAP. Regardless if your IAP changes, the overall incident strategy must be re-confirmed as part of the Follow-Up report. Situations that may/will require changing the original strategy and/or IAP may include:

- Immediate life safety issues(s) not seen from the initial command position
- Basement fires where the initial attack efforts must be re-directed to a different area/location on the fireground
- Fires located in a different area or part of the structure not seen from the initial command position where entry or initial water application will be made from a different location as stated in the IRR
- Conditions after a 360-degree assessment indicate the fire's size, location, or extent requires changing from the offensive to a defensive strategy

4.16 – Offensive fire stream considerations

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

- Smooth bore nozzles: Greater penetration, reach and striking power. Can be used on 1 ¾", 2", and 2 ½" handlines. Less steam conversion.
- Fog nozzles: Increased heat absorption/expansion. Shorter reach. Can be used on 1 ¾", 2", and 2 ½" handlines. Most effective nozzle for protecting exposures.
- Penetrating nozzles: Used to penetrate/pierce a structures walls, floors, and ceilings to apply water from one area of the fireground that is separated via a barrier from another. If not practiced and used (if available) can be slow to set up and deploy. Streams produced by penetrating nozzles should be considered "fog" streams when flowing.

Choose the proper sized attack line:

- 1-3/4" Lines: Fast to deploy, the most mobile handline when charged and flowing water, good volume, 150-200 GPM
- 2" Lines: Slower deployment and mobility speeds. GPM depends on pump pressure and nozzle type, 200-300 GPM
- 2-1/2" Lines: Slowest deployment speeds, difficult to advance and move once charged and flowing water, 200-300 GPM. Usually used with smooth bore nozzles
- Engine Mounted Master Streams: Fast to set up and operate, large volume, great reach and penetration, 500 to 1,000 GPM

- Elevated Master Stream: Slow to set up – maximum water, 500 to 2,000 GPM

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

4.17 - Strategic level attack line placement 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 through doors, halls, stairways, or other vertical and horizontal channels/shafts through which people and fire may travel. General attack line placement guidelines include:

- Always establish an early, uninterrupted water supply for all fire-suppression activities
- Consider mobility vs. GPM when selecting the properly sized hose line
- All initial FD efforts must be directed towards controlling the fire
- Controlling the fire supports 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 and as safely as possible. Safely is defined as: the further away from the fire that you can apply water on it, the safer it is for the occupants, the property, and the firefighters (use the reach of the stream)
- Many times, it is much quicker and safer to apply water onto offensive fires through outside horizontal openings using a straight stream or smooth bore nozzle. This is true for all fires, but especially true for fires that are visible on upper floors or higher elevations
- Always avoid applying a fog pattern into/onto an outside opening
- When required, entry teams must use their handline streams to cool hot smoke (to reduce interior temperatures) prior to direct water application onto the actual burning fuels
- Once fire knockdown has been achieved, fire control crews must continue to reduce the interior temperatures of the structure to below 200 degrees F to improve occupant and firefighter survivability. This is done by direct water application (using a semi-fog pattern or broken solid stream) onto the ceilings, walls, and other surfaces/objects directly exposed to the combustion process
- Be prepared to back up in place hose lines if requested
- Always try to operate from one (1) attack position whenever possible. Operating from multiple attack positions on offensive fires can increase risks to firefighters
- No uncharged hoselines past the entry point of the structure
- All hoselines entering the hazard zone must have adequate GPM (150+ GPM) to protect entry crews
- All members working in the hazard zone must be operating under the protection of a charged hoseline in their immediate geographic/work area
- No Gated-Y's past the entry point of the structure
- Maximum distance inside a structure is 175 feet
- Interior work times must be tied to SCBA air supplies, and the decision to exit the structure (hot zone) must be based on exiting with an air reserve (33%)

Once initiated (flowing 150+ GPM) an offensive attack should quickly have a positive effect on the fire. 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 compartmented structure with common attic/void spaces.

Beware of hose lines that have been operated in the same place for long periods. Fire conditions should quickly change after applying water to the seat of the fire (for the better). The IC must continually evaluate the effect of hose line operations. If the operation of such lines becomes ineffective, move, adjust, or redeploy them.

Normal means of egress most often times will give control forces the fastest access points into the structure while protecting these avenues of escape for occupants and firefighters.

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 must quickly cover and protect the normal means of egress for both the occupants and firefighters to safely utilize.

A strategically positioned 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 outweighs interior reports of “we’re getting it” when fire conditions haven’t changed for the better.

Company Officers and D/G Officers must assume responsibility for the effectiveness of their fire streams. Officers must maintain an awareness of where fire streams are going and the overall effect they are having on controlling/eliminating the fire.

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. That is why a CAN report includes “needs”.

4.18 – Offensive Fire Control Strategic Considerations

The IC manages the Fire Control 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)
- 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 initially 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 time period.

The term **“Knockdown”** indicates that the main body of fire has been controlled in a unit’s assigned geographic work area, but the 7 sides of the fire have NOT been validated for any fire extension.

The term **“Fire Control”** will be transmitted when the main body of fire has been extinguished and all 7 sides of the fire have been confirmed as having no fire extension (or when extension has been controlled) in an assigned unit’s geographic/operational area.

When all areas exposed to the products of combustion report fire control, primary and secondary all-clears, and no other resources are required to complete the remaining tactical priorities, the IC will transmit an **"Under Control"** radio report to dispatch/alarm.

Command must direct whatever operations are required to get water on the fire as early as possible in the event. Command should not become too distracted with other incident requirements until the fire control benchmark is achieved. **The rescue/fire control-extension/exposure problem is solved in the majority of cases by fast, strong, well-placed water application that puts water on the fire as quickly and as safely as possible.**

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:

- Level of risk to fire fighters
- Confinement/control efforts
- The concealed spaces that contain the structures support elements/systems
- Rescue profile of the incident
- Exposures

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.

The basic variables relating to offensive attack operations involve:

- Location/position of attack
- Size of attack
- Required support for the attack until fire control is achieved (door control and additional attack lines if required)

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

Command must make critical decisions that relate to cutoff points and the development of a pessimistic fire control strategy. This decision also includes a forecast of where the fire will be when attack efforts are in position to engage the fire. 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 by applying the water required to control the fire.

Once the fire control benchmark has been achieved and transmitted, the operation must switch its primary focus to ventilating the structure to maximize occupant tenability and firefighter safety.

4.19 Offensive Ventilation Operations

Fire research has conclusively demonstrated that the current fuel loads found in present day structure fires quickly consumes all the available oxygen in the fire compartment and becomes "ventilation controlled". In the early stages of this fire decay, the fire still has enough heat energy (high temperatures) to continue to break down solid fuels into combustible vapors (pyrolysis). This process continues to load the compartment with fuel and heat; at this point in the fire's progression, the only factor limiting the fires growth is the lack of oxygen.

Based on the fire research the following is the Blue Card policy and procedures for managing ventilation on offensive structure fires:

- Until the fire control benchmark has been achieved and transmitted, the entire response team's objective is NOT to supply the fire with any additional air (oxygen) while Command's primary objective is to coordinate an overwhelming force of the proper water application required to control the fire and cool the fire compartment
- Any flow paths (or potential flow paths) identified in the 360-degree assessment should be closed prior to entry whenever possible (or not disturbed if an existing barrier is in place)
- Door control must be provided for entry crews whenever necessary
- NO TACTICAL VENTILATION SHALL BE PERFORMED PRIOR TO FIRE CONTROL (unless hydraulic)
- No vertical ventilation shall be performed on any structure fire at any time
- The process of fire extinguishment starts the ventilation process by cooling (contracting) the hot gases in the compartment. After knockdown, the continued water application to the exposed heated surfaces greatly accelerates this process. The goal is to cool the interior to below 200 F via water application
- Once fire control has been achieved, Command must shift the incident's IAP to a high priority of ventilating the fire compartment/structure. Once fire control has been achieved, the best forms of post fire control tactical ventilation are:
  1. Horizontal ventilation (natural ventilation) with wind speeds of over 6-8 MPH. Wind speeds of over 6-8 MPH will overpower most hydraulic and mechanical ventilation. When high winds are present, upwind horizontal openings should be utilized as your high-pressure inlet points, while consciously controlling the appropriate low-pressure outlet(s)
  2. Hydraulic ventilation. During the fire control process, fog and smooth bore nozzles can be manipulated to produce water streams that create 10,000 to 18,000 CFM when flowing through a horizontal opening (depending on nozzle selection)
  3. Mechanical ventilation (PPV) has been documented to create wind speeds of up to 6-8 MPH flowing through an exhaust opening. PPV should be used (in conjunction with hydraulic ventilation) when wind speeds are below 6-8 MPH, while consciously controlling the appropriate low-pressure outlet(s)

4.20 – Offensive Search and Rescue Operations

One of the major tactical priorities to accomplish (especially in a residential setting) is the protection of any customers exposed to the incident hazards.

The **NUMBER ONE (#1)** method to be used in completing the Life Safety tactical priority in working fire situations is to control the fire as quickly and as safely as possible. The fire research shows that there is a zero chance of occupant survivability if occupants are directly located in a compartment that has flashed over and has become ventilation controlled (high temps, lack of oxygen, toxic atmosphere).

The fire research also shows that the survivable areas connected to a fire compartment that have become ventilation controlled (flash over) have a barrier between the occupant and the fire area (closed door(s) or wall(s)). Therefore, it is imperative that occupants be protected in place (behind their barriers of protection) while all initial efforts are directed towards fire control. Any barriers directly connected to the fire area shall NOT be opened prior to fire control and post fire control ventilation.

The IC will use the following methods to address the Life Safety tactical priority on offensive structure fires.

1. **Protect in place.** A life safety tactic of leaving people indirectly exposed to a fire compartment behind their barrier of protection while control forces control and then ventilate the fire area.
2. **Primary searches**. Are performed in the immediate fire area in conjunction with fire control and are for the purposes of locating victims directly exposed to the products of combustion (very lethal).
3. **Secondary searches**. Are performed after fire control has been achieved and the atmosphere has been properly ventilated. This involves the process of opening barriers and searching any survivable compartments directly exposed to the fire area, along with a secondary, more thorough search of the original fire compartment.

4.20.1 - Rescue Order

The IC uses the standard rescue order to prioritize and manage 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

The IC initiates the completion of the offensive tactical priorities by ordering companies to advance attack lines to the interior of burning structures. This supports the Rescue Order by:

- Placing initial lines directly to the most hazardous area of the building—the burning or burnt part (if a quick hit was used) – places crews in the same area as the most endangered group.
- 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 controls the problem, and it gives the operation an "anchor point" to control the fire
- All other tactical priorities should be addressed AFTER fire control has been achieved and ventilation has taken place
- All initial attack efforts should be directed towards fire control and verifying the 7 sides of the fire prior to opening any barriers protecting any survival compartments.

The IC is responsible for assigning all incident resources in order to achieve quick and effective primary searches of the areas directly exposed to the fire. 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, compartmented, multi-unit/room residential structures, it is 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:

- Contain, control and eliminate the incident problem
- Secure and protect normal means of egress
- Remove the products of combustion
- Search and clear the immediate areas of involvement
- 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 fire control has been achieved and the structure has been adequately ventilated (temps below 200ºF and the O2 level above 19%).

Completed Primary and Secondary searches of the entire structure should be announced (to the Dispatch Center/TRO) over the tactical channel using the order model. The IC shall avoid giving piece meal primary all clear reports over the tactical channel when multiple areas of a structure require a search.

Occupancy type will many times 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 typically have lower life safety requirements.
Primary searches should not be conducted in large, non-residential spaces where companies will outwork their air supplies. 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 located inside the hazard zone.

4.21 – 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 fire control and primary and secondary all-clears have been achieved, a loss-control plan should be developed to describe how salvage and overhaul will be performed for the specific incident.

4.21.1 - 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:

- Ensure overhaul is conducted safely.
- Ensure 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/or 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.
- 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 any construction voids that were exposed to fire to check for and verify fire control.

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 combustible 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 can be accomplished two ways; 1) the removal of large sections of the ceiling. If possible, areas unaffected by fire should have their contents covered or be completely removed from the area before pulling the ceilings down to overhaul an attic fire. 2) In some response systems, a cellulose vac can be utilized to remove the insulation without destroying the ceiling system.

4.21.2 - 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.

