

# CROOK COUNTY FIRE AND RESCUE



Standard Command Functions

1-5

# Table of Contents

## 1.0 - Command Function #1 – DEPLOYMENT

- 1.1 - Company Status
- 1.2 – Dispatch Center
  - 1.2.1 Structural Fire
  - 1.2.2 Wildland Fire
  - 1.2.3 Car Fire
  - 1.2.4 Fire Alarm
  - 1.2.5 HAZMAT
  - 1.2.6 Citizen Complaint
  - 1.2.7 MVA
  - 1.2.8 Medical Calls
  - 1.2.9 Station Move Up
  - 1.2.10 Personnel Call Back
  - 1.2.11 Mutual Aid Request
- 1.3 - Response and general scene safety
  - 1.3.1 - Emergency Response Driving Procedures
- 1.4 - Establishing Command (Function #2)
- 1.5 - Calling for additional resources
- 1.6 - Staging Procedures
  - 1.6.1 – Level 1 Staging
  - 1.6.2 – Level 2 Staging
- 1.7 - IC assigning units into a hazard zone
- 1.8 - Hazard Zone Accountability
  - 1.8.1 - Personnel Accountability
  - 1.8.2 - Company/Task level accountability responsibilities
  - 1.8.3 - Tactical level accountability responsibilities
  - 1.8.4 - Strategic level accountability responsibilities
  - 1.8.5 - Tactical worksheets
  - 1.8.6 - PAR's and Roll-Calls
  - 1.8.7 - Passport Accountability System
- 1.9 - Managing the Work/Rest Cycle
- 1.10 - The 3 Deep Deployment Model
- 1.11 - In Transit
- 1.12 - On Deck
- 1.13 - Company Recycling
- 1.14 - Rehab

## **2.0 - Command Function #2 – Assume, Confirm and the Positioning of Command**

- 2.1 - Establishing Command**
- 2.2 - Naming Command - Radio Designation**
- 2.3 - Command Positioning**
  - 2.3.1- Investigative Command Position (Nothing Showing)**
  - 2.3.2 - Fast Attacking Command Position**
  - 2.3.3 - Company Officer / Leader**
  - 2.3.4 - Command Position - Company Officer**
  - 2.3.5 - Command Position – Chief Officer**
- 2.4 - Transferring Command**
- 2.5 - Package Command for ongoing operation and escalation**
- 2.6 - Upgrading the Command Post (CP)**
- 2.7 - Command Teams**

## **3.0 - Command Function #3 – Situation Evaluation**

- 3.1 - Matching standard conditions to standard actions**
- 3.2 - Strategic Decision-Making Model**
- 3.3 - Information management**
  - 3.3.1 - Previous experience**
  - 3.3.2 - Visual observation**
  - 3.3.3 - Recon information**
  - 3.3.4 - Pre-planning information**
- 3.4 - Critical Factors**
  - 3.4.1 – Critical Factor Category – Building**
  - 3.4.2 – Critical Factor Category – Occupancy**
  - 3.4.3 – Critical Factor Category – Arrangement**
  - 3.4.4 – Critical Factor Category – Life Safety**
  - 3.4.5 – Critical Factor Category – Fire**
  - 3.4.6 – Critical Factor Category – Resource**
  - 3.4.7 – Critical Factor Category – Action**
  - 3.4.8 – Critical Factor Category – Special Circumstances**
- 3.5 – Managing Critical Factors**
  - 3.5.1 - Consider fixed factors – manage variable factors**
  - 3.5.2 - Critical Unknowns**
  - 3.5.3 - Quickly Identify & React to Safety “Red Flags”**
  - 3.5.4 - Maintain a Realistic Awareness of the Elapsed Incident Time**
  - 3.5.5 - Structure & Time Information around the Tactical Priorities**
  - 3.5.6 - Continually Reconsider Conditions; Stay Current & Stay Connected to Resources**

## **4.0 - Command Function #4 – Strategy & Incident Action Planning**

- 4.1 - Matching standard conditions to standard actions for a standard outcome**
- 4.2 - Strategic Decision-Making Model**
- 4.3 - Use the Critical Factors to Develop the Incident Strategy & the IAP**
- 4.4 - Risk Management Plan (RMP)**

- 4.5 - Determine the overall incident Strategy
- 4.6 - Declare the incident's Strategy as part of the Arrival Report
- 4.7 - Confirm ongoing Strategy as part of the Elapsed-Time Notifications (ETN)
- 4.8 - Use the Incident Organization & Communications to Implement the Strategy/IAP
- 4.9 - Standard Company Functions
- 4.10 – Strategic level water supply considerations
  - 4.10.1 - Forward & Key Pumpers
  - 4.10.2 - Pressurized Water Supply
  - 4.10.3 - Pumped Water
  - 4.10.4 - Water Shuttle Operations
- 4.11 - Strategic level attack line considerations
  - 4.11.1 - Fire stream considerations
- 4.12 - Tactical Priorities
- 4.13 - Offensive Incident Action Planning
  - 4.13.1 – Offensive Search and Rescue Operations
  - 4.13.2 – Offensive Fire Control Operations
  - 4.13.3 – Offensive Loss Control Operations
- 4.14 - Defensive Incident Action Planning
  - 4.14.1 - Transitioning from an Offensive strategy to a Defensive strategy
  - 4.14.2 - Exposure Protection – Strategic Separation
  - 4.14.3 - Defensive Water Application
  - 4.14.4 - Defensive Loss Control

## **5.0 - Command Function #5 – Communications**

- 5.1 - Keep Communications Simple: Use Plain Text
- 5.2 - Mix & Match Forms of Communications: Face-to-Face/Radio/Computers/SOPs
- 5.3 - Gear communications toward completing the Tactical Benchmarks
- 5.4 - Upgrade the fast attacking command position as quickly as possible
- 5.5 - Listen Critically: Understand Communications Difficulties from Tough Operating Positions
- 5.6 - Use the Organization Chart as a Communications Flow Plan
- 5.7 - Always Maintain Communications Availability—Answer on the First Call
- 5.8 - Utilize the Standard Order Model to Structure Communications
- 5.9 - The seven basic types of radio transmissions on a hazard zone:
- 5.10 - Begin & control communications upon arrival with a standard Arrival Report
- 5.11 – Follow-Up Reports
- 5.12 - Assigning Units
- 5.13 - Command Transfers
- 5.14 - CAN Reporting
- 5.15 - Roof Reports
- 5.16 - Offensive to Defensive Strategic Shift

## **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 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.

### **Run Card Objective:**

**Update: 5/9/2017**

Outline a standard, initial response, with the apparatus and numbers of people needed to safely address the problem with the tactics we typically use. The call type will be based on the dispatcher's best judgment given the information they have been given.

Crew Count Targets are based on typical station staffing goals of the District. Additional people should be added as appropriate (i.e. Volunteers & VERPS). 1212 is always available to respond on request. When unable to meet the crew count, two appropriately trained members is the minimum for apparatus response in anything other than command vehicles and Tenders. A crew of two in the medic and a crew of two in the engine is appropriate when responding to a scene when equipment from both apparatus is needed. When a response area is unable to fill out the run card, the next closest response area will respond until the run card is complete.

Prior to arrival of the first engine, 1212 may request resources to stage until size up, or through consult with the on scene IC, redirect resources as needed. After arrival on scene, command can request additional resources or may cancel run card resources. Otherwise, it is expected the run card will be filled as additional personnel become available without prompting.

