

Updated 07/25/14

# Mayer Fire Department



## Emergency Standard Operating Guidelines

Emergency Standard Operating Policy  
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Updated July 25, 2014

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## **TAB 010 INCIDENT COMMAND SYSTEM**

The Mayer Fire Department will use a NIMS compliant Incident Command System to manage emergency and non-emergency incidents. It will be used for both small and large scale incidents. The system used will be flexible and modular. It can grow or shrink to meet the different needs of our day to day operations.

The organization of the Incident Command System is built around five major management activities; Command, Operations, Planning, Logistics, and Finance / Administration.

### **011 Incident Command (IC)**

The IC function requires an Incident Commander and staff to develop strategies and to perform several functions in order to accomplish the tactical objectives of the Incident Action Plan.

#### **011.01 Functions of Command**

There are seven main functions of command that should be followed at all incidents requiring the formal establishment of command (IC).

- Assume and announce the establishment of Command
- Evaluation of the situation, “size-up”
- Initiate, maintain, and control the communications process
- Identify overall strategy and develop an Incident Action Plan (IAP)
- Develop an effective ICS organization
- Review, Evaluate, and Revise the IAP
- Provide for Continuity, Transfer, and Termination of Command
- Accountability

### **012 Command Modes**

- Investigative Mode

This mode is typical of the incident with “nothing showing”, which requires the first arriving IC to go with crew members into a situation to investigate further. This requires the use of a portable radio.

- **Fast Attack Mode**  
This mode is typical of incidents that require the IC to perform task level functions in order to provide immediate actions to stabilize the situation. Also known as “Mobile Command” it requires the use of a portable radio.
- **Command Mode**  
This mode places the IC in a stationary command post and is used for incidents, by virtue of their size, complexity, or potential for rapid expansion, require immediate strong, and direct overall command.

### **013 Command Responsibilities**

The Incident Commander (IC) is responsible for the completion of the tactical objectives. The tactical objectives, listed in their order of importance are as follows.

- Provide for the safety, accountability and welfare of all personnel (on-going throughout the incident)
- Stabilize or Control the incident
- Conserve property

#### **013.01 Tactical Objectives**

The tactical objectives and their benchmarks are used for most incidents. Also known as tactical priorities, these priorities are and communication benchmarks are as follows.

- **Personnel Safety**  
Personnel Accountability Reports (PAR's)
- **Search and Rescue**  
Primary and Secondary “All Clear”
- **Fire Control / Incident Stabilization**  
“Fire Control” or “Under Control”
- **Property Conservation**  
“Loss Stopped”

### **014 Levels of Command**

The Incident Command System is comprised of three basic levels of command. These levels of command relate directly to certain positions within the command structure.

#### 014.01 Strategic Level of Command

This level of command involves the overall command of the incident. The Incident Commander, Section Officers and Branch level Officers operate at the strategic level. Although Branch level Officers are known as the coordination level, they are still responsible for strategic level decisions. Branch level Officers are used to limit and maintain the span of control. The strategic level of command is responsible for the following.

- Appropriate Strategy or Mode (Offensive or Defensive)
- Establishment of the Strategic or Incident Action Plan
- Setting incident priorities
- Predicting outcomes and planning
- Assigning specific objectives to tactical level units

#### 014.02 Tactical Level of Command

This level of command involves directing activities towards specific objectives. Tactical level Officers include Division and Group Supervisors. Tactical level Officers are responsible for the following.

- Directing activities in specific geographical or functional areas
- Identifying and requesting specific resources needed to accomplish assigned objectives
- Developing the tactics that accomplish the strategic goals

#### 014.03 Task Level of Command

This level of command involves performing the actual tasks required to accomplish the tactics that meet the need of the strategic goals. These are the firefighters who are performing the actual “work”. Task level employees are responsible for the following.

- Accomplishing the tactical objectives assigned to company level units
- Performing the “hands on” activities required of individuals
- Task level activities should accomplish the tactical objectives

## **015 Incident Commander (IC)**

The IC is the single person who has the overall authority and responsibility at the incident. The IC is charged with establishing the strategies through an incident action plan and setting the objectives and priorities for the incident.

In order to do so the IC may choose to use several key individuals throughout the incident. In addition to Section and Branch Officers, the IC may have as a part of his/her team, Public Information Officers, Safety Officers, and various Liaison Officers.

### **015.01 Safety Officer**

The Safety officer is the individual responsible for monitoring all safety conditions. The Safety Officer is also charged with developing measures for assuring the safety of all personnel assigned to the incident. The Safety Officer has the authority to countermand any command that may put personnel at immediate undue risk. This is the IC until established.

### **015.02 Public Information Officer (PIO)**

The PIO is the main point of contact for the Media, and all other organizations or agencies seeking information directly from the incident or event.

### **015.03 Liaison Officer**

This position(s) is filled with individuals who are assigned to coordinate, like efforts, with other agencies or organizations and the Incident Commander directly. This could include, but is not limited to, Fire Board members, Red Cross, Department of Emergency Management, ADOT, DPS, and YCSO.

## **016 Sections of Command**

As a part of the Incident Command System, The Incident Commander may choose to implement Sections as a part of his/her general staff. There are four basic sections that may be used on emergency incidents depending on the size and rate of time that the incident escalates before it is controlled.

### **016.01 Operations Section**

The Operations Section is charged with accomplishing the Incident Action Plan and Tactical Objectives of the incident. Within the Operations Section, there may be two additional levels of organization. These levels include Branches and Divisions and/or Groups. One of the goals of the Operations Section is to keep the organization as simple and streamlined as possible, and not to overextend the span of control.

#### 016.02 Logistics Section

The Logistics Section is responsible for all of the services and support needs of the incident. This includes obtaining and maintaining essential personnel, facilities, equipment and supplies. Logistics is responsible for managing staging, communications equipment, fuel, vehicle repairs, CISD, food, rehab and other supportive areas as warranted by the nature of the incident.

#### 016.03 Planning Section

The Planning Section is responsible for collecting, evaluating, and displaying information about the incident. They are responsible for the assistance in developing the current IAP and long range predictions and planning. They are charged with forecasting outcomes and time tables. They may evaluate the incident span of control, evaluate future resource needs, and utilize technical assistance.

#### 016.04 Finance/Administrative Section

The Finance and Administrative Section is established for any incident that may require on-site financial management. This section may also be used to monitor and document costs, manage and evaluate legal risk, serve as the EOC point of contact, manage investigations and coordinate the after action review.

### **017 Branches**

Branches are a coordination level of command that may be created on large scale incidents that have more than one component, such as a FIRE with a large MEDICAL, HAZARDOUS MATERIALS, or EVACUATION need. Branch Officers perform strategic functions and help in the reduction of the span of control. Branch level Officers directly manage Division and Group level Supervisors.

### **018 Divisions and Groups**

Divisions and Groups are the tactical level of command and can be geographical (Division) or functional (Group). Division or Group Supervisors establish the tactics that directly accomplish the Strategies of the IAP. These Supervisors are directly responsible for the companies and crews at the task level. Division and Group Officers assign and oversee the tasks that are accomplished by the individual members.

### **019 Span of Control**

The Span of Control is the number of individuals that can be safely supervised by one individual. During normal emergency incidents it is recommended that the span of control stay between 1 and 7. On hazardous material and other critical incidents it is recommended that the span of control not exceed 5.

### **020 Incident Action Plan (IAP)**

An incident action plan or strategic plan should be developed for all emergency incidents. This plan may be written or verbal but should be known by all personnel working on the emergency incident. The plan is to provide all incident supervisory personnel with direction for future actions. Key elements of an IAP should include the following.

- Incident Objectives
- Incident Organization, Chain of Command, and Authority to Act
- Assignments to accomplish the Objectives
- Supporting materials (maps, preplan, SOG's, etc.)

### **021 Emergency Incident Factors**

Emergency incident factors are a standard list of basic items that the IC must consider in the evaluation of tactical situations. The list should provide the IC with a guide of basic items that are involved in size-up, decision making, assigning actions, review and revision of the emergency scene. The 3 main categories of emergency incident factors are as follows.

- Visual Factors
- Reconnaissance Factors
- Preplanning Factors

#### **021.01 Visual Factors**

These factors are obvious visual factors obtained through observation on the incident scene. They are gained through actually looking at a tactical situation. This form of intelligence involves the perceptive capability of command.

## 021.02 Reconnaissance Factors

These factors are factors that are not visual to the IC from an exterior position. This information must be gained by actually sending someone to check or research. This requires the IC to make a specific assignment and then receive information.

## 021.03 Preplanning Factors

These factors are information that is gained from formal pre-emergency planning activities. Such information is available in advance prior to the tactical situation. This information should be documented and easily accessed during emergency incidents.

## **022 Types of Emergency Incident Factors**

There are seven types of emergency incident factors which should be evaluated by Command as they pertain to each individual tactical situation. The IC should keep in mind that not every factor will apply to every incident and the lists are possible examples and are not inclusive.

### 1. Building Factors

- Size
- Roof type and covering
- Interior Arrangement
- Construction type and age
- Condition
- Exterior Access

### 2. Fire or Emergency Factors

- Size of incident
- Extent of structural involvement (if any)
- Location
- Stage of incident
  - Fire- incipient, free burning, smoldering
  - Hazmat- leak, spill, product type, amount
  - EMS- Number of patients, medical priority
- Direction of travel (fire, vapor clouds, runoff, etc.)
- Time of involvement
- Contents involved

### 3. Occupancy Factors

- Specific Occupancy use
- Occupancy Classification (residential, commercial, educational)



Fire load and type of contents  
Status (open, closed, vacant, under construction, etc.)

4. Life Hazard Factors

Number of occupants or patients  
Location of occupants or patients  
Condition or medical triage status of occupants or patients  
Need for medical treatment and or transportation  
Access to the occupants or patients  
Characteristics of escapes routes

5. Arrangement Factors

Type of exposures  
Combustibility of exposures  
Direction of fire spread, spill runoff, or vapor discharge  
Obstructions to operations  
Capability of apparatus placement

6. Resource Factors

Personnel and equipment on scene, responding, and still available to respond  
Condition of personnel  
Availability of water, foam or other agents  
Built in suppression or related systems  
Outside agency response

7. Other Condition Factors

Time of day  
Day of week  
Season of year  
Special hazards  
Weather conditions  
Traffic conditions

**023 Operational Strategies**

The IC is responsible for determining the appropriate operational strategy. Once the appropriate strategy is initiated, it becomes the IC's job to ensure that all personnel are operating within that strategy. For incidents involving hot zone operations there are only two strategies to choose from, Offensive or Defensive. For safety reasons the IC should avoid operating simultaneously in both strategies. At times, potentially defensive incidents will require offensive operations due to the existence of life safety issues. During these times, the strategy will be OFFENSIVE, with "marginal

conditions”, knowing that once search and rescue is completed, the offensive operation will rapidly change to a defensive one.