Salvage operations most often involve 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 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 the customer's property as if it is yours. Only do what's necessary to stop loss. The IC will transmit a report of **"loss stopped"** once all of the affected areas have been properly overhauled, salvaged, ventilated and the incident conditions have ceased causing damage to the structure and its contents.

4.22 – Offensive Structural Firefighting Decontamination (Decon)

Decon happens after somebody or something (PPE, equipment, etc.) has had an exposure to something that is toxic. The goal of decon is to avoid or to reduce all exposures before they happen. This starts with an overall mind-set of:

- Avoid letting toxins get on you in the first place
- When toxins are present, reducing your exposure to the toxins by wearing the proper PPE
- Limit your exposure to toxins to the shortest duration as possible
- Decon as soon as possible after being exposed to toxins
- Preventing cross-contamination of toxins into the cold zone, into the fire trucks and into the fire houses

4.22.1 - Strategic Decon Considerations

- Apparatus assigned to the scene should be placed in the cold zone of the incident with all windows closed (pump operators should never breath smoke).
- If the apparatus is not involved in an integral process of fireground operations, turn off the motor to reduce the diesel exhaust on the scene. In colder climate conditions (below freezing) apparatus may be required to continue running so they don't freeze.
- Establish hot, warm and cold zones at the scene. Limit entry to necessary personnel only, and limit the time firefighters are exposed in the hot zone.
- Working structure fires create very high temperatures and atmospheric pressures inside the interior of the fire structure. These conditions greatly increase the toxins and free radicals that both the occupants and firefighters are exposed to. Therefore, whenever possible, quick hits should be performed from the exterior of the structure to reduce interior temperatures, reduce interior pressures, along with the reduction of the overall toxins being released from the combustion process. This also reduces FF exposures.
- The final extinguishment, continued water cooling of the atmosphere, and post fire control ventilation greatly reduces firefighter and occupant exposures to the toxins produced by the combustion process (because the fire is now out).
- On-deck units can be readily available without standing in smoke. Stay outside of the smoke envelope and be aware of the greater picture when in the warm zone.
- Prior to removing firefighting PPE worn in the hot zone (including SCBA face piece) a gross decontamination shall be performed to remove potentially harmful toxins. Decon workers should

be in the same level of PPE as hot zone workers while wearing their SCBA during the decon process.

- Utilizing the pump operator for decon should be avoided due to their lack of respiratory protection.
- Exiting crew members should decon each other before going off air, or On-Deck crew members can be utilized to perform decon on exiting hot zone crews while on air wearing their SCBA.
- A designated decon line should be deployed in the warm zone outside of the hot zone away from any potential IDLH. The goal of the decon process is not to allow toxins into the cold zone.
- Decon Members should brush large debris off first, and then spray each other with water to remove as many loose particulates from turnouts and equipment as possible.
- Dry Decon: During cold weather operations, dry brushing should be conducted to remove the toxic products of combustions from the fire fighters prior to going off air and removing SCBA face pieces.
- Personnel recycling should consider exchanging their hood for a clean hood
- Personnel recycling should consider a quick neck, hand and face wipe using baby-wipes
- Personnel should wash their hands after; suppression activities and overhaul
- Personnel should wash their hands before; entering Rehab, eating, drinking, returning to their apparatus, and entering their living quarters. When released from the incident, fire fighters should bag their contaminated turnouts in large, encapsulating leak-proof bags for transport back to the station.
- Contaminated equipment, turnouts and hose should be transported back to the fire station out of the cab of the apparatus to reduce cross-contamination into the cab of the apparatus.
- Command and the rest of the response system must allow personnel the necessary time to return to the fire station, out of service, to continue the decon process and return to a ready state in order to deliver service. This includes:
  - The continued decon process of hazard zone personnel and equipment at the fire house (in separate designated areas away from the living quarters)
  - The process of equipment and apparatus being deconned and placed back into a ready state
  - The process of personnel being placed back into a ready state. This includes; showers, and changes into clean work uniforms.

4.23 - 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 both exposures and firefighters.

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

All defensive activities will occur outside of the hot zone (hazard zone).

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”

- Protect exposures - “Fire Control” - Loss Stopped

Defensive operations represent the standard organizational response to situations that cannot be controlled utilizing 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 Alarm/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 the need for 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

4.23.1 - 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 fire causes the building to collapse. 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 make the defensive decision, NOT the building coming apart.

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

- Clear Dispatch – Ask for Emergency Tones/Traffic
- Emergency Tones transmitted
- Announce to all hazard zone units:
- “Shifting to the Defensive Strategy”
- All Unit’s “Exit” or “Abandoned” the structure
- All Units report PAR’s upon exit
- Dispatch/Alarms repeats Emergency Traffic report - verbatim

“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.

“Abandoned 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 on all interior units (unless they have priority traffic).

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

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

4.23.2 - Defensive apparatus placement

Rules of thumb for defensive apparatus placement:

- Always spot out of any potential collapse zone
- Masonry or wood structures – spot 1 x’s the full height of the building away from the structure (or a min of at least 30 ft. away)
- Tilt wall structures - spot 1 ½ x’s the full height of the wall away from the building (30 ft. tilt wall – equals spotting a min of 45 ft. away from the wall)
- Unlike offensive fires, defensive fires require the IC to consider the key tactical placement of Ladder companies for providing aerial master streams
- When protecting exposures that are near the defensive fire area, place the pivot points of master streams on the walls that need to be protected
- Larger buildings with no significant exposures, attempt to place elevated master streams on the corners of the structure
- Engine mounted master streams (deck guns) are more effective when used to apply water through a structures horizontal openings as opposed to “lobbing” water over the exterior walls of a structure (elevated master streams are much more effective applying water over tall walls)

4.23.3 - 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.*

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 exterior 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".

4.23.4 - 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.
- 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.

4.23.5 - Defensive Loss Control

No member shall enter the hazard zone of a defensive fire area. 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 control activities.

5.0 - COMMAND FUNCTION #5 – COMMUNICATIONS

The major goal for this command function is for the IC to initiate, maintain, and control effective incident communications.

Effective incident communications provide the very practical connection between and among the 3 management levels of the organization; the strategic, tactical and the task levels. Incident communications are the information “carrier” that the team uses to connect, commit resources, and to create effective, coordinated action.

To be effective, the IC must somehow orchestrate an ongoing combination of the standard communications activities among the set of participants who are all actively involved with the incident and operate at different levels. Each level operates with its own special set of needs, capabilities, and challenges. These differences create a complex set of operational realities for the entire team. They require a strong, well-practiced, procedures-based communications plan and positive functional based relationships among the participants.

5.1 - Keep Communications Simple: Use Plain Text

We conduct incident operations using plain text communications that are directed toward the completion of the tactical priorities. The use of plain text (common English) is NIMS-compliant, as opposed to 10-code signals and other odd numbering based systems.

Where multiple agencies/disciplines operate together, the participants must all use plain text to share incident information.

5.2 - Mix & Match Forms of Communications: Face-to-Face/Radio/Computers/SOPs

Face to face communication is the most effective form of communication. It should be the preferred form of communication on the task and tactical levels of the incident site. Face to face communications should be used whenever possible in the following circumstances:

- Company officers communicating with their crew members.
- Company officers communicating with other company officers in their work area.
- Tactical level bosses communicating with units assigned to their geographic location.

The entire purpose of placing an IC in a command post is to create the best possible communication environment. In the CP, the IC can more effectively monitor and control radio communications.

All members working on the fireground will avoid distracting the IC with face to face communications. Command must be the person to initiate this form of communication and it should only be performed when the incident hazards have been controlled.

Radio communications are the way that the tactical and task levels connect with the IC working on the strategic level. While radio communication, in and of itself, does not put water on the fire, in most cases, the overall outcome of the incident is directly connected to the quality of the radio communications among the participants.

Because everyone cannot talk on the radio at once, other forms of communications must be used to reduce the overall amount of radio traffic on the hazard zone tactical channel.

- Referencing Alarm orders on mobile terminals eliminates the need for dispatch to transmit them over the tactical radio channel.
- Referencing aerial views on mobile terminals eliminates the need to get arrangement information that can't be seen from the command post.
- Comprehensive task, tactical and strategic level SOP's greatly reduces the time it takes to get companies into action and it streamlines CAN reporting.

5.3 - Gear communications toward completing the Tactical Benchmarks

Communications should focus on the completion of the tactical priorities and firefighter safety. This will help keep communications short, to the point and effective. It also leaves airtime free for important tactical messages that affect everybody working in the hazard zone.

When the IC properly assigns Engine 211 to: *"Lay a supply line to the Alpha side, stretch an attack line to the interior of the Delta 1 exposure for a primary search and check for fire extension. I'm going to make you Delta"*, it becomes the basis for Engine 211 to structure their CAN report back to command. *"Delta to Command, we have a primary all-clear in Delta 1, we have opened up the ceilings and have a working attic fire. We are applying water and opening up more ceilings. We'll need another company to assist in Delta 1 with fire control in the attic space".*

5.4 - Upgrade the fast attacking command position as quickly as possible

Most of the time, the operation will start out with the first arriving company officer on an Engine company. Initial arriving, fast attacking IC's (IC #1) have a narrow window of being able to produce clear and concise radio communications before putting themselves in the worst communications position possible, in full PPE operating in a hazard zone.

Therefore, it is very important to use the very beginning of the event to transmit a complete Initial Radio Report (IRR) and Follow-Up Report before entering the hazard zone, when IC #1 is in their best communication position. These two reports tell other responding units exactly what's going on at the incident, what the first arriver is doing about it, and where they will be located on the incident site.

These two initial reports also allow a fast attacking IC to complete the first 5 functions of command before they enter the hazard zone. These frees them up to then engage the problem and command the incident using a portable radio.
IC #1 from that point on the operation is in a position to quickly assign the next 2-3 responding units to critical areas around the scene, but they are not in position to process lots of information or manage a large amount of resource. The entire response team must understand the communications position IC #1 is in, and support the IC by properly following all hazard zone SOP's.

In rapidly expanding incidents, command must be transferred (or moved out of the hazard zone) to a later-arriving response chief who will operate inside of a stationary, remote command post.

Staying in the command post directly connects the IC to the communications process. A picture of an effective command post IC would show a responder seated inside their response rig (command post), listening to radio traffic (preferably on headphones), talking into a microphone, maintaining a tactical worksheet, and interacting face-to-face with any designated command helpers.

5.5 - Listen Critically: Understand Communications Difficulties from Tough Operating Positions

We put an IC in a strategic command post (outside the hazard zone, inside a vehicle designed to be a command post) so they have an ideal position to send and receive information. Companies operating in the hazard zone are in the worst positions for effective communications.

Many hazard-zone distractions can cause communications problems. The IC needs to understand this when communicating with operating companies. Companies also must understand that their portable radios provide the only communications link to the outside world. The command system depends upon coherent communications between the IC and the operating units.

All hazard zone transmissions shall be carried out on one (1) tactical radio frequency.

Some incidents may require the use of multiple radio frequencies in order to support operations outside of the hazard zone (Level 1 & 2 staging, Rehab, Safety, Planning, Logistics, etc.). Each additional channel activated for the incident must have a dedicated person assigned to manage that channel at all times. The IC must only be responsible for the operation of one (1) tactical radio frequency while an active hazard zone exists.

5.6 - Use the Organization Chart as a Communications Flow Plan

Dividing the incident scene into division/groups has a positive and profound effect on the communications process. When the IC assigns divisions/groups officer responsibilities to the officers initially assigned to the different key tactical positions, it starts to manage their span of control and enhances the entire communications process.

In cases where the IC hasn’t implemented/assigned divisions/groups officers, they will have to communicate directly with each individual unit assigned to the incident scene.

Any time there are 2 or more units working in the same geographically area, Command should designate one of the units the geographic supervisor and all communications from that area will be from the tactical supervisor to the IC.

Division/Group officers will communicate with their assigned companies over the radio or face-to-face depending on their proximity to one another. Preferably, face to face. The division/group officer will communicate with the IC over the tactical channel.

5.7 - Always Maintain Communications Availability—Answer on the First Call

The IC shouldn't be in a tough communications position when they are operating in the command position. An IC working from a command post must focus squarely on the units operating in the hazard zone. This is how we manage strategic-level safety and coordinate the work required to complete the tactical objectives.

The IC must always operate the system (build, expand, reinforce) in a way that allows them to stay connected to the companies operating in these hazardous positions.