*Example: Working Structure Fire in Juniper Canyon when station 1203 is unstaffed. 1212, 1221 and 1271 respond and 1201 is unstaffed. 1222 will respond to the scene if 1224 doesn't respond before they reach Prineville. After personnel call back, 2 firefighters arrive at 1201 and will respond with 1231. All of this will happen unprompted until the on scene incident command says they have enough resources or they need a different type of resource.*

### **Target Crew Counts**

**Working Fire**

Engine: 3  
Medic: 2

**High Acuity EMS Call (EMR, TIR, MVAI)**

Medic: 3  
Engine: 2

**Target Apparatus**

**Working Fire**

<u>Structure</u>	<u>Brush</u>
1212	1212
2 Engines	3 Engines
1 Medic	1 Tender
1 Tender	

**High Acuity EMS Call**

<u>In District</u>	<u>Out of District</u>
1 Medic	1212
1 Engine	1 Medic

**All Unit Response listed in order of priority**

**1.2.1 Structural Fire**

**PSF Possible Structure Fire:** A one (1) unit Engine Company response to a reported fire that poses no / or unknown danger/threat to people or property. (Chimney fire without extension, light smoke, smell of smoke, from a distance unable to see the origin of the flames)

**1201 Response Area:**

- 1221

**1202 Response Area:**

- 1222

**1203 Response Area:**

- Station 1203

**WSF Working Structure Fire:** A multi-unit response dispatched to a reported fire (visible flames or thick smoke) inside of a structure; or a reported fire (except brush fire) that poses a danger/threat to people or property.

**1201 Response Area:**

- 1212
  - 1221
  - 1271
  - 1224
  - 1231
  - 1222 for station coverage
  - 1203 for station coverage

**1202 Response Area:**

- 1212
  - 1222
  - 1221
  - 1271

- Automatic Aid Engine(s) if appropriate per location
- 1231
- 1203 for station coverage

**1203 Response Area:**

- 1212
  - Station 1203
  - 1221
  - 1271
  - 1224 (If 1203 did not respond)
  - 1231
  - 1222 for station coverage

**1.2.2 Wildland Fire**

**BRUSH Possible Brush Fire:** A one (1) unit Engine Company response to a reported wildland fire or possible wildland fire.

**1201 Response Area:**

- 1241

**1202 Response Area:**

- 1247

**1203 Response Area:**

- Station 1203

**WBRUSH Working Brush Fire:** A multi-unit response to a confirmed fire that is threatening life or property, or requires multiple resources to bring under control. This is only available to CCFR responders by **upgrading from a possible brush fire** or other response.

**1201 Response Area:**

- 1212
  - 1241
  - 1244
  - 1245
  - 1231
  - 1247 for station coverage
  - 1203 for station coverage

**1202 Response Area:**

- 1212
  - 1247
  - 1241
  - 1244
  - 1231
  - Station 1203 for station coverage

**1203 Response Area:**



- 1212
  - Station 1203
  - 1241
  - 1244
  - 1245 (If 1203 did not respond)
  - 1231
  - 1247 for station coverage

### 1.2.3 Car Fire

**FCAR Car Fire:** A one (1) unit Engine Company response to a reported vehicle fire that poses no / or unknown danger/threat to people or property. The responding engine may request additional resources based specific information about the customer's emergency problem. 1212 response on highway.

**1201 Response Area:**

- 1221

**1202 Response Area:**

- 1222

**1203 Response Area:**

- Station 1203
- 1221

### 1.2.4 Fire Alarm

**FALARM Fire Alarm:** A station response to a reported fire alarm. The responding station resource may request additional resources based specific information about the customer's emergency problem. 1212 response at complex and high occupancy target hazards (hospital, data center, care home, hotel etc.)

**1201 Response Area:**

- 1221

**1202 Response Area:**

- 1222

**1203 Response Area:**

- Station 1203

### 1.2.5 HAZMAT

**FHAZ HAZMAT:** A station response to a reported HAZMAT problem. The responding station resource may request additional resources based specific information about the customer's emergency problem. (If fire is involved it should be dispatched as a working fire)

**1201 Response Area:**

- 1221

**1202 Response Area:**

- 1222

**1203 Response Area:**

- Station 1203

### 1.2.6 Citizen Complaint

**FBURN Citizen Complaint:** A station response to a reported citizen complaint. The responding station resource may request additional resources based specific information about the customer's problem.

**1201 Response Area:**

- Station 1201

**1202 Response Area:**

- Station 1202

**1203 Response Area:**

- Station 1203

### 1.2.7 MVA

**MVA Unknown Injury MVA:** A limited response to a report of a motor vehicle accident with injuries unknown. The responding resource may request additional resources based specific information about the customer's problem.

**1201 Response Area:**

- 1271

**1202 Response Area East of Copley and Minson Roads and West of the Urban Growth Boundary:**

- 1272

**1202 Response Area Copley and Minson Roads West and South to the County Line:**

- 1222

**1203 Response Area:**

- Station 1203
- 1271

**MVAI MVA with injury:** A multi-unit response to a report of a motor vehicle accident with injuries. Additional resources may be requested based on the reported problem. 1212 response if multiple patients or entrapment is confirmed.

**1201 Response Area:**

- 1271
- 1221

**1202 Response Area East of Copley and Minson Roads and West of the Urban Growth Boundary:**

- 1221
- 1272

**1202 Response Area Copley and Minson Roads West and South to the County Line:**

- 1222
- Redmond Ambulance

**1203 Response Area:**

- Station 1203
- 1271

**1.2.8 Medical Calls**

**EMR Enhanced Medical Response:** A multi-unit response for Cardiac Arrest or Unconscious. Additional resources may be requested based on the reported problem.

**1201 Response Area:**

- 1271
- 1221

**1202 Response Area East of Copley and Minson Roads and West of the Urban Growth Boundary:**

- 1221
- 1272

**1202 Response Area Copley and Minson Roads West and South to the County Line:**

- 1272
- Redmond Ambulance

**1203 Response Area:**

- Station 1203
- 1271

**TIR Traumatic injury Response:** A multi-unit response for a severe traumatic injury, Industrial Accident, Gun Shot Wound, Stabbing, Burns, Electrocution, Drowning, Dive Accident, Fall (from higher than ground level). Additional resources may be requested based on the reported problem.

**1201 Response Area:**

- 1212
- 1271
- 1221

**1202 Response Area East of Copley and Minson Roads and West of the Urban Growth Boundary:**

- 1212
- 1221
- 1272

**1202 Response Area Copley and Minson Roads West and South to the County Line:**

- 1212
- 1272 or 1222 depending on equipment needed
- Redmond Ambulance

**1203 Response Area:**

- 1212
- Station 1203
- 1271

**GMR General Medical Response: (All Other Medical)** A single ambulance response to a report of a general medical call. (Chest Pain, Breathing Problems, Seizure, Stroke, Abdominal Pain, Allergic Reaction, Back Pain, Heat / Cold Emergencies, Diabetic Problem, Eye Injury, Ground Level Fall, Minor Assault, Unknown Situation. Overdose, Poison Chemical Exposure, Heat and Cold Exposure, Hospice transfers to St. Charles and care facility to St. Charles). Additional resources can be requested as needed.