#### 023.01 Basic Offensive Plan

The basic offensive plan includes, but is not limited to, the following.

- Assume and announce command
- Identify critical emergency incident factors
- Establish I-RIC / RIC
- First hand-line with fast aggressive interior attack
- Provide for support functions (forced entry, ventilation, etc.)
- Leak or spill control
- Incident control or stabilization
- Primary and Secondary search
- Second hand-line (back up first)
- Water supply
- Additional resources

#### 023.02 Basic Defensive Plan

The basic defensive plan includes, but is not limited to, the following.

Assume and announce command  
Evaluate damage (write off loss property)  
Identify critical emergency incident factors  
Leak or spill control  
Incident control or stabilization  
Prioritize hose lines  
Continuous water supply  
Big, well place, hose streams  
Elevated hose streams  
Additional resources  
Surround and Drown tactics  
Long term clean up

### **024 Basic Medical Operations**

This procedure establishes a basic guideline for operating on multi-patient / mass casualty incidents. This system can, and should, be applied to any multi-patient incident regardless of the number of patients. The basic medical plan should include the following as a part of the IAP.

- Triage (Arizona START triage system)
- Extrication

- Scene Stabilization and Safety
- Treatment
- Transportation, including landing zone operations

## **025 Staging**

The Mayer Fire Department will operate using two staging guidelines. In most cases, the first arriving units will go directly to the scene. Those units arriving after the first arriving will follow the appropriate guideline.

- Level One Staging
- Level Two Staging

### **025.01 Level One Staging**

Units should typically stage in a direction approximately one block away from the scene in their direction of travel and at a water source when available.

### **025.02 Level Two Staging**

This category of staging is used for incidents that have, or will, escalate to larger alarms. It should be used when the need to control responding resources and keep them from causing undue congestion on an emergency incident. It should also be used for incidents of a technical nature that require limiting the amount of traffic in a geographical location. Level two staging should be located far enough away to avoid conflicts with the scene, but close enough so that when units are requested to the scene they can access it in a timely manner. Level two staging should be located in an area that will accommodate the amount of resources that will be requested to respond.

### **025.03 Staging Officer**

Implementation level two staging automatically requires the implementation of a “Staging Officer”. When a specific officer is not designated, the first company to arrive at the level two staging location will automatically assume the position of “Staging Officer”.

### **025.04 Staging Officer Responsibilities**

The Staging Officer will be responsible for the following functions:

Locate an area of adequate size for all apparatus, if not already assigned by the IC.

Transmit the staging location to the IC and Dispatch, indicating access and routing, if needed.

Ensure that all apparatus is parked in an appropriate manner for quick exit.

Maintain a log of all companies available in the staging area, the type of apparatus, their capabilities, including ALS, staffing levels, and specialized equipment, etc.

Maintain crews in a ready state at their apparatus.

Provide progress reports to the IC, as needed

Assume a position that is visible and accessible to incoming and staged units. Usually when a unit arrives at staging they turn off their emergency lights, and only the Staging Officer's vehicle has their lights on for easy identification.

Assign staged units to the incident as requested by the IC.

During operations where a Logistics Section is implemented, the Staging Officer communicates to the Logistics Officer rather than the IC.

#### 025.05 Radio Designation

The Staging Officer shall use the radio designation of "Staging Division".

### **026 Risk Management Profile**

The Mayer Fire Department will operate under a Risk Management Plan that takes into consideration the amount of danger we will place our members in based on the amount of life and property that will be saved.

The Mayer Fire Department will begin our response, with the assumption that, we will save life and property. Based on that assumption;

We will risk our lives a lot to save, savable lives.

We will risk our lives a little, in an educated manner, to save, savable property.

We will NOT risk our lives at all for what is already lost.

## **TAB 100 INCIDENT COMMAND**

### **101 Formal Establishment**

It shall be the policy of the Mayer Fire Department to ensure that a formal command system is utilized at all incidents that involve the response of three (3) or more units, or will escalate to an incident requiring a response of three (3) or more units, in order to achieve stabilization.

#### Exception

“EMS” related responses up to and including “Echo” level or greater does not require the formal assumption of command.

Due to the nature of the type of incident and potential safety concerns, vehicle accidents, “Rescue assignments”, although EMS, will require the formal assumption of command.

### **102 Assuming Command**

The first arriving unit to all incidents requiring the assumption of command has two options:

A. Formally take command

B. Pass command

Once a formal assumption of command has been declared, the “IC” shall remain the incident commander and is responsible for all Command related activities until command has been formally transferred to another unit or is terminated.

If the first arriving unit chooses to “pass command”, the first arriving unit is still responsible for all “on scene” radio communications with alarm and the other responding units, until the second unit arrives on scene and formally assumes command.

The second arriving unit must either report to, or assume command (if passed by the first arriving unit).

All other responding units will report to “IC” as they approach the scene, in the order in which they arrive.

### **103 Level 1 Staging**

All units, other than the initial unit (or “IC”), should announce to Alarm that they are “*Staged in their direction of travel*” as they arrive within two or three blocks of an incident.

Example: “Alarm Engine 21 is staged North.”

At this time IC would give direction to Engine 21 when a assignment is requested.

Example: “Engine 21, IC; come into the scene and set up horizontal ventilation..”

Once the unit receives direction, acknowledges the direction, and then arrives on scene, the unit should advise the dispatch center “Alarm” that they are “*on scene*”.

Example: “Alarm, Engine 21 is on scene.”

If the first unit on scene does not acknowledge the second unit when they announce that they are approaching the scene, and the first unit crew members are not visible (in the case of a house fire), the second unit should assume command and then achieve a PAR on the first unit.

### **104 Requesting Resources**

Once “IC” has been established, all requests for additional resources needed to complete the Incident Action Plan for the incident should be done through the formal “IC”.

All wildland responses regardless of jurisdictional boundaries, should prompt the senior ranking officer responding to request that State Land be

notified of the incident. This request should be done through the Mayer Fire Department dispatching agency.

Should any additional wildland resources be needed, all requested units should be done through the dispatch center by stating, “*Alarm, advise State Land we are requesting*”

Example: “*Alarm, E22, advise State Land we are requesting an additional Type III engine*”.

Requesting units through State Land should not deter a unit from initial requests for mutual aid responses from the appropriate jurisdictions as long as State Land is notified of the request once it has been done.

### **105 Safety Officer**

When warranted, and as soon as practical, the “IC” should establish a Safety Officer on all incidents that pose a threat to the health and wellness of Mayer Fire Department members.

Until the “IC” delegates this assignment, the “IC”, or the senior ranking officer on scene when a formal IC has not been declared, will be required to assume the duties of the Safety Officer in addition to the other required functions being performed.

### **106 Initial Rapid Intervention Crew / Rapid Intervention Crew**

During incidents that require Mayer Fire Department employees to operate in a “Hot Zone”. A Hot Zone shall be defined as any environment that is, or has a potential for being, Immediately Dangerous to Life and Health (IDLH). The “IC” will assign an Initial Rapid Intervention Crew (I-RIC) and/or a Rapid Intervention Crew (RIC).

As soon as possible, an I-RIC or RIC team should be established at all incidents requiring Mayer Fire Department members to operate in the hot zone.

The I-RIC will consist of two Firefighters that are available to enter the hot zone in the event of a “May Day” situation. The I-RIC will be in full personal protective clothing, including SCBA, and will establish an additional handline, which may be wet or dry, at the point of entry. One member of the I-RIC may be doing other exterior non-committed fire ground functions on the incident, as long as the function does not take away the

immediate ability of the I-RIC member to perform their function of rescue when needed.

As soon as possible, a RIC team must be assigned to replace the I-RIC. The RIC team will consist of a minimum of two firefighters stationed at the point of entry. All firefighters will be in full personal protective clothing including SCBA. In addition to the handline, they shall have the RIC bag and a Thermal Imaging Camera (if available). One of the RIC Team members may perform RIC related activities.

Examples of “non-committed fire ground functions” are, softening a building, identifying exits, securing utilities, pumping operations, bringing tools to the point of entry, etc.

The only exceptions to establishing an I-RIC and/or RIC Team shall be:

- A. An incident in the incipient stages requiring an investigative mode.
- B. An incident with a known life safety hazard.
- C. An incident that has been brought under control and stabilized and an IDLH no longer exists.
- D. An incident requiring a defensive operation from the onset.

If entry into an IDLH is made based on either exception "A" or "B" from above, the member(s) making entry must justify why, on the OSHA 1910.134 Exception line on the incident report, and forward it to the Fire Chief.

Once a primary "All Clear" or rescue of an environment with an IDLH is completed, all operations in the IDLH environment must cease until an I-RIC or RIC Team is established, unless one was established during the primary search or rescue operations.

### **107 Incident Accountability**

The purpose of this section is to identify a system of incident site personnel accountability to account for all personnel, at any given incident, within a small geographic area inside the Hazard Zone. The use of this system will provide enhanced personal safety for the individual firefighter and an improved means for the Incident Commander (IC) to account for all personnel working in the Hazard Zone.

The Hazard Zone will be defined as any area requiring SCBA and/or in which personnel are at risk of becoming lost, trapped, or injured. Examples



include but are not limited to; interior structure firefights, technical rescues, confined space recues, trench rescues and hazardous materials incidents.

#### 107.01 Accountability Tags, Passports, and Boards

All members of the Mayer Fire Department shall be assigned accountability tags. Accountability tags shall be colored to represent the members rank.

Fire Chief: White with black letters  
Battalion Chief: Black with white letters  
Fire Captain: Red with white letters  
Fire Engineer: Green with white letters  
Firefighter: Yellow with black letters  
Apparatus: Blaze Orange with black letters

Each unit will have an accountability passport assigned to the unit. The unit passport will be approximately 3 inches by 5 inches in size and shall have the units shop number engraved on it. A tag similar to the member accountability tag will be engraved with the unit's current designation and shall be placed on the passport in addition to the members who are currently staffing the vehicle.

Example: The Crimson is shop number 0604 and is primarily used as "E22". When in service at station 2, the passport will be engraved with "0604" and will have a tag on it that reads "E22" or "Engine 22".

Engine companies will be equipped with an accountability status board. The accountability status board will be approximately 8 inches by 11 inches in size and will be attached to the driver's side door. This board may serve as the initial accountability board. In addition, command officer vehicles will be equipped with a larger accountability board that will be used on incidents requiring fire department members to enter a hot zone.

#### 107.02 Unit Passports

Personal member's accountability tags must be updated every time a fire department member comes on duty. Unit passports should only reflect what members are currently staffing each vehicle. It is each employee's responsibility to assure that passports are kept accurate at all times. When an employee is relieved from duty or staffs a different unit, it is their responsibility to update the unit passport. In addition, the senior ranking individual assigned to a unit is to assure that the passport is accurate at all times.