5.8 - Utilize the Standard Order Model to Structure Communications

The *Order Model* outlines the communications steps we follow to ensure messages are always received and understood despite the rushed, confusing and dangerous conditions we typically face during operations. The order model also standardizes how the incident's participants will exchange two-way radio communications. The Order Model's required steps are:

1. When the sender is ready to transmit a message, they call the receiver to determine if they are ready to receive the message;
2. The receiver then acknowledges the sender;
3. When the sender receives the readiness reply, they can transmit the message;
4. The receiver then gives a brief restatement of the message to acknowledge the receipt of the message; and
5. The sender restates the message if misunderstood.

Using the order model will significantly decrease the amount of radio traffic on the emergency scene. It will also help eliminate; freelancing, order confusion and it enhances responder safety and accountability.

5.9 - The seven basic types of radio transmissions on a hazard zone:

There are 7 basic communications we routinely perform on the fire ground. They are:

- Initial Radio Report
- Follow-Up Report
- Assigning Units
- Command Transfer
- CAN Reporting
- Roof Reporting
- Offensive to Defensive Strategic Shift

5.10 - Begin & control communications upon arrival with a standard Initial Radio Report

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 size-up of conditions seen from the initial command position. It also provides an initial situation status report to those listening in, such as non-responding companies and bosses still in quarters, and staff officers.

The IRR is not an affidavit of absolute accuracy; it's just a quick snapshot of the incident that provides a "word picture" of what the IC can see from their command position when they first arrive on-scene.

The IRR must include the following reporting elements:

1. Clear Alarm, announce your arrival on the scene
2. Building/area description
3. Describe the problem
4. Action being taken – Initial I.A.P.
5. Declaration of the Strategy
6. Resource Determination
7. Assuming and Naming of Command

1). Clearing alarm: This accomplishes several things:

- It insures that you deliver the IRR on the correct channel. If you clear Alarm on the wrong channel, they should immediately direct you to the correct tactical channel.
- It notifies all other responders you are about to deliver an IRR and assume command
- It automatically activates Level 1 Staging to go into effect.

2). Building/area description: Will be described in 3 different categories:

- Size
- Height
- Occupancy type

Size: the size of the structure should be defined by the overall area of a structure under roof. We should base our size description on how it relates to the areas we can cover with a 200 ft. handline and the maximum depths that we can safely achieve inside the structure. Size will fall into 4 different categories:

- Small - A 200 ft. line can access 100% of the potential fire area.
- Medium – A 200 ft. line can access 75% of the potential fire area.
- Large – A 200 ft. line can access 50% of the potential fire area.
- Mega, Huge, Gigantic - A 200 ft. line can access less than 25% of the potential fire area.

Height: Identifying the height of a structure is very important to all responders. Every floor (or story) that is added to a structure makes it a more complex problem and tactically challenging for all the incident players.

Use the number of stories above grade to describe the height of a structure.

Use the number of Sub-levels (basements, parking garages, etc.) to describe the depth below grade of a structure.

Occupancy type: will many times drive our IAP. Identifying it on the IRR paints a picture to all other responders of the type of situation they're responding into. Here are some basic, common occupancy types:

Single family residence	Multi-unit residential	Apartments	Townhomes
Row houses	Restaurant/Bar	Public assembly	Commercial
Big Box	High rise	Institutional	Strip Mall

Describing Multi-unit residential: Apartments, town houses and row houses all fall into this category. Each of these occupancy types has a distinct set of characteristics that will affect the tactics that we use when operating on multi-unit residential. Therefore, it is critical for the first arriver to properly identify which category the occupancy type fits into.

Apartments must be separated into 1 of 2 categories on the initial report:

- A stand-alone apartment building
- Apartment complex

Apartment complexes gives us a much greater tactical challenge with arrangement as it relates to access, exposures, water supply, handline lengths, ladder access, possible standpipe issues, master stream application, etc.

Complexes must be identified in the very beginning of the event and there must be a standard response to this information:

- No other unit should enter large complexes until the exact location of the problem is located and identified to units level 1 staged.
- Placing pumper's in key tactical positions early on in the incident is critical as it relates to handline lengths and water application.
- Horizontal standpipes should be used to maximize the number of handlines off of 1 forward pumper.

Apartments have a single floor arrangement. This means that the interior of each apartment is on a single floor and does not have access to the upper or lower floors. Access must be made on the floor the problem is on.

Most apartment buildings share a common attic space. This becomes a high priority check of item for the IC and rest of the team and coordinating a working attic fire can become very difficult with large apartment buildings.

Interior and/or exterior stairway access must be identified. Interior, common hallways pose additional tactical challenges and these features must be identified and transmitted very early on in the incident.

Town houses and row houses are described as having 2 or more floors, each unit is attached to other similar units via party walls, and some units can share common attic spaces. The only way to access the upper floors of these units is to enter the involved unit on the 1st floor and use the interior staircase of that unit to access the upper floor(s) with the problem.

Well known occupancy types should be by called their most common identified name. These include:

- Banner Payson Hospital
- Payson Public Library
- Wal-Mart
- Home Depot, etc….

3). Describing the problem: For the fire service, this usually means we are describing "Fire Conditions". The following are the only 5 terms that are to be used when describing fire conditions:

- Nothing Showing
- Smoke Showing
- Working Fire
- Defensive Fire Conditions

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. Dispatch will automatically dispatch support units and will monitor radio traffic to anticipate the needs of Command.

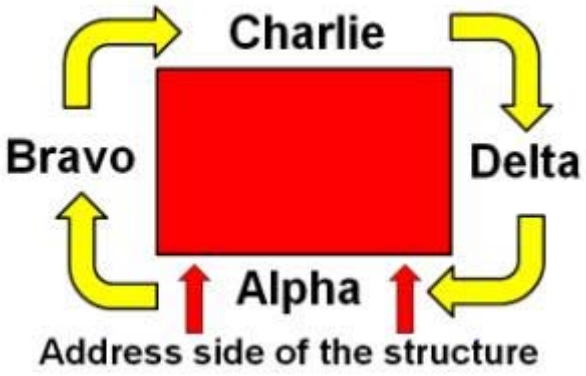
The Location of the problem must also be identified on the IRR. This includes reporting:

- What floor the problem is located on
- For longer buildings (apartments, strip malls, etc.) middle or what end (Bravo or Delta)
- For larger structures – What side of the structure is problem located on

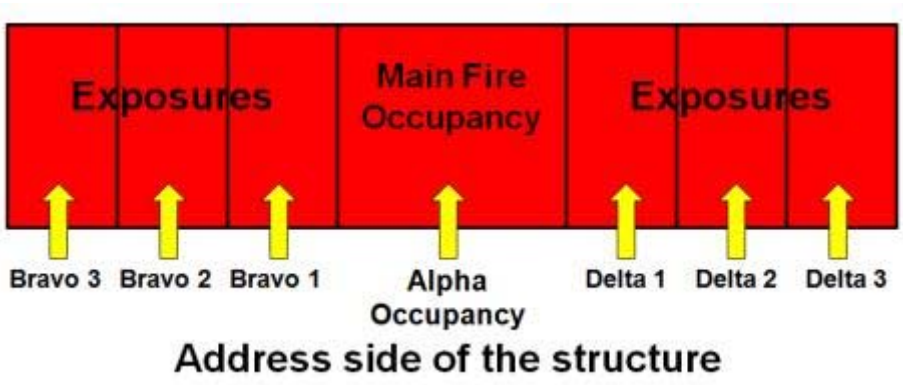
Describing what the problem is and where it is located paints a very good picture to everybody on what the scene looks like and where the subsequent arriving units will probably fit into the IC's IAP.

Geographic Landmarks:

Sides of a building will be described as:



The Alpha side of the structure is "usually" the address, street side. There will be many situations where it is not clear where the Alpha side is. In situations where there is any confusion on the incidents landmarks, initial arriving IC's must make it clear where the Alpha side is located.



Exposures: We identify exposed structures to the main fire occupancy by the side they are on starting with the closest, moving to the next exposure and so on. When the IC can give the exposure number and the occupancy type/apartment number it greatly enhances our directional sense of awareness.

Floors: Are identified by stories above and below ground level. Using Divisions, the individual floor will take on the same floor number as the Division (floor 2 becomes “Division 2”). Many systems just assign the floor number as the geographic designation (floor 2 becomes “2nd Floor”).

4). Initial Incident Action Plan (IAP): Incident action plans describe our operational plan for completing the tactical priorities. IAPs should be short and to the point. The initial IAP should include the following:

- The tasks of the initial arriving unit
- The location of the tasks
- The objectives of the tasks

Tasks: Some of the standard tasks that should be include in the IRR:

- Investigating (nothing showing)
- Establish a water supply
- Stretching handlines
- Operating a master stream
- Performing forcible entry (takes a while)
- Performing a physical rescue

Location of those tasks should include:

- What floor will you operate on

- What occupancy/exposure will you operate in
- What side you'll make entry on
- What side will you be operating on (defensive)

The tasks objectives should center on completing the tactical priorities for the chosen strategy. They are:

- Search/Rescue = Primary and Secondary "All Clears"
- Fire Control = "Under Control"
- Loss Control = "Loss Stopped"
- Firefighter Decon = "Decon Complete"

5). Declaration of the Incident's Strategy: 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

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).

6). Resource determination: 1st arriving IC's must match the incidents problems with the resources required to solve the incidents problems. The request for the appropriate amount resource must happen at the beginning of the event, where our window of opportunity has the greatest chance for success. One of the following resource determinations must be made on the IRR:

- Cancel the original assignment
- Hold the original assignment (Lights/Sirens vs. Normal driving)
- Upgrade/Fill out the original assignment
- Strike additional Alarms/Boxes

7). Assume and name command: The absence of an effective IC is the most common reason for ragged incident beginnings and unsafe endings. Effective (and coordinated) action is the result of beginning (and ongoing) incident operations with an in place and in charge IC.

Use location/occupancy to name command. The radio designation **"COMMAND"** will be used along with the major cross road, or the specific occupancy name of the incident site (i.e. "Main Street Command", "Banner Hospital Command").

The designation of "Command" will remain with the IC throughout the duration of the entire incident.

5.11 – Follow-Up Reports

The initial radio report is usually performed from the front seat of an Engine Company. Once the report has been given and the alarm room acknowledges that report (using the order model) the company officer of the unit is probably out of the cab and has started to go to work.

Follow-up reports make the IRR a little shorter and they give the initial IC a little bit more time to size-up the situation. The follow-up report will probably be the last radio transmission a fast attacking IC gives before entering the hazard zone. This report gives the IC a “last chance” to give clear, concise information before they don full PPE and enter the hazard zone.

Follow-Up Reports should include the following information:

1. Verify the fire’s size, location, and extent (if different from the IRR)
2. Verify basement type (if present) and the stories from the Charlie side
3. Verify the life safety profile of the incident
4. Confirmation of the initial Strategy
5. Any changes to the initial IAP stated on the IRR (if necessary)

Result of a 360: 360’s should be obtained on every structure fire we respond to before making entry into the structure. But the fact is, many times, the initial arriving IC will not be able to conduct a 360. This will be the case for larger, commercial buildings or with long rows of continuous housing where travel times will prohibit the 1st arriver from performing a 360.

On critical incidents (high life safety or where a basement is suspected) where the 1st arriving unit can’t perform a 360, the assignment should be given to a subsequent arriving unit to deploy to the Charlie side to provide a 360 report.

Initial arriving IC s should make every attempt to perform a 360 where life safety is high priority or there is a probability of a basement present. This includes most houses and apartment buildings.

The 360 should only include any additional critical information that was not reported on the IRR.

Standard 360 reporting elements:

Life Safety: Immediate life safety issues are the primary reason we do 360's on residential occupancies. The first thing to note on the Charlie side is whether or not there are any immediate life/safety rescue concerns. If there are any rescue issues, the IC will need to announce it over the tactical channel and re-adjust their IAP to address the life safety issue(s) present.

Number of stories on the Charlie side: The number of stories from the rear will need to be announced in the follow-up report if the stories don't match up to side alpha. This does not include the basement.
Example 1: you have 1 story on the Alpha side. On the 360 you have 1 story on the Charlie side with a walk-out basement. This would still be considered a 1 story structure and should be reported as "we have a walkout basement on the Charlie side".