**1201 Response Area:**

- 1271

**1202 Response Area East of Copley and Minson Roads West of the Urban Growth Boundary:**

- 1272

**1202 Response Area Copley and Minson Roads West and South to the County Line:**

- 1272

- Redmond Ambulance

**1203 Response Area:**

- Station 1203
- 1271

**FMR Frontier Medical Response:** A single ambulance response for a request for an ambulance outside the fire district and auto aid agreements. (Paulina, Post, Mitchell) Additional resources may be requested based on the reported problem. 1212 response for high acuity calls.

**1201 Response Area:**

- 1271

**MTRANS: Medical Transport:** A single ambulance response for an inter-facility transport (St Charles to Bend, Redmond or Madras). 1212 will initiate contact with hospital as needed and make resource assignment.

**All Response Areas:**

- 1272
  - (1201 may staff the call if it will not cause staffing levels to fall below the capability of responding with appropriately trained 2 in the Engine and 2 in the Medic)

**1.2.9 Station Move Up**

Station Move Up: When staffing drops below an ALS crew of 3 at 1201 during:

- Response to a call outside the urban growth boundary of Prineville or
- Incidents that require a Multi-Unit response (Enhanced Medical Response, Traumatic Injury Response, MVA w/ Injuries etc.)

The Substations will reposition to 1201 for staffing or respond to fill out the appropriate run card. Apparatus will be moved up based on need at 1201.

- 1202 will move up first
- 1203 will move up second

**1.2.10 Personnel Call Back**

**PCB Personnel Call Back:**

Request for personnel call back can be made by an on scene IC or chief officer

- General call for personnel to report to their appropriate station
  - As station staffing increases report the changes on the radio if the run card has been filled from the station. ("1202 staffed with 2")
  - Command or 1212 will request additional resources

**MAR Mutual Aid Request:** A request for mutual aid both incoming and outgoing.

**Request for resources to respond into the district:** An incident commander or Chief Officer may request resources from neighboring agencies as single resources or task forces.

(Type of resource shall be gathered by Crook County Dispatch from the requesting officer or incident commander and relayed to the appropriate agencies dispatch center)

- Type of resource
- Code 1 or Code 3
- Respond to the Scene (Give Address) / Station Coverage
  - Single Resource
    - Ambulance
    - Structural Engine
    - Wildland Engine
    - Special Resources
  - Task Force
    - Structural
    - Interface
    - Tender

**Request for resources responding out of the district:** A neighboring agency may request resources to respond to their district as single resources or as part of a larger task force.

**Deschutes County Requesting** – Station 1202

**Jefferson County Requesting** – Station 1201

(Type of resource shall be gathered from the requesting agency or dispatch by Crook County Dispatch and given in the Dispatch Information)

- Type of resource
- Code 1 or Code 3
- Respond to the Scene (Address Needed) / Station Coverage
  - Single Resource – All requests for mutual aid assistance should be dispatched and respond from the closest appropriate station.
    - Ambulance
    - Structural Engine
    - Wildland Engine
    - Special Resource
  - Task Force
    - Structural
    - Interface
    - Tender

# All hazard zone transmissions shall be carried out on one (1) 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.

**Dispatched acknowledgement:** All units responding to an incident shall acknowledge dispatch by radio on the dispatch frequency or by Mobile Data Terminal (MDT) if equipped.

**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 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 dispatcher will dispatch any additional resource required. Because the requesting Unit is typically close to the scene, they should give the dispatcher and responders (if any) at least 1 minute to clear the dispatching radio traffic and start their response out before transmitting a standard Initial Radio Report (IRR).

**Additional Incident Information:** The dispatcher will relay any additional critical information gained from subsequent callers as soon as possible. Critical information and/or updates may be transmitted via MDT or radio.

Companies needing specific additional information should ask, but remember many times the there is only one dispatcher monitoring multiple radio frequencies and answering 911 calls.

## 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.
- All personnel shall be mounted on board, properly attired for the call, and seated with seat belts securely fastened before the apparatus 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 (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.
- All personnel should not exit or approach a vehicle until the parking brake is applied
- 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 1” 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.

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 non-ambulance vehicle is also required to use seat belt at all times when in a moving vehicle. The attendants in the back of an ambulance may only be unbuckled when it is necessary for patient care.
- The Company Officer 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 slow to less than 5 mph 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 slow to less than 5 mph and may proceed only when the driver can account for all oncoming traffic in all lanes yielding the right-of-way.

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 1 response.
- The first arriving unit will advise additional units to respond Code 1 whenever appropriate.

#### **1.4 - Establishing Command (Function #2)**

Command shall be formally declared on all incidents where the IMS system is expected to expand, any incident that an operational mode is declared, or when multiple agencies are

responding to the incident. (Incidents involving helicopters, MVAs, Structure Fires, Wildland Fires, HAZMAT, etc.) The first arriving unit or member to arrive to the scene of the incident should assume command of the incident by transmitting a standard arrival report and scene size-up.

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 request 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.

The IC may call for additional resources by directly contacting staffed stations and requesting specific units or staffing to respond. He / she may also utilize mutual aid by requesting resources via dispatch from neighboring agencies once CCFR resources are depleted or are anticipated to be depleted based on incident priorities and need for specialty units / teams. (Ladder trucks, Special / confined space rescue, HAZMAT). This is also true for wild land incidents. Outside of automatic / mutual aid agreements with local agencies additional resources can be requested via dispatch. All requests should follow the outlined wild land mobilization plan for Central Oregon resources.

## 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.

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 1 Staging

Effective utilization of the 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 fire ground accountability
- Allows Command to formulate and implement an IAP without undue confusion and pressure.

**Staging procedures are in effect for all units dispatched on the alarm assignment.**

**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 stage in an uncommitted position one block from the scene, and announces that they are staged in a direction related to the scene over the

tactical radio channel, (“1221 Level 1 staged north of the scene”, “1271 Level 1 staged south of the scene”).

For engine companies this means that they don’t pass their last water source (in a hydrated area). All units don’t pass their last access point into the incident scene. All staged units must wait for an assignment from the IC before proceeding out of their staged location.

- Applies to all initial responders on the alarm
- 1<sup>st</sup> Unit responds directly to the scene
- Staging immediately goes into effect with Initial Radio Report from first arriving unit.
- All subsequent arriving units stage 1 block away in their direction of travel while not passing their last tactical option / access point.

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 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 are used for greater alarm assignments and where the amount of resources may overwhelm the IC and span of control. 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.

The staging area should be designated by the IC if level 2 staging is enacted.

*Command - “Dispatch from Belknap Command”*

*Dispatch – “Belknap Command”*

*Command – “Level 2 staging is in effect have all responding units stage one block north of the scene, (Give radio frequency assignment if needed)”*

*Dispatch – “Copy (time)”*

Responding Units dispatched to a level 2 staging location should operate on a different radio frequency from the hazard zone tactical 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 addition units / 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 that level 2 staging is in effect and give location.
- 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 unit / 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 channel (All communications will take place on CCFR repeated frequency unless a tactical frequency is designated by the IC). This responsibility can be transferred to a later arriving unit / member if needed.

If the first arriving unit to the Level 2 staging location is a tactical unit or company, the 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 stay as a unit / team to form a minimum of a 2 person company and they can be assigned into the hazard zone as a unit / team.

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 Officer / Leader / Supervisor to whom they are to report to
3. The tactical channel on which they are to operate on

Once dispatched, all units 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 Officer / Leader 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 should Level 1 or Level 2 stage.