If a vehicle is picked up at a station by an “off duty” member responding in to assist, the member will need to assure the passport is updated accurately to reflect who is on the unit prior to responding.

#### 107.03 Incident accountability locations

The initial accountability location will be the first on scene unit’s driver’s position. This vehicle and its location shall be announced by the “IC”. All passports shall be delivered to this location.

Example One: R23 is returning from the hospital and arrives first on scene of a house fire. R23 will be assigned as the “A” side accountability location.

Example Two: *“Alarm, E22 is on scene of a single story residence with a working fire. E22 is taking a handline in for search, rescue and fire control. E22 will be in an offensive mode and “IC”.*

*“Alarm, IC, E22 will be the “A” side accountability location”.*

#### 107.04 Personnel Accountability Reports (PAR)’s

Several accountability benchmarks are included in tactical operations. The PAR confirms the presence of personnel assigned to a crew. For the Group or Division Officer, the PAR is an accounting for all crew members of all their assigned companies. Reports of PAR should include the number of personnel assigned to the Unit, Group, or Division.

Example: The E22 Captain was assigned as the Interior Group Officer and has 3 members, including him or herself, working interior.

*“IC, Interior has a PAR of 3”.*

A PAR will be required for the following situations when:

1. The second unit to any incident is unable to contact the first arriving unit.
2. The tactical benchmark of “All Clear” is achieved. (An “All Clear” is an assumption of a PAR.)
3. The tactical benchmark of “Under Control” is given.
4. The 30 minute elapse time notification if given.

5. Any change from the offensive strategy to the defensive strategy. (An evacuation of the structure and a PAR must be achieved prior to initiating defensive operations.)
6. Any sudden hazardous event at the incident, i.e. flashover, backdraft, or structural collapse.
7. Any report of a missing or trapped firefighter.

In addition, a PAR may be initiated by IC any time it is felt the nature of the incident warrants it.

#### 107.05 Lost or Missing Firefighter

An absent member of any crew will automatically be assumed as lost or trapped in the Hazard Zone until otherwise determined safe. Firefighters, Company, Group, or Division Officers must immediately initiate “MAYDAY” procedures and report any absent members to the IC.

Example: The Fire Attack Group had 4 members working interior and the Group Supervisor could only account for 3.

*“IC, Fire Attack, at this time I have a mayday situation. I have a missing crew member last seen in the southwest corner of the structure.”*

The IC must now deploy the RIC team as “Rescue Group” to the last known location of the lost or trapped firefighter and then must initiate a PAR of all personnel assigned to the incident. The IC must also adjust on-scene strategies to a search and rescue priority, but must not abandon the firefight.

#### **108 Resource Group**

At times when fire department staffing arrives on scene of working incident as single employees in POV’s, the fire department accountability system will need to account for these employees and assure their safety. In order to do so, these employee’s should report to the IC with a PAR tag and await an assignment.

The Resource Division or Group will be identified by placing a large tarp or salvage cover on the ground. Once in place, the following items are the minimum amount of equipment that will be placed at Resource by the Resource Officer; All spare SCBA’s, spare SCBA bottles, EMS gear, Ice chest/water, and a means of tracking the available resources.

If the initial Resource officer identifies a more appropriate location for Resource, the officer may relocate its location as long as the new or alternative location is reported to the “IC”.

If “off duty” response requires an employee to pass a fire station the employee should stop at the station and clear the “IC” for needs if a vehicle is available at the station. If no vehicle is available the responding employee should report to, or established “Resource”.

#### 108.02 Passport Rules

Passports will reflect only those personnel presently assigned to the unit.

Passports will be delivered to the assigned accountability location prior to entering the hot zone or offensive work assignment.

Passports will be maintained at the point of entry to the hot zone.

Passports never enter the hot zone.

Passports will be retrieved by crews upon exiting the hot zone.

#### 108.03 Terminating the Passport System

Passport accountability will be maintained throughout the entire incident. Accountability can be terminated following a report of “Loss Stopped”, at which time a PAR for all crews must be obtained. Based on a risk management assessment of the scene, the IC and or Safety Officer will determine the need to continue or terminate the use of incident accountability. Upon termination and release from the incident, Company Officers and crewmembers will ensure that their apparatus passport is accurate and returned to its respected location.

#### 108.04 Radio Designation

The Resource Officer shall use the radio designation of Resource Group. In the event a separate Accountability Officer is made, the Accountability Officer shall use the radio designation of Accountability Group.

### **109 Search and Rescue**

Since Life Safety has been identified as the key tactical priority on all incidents, the Mayer Fire Department will require that a Primary and Secondary search be performed on all structures involved in, or exposed to, fire and/or other hazardous events. The following outlines the basic search and rescue guidelines and the responsibilities of the assigned group or division supervisor.

#### 109.01 Primary and Secondary Searches

A primary search is the initial and quick search of all affected areas by fire department companies that verifies the removal and/or safety of all occupants. A primary search is time critical and must be conducted quickly during the initial fire stages to be successful.

A secondary search is an activity in which companies thoroughly search the interior of the fire area after the initial fire control and ventilation activities have been completed. This search is conducted when more time is available to perform a detailed search of the incident scene. Thoroughness, rather than time, is the critical factor in a secondary search.

#### 109.02 Communication Benchmarks

Performing search and rescue activities there two main benchmarks that should be reported to Command / Alarm.

##### *“Primary All Clear”*

Given upon the completion of the primary search, once all patients/victims have been removed from the hazard.

##### *“Secondary All Clear”*

Given upon the completion of a thorough search of the affected area once the hazardous event has been brought under control.

Should the fire involvement prohibit a primary search, then the benchmark, *“No Primary Search will be completed”* should be reported.

#### 109.03 Search and Rescue Factors

The stage and/or size the event will be a critical factor that affects the rescue approach. In nothing showing situations, a rapid interior search and report should occur at the same time the crews are investigating the incident.

In “smoke showing” or “working fire” situations, fire control efforts may need to occur simultaneously with rescue operations in order to gain entry and control interior access to complete the primary search. In working fire situations, a primary search must be followed by a secondary search after fire control is achieved. During this time hoseline placement becomes critical in keeping the fire in check, or controlled, until the search can be completed.

In the cases where well or full involvement prohibits immediate entry and primary searches, and it is recognized that survival of occupants is improbable, it should be reported that a primary search will NOT be performed. As quickly as fire control is achieved and structural safety allows for it, a secondary search should be performed for victims.

It is important that operating crews not depend upon reports from spectators to determine the status of victims. Crews should utilize reports as to the location, number and condition of victims as information to support the search and rescue effort.

#### 109.04 Vent, Enter, and Search

Vent, Enter, and Search is a “Targeted Search” tactic only applied under certain conditions. In the event the location of an occupant is known or relayed by a reliable resource, or interior access is blocked by fire, or the 1<sup>st</sup> arriving unit on scene does not have suppression capabilities, it may be necessary to Vent, Enter, and Search. The IC will determine when VES will be conducted.

#### Performing VES

##### Venting the search area

Evaluate the quickest and safest route to the targeted area by performing individualized compartment evaluations. Once located, completely take the window when entry is ready to be made, minimizing the introduction of oxygen.

##### Entering the search area

The survival profile must constantly be evaluated. Occupant and FF survivability must be probable throughout the search and rescue event. Sweep the floor beneath the window for victims and sound the floor for structural integrity prior to entry.

### Isolating the search area

The compartment must have a door(s) to isolate the search area. Upon entry, move immediately to the door. If conditions allow, check immediately outside the door for victims, then CLOSE the door.

### Searching the targeted area

Conduct a primary search of the compartment and exit the room through the same window you entered. V.E.S. can be performed on multiple compartments; however, it must be conducted on a single room at a time.

Communications with IC and the crews performing VES is paramount. The following information should be given to the IC prior to making entry (unit, location, and PAR upon entering/exiting the structure).

### 109.05 Rescue Profile

When developing a rescue profile, command must consider the following factors in developing a basic rescue size-up.

1. Number, Location and Condition of patients/victims.
2. Affect the fire has on the patients / victims.
3. Capability of the fire control forces to enter the building, remove or protect the patients/victims and control the fire.

Command must then make a basic rescue decision:

Do we remove the patients/victims from the fire?

OR

Do we remove the fire from the patients/victims?

In some cases, occupants are safer when left in place rather than moving through contaminated atmospheres. Command must realistically evaluate the capability of the manpower required to actually move the patients/victims over in-place sheltering.

Rescue efforts should be conducted in the following order.

1. Most severely threatened.
2. The largest numbers.
3. The remainder of the fire area.
4. The exposed areas.

Search and rescue techniques will vary based on the size and extent of the incident and/or involved structure. Regardless of the technique used, in order to assure a complete search of the affected structure, an approach that makes sure entire structure is searched without duplication, clearing room by room should be used.

#### 109.06 Radio Designation

When assigned to perform search and rescue, the group or division supervisor will assume the radio designation of the group or division they are assigned to. For example, “Fire Attack Group”, “Interior Division”, or “Division A”.

### **110 Ventilation**

Early ventilation of a building is important to the success of fire control operations and the safety of firefighters and victims. In some cases it is necessary for crews to perform vertical ventilation prior to making entry on a structure presenting with signs of a potential backdraft. *It is important to remember that no ventilation of any kind shall be performed without crews ready to make an aggressive fire attack.* The introduction of oxygen into a fire will intensify the fire behavior and increase the rate and spread.

Ventilation is defined as the systematic removal of heated air, smoke, or other airborne contaminants from a structure, and their replacement with a supply of fresher air.

We Ventilate To:

- Improve life safety for search/rescue and other fire ground operations.
- Increase visibility (reach the seat of the fire faster).
- Decrease danger to trapped occupants by channeling hot toxic gases away.
- Reduce the chance for flashover or backdraft.
- Property conservation from heat and smoke damage.

#### 110.01 Ventilation Objectives

- Determining a safe working surface.
- Complete adequate size ventilation hole(s) and achieve effective ventilation.
- Ventilation Group coordinates with interior crews.
- Follow out operations as directed by Command.
- Continuous monitoring of the roof and structural integrity of the building while under fire conditions.



- Communicate with Interior Crews.
- Provide progress reports to Command.

## 110.02 Vertical Ventilation

If necessary and when resources allow, command should establish a Roof Division during offensive fire operations to evaluate roof conditions. If command declares a need for vertical ventilation they will then designate Roof Group, who will then perform the task of vertical ventilation.

Vertical ventilation is defined as ventilating at the highest point of a building through existing or created openings and channeling the contaminated atmosphere vertically within the structure and out the top.