Example 2: you have a 1 story on the Alpha side. On the 360 you have 2 stories from the rear and a walk-out basement. This should be reported as "we have 2 stories from the Charlie side with a walk-out basement".

Basement type and conditions if known: There are several different basement types across North America, some with very colorful or odd names. Local basement type descriptions must be identified and agreed upon by the local response agencies, so when someone states on their follow-up report "we have an English basement" it means the same thing to the entire response team.

Basement conditions must be identified before entering the structure whenever possible. Conditions in the basement will need to be reported on using the 5 standard narratives to describe smoke and fire conditions.

Basement involvement must be considered whenever there are smoke/fire conditions coming from the 1st floor of a residential fire (in areas that have basements). The initial IC **MUST confirm** the conditions in the basement prior to making entry into the structure.

When the 360 size-up identifies/confirms basement involvement, the IC must re-adjust their initial IAP to make the attack directly on the basement fire. **Firefighters whenever possible should NOT make entry on the first floor or use the interior staircase to access the basement when there is basement involvement and it can be controlled by other means.**

2). Changes to IAP: Performing a 360 gives the initial IC a view of all sides of the fire to report on. Most of the time, the initial IAP won't change. But there are sometimes when the 360 size up will require a change in the IAP. These changes must be announced over the tactical channel in the Follow-Up report. Situations that will require changing the original IAP:

- Physical rescue not seen from the initial command position
- Basement fires
- Fire located in a different area not seen from the initial command post and entry will be made from a different location

3). Accountability Location: The initial arriving unit to a geographic location/area should become the initial accountability location for that location/area. Identifying the 1st accountability location of the incident ("E-1 will be the Alpha - side accountability location") informs the troops (esp. the BC) which side of the structure that you're making entry on (most of the time). It also identifies where later assigned units will drop off their passports if they are assigned to that location/side/area of the incident.

4). Any immediate safety concerns: This includes:

- Potential collapse area
- Hazardous roof structure
- Power lines down or arcing
- Gas meter/tank exposed to fire
- Swimming pools
- Heavy roof coverings or snow loads

5.12 - Assigning Units

Incident operations are conducted around the completion of the tactical priorities. Incident communications should mirror this simple concept. This will help keep communications short, to the point and effective. It also maximizes the available free airtime. The IC must structure unit assignments around:

- Addressing the incident's critical factors
- The completion of the tactical priorities
- Tactical reserve (On-Deck)

When subsequent arriving units arrive to Level 1 staging locations, they will simply announce that they are Level 1 staged; "Engine 211 - Level 1 staged". Dispatch will not acknowledge any Level 1 staged units over the tactical channel. Command will then contact Level 1 staged units and assign them to the incident site based on their IAP.

Orders to Level 1 staged units should be structured in a T.L.O format:

- **Tasks**
- **Location of the tasks**
- **Objectives of the tasks**

Tasks: Some of the standard tasks that can be assigned:

- Establish or support a water supply
- Stretching handlines
- Operate tools or equipment
- Manpower
- Operate a master stream
- Perform forcible entry (takes a while)
- Perform a physical rescue
- Tactical reserve (On-Deck)

Location of those tasks should include:

- What floor to operate on
- What occupancy/exposure to operate in
- What side to make entry on
- What side to operating on (defensive)

When assigning a unit to deploy a handline, the IC MUST designate the following:

What the company needs to do with their apparatus:

- Lay a supply line
- Pump a supply line

- Spot your apparatus out of the way (manpower only)

Where the company will get their handline from:

- Their own company
- Another forward pumper designated by the IC

The tasks objectives should center on the completion of the tactical priorities for the chosen strategy. They are (objective = completion benchmark):

- Search/Rescue = Primary and Secondary “All Clears”
- Fire Control = “Under Control”
- Loss Control = “Loss Stopped”

When assigning companies to areas that already have units assigned, the IC must inform the unit being assigned of who they will report to/work under. The IC must also contact the division/group supervisor and inform them of the unit being assigned to their location.

5.13 - Command Transfers

Typically, when a fast attacking IC transfers command to a subsequent arriving command officer, they are physically located in the hazard zone, so the transfer will take place using a portable radio.

Command must be transferred in a standard manner per this SOP. The following sequence represents a standard command transfer:

- Verify that all operating positions match the current incident conditions
- Announce your arrival to scene (Dispatch will acknowledge)
- Contact the current IC using the Order Model
- Verify, document and confirm the position and function of all resources located in the hazard zone with the current IC
- Inform the current IC that you’ll be “Taking it from out here”
- Contact Dispatch
- Announce that you’ll be assuming command (“BC-1 will be assuming Main St. Command”)
- Re-announce the overall Incident strategy
- Make a resource determination
- Announce the CP location

One of the following resource determinations must be made when transferring command:

- Cancel the original assignment
- Hold the original assignment (Lights/Sirens vs. Normal driving)
- Upgrade/Fill out the original assignment
- Strike additional Alarms/Boxes

The IC should designate a Level 2 Staging location when requesting greater alarms (3rd Alarm and above in the Rim Country Dispatch System).

5.14 - CAN Reporting

CAN reporting gives the troops a regular, consistent way to report back to the IC on their progress and needs. CAN reporting keeps things simple and it delivers the IC the information needed to keep the strategy and IAP current. The CAN acronym stands for:

- Conditions
- Actions
- Needs

CAN reports should be structured around the IC's assignment and the completion of the tactical priorities. Here is a basic list to choose from when providing a CAN report to command:

Conditions	Actions	Needs
Where you are	A/C progress	Reinforcement
Any obstacles	F/C progress	Relief
Smoke conditions	Can't find the fire	Support work
Int. visibility	Checking for ext.	Tools or Equip
Fire conditions	Concealed space info	Cover other areas
Heat conditions	PAR's	Urgent help
Interior layout	All Clears	
Fire separation	Under Controls	
Fuel loads	Loss stopped	
What's burning		
What's not burning		

5.15 - Radio Discipline

When 3 to 4 units (and up) are assigned to the incident site the tactical channel can start to fill up with unnecessary radio traffic. The 2 main reasons for this are:

1. Assigned units are communicating/contacting the IC with non-essential radio traffic.
2. The IC themselves are communicating non-essential radio traffic.

The IC MUST control the radio traffic on the tactical channel or they will not be able to control the overall incident site. The following radio guidelines are to be strictly adhered to when there are units assigned in a hazard zone:

- Know exactly what you're going to say before clicking the microphone to talk.
- Only communicate information on the tactical channel that pertains to the completion of the tactical priorities and firefighter safety.
- Always let communication loops close before clicking the microphone button to talk.
- Only break into the Order Model with high priority traffic.
- Always let the IC be the one to contact you.

- Always end every CAN report with a Need assessment (or “No Needs”).
- Never get on the radio to give good news (All-Clears, Under Controls, and PARs) unless it is requested by the IC.

There are 4 major types of radio communication to the IC:

1. Routine radio traffic
2. Status Changes
3. Roof reports
4. Priority traffic

5.15.1 - Routine radio traffic:

Routine radio traffic should be the most common communication performed on the emergency scene. In most instances, routine radio traffic should only be initiated by the IC.

Command must structure all routine radio traffic using the Order Model.

Once a Unit is assigned into the hazard zone, they should maintain radio silence unless they are contacted by Command.

All communications that details the routine work that Units perform in their assigned work areas should be done face to face and must not be transmitted over the tactical channel. The purpose of this policy is to eliminate all “good news” reporting over the tactical channel. This includes:

- Knock downs
- No extension reports
- Primary all-clears
- PAR’s

This policy does not eliminate a Unit’s responsibility to contact the IC with:

- Fire control reports
- Status changes
- Roof reports
- Priority traffic

Command may also order a Unit to “get back to them” as soon as an information target has been obtained or verified. Unit’s contacting command with an IC information request that results in good news, should structure their report as a standard CAN report using the Order Model (example; “Command from E-1 with a CAN report”). Information requests that result in bad news to the IC should be structured as priority traffic (covered later in the section).

5.15.2 – Fire Control Reports

Blue Card has a no-good news reporting policy – but a major offensive incident action planning benchmark for the IC is when the operation achieves the “Fire Control” benchmark. The fire control

benchmark report represents a major shift in the overall focus of the operation going from a water application, fire control mode, to a focus on ventilating the structure followed by secondary searches.

“Fire Control” will be transmitted when the main body of fire has been extinguished and all 7 sides of the fire have been confirmed as having no fire extension (or when extension has been controlled) in an assigned unit’s geographic/operational area.

5.15.3 - Status changes

A status change is defined as: moving from an assigned work location to a different geographic work location or exiting the structure to recycle or rehab.

Status changes should be given as soon as possible, but the sender must use the Order Model to structure the report. When clearing the IC with a status change, the sender should start the communication with a “status change”. Example: “Command from E-1 with a status change”.

If a Unit has completed their entire work assignment, they should contact Command with a status change and request another assignment. Example; “Command from E-1 with a status change” -” Engine 1 has a primary all-clear, there is no fire extension to the 2nd floor or the attic space, we are at 75% air, and our NEED is to be reassigned”.

A status change report should be made as soon as possible if a Unit is unable to gain access to an assigned work area (access or building arrangement). Example; “Command from E-2 with a status change” – “E-2 has it made it to the Charlie side and there is no access to the interior from the Charlie side. Our NEED is to be reassigned”.

5.15.4 - Roof Reports

Ladder companies have the apparatus and equipment (ground ladders/power tools) to access and operate on the roofs of most mid-level structures. These units can provide very valuable tactical information to the IC and the rest of the troops about what is going on above interior operating units.

A company assigned to the roof will make the following assessment (size-up) of the roof:

- Type of roof if not easily identified from the ground (peaked, flat, bowstrung, etc.)
- Stability of the roof (stable, unstable)
- Fire or smoke conditions and their location on the roof
- Location of any firewalls
- Unusual heavy roof loads (if present)
- Conditions in the Attic (if known)
- Basic blueprint of the building if unusual

Any roof report containing significant tactical information should be given to the IC shortly after the roof company has made access to the roof and has obtained the information. The sender must use the order model to structure a standard report. When clearing the IC with a standard roof report, the sender should start the communication with; “roof report”. Example: “L-1 to Command with a roof report”.

Reports from the roof containing any of the following information should be structured as priority traffic and should be made as soon as possible:

- Unstable roof
- Eminent collapse potential
- A locally identified hazardous roof structure (bow stung, etc.)
- Working fire in the attic space

5.15.5 - Priority Traffic Reports

Once a unit is assigned into the hazard zone, they should maintain radio silence, and wait to be contacted by the IC. The following are examples of the ONLY instances where a unit can break radio silence. These transmissions should be structured as Priority Traffic reports (example: “Command from Delta – Priority Traffic”) and they MUST be transmitted as soon as the information is obtained:

- Unable to complete a critical assigned task/tactical objective
- Urgent need to be reinforced/backed-up to complete an assigned task/tactical objective
- Victims encountered
- Working concealed space fires not easily controlled by the locating unit
- A roof report that includes: attic fire, unsafe roof structure, eminent collapse threat
- Sudden, significant incident events (flashover, back draft, collapse)

All Priority traffic reports are to be direct to and acknowledge by the IC. Having the Alarm/Dispatch center acknowledge priority traffic reports will greatly slow down the IC’s ability to quickly readjust their IAP and/or Strategy based on these reports.

Unit/members with priority traffic are allowed to break into the order model of routine radio traffic to deliver their priority traffic report. Once the IC has acknowledged the priority traffic report, they should conclude their radio transmission with the unit whose traffic was broken into.

All communications that details the routine work we perform in our assigned areas should be done face to face in the work area and must not be transmitted over the tactical channel. Wait for the IC to contact you if you don’t have bad news (the above list). Mayday communications are in a separate category and will be covered in the Tactical Operations section of the manual

Once a unit is assigned into the hazard zone, they should **maintain radio silence** and wait to be contacted by the IC. The following are examples of the ONLY instances where a unit can break radio silence. These transmissions should usually be structured as Priority Traffic reports (example: “Command from Delta – Priority Traffic”):

- Unable to gain access to an assigned work area
- Unable to complete an assigned task/tactical objective
- Urgent need to be reinforced/backed-up to complete an assigned task/tactical objective
- Status change from an assigned work location (moving locations, exiting the structure)
- Victims encountered
- Roof reports containing significant tactical information

- Working concealed space fires not easily controlled by the locating unit
- Sudden, significant incident events (flashover, back draft, collapse)
- Mayday (anytime a unit/member cannot safely exit the hazard zone)
- Anytime the IC directs you to contact him/her immediately after obtaining a specified piece of information

All communications that details the routine work we perform in our assigned areas should be done face to face in the work area and must not be transmitted over the tactical channel. Wait for the IC to contact you if you don't have bad news (the above list).