The arrival of non-IDLH staff (non IDLH work) can enhance the Command organization and incident management. These members 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.

Vehicle parking at the incident site can be very limited. Un-needed, subsequent arriving apparatus should be left out of the way. 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.

Non-IDLH staff 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:

- 1. Tasks
- 2. The Location of those tasks
- 3. The Objectives of the tasks

One of the IC's major objectives is to control both the position / location and function of all resources 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.

Note- When units / crews are assigned into the hazard zone by command they will retain their unit ID for accountability unless specified by the IC or Supervisor. Engineers will be known as the unit ID + Engineer. (Example below) If crews are divided into multiple teams the IC or supervisor is responsible for assigning identification to the crew / team that is comprised. The original team / crew will remain identified by the unit ID they arrived on.

Crew Communications:

Command- "1221 from command"

1221- "1221"

Command- "Report to the alpha side, pull a 1 ¾ line to the man door alpha side and make entry for fire control and primary search"

1221- "Copy, pull 1 ¾ line to the alpha side for entry, we be completing fire control and primary search"

Command- "affirmative"

Communications to Engineer:

1221 crew- "1221 Engineer from 1221"

1221 Engineer- "1221 Engineer"

1221 Crew- "Charge the green pre-connect"

1221 Engineer- "Copy charging the green pre-connect"

## 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 - Personnel Accountability**

All CCFR members operating on any incident shall have accountability within the team they are operating with. They shall further ensure accountability with an assigned officer / leader / or supervisor. No member shall be allowed to function within an IDLH environment without proper accountability. (Minimum accountability is a Passport tag with the IC, passport tag with assigned officer / leader / supervisor, and verbal accountability with all assigned unit / team.

### **1.8.2 - Company/Task level accountability responsibilities**

Companies / Teams / Units 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 / Leader by either:

- Voice (physical voice, radio)
- Vision (physically see, TIC),
- Touch (physically touch, hose line)

Officers / Leaders shall give an accountability report upon exiting the hazard zone to either the IC or their assigned supervisor.



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 assigned officer / leader / supervisor.

### **1.8.3 - Tactical level accountability responsibilities**

Whenever two (2) or more companies / teams / units are assigned to one geographical area, a tactical level officer / supervisor / leader must be designated for the area. Before a 3<sup>rd</sup> unit / team can be assigned to the same geographic area, supervision should be upgraded with an officer level member if possible.

When the IC assigns units / teams / companies to an operational area, the officer in charge of that area is responsible for accountability and management inside the 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 higher ranking officer should be used to replace the initial Officer / Leader / Supervisor.

Here is the list of the responsibilities for an Officer / Leader assigned as a tactical level supervisor.

- Plan matches IC Plan
- Risk Management in the assigned area
- Complete Tactical Priorities in the assigned area
- Positions always match conditions in the assigned area
- Implement and manage the S/D IAP
- Coordinate w/ other S/D's when needed
- Manage the Passport Accountability System
- Assist with assigned resources Air Management
- Manages Work-Rest Cycles
- Manages On-Deck crews
- Manages Recycle & Rehab

### **1.8.4 - 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 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 supervisor 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 unit / team / 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 officers / leaders / supervisors assigned around the incident site.

**1.8.5 - 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.

### **1.8.6 - PAR's and Roll-Calls**

**Personnel Accountability Report (PAR)** – Systematic Accountability check of all resources assigned to a work area or incident by the IC or designee. Serves as confirmation that all personnel assigned to a crew, geographic area, or tactical supervisor are accounted for.

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

**Roll-Calls:** Is the physical task of gathering / recording accountability from all levels of the organization setup on an incident. This is driven by the IC or designee to achieve a PAR. (See Personnel Accountability Report.)

When the IC makes a general announcement to all units on the fire ground to initiate a roll call, all individuals, units, assigned supervisors and/or teams shall.

- Notify their company officer of their condition and location.
- Notify the supervisor of their condition and location.

- 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 supervisors and units 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 / team 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 operational modes (Offensive to Defensive)

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.

### **1.8.7 - Passport Accountability System**

When properly used, the passport accountability system will increase firefighter safety and provide the IC and assigned 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 fire apparatus shall consist of:

- 2 Passports (Marked with the unit number)
- Tactical Worksheet / Command Board
- Grease pencils
- All response chiefs / command vehicles carry a command management board in their vehicle.

Passports are colored tags, which measure approximately 2 by 4 inches that are marked with unit number / identifier. Name tags of the crewmembers that responded on that apparatus should be affixed to that units passports while responding.

Each member of CCFR shall have at minimum 3 passport tags (Bones) on each of their helmets structure and wildland. These passport tags (Bones) shall have the first initial and last name of the crew member.

The passport and crew member tags (Bones) should be attached with Velcro to the Tactical Worksheet / Command Board at the accountability location designated by the IC.

Extra individual nametags should be kept on the underside of the member's helmet.

### **Passport Application and Use**

Each leader / officer / supervisor will be responsible for ensuring that the passports reflect only the members presently assigned to the team / company. Passports shall reflect only crew members operating on the scene. When companies are split into teams one set of passport tags need to be placed on the accountability board to reflect this and a second set needs to be given to the officer / leader / supervisor that the team is now assigned to.

Implementation of the passport system will occur at any incident that requires the use of an SCBA or has an IDLH environment. The use of the accountability system will commence as the first unit arrives on the scene. The first arriving company will give an arrival report and assume command. In the size up, give their accountability unit location, geographic location will be announced.

Example:

*Command: "Dispatch Belknap command"*

*Dispatch: "Belknap Command"*

*Command: "This is a small single story wood frame structure with a working fire in the kitchen area, West is Alpha side, Accountability is set up at 1221, we are in the Offensive mode."*

*Dispatch: "Copy"*

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 command board / tactical worksheet of the accountability unit. If the IC is not in a combatant commander position passport tags will go directly to the IC.

As additional companies arrive to the incident location, their passports are delivered to the accountability unit (Command Board / Tactical Worksheet) or the IC, and the process is repeated.

Upon exit, the Officer / Leader / Supervisor must retrieve their passports from assigned Officer / Leader / Supervisor if they are assigned a different location or are reporting to rehab. (This does not apply to recycling crews / units as they remain accountable to the same Officer / Leader / Supervisor. The Officer / Leader / Supervisor are responsible to see the passport tags are retrieved.

### **Tactical Level Passport Accountability**

When supervision is transferred from an Officer / Leader / Supervisor to a chief officer, it elevates management with a true strategic level boss vs. a working boss. This greatly facilitates

the completion of the incident objectives, it enhances the accountability process and it increases firefighter safety.

Chiefs / Officers assigned to manage a Team / Group / Division / Unit / Company, will need to be fully geared up or turned out.

Once the accountability board is retrieved, go to the initial accountability unit where the passports are located and place them on the accountability board.

A team / company / unit being assigned to a location that already has an officer / leader / supervisor in place will report to the assigned location face to face with that person, give him/her the passports, and await an assignment from the assigned officer / leader / supervisor while remaining intact as a team.

The assigned leader / supervisor / officer will need to help manage the air supply of the teams / units / companies assigned to their area. This is one of the main functions of the accountability board.

The rule of thumb for managing the work / rest cycle of a hazard zone unit / team / company is to contact 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.

Supervisors assisting assigned Units / teams with their air management times in no way take away or diminish the leader / officer's responsibility for managing his / her crews air supply.