Roof Division/ Group must enter the roof from an established safe area and *must have a secondary means to escape the roof quickly*. Prior to accessing the roof the Roof Division/Group Officer must quickly evaluate conditions to assure the roof is structurally sound before attempting to work on it. The degree and extent of any signs of weakness must be considered before committing personnel above the fire. Once on the roof, every member is responsible for evaluating their route (sounding the roof, walking on load bearing walls) and progress as they proceed out on the roof. A constant re-evaluation of roof safety must be maintained throughout roof operations. *Time and fire conditions will be constantly working to weaken the roof.*

There are two common ventilation cuts that will be performed:

Louvered Cut- is a rectangular opening cut in a roof, allowing a section of roof deck (still nailed to a center rafter) to be tilted, thus creating an opening similar to a louver, allowing natural winds to channel toxic gases vertical out of a structure.

Trench Cut – is defensive tactic that involves cutting an exit opening in the roof of a building, extending from one outside wall to the other, to create an opening at which a spreading fire may be cut off.

Adequate size ventilation holes must be cut and opened if ventilation is to be successful. Ventilation hole(s) of at least 10% of the roofs surface is a rule of thumb to consider or a minimum of 4 ft. by 4 ft. Keep in mind that ventilation is not complete until the drywall has been removed to allow the toxic gases to escape.

### 110.03 Horizontal Ventilation

Horizontal ventilation is defined as any technique by which heat, smoke, and other products of combustion are channeled horizontally out of a structure by way of existing or creating openings.

Hydraulic Vent.- During an interior fire attack a fog stream aimed at an opening draws air into the stream, thus channeling products of combustion out of the structure.

Positive Pressure Vent. (PPV)- Mechanically blowing fresh air into the space in sufficient volume to create a slight positive pressure within, thereby forcing the contaminated atmosphere out the exit opening. Too many openings will reduce the effectiveness of PPV.

Negative Pressure Vent. (NPV)- Using smoke ejectors to develop artificial circulation and to pull smoke, heat, and gases out of a structure. Ejectors can be placed in windows, doors, or roof vent openings.

### 110.04 Common Tools Used For Ventilation

- Ladders
- Fire Hose (hand line)
- Chain and Circular Saws
- Mechanical Fans (Smoke Ejectors / Blowers)
- Pick and Flat Head Axes
- Pike Poles, Dry Wall Hooks
- Personnel Protective Equipment, Including SCBA and Radio

### 110.05 Communication

Ventilation group must be in prompt communications with interior crews to dictate where ventilation needs to occur. Ventilation Group must advise Command when ventilation holes are completed and any changes that may have occurred with the roof conditions.

There is one main benchmark that should be reported to Command / Alarm when performing ventilation.

*“Ventilation Complete”* Which should be given once the task of ventilating has been completed.

Ventilation may be performed during any of the 4 stages of fire combustion.

#### 110.06 Phases of Fire Combustion

Incipient/ Growth Stage- is that which follows the actual ignition. As the fire progresses, heat is generated and the temperature will increase with the progress of the fire. As the superheated gases reach their ignition point in the upper layers of the room, they may ignite causing a Rollover.

Flashover Stage- occurs when there is simultaneous ignition over the entire surface of a room and its contents.

Fully Developed Stage- following the flashover, a compartment fire will continue to burn freely with high intensity.

Decay Stage- the flame may diminish completely if the compartment is sufficiently airtight. In this case burning is reduced to glowing embers. This stage may potentially pose as a hazard to firefighters due to the possibility of a backdraft. A *backdraft* is the rapid, almost instantaneous combustion of flammable gases produced by materials that are burning under conditions of insufficient oxygen.

#### 110.07 Indications of Backdraft

- Pressurized smoke exiting small openings.
- Confinement and excessive heat.
- Little or no visible flame.
- Smoke leaving the building in intervals or puffs (appearance of breathing).
- Smoke-stained windows.
- Black smoke turning dense, grayish yellow.

#### 110.08 Indications of Flashover

Flashover is defined as simultaneous ignition of all combustible material in an enclosed area when the majority of surfaces in a space are heated to the temperature at which the flammable gases that are being produced from the combustible materials in the space are hot enough to ignite, typically at temperatures around 500C or 930-1,100F.

#### Indications;

- Rollover
- High Heat
- Smoke banking down to floor
- Dense Smoke
- Advanced stages of burning

#### 110.09 Radio Designation

Members assigned to a geographical location shall use the radio designation of “Roof Division”.

Members assigned to perform ventilation shall use the radio designation of “Ventilation Group”.

### **111 Fire Attack**

The following procedure outlines the fire ground strategy to be employed at structure fires. Fire ground operations will fall in one of two strategies, *OFFENSIVE* or *DEFENSIVE*. The two strategies are based on a standard Risk Management Plan that is to be employed at ALL structure fires.

Within A Structured Risk Management Plan;

We will risk our lives a lot, to *PROTECT SAVABLE LIVES*.

We will risk our lives a little, to *PROTECT SAVABLE PROPERTY*.

We will not risk our lives at all, to *SAVE WHAT IS ALREADY LOST*.

When considering the level of risk, the Incident Commander will choose the proper strategy to be used at the fire scene and ensure that all personnel on the fire ground are operating within the selected strategy.

The *strategic mode* will be based on an evaluation of *Emergency Incident Factors* as described previously in sections 020 through 022.

#### 111.01 Managing the Strategy

Managing fire ground strategy must start with the arrival of the first unit and be constantly monitored and evaluated throughout the entire incident. *The Incident Commander will include the fire ground strategy in the On-Scene Report and then repeat the strategy at each notification of elapsed time. As Command is transferred to later arriving officers, these officers assuming Command must reevaluate the fire ground strategy based on the Risk Management Plan. Everyone operating on the fire ground must be operating in the same strategic mode; Offensive or Defensive. At NO TIME will the Mayer Fire Department operate simultaneously with Offensive and Defensive strategies in the same fire area.*

#### 111.02 Offensive Strategy

Offensive strategy is an interior attack and related support work directed toward quickly conducting a search for victims, bringing the fire under control and limiting property loss.

Within the framework of the Risk Management Plan, the structure must first be determined safe to enter. Once determined safe, an Offensive Fire Attack is centered on making a *RESCUE*. When safe to do so, the Mayer Fire Department will initiate offensive operations at the scene of structure fires.

Offensive fires should be fought from the *interior/ unburned side*, utilizing small caliber hand lines (1 ½”- 1 ¾”) for better maneuverability. An attack from the burning side can drive the fire, smoke, and heat into uninvolved areas of the building and should be avoided when possible.

It is very important for the IC to anticipate where the fire will be when attack efforts are ready to actually go into operation; if misjudged, the fire may burn past the attack/cutoff position before resources and personnel are in position. Project your set-up time, write off property that is already lost and go on to protect exposed property based on the most dangerous direction of fire spread.

#### 111.02a Marginal Situations

Many times offensive/defensive conditions are clear cut and Command can quickly determine the appropriate strategy. When situations arise that a fire should be fought defensive from the onset of the operation, or has a potential be defensive in a very short time frame, yet a known life safety issue exists, if possible members must operate *Offensively with a MARGINAL situation*. Command must initiate an offensive interior attack due to life safety issues, while setting up defensive positions on the exterior. Once the life safety issues have been addressed, the strategy will then change from offensive to defensive.

***THE ONLY REASON TO OPERATE IN MARGINAL SITUATIONS IS RESCUE.*** When possible, Command should assign a Roof Division during marginal situations for rapid evaluation of roof conditions.

#### 111.02b Transitional Attack

Transitional Attack is an Offensive Strategy, defined as a quick knockdown of the fire from the exterior by applying a straight stream deflected off the ceiling directly above the fire. ***At no time during the use of this technique is water directed directly on the seat of the fire, nor should this technique be used at any time when firefighters are on the interior of the building.***

If applied correctly the straight stream will NOT negatively disrupt the thermal balance or push the fire to uninvolved areas inside the structure. This tactic will slow fire progression and allow firefighters to perform an offensive attack under more tenable conditions. It is important to note that excessive nozzle movement or a break/ interruption in the straight stream before it strikes the ceiling above the fire will reduce the tactics effectiveness.

A transitional attack may be appropriate when:

- A structure fire is pre or post flashover with visible flames venting from one or more openings. **Note:** A fire that is not advanced enough to cause window failure is most likely in the incipient stage, and an offensive attack would be the preferred tactic.
- Time required to make an offensive attack is delayed.
- No firefighters are on the interior of the building.
- There is absence of an imminent rescue.
- Resources are insufficient to comply with “two-in/ two-out”.

Firefighters must know the location of the fire to apply this tactic.

Refer to section 23.01 of this Manual for the *Basic Offensive Plan*.

### 111.03 Defensive Strategy

Defensive strategy is an exterior attack directed to first reduce fire extension and then bring the fire under control. The decision to operate in a defensive strategy indicates that the offensive attack strategy has been abandoned for reasons of personnel safety, and the involved structure has been considered a loss (the Incident Commander made a conscious decision to write the structure off based on the Risk Management Plan).

The announcement of a change to a defensive strategy will be made as Emergency Traffic and all personnel will withdraw from the structure and maintain a safe distance from the building. A *PAR (Personnel Accountability Report)* shall be obtained after any switch from offensive to defensive strategy. Interior lines will be withdrawn and repositioned when changing to a defensive strategy and large caliber lines (2 ½”-3”) shall be deployed for a surround and drown tactic. 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. Once exposure protection is established, attention may be directed to knocking down the main body of fire. *If defensive operations*

*are conducted from the onset of the incident, Command will notify Alarm that there will not be a primary search completed for the affected structure(s).*

Refer to section 23.02 of this Manual for the *Basic Defensive Plan*.

#### 111.04 Tactical Objectives for Fire Attack

##### 111.04a Search and Rescue

Refer to Section 109 of this Manual for detailed information regarding search and rescue techniques and practices. Communications Benchmarks for search and rescue operations are;

*“Primary All Clear”*; given once a quick aggressive initial search had been completed.

*“Secondary All Clear”*; given after the incident is stabilized and the scene can be thoroughly searched using more time and detail.

##### 111.04b Fire Control

Fire under control means the forward progress of the fire has been stopped and the remaining fire can be extinguished with the on-scene resources; it does not mean the fire is completely out. Command must consider the 7 sides of the fire: Front, Rear, Both Sides, Top, Bottom and Interior. Fires cannot be considered under control until all 7 sides are addressed. Communication Benchmark for fire control is;

*“Fire/Under Control”*; given to identify the point at which the fire has been knocked down, will not continue to progress or extend.

Alarm will record the time of this report and Command will initiate a PAR on the fire ground.

##### 111.04c Property Conservation

Property conservation is obtained through a process that incorporates both salvage and overhaul operations.

Salvage includes activities required to stop direct and indirect fire damage in addition to those required to minimize the effects of firefighting operations. Virtually every fire, small or large, produces a need for some form of

salvage operations. This includes losses from water, smoke and firefighting efforts.

The goal of overhaul is to reduce the incidence of secondary fires, control loss, and stabilize the incident scene while providing for firefighter safety in doing so.