5.15.7 - Emergency Traffic

Emergency traffic should only be used for true emergencies. The improper, over use of emergency traffic at emergency scenes tends to diminish the overall effect it has on the operation.

The IC is the only person who can initiate an emergency traffic report. Companies operating in and around the hazard zone will contact the IC with priority traffic reports and the IC will determine the need for emergency traffic and the corresponding tones. When emergency traffic is given, the IC will contact the Alarm/Dispatch center directly to initiate the report. Once emergency traffic has been requested, the Alarm/Dispatch center will immediately activate the emergency traffic tones. It is very important to get the emergency traffic tones transmitted as soon as possible. The sooner they are activated, the sooner the IC and all other affected units can initiate corrective action(s).

The emergency traffic report should be structured in the following manner:

- The IC will contact the Alarm/Dispatch center directly and ask for emergency traffic
- The Alarm/Dispatch center will sound the emergency traffic tones
- The IC will deliver the emergency traffic radio report
- Once the report has been given, the Alarm/Dispatch center will repeat the emergency traffic report verbatim on the channel it was given on

Example:

- IC - "Main St. Command to the Alarm/Dispatch center, emergency traffic"
- Alarm/Dispatch center sounds the emergency traffic tones
- Alarm/Dispatch center - "Go ahead with your emergency traffic Command"
- IC - "Main St. Command to all units, we are going defensive on this structure. All units operating in the fire structure, exit the structure and report PAR's upon exiting"
- Alarm/Dispatch center – repeats Command's radio traffic verbatim

Emergency traffic will receive the highest communications priority from the Alarm/Dispatch center and the IC. All other units operating at the incident site will maintain radio discipline until the emergency traffic has been cleared by the IC.

Once the situation that caused the Emergency Traffic has been mitigated (PAR's obtained, power shut off, etc.) the IC should contact the Alarm/Dispatch center and clear the Emergency Traffic with a brief report stating why. Example; "Alarm from Command", "Alarm go Command", "Command to all Units

456 Main St. all Units have exited the structure with PAR's. Command is clearing Emergency Traffic and will remain in the defensive strategy. All Units return to routine radio traffic".

5.15.8 - Offensive to Defensive Strategic Shift

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.**

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

- Clear Dispatch – Ask for Emergency Tones/Traffic
- Emergency Tones transmitted
- Announce to all hazard zone units:
- Shifting to the Defensive Strategy
- All Unit's "Exit" or "Abandoned" the structure
- All Units report PAR's upon exit
- Dispatch/Alarm repeats Emergency Traffic report - verbatim

"Exit the Structure" will be defined as: an orderly withdrawal where interior lines and equipment will be withdrawn and repositioned/shut down 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 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 division/group officer or command on the status of their crew upon exiting.

Division/group officers will notify command of the status of the individual crews assigned to their division/group upon their exit.

6.0 - COMMAND FUNCTION #6 – ORGANIZATION

Major Goal of Command Function 6 - Organization: To develop an effective incident organization using the SDG system to decentralize & delegate tactical responsibilities.

Function 6 - Organization will focus primarily on managing and expanding the Tactical level (hot/warm zone) of the organization.

6.1 - Organizational Levels

There are 3 operational levels that function at the scene of every hazard zone. They are:

- Strategic level
- Tactical level
- Task level

Each level is distinct, each is managed in a different way, and they each have their own set of roles and responsibilities.

Strategic Level - This organizational level is designed around the IC (and Command Team) operating in the Command position, working out of a stationary command post. The Strategic level involves coordinating the activities necessary for overall operational control, determining the incident's strategy, and developing an IAP that completes the incident's tactical objectives.

Tactical Level - The first management "subdivision" of the incident scene is done by assigning division/group responsibilities. Division/group officers are responsible for the tactical deployment and supervision of all assigned resources in their assigned area. These tactical assignments are made directly by the IC to specific units.

Task Level - Is where the work is performed by assigned companies. The Strategic and Tactical levels are in place to support the task level. Task level activities are supervised by company officers working with the members of their companies directly in the hazard zone.

The task level is the most important level on the incident site because it solves the incidents problems while taking place in an IDLH atmosphere that can kill the workers. All activities outside the hazard zone are in place to support units working on the task level.

6.2 - Fast Attacking IC's (IC#1)

For the majority of the local incidents we respond to, the responsibility for managing all 3 organizational levels is handled by the officer of the first arriving engine company and they will become the initial IC for the incident, IC #1.

A fast attacking Company Officer IC is the only person on the entire response team who will operate on all 3 organizational levels.

- Strategic level – IC #1 will size up the incident's critical factors, declare the incident strategy and assume command of the incident.

- Tactical level - IC #1 will implement and execute an IAP that addresses the incidents critical factors in order to facilitate the completion of the tactical priorities
- Task Level – IC #1 will directly supervise and assist their crew members with the tasks required to bring the incident's problems under control.

The command system also calls on the fast attacking IC to assign the next arriving 1 to 2 engine companies and the first-in ladder company to support the initial Incident Action Plan.

In most cases, this initial, well-coordinated attack wave usually eliminates the incident hazards and there is no urgent need to upgrade the positions on the Strategic or Tactical levels.

Incidents that are not quickly controlled, are escalating, or are significant in scope and size upon our arrival, must have the Strategic and Tactical operational levels upgraded as required.

The strategic level of command on these types of incidents will usually be the 1st operational level that is upgraded. When the initial arriving command officer, IC #2, arrives on scene and transfers command from the fast attacking company officer IC, they assume responsibility for the strategic level of the operation.

This command transfer significantly improves the IC's position and ability to perform and manage the 8 Functions of Command and the corresponding strategic safety requirements for the entire incident operation.

6.3 – Subdividing the Incident Scene

An IC must have a system in place where the rate of assigning companies to the emergency scene doesn't exceed their span of control. The IC accomplishes this by forecasting and establishing geographic and functional responsibilities that divides the incident scene into smaller, more manageable tactical sub-divisions.

Tactical Subdivisions: on Type 4 and 5 local incidents are typically referred to as divisions, or groups. The IC must correctly name the different work areas on the incident site to help eliminate any confusion on the fire ground.

ICS/NIMS use the terminology of Divisions and Groups:

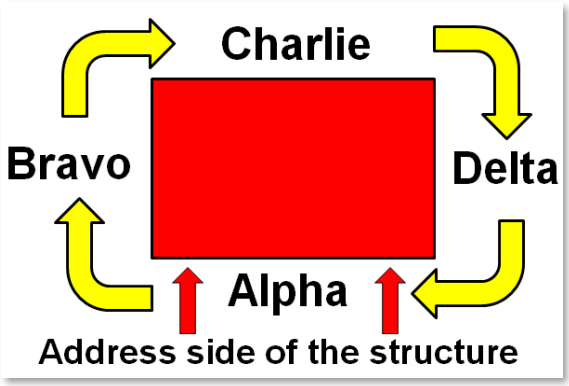
- Division is a geographical subdivision of the incident site
- Group is a functional work group that is not tied to a specific location

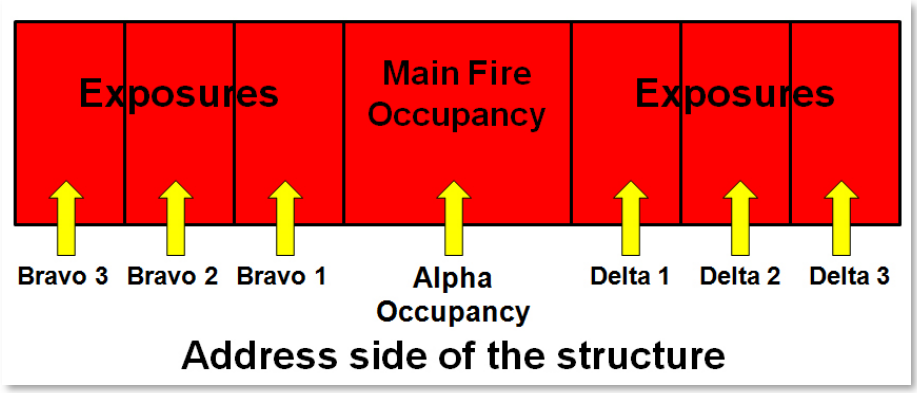
The term "sector" is a term that is still widely used in the English speaking fire service. The term Sector is used to name both geographic and functional work groups but it is not used by the Payson Fire Department or any of the regional Rim Country fire resources and will not be referenced by PFD hazard zone management SOPs.

IC's manage strategic level accountability by controlling both the position and function of all hazard zone units using a tactical worksheet. Therefore, **Groups**

shall not be utilized inside of the hazard zone. All units assigned into the hazard zone must be assigned to a specific geographic location where they will be responsible for the completion of all tactical priorities (S/R. F/C, L/C) in their assigned area.

Geographic Landmarks: The Alpha side of the structure is "usually" the address, street side. There will be many situations where it is not clear where the Alpha side is. In situations where there is confusion on the incidents landmarks, initial arriving IC's must make it clear where the Alpha side is located.





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Floors: Are identified by stories above and below ground level. Using Divisions, the individual floor will take on the same floor number as the Division (floor 2 becomes “Division 2”). Many systems just assign the floor number as the geographic designation (floor 2 becomes “2nd Floor”).

6.4 - Forecasting and establishing Geographic & Functional responsibilities:

The IC must forecast where the overall event is going, subdivide the hazard zone into manageable tactical units and then assign geographic responsibilities early on in the incident in order to build an effective incident organization.

Geographic subdivisions are most effective when they are assigned in anticipation of their need, rather than in a crisis because it is very difficult to play catch-up in fast-paced, escalating incidents.

Subdividing the incident site provides tactical supervision, direction and support to units assigned and operating in a hazard zone. This delegated management also helps the IC to achieve the incidents tactical objectives much more safely and effectively. Utilizing the appropriate subdivisions will:

- Reduce the IC's span of control.
- It streamlines and creates more effective incident scene communications.
- They allow the IC to focus on the Strategic elements of the incident from a stationary command post.
- Divisions/groups give the IC an array of functions to choose from and match to the particular needs of each Incident.
- It greatly improves the accountability system
- It places strong tactical direction and leadership where the work is actually taking place.
- Improves firefighter safety by having dedicated officers directly manage and control the position and function of the operating companies assigned to them.

Offensive fires usually don't last very long. We either put the fire out in the limited time frame we have (less than 20 minutes) or we don't put the fire out, we exit the structure and then get away from the incident problem.

Building large incident organizations on offensive fires doesn't happen very often. But there are many situations that can facilitate long duration, over 30-minute, offensive operations. Some of these offensive situations include:

- Multi-Unit residential structures where the fire has extended into the concealed spaces or into adjoining units.
- Other highly compartmented structures with fire extension in concealed and common attic spaces
- Sprinkler controlled, large area cold smoke fires
- Defensive fire situations where we operate in offensive positions in the exposed structures
- compartmented Mid & High Rise Structures

The IC must automatically, instinctively, and quickly develop and compare the event vs. response profile and then call for the additional resources that will be required to bring the response model up to effectively engage and overpower the problem the event is creating.

As the resource required to bring the incident under control escalates, the Strategic level (the IC) and the Tactical level (Division/group officers) must also be supported. This support needs to be included in the regular dispatch system. The standard response elements of additional staff and response chiefs on greater alarms will give the IC the needed resource to implement an organization that keeps up with, and outlasts the event.

6.5 - Company Officer Hazard Zone Tactical Supervision

Generally, in the front end of escalating or large scale events, the IC will assign - the company officer of the first arriving unit to a work location - initial division/group officer responsibilities. These initial division/group assignments start to subdivide the incident scene early on and they keep the IC ahead of the deployment process.

When 2 or more units are working in the same division/group, the IC should designate one of the company officer's (usually the 1st arriving unit to the location) as the division/group officer. This will prevent 2 companies working in the same area from reporting the same information to the IC.