Companies / teams exiting the hazard zone will perform a face to face with their assigned supervisor. One item to cover in the face to face communication is the physical condition of the crew exiting the hazard zone. Supervisors / Officers / Leaders are responsible to monitor the welfare of their personnel at all times and determine if assigned teams are recycling adequately or a formal rehab is appropriate.

If the company is able to recycle, they will retain their assignment to the supervisor / location, and the supervisor / officer / leader will retain the unit / team / company's passport on their accountability board, noting that they are recycling.

If the company / teams is sent to rehab, the supervisor / officer / leader will return the passport to the unit / team / company being sent to rehab and they will notify command of the status change of the company ("Command from Charlie, I'm sending Firefighter A, Firefighter B to Rehab and I need another team 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, Officers / Leaders / Supervisors and crewmembers will ensure that the passports 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 / team 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 assigned by command, usually the first arriving engine.

### **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. Officers / Leaders / Supervisors 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, Officers, Leaders, Supervisors 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. Officers, Leaders, Supervisors must manage this on the task level and keep the IC or Officers / Leader / Supervisors 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 area.

Officers, Leaders, Supervisors need to use the accountability system hardware tools to assist them in managing their assigned company's work/rest cycle, air supply, and accountability.

Officers, Leaders, Supervisors 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.

All crew members shall notify their officer / supervisor when air levels reach 50%.

### **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 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 if possible 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 / unit / team needs to assemble

The IC or officer will lose direct accountability of these companies while they're In Transit. It is the responsibility of the Officer / Leader of the unit / team 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 Leader / Officer should consider providing 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. *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 assist an IC with managing hazard zone units work/rest cycles and their air supplies.

On Deck crews will be supervised either by the Officer / Leader / Supervisor in the location or assignment they have been delegated to. The most likely assignments for On Deck companies are:

- Reinforce a position within an assignment or location
- Crew relief within an assignment
- Any other tactical position assigned by the IC
- Deploy as RIC

Once the IC has deployed units to the critical assignments and locations around the incident scene, the IC must then take a proactive aggressive approach to assigning additional resources to those priorities. 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 location.

The order would sound like this:

*Command: “1222 command”*

*1222 Officer / Leader: “1222”*

*Command: “Report to the Charlie side with your crew, you are On Deck for Fire Attack”*

*1222 Officer / Leader: “Copy report to Charlie Side, We are On Deck”*

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 / unit / team must contact the IC or their Officer / Leader / Supervisor if in place 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
- ID of crews / teams operating inside the structure
- Approximate location of interior crews / teams
- Identify which crews are operating each hose line

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

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

### **1.13 - Company Recycling**

Companies operating within an assignment or location 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 / units 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 S/D 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 resources in critical assignments or locations, crews being relieved and exiting their assignment or location should recycle themselves in a timely manner. Companies being relieved and recycled will remain assigned to their Leader / Supervisor, refill their air supply, re-hydrate, then report back to their assignment.

Officers / Leaders should forecast the length of time they will be working in an assignment and should bring spare air cylinders if necessary. This will enable a company to recycle close their assignment in a timely manner when a scene is large or spread out. The Supervisor / Officer may need to request additional resources to replace on deck crews or have recycled crews assume vacated on deck positions.

Officers / Leaders and Teams / Units are responsible to monitor the welfare of their personnel at all times and determine if recycling or a formal rehab is appropriate.

### **1.14 - Rehab**

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

The IC 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 Leader / Officer when arriving to rehab and deliver the company's passports.

The Rehab officer will notify the IC or 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 supervisor / officer will confirm with the IC/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 working assignment, the Rehab officer will take on the role similar to a Level 2 staging officer, returning the unit / team / crews 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 Supervisor / Leader / Officer 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 more than two (2) 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 (GMR, Burn Complaints, etc.)
- Any EMS call requiring only two companies (EMR without outside agencies)

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 Arrival Report, (Function 5 – Communications).

The confirmation of Command occurs when the Dispatch Center uses the Order Model to repeat the Arrival Report 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 a 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.

## **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 downgrade if responding code 3 (lights and sirens) and continue into the scene using a Code 1 response (normal driving).

### **2.3.2 - Fast Attacking Command Position (Combative Command)**

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 if indicated by the incident. 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 or Response Chief (IC #2).
3. If the situation is not stabilized and there is a delay in the arrival of a command level officer, the Fast Attacking Company Officer IC must consider moving 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 / Leader. Minimum 2 person Team in a hazard zone
  - Assign your crew member(s) to another Company / Team in the hazard zone. This must be acknowledged by both the original and the receiving officer / leader 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 / Leader**

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 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 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 Company / Chief Officers as required.

The strategic level of command on these types of incidents will be the 1<sup>st</sup> 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 / leader 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 / team personnel to another company / team. 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 during fire, Hazmat, Rescue Incidents. An exception can be made during EMS response when EMS units are responding with an Engine Company arriving within 1 minute prior of EMS unit with a command level officer / leader on board. *(Example. A medic unit and engine response to an MVA from the same station when engine is arriving directly behind medic unit and size-up is given by arriving medic unit.)*

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 fire ground.

Responding Command Officers should do the following, if/when possible, while en route 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 [MDT, Smart Phone or Tablet] (if not driving)
- Listen critically to all radio traffic
- Log assigned companies onto the tactical worksheet (if not driving)

**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 on call Chief Officer will respond directly to the scene if dictated by type of call or requested by responding units. If an active hazard zone still exists, or if there is 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 if transfer is needed.

1. Face to Face with the current IC if possible
2. Size-Up - Verify that all operating positions match the current incident conditions
3. Verify the position & function of all hazard zone resource with IC#1
4. 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 CP) 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/Groups
- 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 or CP, the CP becomes the IC’s “field office.” Based on the size and design of the command vehicle (typically a response chief’s vehicle), 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 ([MDT, Smart Phone or Tablet], reference materials)

## **2.6 - Upgrading the Command Post (CP)**

Here are some of the disadvantages to working in an vehicle 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 Vehicle-CP has reached its command limit, it should be upgraded to a larger area 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 post (CP) 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 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 posts 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 CP:

- 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 CP should be utilized on all multiple-alarm incidents.

While this 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.

### 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. By 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 cases, 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.

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 en route, 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 if possible take a route that shows 3 sides of the structure, or when possible, completely circle the incident (especially later arriving Chief 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 SDGs 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 SDGs 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. SDG 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 SDGs 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. Occupancy

3. Arrangement
4. Life safety
5. Fire
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 compartmentalization / 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 – 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

### **3.4.3 – 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

### **3.4.4 – 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 – 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

### **3.4.6 – 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 responders 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 (Co. 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/truck 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 include search/rescue, fire control, property conservation and 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)

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

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

- 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, communication, apparatus, water supply, 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 risk 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**

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

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

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

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

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

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

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

#### **4.6 - Declare the incident's Strategy as part of the Arrival Report**

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 – Elapsed Time Notifications**

##### **Confirm ongoing Strategy as part of the Elapsed-Time Notifications (ETN)**

When command is established on any incident it will prompt dispatch to begin Elapsed Time Notifications (an IC can also request ETN's whenever they feel it is necessary).

Dispatch will announce over the radio frequency to command an elapsed time notification every ten (10) minutes until the incident is placed "under control", or until command requests to discontinue ETN's.