The communication benchmark for property conservation is; “*Loss Stopped*”; given to identify the point at which property damage has been stopped and includes the completion of salvage and overhaul.

## **112 Evacuation**

### 112.01 Purpose

The purpose of this procedure is to provide guidelines to conduct an evacuation of citizens in a geographic area during an emergency incident. The potential for evacuation should be considered during all emergency incidents. The key to an organized and manageable evacuation is to develop an Incident Command System early and initiate a plan and to continually update the plan.

A plan for evacuation should address the following factors:

- A Command structure
- Determine the need for evacuation versus in-place sheltering
- Early notification of the Police Department
- Identification of an area to be evacuated, perimeters, etc.
- Required resources
- Evacuation time frame
- Identification of shelter sites and preparation of these sites
- Duration of the evacuation
- Re-entry of those evacuated
- Information about hazard and evacuation presented to evacuees (multi-lingual)
- Follow-up with evacuees upon re-entry
- Security of the area evacuated

Other areas which will need to be considered also include:

- Assignment of a Police Liaison
- Communications
- Media support (PIO)
- Establishing a Transportation Group for evacuees
- Communicating evacuation plan and shelter sites to the Command organizations of all agencies involved



### 112.02 Area of Evacuation

The area of initial evacuation should be identified by the Incident Commander. The Planning Section will re-evaluate the evacuation area and recommend any necessary adjustments. The evacuation boundaries should follow streets and established roadways. A map should be utilized and distributed to all officers and agencies involved and provided to the Evacuation Group. In some situations, in-place sheltering can be used to protect the public rather than to initiate an evacuation. In-place sheltering can be considered during the following circumstances:

- The hazardous material has been identified as having a low or moderate level of health risk.
- The material has been released from its container and is now dissipating.
- Leaks can be controlled rapidly and before evacuation can be completed.
- Exposure to the product is expected to be short-term and of low health risk.
- The public can be adequately protected by staying indoors.

Command may need to provide instructions to the affected public such as the need to stay indoors shutting down their HVAC and closing all doors and windows.

### 112.03 Levels of Evacuation

There are two levels of evacuation that we as first responders will deal with. Each requires a different resource commitment. They include:

#### *Site Evacuation*

Site evacuation involves a small number of citizens. This typically includes workers at the site and people from adjacent occupancies or areas. The citizens are easily evacuated and collected upwind at the perimeter area. Evacuation holding times are typically short, generally less than an hour or two, and citizens are permitted to return to their businesses or homes.

#### *Intermediate Level Evacuation*

The Intermediate Level involves larger numbers of citizens and/or affects a larger area. This level affects off-site homes and businesses and normally

affects fewer than 100 people. People may remain out of the area for two to four hours or more. Evacuation completion times will be somewhat longer than a site evacuation but generally rapid. Collecting, documenting and controlling the evacuees become more difficult. Off-site collection sites or shelter areas will need to be determined and managed. Some evacuees will leave the area on their own or be sent home by employers. Site perimeters become larger and perimeter security requires more resources. Close coordination with the Police Department and other agencies will be required.

#### 112.04 Command Responsibilities

Command's responsibilities include the following items:

- Rapidly size up the situation to determine the need to evacuate.
- Develop Evacuation Plan.
- Request a police supervisor to the Command Post.
- Determine evacuation perimeters.
- Determine the number and location of shelter sites and communicate the locations to the Command organization.
- Order evacuation.
- Provide resources required.
- Establish police liaison; request a ranking police officer to the Command Post.
- Provide a ranking fire officer to the police liaison officer/Police Command Post.
- Order the alert of other appropriate agencies.
- Expand the Command organization to meet the incident/evacuation needs.
- Establish an evacuation plan and communicate the plan to Branches, Divisions and agency liaisons.
- Monitor, support and revise the evacuation process as necessary.
- Evacuate persons from the greatest danger first.
- Assign specific areas to evacuate in order to avoid duplication or missed areas [use Fire department map book - either page numbers (i.e., 21834)]
- Provide the transportation necessary for evacuees.
- Provide continuing command of the evacuation, decommitment and return of evacuees.
- Determine the need to implement a unified command structure involving other agencies. This would depend upon the nature of the incident.

### 112.05 Communications

A separate radio frequency can be utilized for the Evacuation Group. This should be assigned as early in the incident as possible.

- Dispatch appropriate resources as requested.
- Notify the appropriate Fire and County officials.
- Notify the appropriate support agencies as requested or listed in Standard Operating Procedures.
- Initiate recall of additional Dispatch staff to meet the demands of the incident.
- Notify the County telephone switchboard operator and provide the operator a status report. Update the operator as needed.
- Notify the hospitals in the area of evacuation (both those exposed and not exposed) and provide a status report and updates as needed (intermediate and large-scale evacuations).
- Update Fire Administration staff of the status of the incident if it is during normal business hours. They will receive many calls from citizens requesting information.

### 112.06 Communications Benchmarks

Accountability both on the small and large scale is important to ensure all persons inside or near the hazard area are evacuated and accounted for.

The two most important communications benchmarks that should be reported to the IC,

Are;            *“Black Mountain Rd. has been evacuated”*

This benchmark is given once a single home or block has been evacuated.

And;            *“All persons have been evacuated on Division Alpha, ready for re-assignment”*

This benchmark is given once all persons in your assigned division have been evacuated.

### 112.07 Law Enforcement Liaison

A law enforcement representative will need to be assigned to the Planning Section and another to the Evacuation Branch as a liaison. The law enforcement liaisons will communicate with the law enforcement Incident Commander and keep other parties in law enforcement informed of the plan, progress, etc.

### 112.08 Who Should be Evacuated

All residents living/working in the area identified should be evacuated. In the event that a resident decides not to evacuate, they should be specifically informed of the risk and, if they still refuse, left to stay. The Evacuation Branch is to be notified and a note of the citizen's address made for further follow-up.

### 112.09 Evacuation Group Responsibilities

On large-scale evacuations, a Branch level position on a separate radio channel will be necessary. Groups will also need to be established and report to the Evacuation Branch officer. Typically, a large commitment of police officers will be required to accomplish an evacuation. The Evacuation Branch officer may be either a police or fire officer. The Evacuation Branch must obtain a ranking police official at his/her location in order to closely coordinate evacuation efforts. An appropriate commitment of police resources must be obtained. Evacuation responsibilities include:

- Obtain resources needed to evacuate.
- Obtain ranking police officer as liaison.
- Provide a ranking fire officer to the Branch officer.
- Establish Groups as needed.
- Provide Groups objectives and specific areas to evacuate (use Fire department map pages for grids).
- Provide Groups with shelter location and instructions.
- Provide Groups with evacuation instruction pads and written evacuation information for evacuees if possible (consider needs for multiple languages).
- Provide Groups with private vehicle routing instructions (out of the area).
- Obtain/provide ambulances, buses or other transportation to those requiring transportation out of the area.
- Evacuate those at greatest risk first.
- Evacuate the greatest concentrated areas next (i.e., apartment complex).
- Consider individual Divisions for large population occupancies (i.e., multi-story buildings, large apartment complexes, schools, etc.).
- As individual geographic or grid Groups complete their evacuations, terminate the Group identity and reassign resources to other developing Groups (for large-scale evacuation).
- Closely document and maintain records of the evacuation process to avoid duplication or missed areas.
- Document those addressees and times for those refusing to leave.

## 112.10 Information and Notification

The Police Department and fire companies should be used for resources/staffing to conduct a walkthrough or drive-through in the area to be evacuated. Fire companies should be assigned to hazardous areas with police assigned to safe areas. The officers should provide residents with information about the situation and be told that they are being evacuated, to where, and why. It is necessary to inform the residents of shelter areas being established to minimize confusion and anxiety.

Door-to-door notification is time-consuming. In many cases, adequate resources and time is not available to do this type of face-to-face notification. Use of sirens, air horns and PA systems will speed the alert process.

When making door-to-door evacuations:

- Be in uniform.
- Wear your helmet.

Face-to-face notification should include the following instructions:

- There is an emergency.
- You are in danger.
- Leave immediately.
- Go to shelter (location).
- Take ( ) route out of area.
- Do you need transportation?
- Consider multi-lingual needs.

Evacuees should be advised to take the following items:

- Wallet/purse
- House and car keys
- Money
- Eyeglasses
- Medications
- Proper/warm clothing
- Family pet

In other situations, where immediate and rapid evacuation makes door-to-door notification impossible, use the following notification method:

- Use three (3) five-second blasts of the siren while on the "YELP" setting.
- Follow with the standard evacuation instruction over PA system (see instructions above).
- Use maximum volume on PA system.
- Proceed slowly to maximize notification.
- Initiate notification at the beginning of each block and each 50 yards after that.

*Once each assigned grid of objectives is complete, report completion to the Evacuation Branch/Division officer.*

An information phone line may need to be set up to provide an information source for citizens with concerns about the incident. This information would be for family members affected by the evacuation or medical information for Haz Mat incidents and general information about the evacuation.

Some citizens may refuse to leave. A few methods of persuasion include:

- Be in uniform.
- Wear your helmet.
- Wear SCBA and facepiece (air hose may not need to be connected) when advising the citizen to leave.
- Ask for next of kin and a phone number.
- Write the next of kin information down.
- Refusals should be noted and reported to the Branch Officer by radio.
- Evacuations follow somewhat of a triage philosophy -- we'll evacuate the greatest number for the greatest benefit. Individual refusals will be left to fend for themselves. There simply may not be enough time or resources to initiate forced removal of persons from their homes. However, documentation of the refusal should be done. Write the address down (or if radio traffic permits, radio the address to the Evacuation Branch).

#### 112.11 Return of Evacuees

The decision to return evacuees to their homes will be the sole responsibility of the fire department Incident Commander. If the EOC is operating, the decision to return evacuees will be made by the EOC staff. No other County agency will be authorized to order the return. The Planning Section will jointly develop a return plan for evacuees. Returning evacuees may require some transportation be provided. Transportation Group should be reactivated to organize these needs.

## 112.12 Radio Designation

Radio designation will be “Evacuation Group.”

## **113 Hazardous Materials**

This plan provides a basic philosophy and strategy plan for Hazardous Material situations. M.F.D. Standard Operating Procedures, unless superseded by a specific part of this plan, remain in effect for HazMat Incidents.

HazMat Incidents encompass a wide variety of potential situations including fires, spills, transportation accidents, chemical reactions, explosions, etc. Hazards involved may include toxicity, flammability, radiological hazards, corrosives, explosives, health hazards, chemical reactions and combinations of factors. This plan provides a general framework for handling a HazMat Incident, but does not address the specific tactics or control measures for particular incidents.

Every field incident presents the potential for exposure to hazardous materials and the products of combustion of an ordinary fire may present severe hazards to personnel safety.