When assigning a unit to deploy to and/or assume initial geographic or functional responsibilities, the IC needs to transmit:

- The location or function of the subdivision
- The division/group appropriate name
- The tactical objectives to be addressed in the division/group

When arriving to a geographic hazard zone location, the division/group officer must size up all of the critical factors in their area of responsibility. If defensive conditions exist in the area, Command must be notified immediately and the strategy (at least for that area) must be changed.

For offensive operations, the Company Officer D/G Officer and his or her crew will make entry into the hazard zone. Company Officer D/G Officers become the initial evaluation and reporting agents for the IC and will transmit condition reports in the hazard zone. These reports provide the IC the information required to:

- Forecast and stay ahead of the incident conditions
- Adjust the overall strategy
- Adjust the current IAP

The division/group officer should give a CAN report when requested by the IC that includes the following information:

- The conditions in their assigned area
- Their current actions
- Any Tactical objectives that have been met
- A Needs assessment in their assigned area (or no Needs)
- Any significant safety concerns in and around their work area

When assigning resource to a division/group that is already established with a company officer, the IC must include:

- The location of the assignment
- The tasks required
- The tactical objectives to be addressed
- Identify the division/group officer that they will be reporting to/working under

Command must then contact the division/group officer and inform them what additional resource has been assigned to their area.

Units that are deployed into a division/group that has not yet been upgraded with a command officer must drop off their unit passport to the pre-determined accountability location.

Company officer division/group officers have the same set of challenges as fast attacking company officer IC's. They are:

- Communications difficulties wearing full PPE
- Working in a hazard zone (heat, visibility)
- Supervising and accounting for their own crew members
- Engaging and focusing in on task level activities
- Must be tied to a hoseline

IC's who assign 2 or more companies to an active division/group can't expect a company officer/division/group officer to appropriately manage and supervise all assigned resource while they are working in a hazard zone. IC's should use the rule of thumb that an active division/group should be upgraded with a command officer when it has 2 or more units assigned to it.

6.6 – Command Officer – Hazard Zone Tactical Supervision

Upgrading D/G supervision from a company officer to a command officer needs to be a well-practiced and regular occurrence on the incident site. When D/G supervision is transferred from a company officer to a command officer, it elevates D/G management with a true tactical level boss. This greatly facilitates the completion of the D/G objectives and firefighter safety.

As the IC assigns subsequent arriving chiefs to assume D/G responsibilities it quickly builds and embeds powerful tactical and safety elements across the entire incident scene. This places the IC in the strongest strategic position to manage the position and function of all assigned resources.

Subsequent arriving chief officers should Level 1 Stage over the tactical radio frequency. Subsequent arriving chief officers must avoid doing face to face communications with the IC when an active hazard still exists.

When assigning a chief officer to assume geographic or functional responsibilities, the IC needs will need to transmit:

- The location of the D/G
- The appropriate name of the D/G
- The tactical objectives to be addressed in the D/G
- The units currently assigned to the work area
- The current D/G supervisor they will be replacing (if any)

Chief officers who are assigned division/group responsibilities must:

- Park their response vehicle in a manner that won't block apparatus access into the scene/ work area
- Don their full protective gear
- Gather the necessary Accountability and RIC equipment
- Report to their assigned division/group
- Implement the Passport Accountability and Air Management system (Section 1.8.6)

The D/G officer will need to position themselves just outside of the hazard zone in their division/group. Entering into the hazard zone would place the division/group officer at the same disadvantage as interior companies working in the division/group and entry should be avoided.

The best position to manage the division/group is in the warm zone of the division/group at the entry point. This location puts the D/G officer in the most ideal position to manage, coordinate, and account for all the D/G resources.

There are 2 main functional areas a D/G officer must manage in their assigned D/G. They are:

- The **Tactical** level requirements to run the D/G
- The **Embedded Safety** requirements to run the D/G

D/G officers are responsible for the following basic **Tactical** functions:

- Size-up the D/Gs critical factors
- Apply the risk management plan making sure that the D/Gs actions are always matching the conditions
- Develop the D/G's Incident Action Plan within the IC's overall Strategy and IAP
- Supervise the work in the D/G
- Redirect the D/G's activities as required
- Request additional resource from the IC as required, always maintaining a tactical reserve within their assigned D/G whenever possible.
- Coordinate with other D/Gs as required
- Provide progress reports to the IC
- Monitor personnel safety, accountability, and welfare in their D/G, and
- Decommit companies as operations are completed

The deployment of units into an IDLH hazard zone **must** be managed around crew accountability and the times directly connected to the air supply of working firefighters. D/G officers are responsible for the following basic **Embedded Safety** functions for the work area are:

- Managing the D/G accountability (using the passport system)
- Track and manage the work times of interior crews around SCBA airtimes
- Assist with the rotation of companies in and out of the hazard zone
- Manage on deck crews
- Manage the recycle and the rehabbing of crews
- Monitor the D/G for any significant safety hazards

Departments that pair their response Chiefs with Chief's Aides have a significant incident management and safety advantage. When the IC assigns a Chief working with an Aide to assume D/G responsibilities, the Chief Officer becomes the D/G officer responsible for the **Tactical** functions in the D/G, and the Aide will assume the **Embedded Safety** responsibilities for that particular D/G.

One (1) Command Officer can routinely manage both the **Tactical and Embedded Safety** requirements for an assigned area. Depending on the situation, supervising 4 to 5 companies usually maxes out the span of control for 1 person managing the D/G and supervision should be reinforced with subsequent arriving IDLH qualified supervisors (chief officers, safety officers, training officers, qualified staff officers).

IC's must maintain an awareness of how many companies are assigned to a D/G and try not to "over assign" to one area. Other attack positions must be considered and/or established.

When assigning resources to a D/G that has a command officer, the IC must include:

- The location of the assignment

- Identify the D/G Officer that they will be reporting to/working under

Command must then contact the D/G Officer and inform them what additional resource has been assigned to their area. It will then be the D/G Officer's responsibility to contact the assigned unit and deliver any orders required to get the company into action in the D/G.

When formal supervision has been upgraded in the D/G, a unit assigned to that D/G will need to deliver their passport and check in directly with their assigned D/G officer before going to work.

6.7 - Offensive Hazard Zone Tactical Level Supervision General Guidelines

The S/D Officer's plan always needs to fit into the IC's plan. They will need to continually size-up the S/D critical factors and apply the RMP by making sure that the S/D actions are always matching the conditions in the S/D.

S/D Officers must develop the Incident Action Plan for their S/D that facilitates the completion of the tactical priorities for their assigned area.

Both Company and S/D Officers need to balance the amount of air we bring into the hazard zone with the amount and duration of the work that must be performed and completed in the hazard zone. S/D officers must make an early resource size up and call for the resources that will be required to perform the necessary tasks while safely managing the workers air supplies.

The goal of the deployment and SDG system is to always have enough workers **assigned performing the work**, to have enough workers **that are assigned to On Deck positions within the SDG that are ready to go to work**, and then have enough of a tactical reserve **in staged positions, waiting to be assigned to go to work**.

The IC must use the "3-deep" deployment model to supply a steady, adequate stream of companies to the various S/Ds. This approach to deployment places ready-to-go resources in all the key operating positions around the incident site and it greatly enhances firefighter safety and effectiveness.

As working companies properly manage their air supplies and cycle out of the hazard zone, On Deck companies should be positioned within the S/D to quickly take their place. This deployment model also allows exiting companies to actually have a face-to-face briefing with the S/D Officer and the companies that are relieving them. This reduces the amount of radio traffic on the tactical channel and streamlines the communication process for the entire incident.

The communications flow chart should overlay and reflect the organization the IC has implemented. The IC gives orders and makes assignments to establish the overall organization and to implement an effective IAP. After the organization is in place, the IC should shift from primarily ordering units into position, to requesting, listening and reacting to critical working area(s) CAN reports.

The IC should avoid automatically assigning more resources to established D/Gs. Once the organization is implemented, these SDG officers should report to the IC on the conditions in their area, the actions they are taking and any necessary resources or support (Needs). This allows the IC to operate on the strategic level, serving as a resource allocator to the D/Gs based on each tactical area's needs.

D/G Communications Model:

- Company Officers will communicate with their individual crew members face to face
- Company Officers will communicate with other Company Officers in their work area face to face whenever possible
- Company Officers should communicate with their D/G Officer face to face whenever possible
- There will be occasions when Company Officers will need to communicate with their D/G Officer or Command over the assigned hazard zone tactical radio frequency
- D/G Officers will communicate directly with the IC over the assigned hazard zone tactical frequency.

Chief officer D/G officers become the central reporting agents for their assigned area and they should give more encompassing and complete progress reports on the D/G conditions, actions, and needs.

In some cases, a D/G officer may be assigned to an area/function initially to evaluate and report conditions and advise Command of needed tasks and resources. The assigned Officer will proceed to the D/G area, evaluate and report conditions to the Incident Commander, and assume responsibility for directing resources and operations within his/her assigned area of responsibility.

D/G Officers along with company officers are responsible to monitor the welfare of their personnel at all times and determine if D/G recycle can be done within the D/G or if a formal rehab is appropriate.

D/G officers may need to request additional resources to replace On Deck crews, recycling crews or crews that have been assigned to a Rehab D/G.

6.8 - Hazard Zone – Defensive Tactical Level Supervision General Guidelines

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.

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, searched and protected. The first priority in defensive operations is personnel safety; the second is exposure protection.

The defensive perimeter and collapse zone must be identified and all operating units will remain behind those defined boundaries —*this perimeter must not be crossed.* D/G officers who are in charge of defensive operations should use hazard zone tape to identify the defensive fire perimeter and collapse zone that must not be crossed by firefighting forces. This tape perimeter will greatly assist the D/G officer in managing firefighter "creeping".

Water supply becomes a critical factor when managing defensive operations. D/G officers will need to coordinate with the IC in establishing uninterrupted water supplies with sufficient enough flows to control the problem and/or protect exposures.

D/G officers should also shut down all small-diameter handlines (unless they are being used to directly protect exposures). This diverts that water into master-stream devices that can apply large amounts of water directly on the fire and the exposures. These actions also reduce creeping.

No member shall enter the hazard zone of a defensive fire area. 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.

On defensive fires with exposures, D/G officers managing exposure protection in the offensive strategy will follow the same offensive strategy guidelines in Function 5 - Strategy and IAP.

7.0 - Command Function # 7—Review, Evaluate, Revise

Major Goal: To confirm the current Strategy and IAP meets the incident's tactical requirements & adequately provides for worker safety.

The biggest reason we continuously perform size-up, evaluation and revision is so our workers can operate safely, complete the tactical priorities, and go home unharmed after the event.

A standard front end ensures our incident operations remain under control from the beginning of the event and assures those operations occur within a structured plan. When the IC performs the standard command functions from the very beginning of the incident, it provides a basis for any revisions required to match the strategy and IAP to the current incident conditions.

The ongoing evaluation of the incident's critical factors is the basis for managing the current strategy and IAP ***and*** keeping it current (positions always match conditions).

7.1 - Carry out all Command Functions in a standard order

The initial IC (IC#1) performs the first five functions of command during the first minute(s) of incident operations. The functions are arranged in the natural order the IC performs them. This provides a standard system for managing the emergency scene.

The command system is designed to achieve the tactical priorities in a regular fashion. The IC uses the system to:

- Control the incident (assume command)
- Determine the appropriate strategy and IAP
- Manage incident communications
- Request and assign resources
- Decentralize the management process by assigning D/G officers
- Review and evaluate operations and make the required changes
- Transfer command to a later-arriving command officer
- Complete the tactical priorities
- Support the IC when necessary
- Terminate command when the event is complete.

7.2 - Strategic Decision-Making Model

The strategic decision-making model gives the entire organization an evaluation/action system that takes the mystery out of initial and ongoing emergency operations. Everyone working at the incident scene must be constantly evaluating incident conditions while matching our position and actions on the current incident conditions. By continually evaluating these factors, we keep the plan current and the workers safe.

7.3 - Implement Command Elements Early to Enable Midpoint Review & Revision

When we implement the regular command-system elements from the beginning, they provide the framework for midpoint review and revision:

- SOPs
- Size-up/risk-management plan
- Standard strategy/action planning
- Strong, standard command positioning
- Strong communications
- Strong D/Gs

The review process is nothing more than a continuation of the system we used to commence operations. If the IC didn't perform the first five functions of command during the initial stages of operations, it is almost impossible to make necessary changes and adjustments as the incident progresses.