The IC must verbally acknowledge each 10 minute notification by copying the transmission. For working fire incidents the IC must also re-announce the incident's strategy at every ETN until the incident is placed under control, or until command requests to discontinue.

#### **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 controls evolving operations by decentralizing the hazard-zone when assigning S/D/G responsibilities. S/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 usually have a better view of conditions in their SDG than the IC.
- They are in a much better position to directly manage the safety in their SDG.

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

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

#### **4.9 - Standard Company Functions**

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

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

Standard company operations integrate the efforts of companies / teams 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 fire ground. This greatly reduces radio traffic.

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

All Units / Teams can perform the following functions as assigned regardless of the unit they responded on or are assigned to.

#### **Standard Engine Company Functions (Engine Work):**

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

#### **Standard Ladder/Truck Company Functions (Truck / Rescue Work):**

- Search, rescue, and treatment
- Ventilate
- Forcible entry
- Raise ladders
- Provide access/check fire extension
- Utility control
- Provide lighting
- Deploy aerial devices
- Operate ladder pipes (aerials and platforms only)
- Perform overhaul
- Extrication
- Loss control activities

Every company/team 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 hand lines can the supplied pumper(s) charge and pump
- How many large diameter openings can the supplied pumper(s) charge and pump

- Is there a need for pumped supply lines

When assigning an Engine Co. (pumper) to deploy and operate a hand line(s) in the hazard zone, it is very important for the IC to specify what to do with the units apparatus and where their hand line 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 fire ground 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 friction loss in the supply hose (up to 1,000 ft) and it delivers the max GPM possible from the hydrant to the forward pumper (up to 2,000 GPM using 5" LDH).

#### **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

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 fire ground 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 if resources are available when supplying aerial devices, large bore master streams, or several handlines at once.

#### **4.10.4 - Water Shuttle Operations**

If the IC forecasts/predicts that more than a standard sized tank of water (1000 gallons) will be required to properly control and overhaul the fire, they should establish a water supply using a fire hydrant or a tender 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 limit the amount of radio traffic to only which is needed to conduct the operation.

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.

There are 2 main components to a water shuttle operation:

- **Dump Site**; using portable water tanks at the scene
- **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 Tender 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.

**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 be notified to be aware of greater filling and turnaround times. A drafting pumper can be utilized if needed to supply water from the draft site to fill tenders.

#### **4.11 - Strategic level attack line considerations**



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

- All initial efforts must be directed towards controlling the fire.
- These actions must support rescue efforts and hose lines must be placed in a manner to control interior access, confine/control the fire, and protect avenues of escape.
- Water should be applied to the fire as quickly as possible. Many times it is much quicker and safer to apply water on the fire through outside horizontal openings using a straight stream or smooth bore nozzle. This is especially true for fires that are visible on upper floors or higher elevations.
- Additional hose lines should cover other critical areas or when covered, back up in place hose lines if requested.
- In situations involving larger structures, additional hose lines should be deployed to protect secondary means of egress (always consider the presence of personnel operating in opposing positions).
- No uncharged hose lines past the entry point of the structure. All hose lines entering the hazard zone must be charged and have an adequate enough stream to protect entry crews.
- No Gated-Y's past the entry point of the structure

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

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

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

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

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

#### **4.11.1 - 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. Less steam conversion.
- Fog nozzles: Increased heat absorption/expansion. Shorter reach. Most effective in confined spaces and protecting exposures.

Choose the proper sized attack line:

- 1-3/4" Lines: Fast, mobile, good volume, 120-160 GPM
- 2-1/2" Lines: Slow and difficult to advance and move once charged and flowing, 200 – 300 GPM
- Elevated Master Stream: Slow to set up – maximum water, 500 to 2,000 GPM
- Engine Mounted Master Streams: Fast to set up, large volume, great reach and penetration, 500 to 1,000 GPM

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

#### **4.12 - 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 fire ground planning. The IAP must be short and simple; complicated IAP's tend to break down during this critical time.

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

#### **4.13 - Offensive Incident Action Planning**

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

Offensive Strategy Tactical Priorities and their corresponding completion benchmarks:

- Fire Control – "Under Control"
- Life Safety – Primary and Secondary "All Clear(s)"

- Property Conservation – “Loss Stopped”

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

#### **4.13.1 – Offensive Search and Rescue Operations**

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

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

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

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

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

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

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

- Advancing initial lines directly to the most hazardous area of the building—the burning part – places crews in the same area as to the most endangered group.
- Initial interior crews will be searching and protecting the same corridors that the occupants in the building would use to evacuate.
- The hand line protects FF’s, it starts to control the problem, and it gives the search operation an “anchor point” to clear the rest of the structure from.
- All initial attack efforts must be directed toward supporting rescue efforts and hose lines must be placed in a manner to control interior access, confine/control the fire, and protect avenues of escape.

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

The most urgent reason for calling additional resources is for the purpose of covering life safety.

Command must develop a realistic (and pessimistic) rescue size-up as early as possible.

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

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

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

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

Completed Primary and Secondary searches of the entire structure shall be announced over the radio to command. IC's shall avoid giving piecemeal 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 have a much lower life safety hazard and all initial actions should be directed towards putting water on the fire unless there is credible information of survivable occupants inside of the hazard zone.

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

Search and Rescue rules of thumb:

- The 1st hand line should put water directly to the fire for firefighter safety and to support completing primary and secondary searches.
- In working incident situations, “All-clears” must be obtained for all residential occupancy types where an offensive strategy is being implemented.
- Smaller sized occupancies will accommodate a more rapid search.
- Larger sized commercial occupancies – all initial efforts directed towards fire control.
- A TIC's primary use is for S&R and crew accountability.

- All personnel working in the hazard zone must either bring in their own hand line or work under the protection of a hand line located in their same geographic location while performing search operations.
- Once “All-Clears” have been gained in operational areas, the IC must constantly consider that we are the only life safety threat in the hazard zone.

#### 4.13.2 – Offensive Fire Control Operations

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

- The interior/inside
- The top (includes ceilings, joist spaces, attics, and floors above)
- The bottom (includes the floor below, crawl spaces, joist spaces and basements)
- All four sides (includes adjacent rooms, occupancies, or other buildings) and the concealed spaces of all those sides (includes walls, joists, attics, utility chases, void spaces, build-over's, etc.).

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

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

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

- Always establish early an uninterrupted water supply for interior fire-suppression activities.
- Consider mobility vs. gpm when selecting the properly sized hose line.
- The highest priority during initial operations is putting water on the fire
- Water should be applied to the fire as quickly as possible.
- The initial interior hose line should be placed between the fire and the most severe exposure (people or property).
- In most instances, the fire should be cut off and contained/knocked down to facilitate search and rescue activities and firefighter safety.
- All members in the hazard zone must be working under the protection of a hose line in their immediate geographical area.
- 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 must be based on exiting with an air reserve 25% or 600psi.

Command must not focus only on what is on fire. In some cases, the most effective tactical analysis involves an evaluation of what is *not* burning rather than what is actually on fire. The

unburned portion represents where the fire is going and should establish the framework for fire control activities and requirements.