This procedure is specifically applicable to known HazMat Incidents, but it does not reduce the need for appropriate safety precautions at every incident. Once an incident is deemed a HazMat incident by command (IC), a Haz-Mat Group should be established to mitigate.

### 113.01 First Arriving Unit

The first arriving unit will establish Command per our protocols and begin a size-up. The first unit must consciously avoid committing itself to a dangerous situation. When approaching, slow down or stop, to access any visible activity taking place. Evaluate effects of wind, topography, and location of the situation. Units must stage in a safe location, taking into account wind, spill flow, explosion potential and similar factors in any situation. Gather information via witness reports, consult employees, employ binoculars, etc.

### 113.02 Size-up

Command must make a careful size-up before deciding on a commitment. It may be necessary to take immediate action to make a rescue or evacuate an area, but this should be done with an awareness of the risk to fire department personnel, and taking advantage of available protective equipment. Firefighter exposure should be reserved for "life-safety" (immediate and potential).

The objective of the size-up is to identify the nature and severity of the immediate problem and gather sufficient information to formulate a valid action plan. A HazMat Incident requires a more cautious and deliberate size-up than most fire situations.

Avoid premature commitment of companies and personnel to potentially hazardous locations. Proceed with caution in evaluating risks before formulating a plan and keep uncommitted companies at a safe distance usually Level Two Staging. Inform all who are assigned to the area what the hazards are and what protective equipment is required. Take immediate action to evacuate and/or rescue persons in critical danger, after providing for safety of rescue personnel.

The radio Communication Benchmark on size up reported to Command/Alarm will be: **A Working HazMat Incident.**

As the incident progresses further benchmarks should be:

*“Hazard zone established”*

This is established by Command and may be divided into Hot, Warm, and Cold zones by Command and /or HazMat personnel.

*“Primary all clear in Hazard zone”*

This is given when all persons in danger are evacuated.

*“Hazard Mitigated”*

This is when the incident Hazard is disposed of.

### 113.03 Initial Actions

Upon the completion of size-up the first arriving unit should;

1. Identify the type of material.
2. Develop an Incident Action Plan (IAP).
3. Control the hazardous area by establishing a Hazard Zone and Evacuation Zone.
4. At confirmed HazMat incidents designate a HazMat Group Officer.

#### 113.03a Identify the Type of Material

Use placards, labels, and markings; container shapes and sizes; shipping papers, MSDS and related documents, and refer to pre-fire plans. In addition



information can be obtained from personnel at the scene (plant management, responsible party, truck drivers, fire department specialists).

Utilize reference materials carried on apparatus and have dispatch contact other sources for assistance in sizing up the problem. (ERG's, NFPA Fire Protection guide for Hazardous Materials, Chem-Trec, manufacturers of materials, C.A.M.E.O., Poison Control, D.E.Q., etc.).

#### 113.03b Develop an IAP

At confirmed HazMat incidents, be sure to call all available Technicians and Chief Officers to the scene. Gather and consider all information available prior to acting. Do not become paralyzed by indecision, but make the best of available information and history of like situations. The IAP must provide for;

1. Incident objectives
2. Incident Organization, Chain of Command, and Authority to Act.
3. Assignments to accomplish objectives.
4. Supporting materials (maps, preplan, SOG's, ect.)

#### 113.03c Control the Hazardous Area

##### Hazard Zone:

Hazard Zone is the area in which personnel are potentially in immediate danger from a hazardous condition. This is established by Command and access to this area will be rigidly controlled and only personnel with proper protective equipment, radio communication, a back-up contingency and an assignment will enter. The Hazard Zone may be subdivided into hot, warm and cold zones to differentiate levels of protection required. Because monitoring devices may be necessary to establish zones of activity HazMat Technicians may be required to establish zones. Continual metering may be necessary.

##### Hot Zone:

The area immediately around the incident site. Appropriate training, protective clothing, and equipment *must* be worn by all personnel in the Hot Zone. Awareness Level and Operational Level trained personnel are not permitted in the Hot Zone.

### Warm Zone:

The warm zone is the bridge between hot and cold zones where personnel and equipment decontamination takes place. It includes control points for the access corridor and thus assists in reducing the spread of contamination. All personnel in this area must have decontamination training and wear the proper PPE.

### Cold Zone:

The area where the command post and support functions that are necessary to control the incident are located. This area is also called the clean zone.

### Evacuation Zone:

The Evacuation Zone is the larger area surrounding the Hazard Zone, in which a lesser degree of risk to personnel exists. All civilians would be removed from this area. The limits of this zone will normally be enforced by the Law Enforcement Agency having jurisdiction, and is based on distances and directions established in consultation with Command. The area to be evacuated depends on the nature and amount of the material and the type of risk it presents to unprotected personnel (toxic, explosive, etc.).

NOTE: When toxic or irritant vapors are being carried downwind, it may be most effective to keep everyone indoors with windows and doors closed to prevent contact with the material instead of evacuating the area.

#### 113.03d Designate a Hazmat Group Officer

Command should immediately establish a Hazardous Materials Group Officer. HazMat Technicians should be called to the scene and utilized to assist in command decisions. The HazMat Officer should follow the Hazardous Material response guidelines established by Mayer Fire Department. If this cannot be accomplished by on scene personnel it may be necessary to contact an outside agency with a HazMat team.

#### 113.04 Decontamination

Emergency responders should follow standard decontamination procedures (flush-strip-flush). Mass casualty decontamination should begin as soon as possible by stripping (all clothing) and flushing (soap and water). If biological agents are involved or suspected, careful washing and use of a brush are more effective. If chemical agents are suspected, the most important and effective decontamination will be that done within the first one or two minutes. If possible, further decontamination should be performed using a 0.5% hypochlorite solution (1 part household bleach mixed with 9 parts water). For

persons contaminated with radioactive material, remove them to a low radiation area if necessary. Remove their clothing and place it in a clearly marked sealed receptacle, such as a plastic bag, for later testing. Use the decontamination methods described above, but avoid breaking the skin. External radiological contamination on intact skin surface rarely causes a high enough dose to be a hazard to either the contaminated person or the first responders. For this reason an injured person who is radiologically contaminated should be medically stabilized, taking care to minimize the spread of the contamination to the extent possible, before decontamination measures are initiated.

Those members assigned to perform decontamination must be dressed in the same, or greater, level of protection than those who are being decontaminated.

### 113.05 Gas Emergencies (Propane & Natural Gas) Natural Gas

Methane (CH<sub>4</sub>) is the pure form of natural gas, but it can contain fractional amounts of ethane, propane, butane and pentane. Natural gas, by definition, is non-toxic, but its ability to displace oxygen makes it potentially lethal when present in large quantities, or in a confined space. Natural gas is lighter than air, so it can rapidly diffuse into the open air. Its flammable proportions are approximately 4-15% in open air, and can only be accurately measured with combustible gas measuring instruments.

Natural gas is transported via networks of pipes ranging from large-diameter cross-country lines to smaller grid systems in urban areas. The pressures can vary from 1,000 psi in the larger lines, to around 0.25 psi in residential use. Natural gas can be compressed and stored in pressure tanks (CNG) or cooled to be stored as a liquid (LNG); and can be subject to BLEVE.

Natural gas is colorless and odorless, so Mercaptan is added, by the utility company, to aid in detecting leaks. Mercaptan can be filtered out by soil, so leaks which travel a distance from the gas line break may have no odor.

### Liquid Propane Gas

Propane and butane are the most common liquid bottled gases, but propane is the most commonly used. Propane, by definition, is non-toxic, but its ability to displace oxygen makes it potentially lethal when present in large quantities, or in a confined space. Liquid propane gas is heavier than air, so

it will collect in lower spaces of structures, and residual amounts may exist after an incident is deemed stabilized. Its explosive proportions are approximately 1.5-10% in open air.

Liquid propane gas is widely used in various applications. Within the Fire Department jurisdiction, the majority use of propane is used for heating of residential homes or commercial structures. Secondary uses are for outdoor cooking, vehicle fuel, and bulk storage for refueling of vehicles and tanks. Liquid propane gas is stored in compressed-pressure cylinders and tanks, and may be subject to BLEVE. Liquid propane gas is odorless, so Mercaptan is added, by the vendor, to aid in detecting leaks. Propane in liquid form may be visible as a misty cloud at the site of the leak.

### Incident Control

There are three general types of incidents involving gas incidents; explosions, fires, and nothing showing with or without evidence of a leak. Any time gas is suspected to be involved in a working incident, request response of the appropriate vendor, usually prominently displayed on the or available from the property owner. The appropriate gas vendor is a valuable component in the command, function, and task required to mitigate a working gas incident.

**Explosions:** Any time an arriving company finds evidence of an explosion, and gas is known to be used, it must be suspected as the source. Propane can reside in low levels of the area, such as underneath mobile/manufactured homes, even after an explosion has occurred. Assume there is still a leak until otherwise confirmed by physically securing the tank, the gas shut-off at the structure, or by instrumentation. Secure the utilities at the site of the explosion if still able to do so after the explosion. Additionally, provide for the evacuation of nearby structures which are at risk.

**Fires:** In cases of a gas leak with active fire, first attempt to secure the gas at the source of the leak. If the leak is due to a break or leak in a main tank valve or gas line, it is not advisable to extinguish the fire at the location of the break; as this would turn a visible hazard into an invisible one subject to buildup, spread, and possible explosion. It is not advisable to put water directly on a control or relief valve on a tank, as icing may occur. Protect exposures, and keep the top of propane tanks cool with defensive hose lines as needed; depending on the size of the tank involved, large-bore hose lines may be required. In the case of a fire, all utilities should be secured.

Nothing Showing: This can be with or without evidence of an active gas leak. Evidence can be the sound of a leak either at the tank or below ground in the supply piping, or by the odor of mercaptan in the vicinity. False gas odors have been reported near open trash dumps, open sewer lines, or septic systems. In any incident with strong evidence or suspicion of an active leak, secure the tank and secure utilities, preferably from outside of the affected area if possible.

In the case of an actively venting propane tank, depending on the size, it may be advisable to simply allow the tank to vent out if it cannot be secured.

### Operational Concerns

Incident priorities, in order, are to stage upwind, designate and evacuate the hot zone, evacuate areas around the hot zone, protect exposures as needed, and secure the source if possible. Do not rely on odor, but rather use instrumentation to check levels of gas in suspected areas.

The Mayer Fire Department carries a small amount of non-sparking equipment to temporarily secure leaks in small-diameter low-pressure gas lines until the gas company can repair them. Do not rely on these adjuncts to permanently repair a gas leak, or to make the area of a leak safe for normal occupation or function.

After the incident is stabilized, ensure that the source of the leak (i.e., a meter or tank valve) is locked out and tagged out by the utility provider, until repairs can be made by the utility provider.