The communications flow chart should overlay and reflect the organization the IC has implemented. The IC gives orders and makes assignments to establish the overall organization and to implement an effective IAP. After the organization is in place, the IC should shift from primarily ordering units into position, to requesting, listening and reacting to critical working area(s) CAN reports.

The response and arrival of additional command officers strengthens the overall Command organization. As the incident escalates, the IC should use the subsequent arriving command officers to fill D/G officer or command support positions. Filling these different command/tactical roles:

- Improves safety
- Decreases the span of control
- Improves communication
- Improves accountability
- Improves management of the D/Gs created

7.4 - Receive & Evaluate CAN Reports using the Order Model

The IC uses visual size-up and progress reports as the basis for Command Function 7. The visual information is limited to the IC's physical command position. If the IC is operating in the fast-attack mode (a company officer), their view is limited to their current work area. If the IC is operating in the command position, they should have a pretty good overall view of the two most critical sides of the incident scene.

The goal of the system is to place an IC in the command position as quickly as possible. The IC can then monitor the overall operational effect on the incident problem.
The IC receives IAP information from operating D/Gs. This information should include a description of the critical factors, the tactical priorities completed, and should start to reveal any critical unknowns on the emergency scene. The IC can see overall conditions from the command post and can determine whether conditions are getting better or worse.

7.5 - Use Strategy & Action-Plan Review as the Revision Checklist

- Firefighter safety
- Does the current strategy match the current conditions
- 1, 2, 3 priority progress reporting
- Location of attack
- Size of attack
- Effect of the attack

- All affected areas searched
- Timing and support
- Adequate back up
- Adequate resources
- Have a Plan B?
- Correct actions to the current conditions (Fire Control, All Clears, Loss Stopped)

IAP No. 1 is the IRR; it states that someone has arrived on scene, it describes the incident problem, it explains the incident strategy, describes the action taken, the resource needed to control the problem, and it identifies the IC in charge of the incident scene.

The minute or so that IC#1 spends making a good initial and follow up report, wraps together the first five functions of command and serves as the foundation for the first Strategy and IAP. In many cases, this initial IAP and the effective assignment of 2-3 other units into the incident scene solves the incident problem.

The typical offensive strategy and IAP looks like this:

- We put out the fire
- We search the occupancy
- We revise the IAP from one that targets search, rescue and fire control to one that focuses on checking for fire extension, removing smoke, controlling the loss.
- After achieving these operational targets, we shift the IAP again, focusing on recycling/rehabbing personnel, fire investigation, securing the property, turning it back to the RP, and making sure the customer has the necessary after-fire support.

7.6 - Quickly Make Strategy Transitions and IAP Revisions Based on the RMP and Changing/Forecasted Conditions

Once an attack is in place, **all fire conditions behave in 1 of 2 ways:**

1. They are getting better, or
2. They are getting worse

After assigned resources have had a chance to assume their key tactical positions and begin operations, the IC must quickly determine their effectiveness on controlling the incident problems.

- In general, a well-executed, offensive fire attack will quickly control the fire.
- If the fire continues to grow despite control efforts, it is a sure sign the current plan is not working.
- The IC must quickly determine whether they can solve the problem by:
    1. Reinforcing current positions or
    2. Establishing key attack position/s that aren't yet covered
- If the fire is too big to control with handlines from interior positions, and an exterior reset or "quick hit" from a safe position was ineffective, a strategic change from offensive to defensive is required.
- This decision must take into account how long it will take to get required resources into position, as well as how long it will take to evacuate and account for interior crews if conditions continue to worsen.

When the current IAP doesn't solve the incident problem(s), the IC must revise it based on the bullet points listed above.

8.0 - Command Function #8 – Continue, Support & Terminate Command

The major goal of Command Function 8: To provide enough command to manage the required units for the necessary length of time in order to achieve the tactical priorities and protect all of the hazard zone workers.

The IC's ability to conduct command operations over this time period determines the entire operation's overall effectiveness. Every tactical situation involves a different combination of elements that affect the operation's length and intensity.

8.1 - Assume, Maintain & Upgrade an Effective Command Position

Offensive incident operations usually begin with a Company Officer IC (IC#1) operating in the fast-attack position. This ends when the incident problem is solved or when command is transferred to an IC who will operate in the Command position (IC#2). Command is then reinforced as later-arriving chiefs arrive on the scene and support the IC.

Depending on arrival order, rank and SOPs, later-arriving Chief Officers can be assigned to the following standard Command support positions:

- Division/Group (D/G) Officers
- Support Officer (S/O)
- Senior Advisor (S/A)
- Branch positions
- Section positions

As the command requirements for the incident grow, so should the command post. The command team will usually operate from a larger "command van" command post.

The system must expand progressively and naturally to improve the IC's position and the level of support given to the IC.

8.2 - Use Standard Command Transfer (Both Ways)

To a major extent, command effectiveness is directly connected to regular command positioning; the entire command system revolves around the rapid establishment of a stationary, remote IC, operating in a standard CP.

The 1st arriving Chief Officer will respond directly to the scene. If an active hazard zone still exists, or if there are still tactical benchmarks to coordinate, Command should be upgraded into the Command position.

This command transfer significantly improves IC #2 position and their ability to perform and manage the 8 command functions and the corresponding strategic safety requirements for the entire operation. Placing the IC in a standard CP position where they can focus exclusively on incident management enhances and facilitates both the completion of the tactical priorities and firefighter task-level safety.

If this level of command doesn't bring the incident under control, the IC will need support. This support comes when subsequent-arriving chief officers fill the standard command support positions.

As the hazards subside and incident operations wind down, command will be transferred from the current IC to a company officer or other person who will remain on scene until the very end.

- Normally done at the end of the incident
- All the tactical priorities have been achieved
- No Hazard Zone present

We use the same system to de-escalate command that we used to escalate it, always matching the level of command to the current situation.

8.3 - Develop & Maintain Effective Fireground Communications

Command positioning plays a big part in effective fireground communications:

- Fast-attacking IC will run the incident over a portable radio. Worst communications position, can only operate 1 radio channel.
- IC working in a Command position unsupported. Much better communications position, can only operate 1 radio channel.
- IC working in a Command position supported. Best command position, can operate multiple radio channels.

The IC requires a support system that allows them to stay in constant, undistracted contact with all the companies/D/Gs operating in the hazard zone.

8.4 - Share All Pertinent Information Up & Down the Chain of Command

Sharing information is how we keep the IAP current and make sure our actions match conditions. The goal of the system is to place an IC in the command position as quickly as possible. The IC can then monitor the overall operational effect on the incident problem.

The IC then receives IAP information from operating D/Gs. This information should include a description of the critical factors, the tactical priorities completed, and should start to reveal any critical unknowns on the emergency scene. The IC can see overall conditions from the command post and can determine whether conditions are getting better or worse.

We must share with everyone any critical information that affects all operational areas and/or has an impact on firefighter safety. The best way to do this is through the use of priority and emergency traffic reports.

8.5 Consider the time it takes to complete each Tactical Priority

The tactical priorities represent the core of the IAP at any given point during incident operations.

The IC begins incident operations by estimating the total length of time it will take to complete incident' tactical priorities. This estimate allows the IC to break the entire incident operation into smaller pieces and time frames that correspond with the strategy and IAP that the IC implements, manages and revises throughout the incident.

Estimate how long each tactical priority will take, along with how many people or crews it will take to accomplish them. This should give the IC a general idea of how many command officers they will need to request to the scene.

These forecasted additional command elements need to be estimated and call for when requesting additional resources.

8.6 - Estimate the Duration of Command

The IC should forecast how long incident operations will last and how large the command organization needs to be based on the critical factors of the incident. This determination should occur very quickly in the operation.

Time and intensity determine how long the IC and the rest of the command team can remain in charge of an event. Long, slow-moving events (burning debris piles with no exposures, defensive fires with no exposures, etc.) are not as stressful as more complex incidents with personnel operating in a hazard zone.

If the incident is going to last beyond the time a command team can reasonably manage, a schedule should be developed. This schedule should manage command-team rotations, as well as rotations for any other staffing positions filled throughout the event.

8.7 - Develop & Support an Organization that Outlasts the Event

The response and arrival of additional command officers strengthens the overall Command organization. As the incident escalates, the IC should use the subsequent arriving command officers to fill D/G officer or Command support positions. Filling these different command/tactical roles:

- Improves safety
- Decreases the span of control
- Improves communication
- Improves accountability
- Improves management of the S/Ds created

8.8 - Build a Command Team

The system is built from the ground up. We must transfer command before IC #1 becomes overwhelmed; this usually occurs when the incident's problems aren't eliminated quickly.

Command is typically transferred from a Company Officer, fast attacking IC#1, to the first-arriving response Chief. This should be the only command transfer that takes place during the incident. From this point on, a strategically positioned IC requires the support and reinforcement of a command team.

These are all terms used to describe a quickly assembled, local incident-management team that provides support for the IC. Command teams are an organizational response to significant, local incidents. They provide enough command support to bring these situations under control rapidly. Command team members include:

- The Incident Commander
- The Support Officer
- The Senior Advisor

The Incident Commander: Command shall be formally declared on all incidents where two (2) or more Units are dispatched. Typically, the company officer of the first arriving engine company will become the initial IC for the incident, IC #1.

There are three command positions that a company officer can place themselves in, depending on the situation. These three command positions are:

- Investigating Command position
- Fast-Attacking Command position – Inside the hazard zone
- "Command" position - Stationary, inside of a Command Post (CP).

Command must be quickly transferred to a subsequent arriving chief officer on Incidents that are not quickly controlled, are escalating, or are significant in scope and size upon our initial arrival. A strategically placed IC is responsible for:

- Overall Safety Boss & Manage Hazard Zone
- Perform 8 Functions of Command
- Evaluate Inc. Critical Fireground Factors
- Risk Management Analysis
- Develop and Manage Strategy
- Coordinate the IAP with D/Gs
- Manage the completion of the Tactical Priorities
- Resource deliverer based on D/G requirements

If the Incident continues to escalate, a strategically positioned IC requires the support and reinforcement of a command team to manage all of the above bullet points.

The Support Officer: IC#2 will need to assign subsequent arriving chief officers to either:

- Forward positions on the hazard zone site as D/G officers.
- Command support roles to assist the IC in directly managing the incident.

The first command support position is the Support Officer (SO). The SO's roles and responsibilities include:

- Evaluate and recommend changes to the incident action plan—the IC and the SO continually engage in a "challenge-and-verify" exchange;
- Provide direction relating to tactical priorities, specific critical incident factors and safety;
- Evaluate the need for additional resources;
- Assign logistics responsibilities;
- Assist with the tactical worksheet for resource control, accountability and tracking; and
- Evaluate the incident organization and span of control.

Many times plugging an SO into the command post is all it takes to bring a fast-moving, an almost out-of-control incident back into balance. An SO also serves as the IC's "shield" by keeping the attention-diverting distractions away from them. This allows the IC to stay on the tactical channel and to focus continually on the critical factors, firefighter safety and the tactical priorities.

Departments that pair their response chiefs with chief's aides have a significant incident management and safety advantage. If the first arriving chief officer assumes command, they have a built in support officer. When the IC assigns a chief working with an aide to assume D/G responsibilities, the chief officer becomes the D/G officer responsible for the **Tactical** functions in the D/G, and the aide will assume the **Embedded Safety** responsibilities for that particular D/G.