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

- Rescue activities
- Level of risk to fire fighters
- Confinement efforts
- The concealed spaces that house the structures support elements
- Exposures

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

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

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

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

The basic variables relating to attack operations involve:

- Location/position of attack
- Size of attack
- Support functions

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

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

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

#### **4.13.3 – Offensive Loss Control Operations**

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

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

- Overhaul
- Salvage

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

## **Overhaul**

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

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

- Insure overhaul is conducted safely.
- Insure proper PPE is worn for the conditions, SCBA worn by all members operating within the hazard zone.
- Ensure appropriate 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 hose line remain in the fire area to detect any possible hidden fire and re-ignition during the overhaul phase of the operation.
- Use early and continuing positive pressure ventilation when appropriate to maintain an acceptable working environment and reduce loss.
- Fire companies must evaluate and monitor conditions when operating fans.
- Meet with the property owner/occupant concerning overhaul operations.
- Closely coordinate overhaul with fire investigators.

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

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

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

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

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

## **Salvage**

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

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

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

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

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

The following items should be considered when addressing salvage:

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

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

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

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.



#### **4.14 - Defensive Incident Action Planning**

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

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

Defensive Strategy Tactical Priorities and their corresponding completion benchmarks:

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

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

If defensive operations are conducted from the onset of the incident, Command must notify 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 fire ground factors
- Quick determination on additional resource
- Evaluate fire spread/write-off lost property
- Search exposures
- Protect exposures
- Prioritize fire streams, provide big, well placed streams, pumped water
- Surround and drown

#### **4.14.1 - 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 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:**

- All units on the Fire Ground will be notified of a Strategy Change over the air via radio.
- All units will be told how to shift operations "Exit the Structure" vs "Abandon the Structure"
- A PAR will be completed for all units assigned to the incident operating within the hazard zone.
- The strategy change will be relayed to dispatch via radio.

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

"Abandon the Structure" will be defined as: an emergency retreat where all hose lines 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. When an "Abandon the Structure" is called all apparatus operators of apparatus in the immediate area will sound a single air horn blow lasting 10 sec.

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

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

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

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

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

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

#### **4.14.3 - 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 500 GPM should be the guideline for all master stream flows.
- Small diameter hand lines 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.

#### **4.14.4 - Defensive Loss Control**

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

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

#### **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 provides the very practical connection between and among the 3 management levels of the organization; the strategic, tactical and the task levels. Incident communications is 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/leaders communicating with their crew members.

- Company officers/leaders communicating with other company officers/leaders 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 fire ground 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 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 1224 to:

**Command-** *"1224 from command"*

**1224-** *"1224"*

**Command-** *"1224 Lay 2 to the Alpha side, stretch a 1 ¾" line to the interior of the Delta 1 exposure for a primary search and check for fire extension. You are now known as delta", it becomes the basis for Engine 1224 to structure their CAN report back to command.*

**Delta-***"Command from Delta"*

**Command-** *"Command"*

**Delta-** *"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".*

**Command-** *“Command copies you have a working attic fire in delta 1 and need additional resources to assist in delta 1 with fire control in the attic”*

### **5.3.1 - CCFR Tactical Benchmarks**

Communicating Tactical benchmarks to dispatch as they are completed is the duty of the IC. Crews that are working towards

#### **Offensive Benchmarks:**

**“360 Complete” – Walk or Drive around 360 completed of fire building or area**

**“Primary All Clear” – Entire Fire Occupancy**

**“Under Control” – Fire Control**

**“Secondary All Clear” - Entire Fire Occupancy**

**“Loss Stopped” – Incident and FD are not causing further damage.**

#### **Defensive Benchmarks:**

**“360 Complete” – Walk or Drive around 360 completed of fire building or area**

**“Primary All Clear” – Exposures**

**“Secondary All Clear” – Exposures**

**“Under Control” – Fire is Controlled**

**“Loss Stopped”- Exposures are not in danger**

#### **Wildland Benchmarks:**

**“Size-up Complete” – Fire completely scouted and sized up**

**“Evacuation Complete” – (Only used if evacuation required)**

**“Fire Contained” – Fire 100% contained within fire lines and/or natural barriers.**

**“Under Control” – Fire under control, Mop-Up objective complete.**

#### **MVA / Multi-patient Trauma Benchmarks: (2 or more patients)**

**“360 Complete” – Scene Safe, Patients Triage.**

**“Extrication Complete” – (Only used if mechanical extrication required)**

**“First Patient Transported” – First patient transported**

**“All Patients Transported” – All patients transported**

### **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 Arrival Report and Size-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 reports also allow a fast attacking IC to complete the first 5 functions of command before they enter the hazard zone. This frees them up to then engage the problem and command the incident using a portable radio.

IC #1 from that point in the operation is in a position to quickly assign the next 2-3 responders 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 the IC 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 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 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 S/D/G has a positive and profound effect on the communications process. When the IC assigns S/D/G 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 SDG officers/leaders, 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.

S/D/G officers/leaders 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 S/D/G officers/leaders 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.

Radio messages and communication should follow the “Hey you it’s me” standard and communication loops closed by copying the transmitted messages.

**IC** – *“1224, Elm Street Command”*

**Unit-** *“1224”*

**IC-** *“1224 access the scene from the south on elm street, lay 2 from the hydrant on NE 7<sup>th</sup> to 1221, leave your engineer at the pump and report with your crew to the command post.”*

**Unit-** *“1224 copies access from the south on elm street, lay 2 to 1221, engineer to stay with engine, 1224 crew report to the command post.”*

**IC-** *“Affirmative”*

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:

- Arrival Report
- Size-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 Arrival Report**

The initial IC begins the command, control and communication process with an Arrival Report. 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 Arrival Report 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 Arrival Report must include the following reporting elements:

1. Clearing Dispatch, Announce your arrival on the scene
2. Confirm Location
3. Building size / description
4. Describe the problem
5. Action being taken – Initial I.A.P.
6. Declaration of the Strategy
7. Resource Determination
8. Assuming and Naming of Command

**1). Clearing Dispatch:** This accomplishes several things:

- It insures that you deliver the Arrival Report on the correct channel. If you clear dispatch on the wrong channel, this should immediately identify if you are on the correct channel.
- It notifies all other responders you are about to deliver an Arrival Report 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 hand line 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, and 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 Arrival Report 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 standalone apartment building
- Apartment complex

Apartment complexes gives us a much greater tactical challenge with arrangement as it relates to access, exposures, water supply, hand line lengths, ladder/truck 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 hand line lengths and water application.
- Horizontal standpipes should be used to maximize the number of hand lines 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 1<sup>st</sup> 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:

- Hospitals
- Box Stores
- Occupancies with well-known names and familiarities.

**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
- Light Smoke 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. If the incident is upgraded to a “Working Fire” structural or wildland in nature the corresponding run card will be automatically filled out and respond until the IC makes a resource determination.

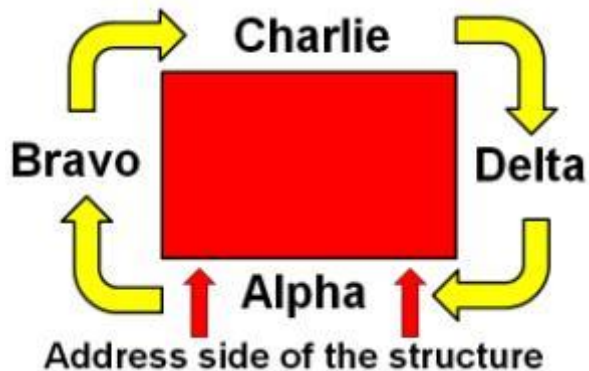
The Location of the problem must also be identified on the Arrival Report. This includes reporting:

- 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.