### Personnel Safety

When working in a suspected leak environment, full PPE shall be worn at all times. When working in a known ignitable environment, personnel shall be in full PPE and on SCBA air, with a charged hose line.

### **113.06 Responses to Power Lines/Energized Electrical Equipment**

The IC is responsible for determining the appropriate operational strategy. Once the appropriate strategy is initiated, it becomes the IC's job to ensure

that all personnel are operating within that strategy. Always practice safety around power lines during fire operations. Avoid all power lines on poles and towers as well as downed power lines. Utility companies should be requested early into the incident to de-energize effected power lines.

113.06a Response to Power Lines Down:

- Consider all down wires as ***“energized”***
- Place apparatus away from downed lines and power poles and out from under involved overhead lines that could fail and fall onto equipment or personnel.
- Secure the area/deny entry.
- In the event of multiple lines/poles down over a large area, call additional recourses.

113.06b Down power lines on Vehicles.

- Do not touch vehicle.
- Have occupants remain inside the vehicle.
- Place all apparatus a safe distance away from down lines.
- **If occupants must leave the vehicle, (fire or other threat to life) instruct them to open the door, not step-out!** They should jump free of the vehicle without touching vehicle and the ground at the same time; they should walk away from the vehicle with very small steps.

113.06.c Sub-Station, Transformer, Electrical Vault and Manhole Fire.

- Clear the area
- Be aware of explosion potential.
- Place apparatus in a safe location away from overhead power lines
- Protect exposures.
- Do not make entry until the utility representative has verified that the above electrical equipment has been de-energized. The utility representative may have to make entry to the uninvolved sections to safely de-energize the equipment.

113.06d Watch for Hazards:

The hazards include, but are not limited to, the following.

Step Potential

- Electrical current can flow through the ground where power lines are down. Saturated soil increases hazards.

- Poor soil resistance in the desert southwest may not provide enough of a ground to trip a circuit even when a conductor is laying on it.

### Touch Potential

- Downed power lines touching conductive objects or structures can energize those objects or structures. Fences, vehicles, metal buildings can be energized if in contact with downed lines. Contaminated line insulators (fire retardant, ash, water, dirt.) can begin to track stray voltage to the metal supporting structure.
- Direct contact with downed power line or power lines hidden within trees, low lying vegetation or obscured by smoke and ash is dangerous.
- Touching vehicles in contact with power lines can be hazardous.

### 113.06e Safe work practices.

The basic safe work practices include, but are not limited to, the following.

- Keep a safe distance from downed power lines. A **one-span** exclusion zone should be established around a downed power line. **A span is defined as the distance between power poles.**
- Call APS for assistance in securing the status of the line.
- Consider location and status of power lines in all strategic decisions. Include APS Representatives in all decisions of activities near power lines.
- All downed power lines must be considered energized! Mark location of downed lines and communicate to IC promptly.
- Do not apply solid-stream water applications on or around energized equipment or lines.
- Only qualified electrical utility representatives are permitted to touch, cut, or move downed power lines.
- Never climb towers or poles.
- Do not locate command centers or staging areas within the transmission tower clear zones.
- Use caution when spraying water on or around energized electrical equipment.
- Hose streams conduct current! Use a fog spray at the base of the pole. Your primary responsibility is to protect the surrounding area.
- PCB Hazards: Smoke potentially fatal; avoid and contain pools of oil around transformers.
- Pad-mounted and overhead transformers can explode.

## 114 MAYDAY

The purpose of this procedure is to identify the roles and responsibilities of all the parties involved at an incident where a "MayDay" has been transmitted.

### 114.01 "MayDay" Radio Message

The radio message "MayDay" will be used by firefighters to report their status as being lost, trapped, or injured and needing rescue. Any member may use "MayDay" to report a lost firefighter. Any report of "MayDay" will receive priority radio traffic followed by the emergency traffic tone. The term "MayDay" will be reserved **ONLY** to report a lost, trapped, or injured fire fighter(s). The term "emergency traffic" will be used to report all other emergencies.

### 114.02 Command Responsibilities

Command will maintain an awareness of the location of firefighters on the fire ground primarily through assignments and the accountability system. In the event that a firefighter cannot be located through a PAR, or any other time a firefighter is missing, the captain or any member should announce a "MayDay." The term "MayDay" will indicate a lost, trapped, or injured firefighter. Command shall respond to a "MayDay" by implementing a rescue plan for the firefighter(s).

### 114.03 Use Emergency Traffic Tones for a Missing Fire Fighter

All personnel operating at the scene need to be alerted that a firefighter is lost, trapped, or injured. This tone is delivered by the firefighter in distress by pressing and holding the orange button for two seconds located on top of all Mayer Fire Kenwood portable radios. A radio tone will emit and will open the channel for 30 seconds.

### 114.04 Commit the Rapid Intervention Crew/Rescue Group

All significant firefighting operations will have a rapid intervention crew (RIC)/Rescue Group assigned. This team should be fully outfitted with protective clothing, SCBA, etc., and monitoring all tactical radio traffic. Upon report of a missing firefighter, the incident commander has a completely fresh crew/crews fully outfitted, available for commitment to an



immediate search and rescue of the last known area of the missing firefighter(s). The RIC team, or any fresh crew(s), must be immediately sent to the rescue area. The commitment of additional crews, however, must be controlled and organized. Once the RIC crew is assigned Rescue Group, an additional RIC team must be in place.

#### 114.05        Withdrawing Companies from the Affected Area

In some situations, such as collapse or explosion, crewmembers may get separated. The only practical method, to obtain an accurate PAR of effected crews, may be to withdraw them to the exterior. In addition, withdrawal may be the only way to quickly obtain accurate information and reconnaissance on exactly where trapped members may be, routing to victims, debris locations, and the type of rescue equipment needed. Once the roll call and reconnaissance information is quickly obtained, crews can be re-assembled into a more organized rescue effort. Withdrawal is a judgment call based on circumstances at the time, information available, and resources. It may not be practical or possible to do. However, the absolute need for an accurate roll call and information on missing firefighters remains a critical priority. If it's determined not to withdraw, a detailed roll call must be obtained from each division/group for all crews operating under his/her direction.

#### 114.06        Do not Abandon Fire Fighting Positions

The reasons for a rapid intervention crew/Rescue Group, and the immediate request for additional resources, becomes very clear with this critical fire ground need. If a missing firefighter(s) is to survive, the incident commander must keep the fire out of the rescue area. Without rescue teams in place, any rescue effort will be significantly delayed. A decision must be made, does he/she relocate companies committed to fire combat to the rescue effort and allow the fire to spread? Or does he/she hold the fire positions and wait for additional resources for the rescue effort? With RIC Group in place, the incident commander can initiate an immediate rescue effort without withdrawing or relocating fire combat companies.

In most situations the incident commander cannot allow the fire to spread. If anything, these fire combat positions need to be reinforced. Additional companies should be sent to priority positions to keep the fire out of the rescue area. Large caliber hand lines and master-stream appliances should be deployed when safe to do so. Adequate water supply must be obtained for this reinforced response.

#### 114.07 Dispatch Center Responsibilities

Per Sedona Fire Regional Dispatch Center's policies and procedures; when a "MayDay" code is received in the communication center, either directly on the main channel or relayed by the incident commander, the communication specialist shall immediately sound a three second warble emergency alert tone on *both the main and tactical* frequency in use for the incident. The communications specialist will then announce, on the main frequency, that the "MayDay" code has been activated. This should alert all personnel to hold non-emergency traffic.

Following the emergency alert tone, the communications specialist shall:

- Automatically dispatch 2 Type-1 engines, one duty chief, and one ALS ambulance. The dispatch should include the information that the assignment was upgraded due to an activation of the "MayDay" alert.
- Call in a backup communications specialist.
- Both the main and the tactical frequency, which the incident is on, shall be monitored in the communications center with emphasis placed on monitoring the tactical frequency.
- Emergency calls should continue to be dispatched on the primary frequency,
- All other working incidents will be directed to tactical frequencies that are not in use.

#### 114.08 Communication Benchmarks

If the firefighter is found in a bad situation, and a MayDay declaration is necessary, the following steps using the acronym "LUNAR" needs to be broadcasted over the tactical frequency.

*"MayDay, MayDay, MayDay"*

<b>L</b> Location	<i>"First floor Bravo Side"</i>
<b>U</b> Unit	<i>"Engine 23 and/or their Division/Group"</i>
<b>N</b> Name	<i>"Firefighter Jones"</i>
<b>A</b> Air Supply Status	<i>"2000 PSI remaining"</i>
<b>R</b> Resources needed for rescue	<i>"Need wire cutters, I am entangled"</i>

The radio designation will be "IRIC or RIC Group."

If assigned to rescue, the radio designation will be “Rescue Group”

#### 114.09 Mayday Safety Checklist

This checklist shall be utilized as a tool by the Incident Commander in the event a Mayday is broadcasted on an emergency incident.

- Broadcast emergency traffic
- Change the plan to high priority rescue effort
- Request additional resources
- Conduct a PAR and withdraw crews if needed
- Activate RIC and assign Rescue Group
- Assign additional companies to RIC
- Don't abandon firefighting efforts
- Provide reinforcement to firefighting efforts
- Assign chief officer to Rescue Group
- Establish Treatment and Transportation Groups
- Open/unlock all doors
- Ventilate
- Provide lighting
- Coordinate & control search and rescue efforts
- Assess need for technical rescue teams
- Monitor structural stability of building
- Media control; assign PIO

## **115 Rehabilitation**

The intent of the Rehabilitation Group is to lessen the risk of injury that may result from extended field operations under adverse conditions. The Rehabilitation Group, radio designation “REHAB”, will be utilized to evaluate and assist personnel who could be suffering from the effects of physical or mental exertion during emergency operations.

It will be the responsibility of Command to make an early determination for the need of a Rehab Group. In a situation where rehab is to be utilized a Rehab Group Officer will be put into place. The Rehab Officer’s responsibility is to make sure crew members receive REST, HYDRATION, and a MEDICAL CLEARANCE.

### 115.01 Rehab Should Be:

- Isolated away from any fire ground operations.
- Located in an area big enough to accommodate the number of personnel on scene.
- Accessible for an ambulance and EMS personnel.
- Removed from hazardous atmospheres; including apparatus exhaust fumes, smoke and other toxins.
- Provided in the shade in summer and protection from inclement weather at other times.
- Located away from spectators and media whenever possible.

### 115.02 Rehab Group Will Provide:

1. Revitalization - rest, hydration and refreshments
2. Medical evaluation and treatment of injuries
3. Reevaluation of physical condition
4. Transportation for those requiring treatment at medical facilities
5. Reassignment

### 115.03 Revitalization

All personnel should be provided supplemental cooling devices (wet towels, fans, etc), fluid and electrolyte replacement, and nourishments when on prolonged incidents. **REMEMBER:** It is important to encourage personnel in Rehab to “dress down” by removing their PPE to promote cooling

#### 115.04 Medical Evaluation

Rehab, when available, will be staffed by an ALS crew and Rescue. Personnel will receive evaluation and treatment for heat stress and injuries as needed.