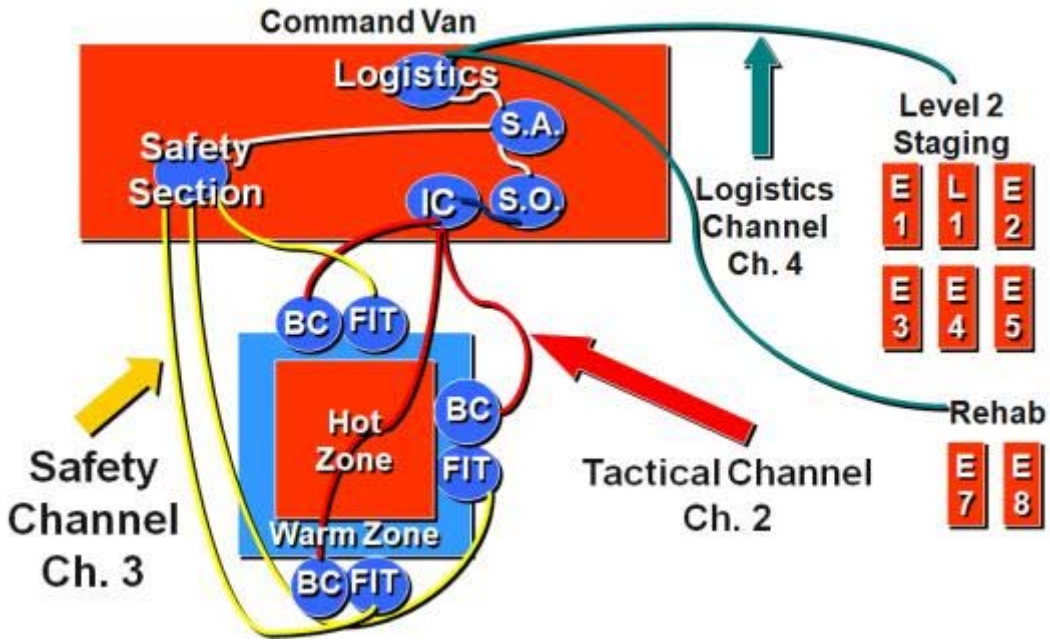
Command Team Members—Senior Advisor

The third member of the command team is the senior advisor. The SA is normally the highest-ranking member of the command team and the highest-ranking response chief should assume the role of SA, e.g., the shift commander, duty chief, etc. Their major responsibility is to look at the entire incident and its impact from a broader perspective and to provide direction, guidance and advice to the rest of the command team and support staff. The SA manages and is in charge the command post. The SA's Roles & Responsibilities:

- Review and evaluate the incident action plan, and initiate any needed changes (more challenge and verify);
- Provide ongoing review of the overall incident (the big picture);
- Review the organizational structure, initiating change or expansion to meet incident needs;
- Recommend section and branch functions as required;
- Manage appropriate Sections as needed;
- Provide management and coordination between the key radio operators in the command post (IC/SO, safety, logistics);
- Serve as liaison with other city agencies and officials, outside agencies, property owners and tenants; and
- Forecast (and react to) the effect this incident will have in tomorrow morning's newspaper (front page, above the fold).

When an SO and SA are supporting the IC in the command post, you have an integrated, three-person team working together to perform the functions of command.

The IC should use the radio designation "Command" and will generally be the only member of the command team communicating over the tactical radio frequency (the hazard-zone channel).
The IC and command team remain effective only when they operate on the strategic level. If they get bogged down in tactical- and task-level details, incident operations as a whole will suffer. The command team must use the different pieces of the incident organization to escalate operations and delegate detail management.



The command team's main goal and focus is managing the workers operating in the hazard zone. This includes providing whatever technical support necessary (e.g., special operations, hazmat, technical rescue, etc.).

Large, complex incident operations require a larger command staff to manage any additional organizational positions.

8.9 - Implement Management Sections & Branches as Necessary

The command team's main goal and focus is managing the workers operating in the hazard zone. This includes providing whatever technical support necessary (e.g., special operations, hazmat, technical rescue, etc.).

Large, complex incident operations require a larger command staff to manage any additional organizational positions. These positions provide logistical, planning and administrative support; they also fill safety and branch officer roles where needed.

8.9.1 - Section Positions

As incident operations escalate in time, size and complexity, the strategic-level responsibilities can overwhelm the command team. To avoid this command “overload,” we can quickly expand the incident organization by assigning section-level positions. These positions include:

- Logistics
- Planning
- Operations
- Admin
- Safety

One of the keys to effective incident management is building the properly sized incident organization and support staff. The command team uses the Section positions to delegate functional and support responsibilities. This allows the IC and the command team to focus solely on managing the resource in the hazard zone.

The Logistics Section is the support mechanism for the organization. Logistics provides services and support systems to all the organizational components involved in the incident. The Logistics Section will operate on its own radio channel. Roles and responsibilities of the logistics section include:

- Provide rehab.
- Manage staging
- Provide and manage any needed supplies or equipment.
- Forecast and obtain future resource needs (coordinate with the Planning Section).
- Provide any needed communications equipment.
- Provide fuel and needed repairs for equipment.
- Obtain specialized equipment or expertise per Command.
- Provide food and associated supplies.
- Secure any needed fixed or portable facilities.
- Provide any other logistical needs as requested by Command.
- Collect and provide information for an After Action Review.
- Supervise assigned personnel

The Planning Section is responsible for gathering, assimilating, analyzing, and processing information needed for effective decision-making. The Planning Section serves as the Incident Commander's "clearing house" for information. This allows the Incident Commander to have a single person provide him/her with information instead of having to deal with dozens of information sources. Information should be used to make long-range plans. The Planning Section Chief's goal is to plan ahead of current events and to identify the need for resources before they are needed. Roles and Responsibilities:

- Evaluate current strategy and plan with the Incident Commander.
- Refine and recommend any needed changes to plan.
- Evaluate incident organization and span of control.
- Forecast possible outcome(s).
- Evaluate future resource requirements.
- Utilize technical assistance as needed.
- Evaluate tactical priorities, specific critical factors, and safety.

- Gather, update, improve, and manage information with a standard systematic approach.
- Facilitate an After Action Review (AAR) and After Action Report.
- Liaison with any needed outside agencies for planning needs.

The Administration Section evaluates and manages the risk and financial requirements for the fire departments involvement in the incident. Roles and responsibilities of the administrative section include:

- Procurement of services and/or supplies from sources within and outside the fire department or city as requested by Command (coordinates with Logistics).
- Documenting all financial costs of the incident.
- Documenting for possible cost recovery for services and/or supplies.
- Analyzing and managing legal risk for incidents such as, hazardous materials clean up.
- Serves as the Incident Commander's liaison with: city officials, litigators (and other lawyer types) regulatory agencies (EPA, OSHA, DOT, FBI, etc.).
- Monitors and coordinates emergency service delivery to the rest of the community during major incidents to ensure adequate coverage.
- Serves as the E.O.C. representative in the command post and provides briefings to the E.O.C. staff.
- Manage investigations (arson, etc.).
- Collect and provide information for an After Action Review.

The Administration Section is responsible for obtaining any and all needed incident documentation for potential cost recovery efforts, or litigation, including criminal charges.

The Operations Section: is responsible for the tactical priorities, accountability, and the safety and welfare of the personnel working in the Hazard Zone. The Operations Section Officer uses the tactical radio channel to communicate strategic and specific objectives to D/G officers and/or branch officers. Roles and responsibilities:

- Coordinate activities with the Senior Advisor.
- Implement the Incident Management Plan.
- Assign units to D/G/Branches based on Tactical Objectives and priorities.
- Build an effective organizational structure through the use of D/Gs and/or Branches.
- Provide Branches and D/G Tactical Objectives.
- Manage Operation Section activities.
- Personnel Accountability.
- Provide for life safety.
- Determine needs and request additional resources.
- Consult with and inform other Sections and the Incident Command Staff as needed.
- Collect and provide information for an After Action Review.

The IC can assume the designation (Ops) when a full command team is assembled. The Senior Advisor will take over the role of IC and will manage the command-post operation. At no time does this designation mean that the Ops should leave the command post and place themselves around the hazard zone. The Ops section in these instances remains responsible for managing the units in the hazard zone, they will remain in the CP, and will still go by the designation of “Command”;

The Safety Section: This includes the concept of “embedding” safety elements and the communications flow plan the command team uses to connect all the different organizational elements to ensure workers’ safety in the hazard zone.

8.9.2 - Implement the Appropriate Branches When Required

Rarely on the local level will an incident may require most, if not all, of a community's resources (and the neighbor's community as well). These big-time, major incidents can quickly overwhelm Command with multiple D/Gs.

The next subdivision between command and D/G is a ***Branch***. Branch officers operate on the coordination level and manage D/G officers that command assigns to them. (The D/Gs are typically grouped in the standard branches shown above). Command should consider implementing branches when:

- The incident is forecasted as a major event that will eventually need many D/Gs
- The incident has two or more large, distinctive components (e.g., Has-Mat, evacuation and medical)
- The incident covers a large geographical area
- Anytime the number of D/Gs starts to overwhelm command

The activation of branches signifies that the incident is going to be split into large, separate pieces. Each Branch should operate on its own radio channel when managing and directing the activities of D/G officers. Branch officers will communicate with Command on a separate radio channel designated by the IC. The radio designation of branch officers should reflect the function or geographic area of the branch.

When Command implements branch officers the IC will assign a separate radio channel (not the tactical channel) for communications within the Branch. D/G officers should be notified by Command of their new supervisor. This information should include:

- What Branch the D/Gs is now assigned to.
- The radio channel the branch (and D/Gs) is operating on.

Branch Officers operate in forward positions. They should utilize a command officer's vehicle as a forward Branch Command Post (when feasible). In these situations, Command must assign officers in the command post to monitor each branch radio channel.

Branch Officers are not limited to operations. Any of the section officers may implement branches within their individual sections as needed.

8.10 - Provide Rehab, Rotation & Relief for the IC & Command Staff

This should be a regular part of extended operations. The IC, command team, D/G Officers, section chiefs and everyone else operating at the incident scene will need periodic rehab, rotation and relief during the course of the incident.

Extended fire-incident operations are generally slower-moving, defensive events. During these types of operations, where no one operates within a hazard zone, a well-supported IC may be able to stay in command for several hours. Incidents that last many hours or days require some type of rotational roster requires for the cycling of companies in and out of incident operations as well as the command staff required to control operations.

8.11 - Reduce the Command Structure as Part of the Ending Stages of Incident Operations

We use the same system to conclude incident operations that we use to expand the command structure for escalating events. As we complete the tactical priorities, obtain PARs and wrap up incident operations, the IC needs to develop a plan for the closing phases. At this point, the IC needs to get out of the command post and tour the incident site. During this "walk about," the IC gets a firsthand look at

the incident scene, talks with crews, decides what remains to be done and formulates a plan for scaling back the operation.

The command transfer is generally accomplished by transferring command back to an officer of a unit who will remain on the scene until the event is complete.

8.12 - Ensure that an Adequate Critique Process is Underway before De-Commitment

The critique process is how we figure out what went well and what we could have done better. This is a key piece of the action-management cycle—develop SOPs, training, application, critique and revision. Revision (and improvement) is only possible if we conduct regular critiques.

Small-scale incidents generally end pretty quickly. This facilitates conducting the critique prior to everyone leaving the scene. The IC should lead this process and base the critique on the department's SOPs, the incident conditions upon arrival (critical factors), the actions taken, communications and the overall incident outcome.

It is more difficult to conduct on-scene critiques at incidents that require large amounts of resources. These events tend to last longer, and the initial-arriving companies have often times been released from the scene by the time the operation ends. These incidents should be critiqued at a later date and the lessons learned distributed throughout the entire department.

The most important goal of any critique, regardless of the incident size, is to improve our operations. Any significant lessons learned, both good and bad, should be shared with the rest of the organization. These lessons learned should be incorporated into department SOP's and training.

8.13 - Place Resources Back into Service with a Demobilization Plan

The IC’s demobilization plan should begin with replacing the most fatigued companies first. If it will take some length of time to get these ready for service, they can remain unavailable until they get their rig restocked (hose loaded, fluids topped off, tools and equipment restocked, etc.).

For large-scale incidents where lots of units will be going back into service, the IC needs to ensure that the correct number and type of units will remain on scene until all the incident’s needs have been met. This includes making sure the customer(s) have any needed after-incident support (Red Cross, social services, insurance company, family support, etc.).

8.14 - Provide Required Critical Incident Support

Incidents that involve trauma, death and loss can be very difficult on responders. The critique offers an excellent forum for the IC to sit down with all the incident players to find out how well they are coping with the event.

The post incident review with your boss and co-workers to help make sense of what just happened can be therapeutic. The IC needs to use this time to make sure that everyone is stable, both physically and mentally, before placing them back into service.

The best critical incident support happens before we respond to emotionally charged incidents. Working for an organization that cares about its members is the best preventive medicine. The organization shows its regard for the members in everything it does. The main areas include:

1. How the bosses treat the workers
2. How the workers treat one another
3. How everyone treats the customer

4. The training and skill level of the workers
5. The apparatus and equipment (is it adequate?)
6. The systems (IMS, safety, accountability, etc.) that we use when we deliver service

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