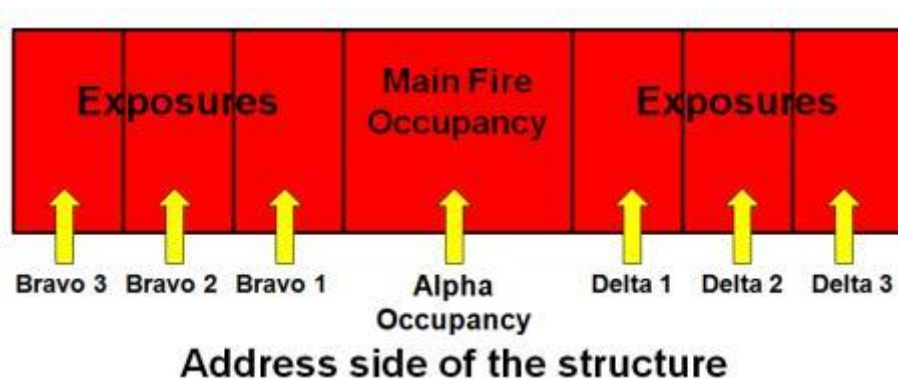
## Geographic Landmarks:

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”).

<b>Floor 4 – Division 4</b>
<b>Floor 3 – Division 3</b>
<b>Floor 2 – Division 2</b>
<b>Floor 1 – Division 1</b>
<b>Sub-Floor 1 – Sub-Division 1</b>
<b>Sub-Floor 2 – Sub-Division 2</b>

**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 Arrival Report:

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

Location of those tasks should include:

- What floor will you operating on
- What occupancy/exposure will 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”

**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 arrival report or size up 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:** 1<sup>st</sup> 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 Arrival Report:

- Cancel the other responding units
- Continue All Resources *code 1 or code 3.* current responding resources)
- Upgrade to.... (WSF working structure fire, WBRUSH working brush fire...etc)
- Personnel Call Back. (PCB personnel call back, on call chief, callback of on call and off duty personnel.)

**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", "St. Joe’s Hospital Command").

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

### **5.11 – Follow-Up Reports**

The Arrival Report is usually performed from the front seat of an Engine Company. Once the report has been given and dispatch 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 Arrival Report 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. Result of a 360 (if performed)
2. Any changes to the initial IAP or Strategy
3. Accountability location
4. Any immediate safety concerns

**1). 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 1<sup>st</sup> arriver from performing a 360.

On critical incidents (high life safety or where a basement is suspected) where the 1<sup>st</sup> arriving unit can't perform a 360, the assignment should be given to a subsequent arriving unit to complete a 360 and announce findings.

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 Arrival Report.

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 radio 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 a daylight 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 IAP must re-adjusted 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 accountability location of the incident ("1221 will be the accountability location") informs the firefighters (esp. the next arriving officer and responding chief officers) 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 arching
- Gas meter/tank exposed to fire
- Swimming pools
- Heavy roof coverings
- Propane Tanks and dangerous exposures

## 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 contact dispatch and arrive on scene, Level 1 staged. Command will then contact Level 1 staged units and assign them to the incident site based on their IAP.

**Unit** – *“dispatch 1222”*

**Dispatch** – *“1222”*

**Unit** – *“1222 on scene Elm Street, level 1 staged”*

**Dispatch** – *“copy 1222 level 1 at 0130”*

**Command** – *“1222, Elm Street Command”*

**Unit** – *“1222”*

**Command**- *“spot your apparatus out of the way and report with your crew to Division 1 on the alpha side, you will be on deck.”*

**Unit** – *“1222 copies park out of the way, report to division 1 on the alpha side, we are on deck”*

**Command**- *“affirmative”*

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

When assigning a unit to deploy a hand line, 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 hand line 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 area 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 level officer, they are physically located in the hazard zone, Command should be transferred in a face to face manner whenever possible. There are incidents where this is not feasible or is not in the best interest of the incident (Rescue when command is actively engaged in the rescue activities).

Command must be transferred in a standard manner (per SOP's). The following sequence represents a standard command transfer:

- The officer accepting command is on scene at the incident.
- Verify that all operating positions match the current incident conditions
- 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 "command is now transferred"
- Contact Dispatch
- Announce that you'll be assuming command ("Smith is assuming Main St. Command,")  
Re-announce the overall Incident strategy "(... We are still in the Offensive Mode,)"
- Make a resource determination "(No additional resources are needed at this time)"
- Announce the CP location when determined

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

- Cancel the original assignment
- Continue All Resources *code 1 or code 3*. current responding resources)
- Upgrade to.... (WSF working structure fire, WBRUSH working brush fire, etc.)
- Personnel Call Back. (PCB personnel call back, on call chief, callback of on call and off duty personnel.)
- Resources on scene can handle

The IC should consider a Level 2 Staging location when requesting additional resources.

## 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**

Where you are  
Any obstacles  
Smoke conditions  
Int. visibility  
Fire conditions  
Heat conditions  
Interior layout  
Fire separation  
Fuel loads

### **Actions**

A/C progress  
F/C progress  
Can't find the fire  
Checking for ext.  
Concealed space info  
PAR's  
All Clears  
Under Controls  
Loss stopped

### **Needs**

Reinforcement  
Relief  
Support work  
Tools or Equip  
Cover other areas  
Urgent help

## Radio Discipline

When 3 to 4 units (and up) are assigned to the incident site the dispatch 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 dispatch 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 air that pertain 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 channel with high priority traffic.
- Always end every CAN report with a Need assessment (or "No Needs").
- Deliver good news only when requested (All-Clears, Under Controls, PARs) unless it is request by the IC or S/D/G boss when assignment is given. (*"1224 go to the roof for vertical ventilation report on roof and attic conditions"*)

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 should 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 - Roof Reports**

Company Officer's / Leaders assigned to truck work need to make the following assessment (size-up) of the roof and this size-up must be transmitted to the IC if there is any significant tactical information to report:

- Type of roof if not easily identified from the ground (peaked, flat, bowstrung, etc)
- Condition of roof (stable, unstable)
- Fire or smoke conditions
- Location of any firewalls
- Unusual heavy roof loads (if present)
- Conditions in the Attic (if known)
- Basic blueprint of building if unusual
- Action being taken

An important element to convey to the IC when giving your initial roof size up report to the IC is; the stability of the roof and should people be operating under it.

After ventilating a roof, the Ladder/Truck Company should give a follow-up report to the IC that includes:

- Where you cut
- The effect on the fire
- Conditions in the attic space
- Roof stability

### **5.16 - 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:**

- All units on the Fire Ground will be notified of a Strategy Change over the air via radio.
- All units will be told how to shift operations "Exit the Structure" vs "Abandon the Structure"
- A PAR will be completed for all units assigned to the incident operating within the hazard zone.
- The strategy change will be relayed to dispatch via radio.

"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" - Stop everything you are doing and leave the hazard area or structure by any means possible. Do not waste time by dragging tools or bringing hose lines. This order should only be given when crews may be seriously injured, or loss of life may occur if they fail to immediately exit. When "Abandon the Structure" order is given the All apparatus operators close to the hazard zone will sound air horns with one continuous blast lasting at least 10 seconds.

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 priority traffic).

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

S/D/G Officers will notify Command of the status of the individual crews assigned to their S/D/G upon their exit when requested during the PAR.