The ALS crew in this section will pay close attention to the member's:

- Pulse
- B/P
- Body Temperature
- Pulse Ox (SaO2)
- Physical Appearance

The ALS crew assigned will advise the Rehab Group Officer of the necessity of medical treatment and transportation due to physical condition.

The ALS crew may, at any time, expand the evaluation process and/or initiate immediate transport if warranted. A patch will be made to the MFD base hospital and medical direction will be followed. Personnel who are deemed competent to make medical decisions may refuse invasive procedures, but they must be evaluated per medical direction and may not return to duty without medical clearance. Should medical direction allow a non-ambulance transport, the employee will be driven to the appropriate medical facility. Under no circumstances will an employee who has been directed to seek medical treatment/evaluation be allowed to drive a vehicle.

#### 115.05 Reevaluation

After allowing for a cooling down period (approximately 10-20min) the pulse, blood pressure, temperature, and physical appearance will be rechecked. Any person with a pulse rate greater than 100, a temperature greater than 101F, a blood pressure less than 100 systolic or greater than 180 systolic, an oxygen saturation below 90%, or who is deemed to be unfit to return to the incident, will be treated as outlined in the Medical Evaluation section above.

#### 115.06 Reassignment

This critical section determines a crew member's readiness for reassignment. The Rehab Group Officer is required to have face-to-face communications with personnel attending Rehab Group. When a crew member is released from rehab he must report to the Resource Group Officer for reassignment.

The Rehab Group Officer will update Command throughout the operation with pertinent information including, the manpower in rehab, and the status of injured personnel.

## **116 Tactical Radio Channels**

### **116.01 Dispatch**

When three or more units are dispatched to an incident, Alarm will include a tactical frequency designation in the additional information broadcast. Tactical channels will be assigned in the following order: Tac 3, Tac 4 & Tac 5.

### **116.02 Responding Units**

The Duty Chief or the IC should consider assigning a tactical frequency whenever an incident escalates, or is likely to escalate, beyond two units on scene.

Following the arrival of the first unit on scene, later arriving units shall switch to the tactical frequency as follows:

**Approaching the Scene** – Units approaching the scene shall announce that they are "approaching the scene" as spelled out in Section 103. Upon arriving on scene, incoming units shall notify Alarm that they are on scene AND switching to the tactical frequency.

Example: "Alarm, R23 is on scene and switching to Tac 4."

**Level One Staging-** Units approaching the scene notify Alarm of their staging locations and wait to be called into the scene. Upon arriving on scene, incoming units shall notify Alarm that they are on scene AND switching to the tactical frequency.

**Level Two Staging-** The first unit arriving in Level Two Staging shall notify Alarm of the location and then request a frequency assignment from IC.

### **116.03 Mutual Aid**

In the event of a mutual aid incident within the Mayer Fire District, the Duty Chief or IC should consider utilizing tactical frequencies on the AIRS frequency list, especially if responding units are being dispatched from different dispatch centers. (see frequency lists).

Unified Command operations may benefit from utilizing the repeater frequencies on the AIRS frequency list.

## **117 Live Fire Training**

The purpose of this procedure is to establish standard guidelines for conducting structural training fires while complying with NFPA Standard 1403. The objective of a training fire is to provide realistic fire ground training under actual fire conditions for firefighters while providing high levels of safety and minimizing risk to firefighters. Training fires will be designed to minimize the risk and to control the fire conditions so that firefighters are not unnecessarily exposed to hazards or injuries. Training fires present the same hazards as those encountered at actual field incidents. The Incident Command System employed at actual fire incidents will be Standard Operating Procedure at all structural training fires.

### 117.01 Command

One officer on the scene shall be designated as "Command" and will assume the Command functions. A Command Post shall be established and positioned to afford maximum visibility of the structure, operating companies and fire conditions.

### 117.02 Communications

Command is responsible for establishing radio communications with each company officer or training officer involved in the drill. Channel assignment must be coordinated with Dispatch and all companies involved. Companies operating at the training fire will continuously monitor the assigned radio channel. All radios will be checked for proper functioning and correct channel prior to initiating training fire operations.

### 117.03 Safety

The Safety Officer shall have full authority to intervene and control or stop any aspect of the operations when in his/her judgment; a potential or real risk to personnel exists. He/she will not be assigned other duties that would distract from his/her safety responsibilities. Each training fire will have an "Interior Safety" and "Exterior Safety" Officer. Additional Safety Officers may be assigned to the training fire if the conditions dictate. Responsibilities of the Safety Officer(s) will include but not be limited to the prevention of

unsafe acts and elimination of unsafe conditions. For an individual to perform Safety Officer functions, he/she must meet NFPA standards for a Safety Officer.

Company officers acting as instructors will be responsible for the direct supervision of assigned students and their safety and welfare, including the prevention of unsafe acts and the elimination of unsafe conditions.

Fire Department personnel will not be permitted to operate on the roof during active fire conditions in the building. The number of personnel involved in training fires often exceeds the number normally assigned at actual incidents. To reduce risk, and assist with scene management, training fire participants shall be formed into individual companies consisting of no more than four (4) members and supervised by a company officer.

No personnel shall be permitted to act as a victim(s) during live training fires.

To reinforce safety procedures, a protective clothing and equipment inspection shall be conducted on all firefighters immediately prior to and after engaging in suppression activities. The inspection shall insure that all clothing and equipment is serviceable and worn in a manner to provide the maximum personal protection. The Safety Officer will be responsible for completing the safety checklist prior to initiating the training exercise.

One officer on the scene shall be designated as an accountability officer and will assume the accountability functions. To enhance accountability and to improve tracking of firefighters in the Hot Zone, the "PASSPORT" system shall be used.

#### 117.04 Starting the Fire

The use of flammable or combustible liquids, as defined in NFPA-30, shall be prohibited for use in live fire training evolutions. Only Class A materials shall be used in live fire training. The ignition process will be conducted under the direct supervision of the Safety Officer. Command shall assign an experienced firefighter to become "FIRESTARTER." It is the responsibility of the FIRESTARTER to initially ignite the fire with the department approved device. FIRESTARTER shall also regulate the fuel load for each evolution to maintain a tenable atmosphere inside the training fire rooms. The RIC unit shall be in place with a charged hose line prior to ignition.

#### 117.05 Attack Plan

The officer in charge shall develop an attack plan based upon information obtained during the pre-plan and building preparation stages.



The Attack Plan shall specify:

- Points of ignition
- Amount of fire load
- Position of entry attack lines
- Position of RIC units
- A Rescue Plan

All personnel involved in the drill shall be instructed on each element of the attack plan prior to igniting the structure and shall receive a walk through briefing of the building prior to each training fire. An evacuation plan and signal shall be reviewed and agreed upon.

#### 117.06 Records and Reports

The following records and reports shall be maintained on all live fire training for two years.

- a. An accounting of the activities conducted.
- b. Roll call of all participants, including the Safety Officer and other support personnel.
- c. Documentation of unusual conditions or events encountered.
- d. Any injuries and treatment provided.
- e. Copy of "Transfer of Authority" form signed by property owner.
- f. Copies of all permits, releases or other documents relating to the training fire.
- g. Records of critiques.

#### 117.07 Off Site Training Burns, Pre-planning

The officer in charge of the drill will conduct an initial inspection of the training fire site. If the building appears acceptable, he/she will make an appointment with the Safety Officer to inspect the building. Single-story structures shall always be considered first choice when selecting training in interior firefighting operations. Two-story structures will only be considered when the building has been thoroughly inspected by the Safety Officer and the Fire Chief. Both officers must agree that the building is structurally sound for training burns. Adequate egress/access points on the second floor must be readily available.

The officer coordinating the training fire will inspect the building with the Safety Officer. The building must meet fire safety and structural integrity criteria before approval to conduct a training fire is given by the Safety Officer. The Safety Officer shall have full authority to deny approval if the building is determined unsafe. Buildings incapable of withstanding exposure

to fire conditions shall not be utilized. Buildings with bars on windows or doors that cannot be removed shall not be utilized. Traffic control will also be a major factor for consideration in approving live structural training fires. Approval will not be given where traffic cannot be effectively controlled or re-routed.

#### 117.08 Asbestos Considerations

Prior to scheduling any training activities an asbestos consideration must be conducted by an AHERA accredited asbestos building inspector to ensure that no asbestos is present in the structure. The asbestos survey must follow AHERA guidelines and in addition include sampling of all materials, which are determined by the inspector to be suspect for asbestos. This MAY include roofing components, ceiling tiles and finishes, flooring or interior and exterior textured wall treatment layers including but not limited to stucco and paint. Metals, wood and glass are recognized as having no potential for asbestos.

If asbestos is determined in any layer of material, in concentrations greater than 1%, the structure/house may not be used for any type of training activities, including burns, forcible entry, etc.

#### 117.09 Building Preparation, Obtaining Permission, and Permits

The training officer coordinating the live structure burn shall be responsible for obtaining all releases, permits and other approvals and releases relating to the training fire. They shall include, but not necessarily be limited to the following:

1. Confirm a clear title on the property.
2. Obtain written permission from the building owner.
3. Verify ownership of the selected building.
4. Obtain documented proof of cancellation of insurance on the selected building.
5. Obtain a burn permit.
6. Obtain permission to burn from ADEQ.
7. Obtain approval from the Fire Chief.
8. Obtain approval of Safety Officer.
9. Review requirements and restrictions in the Fire Department's Burn Permit with Yavapai County Department of Environmental Services. Review expiration date on the permit.
10. Request and confirm completion of an asbestos NESHAPS survey to be completed by an AHERA Certified Building Inspector.

11. If asbestos, in any form, is determined in the structure, the structure will not be considered for training burn or any other type of training activity.

#### 117.10 Site Preparation

The following preparations will be made prior to conducting a training fire in a structure:

- Perform a detailed walkthrough by the Fire Chief or his/her designee.
- Confirm that utility service (gas and electric, etc.) has been disconnected.
- All debris will be cleared from entrances and exits and from the immediate exterior area.
- At least two points of egress shall be provided in all training fire structures.
- All interior contents shall be arranged to permit free access to and egress from all rooms.
- No additional combustible, or smoke generating substance other than wood pallets or other Class A materials will be added to any structure.
- The fire load shall be conservative.
- Low-density combustible fiberboard and unconventional interior finishes shall be removed.
- All windows and doors to be used for egress or emergency evacuation will be checked for and made capable of unrestricted opening.
- Structures will be pre-vented at the roof. The roof vent opening may be covered with an appropriate material. A metal cable will be attached to prevent burn-through and the cable will be extended to the ground. The vent cover will be removed at an appropriate time during fire attack operations to permit ventilation and prevent flashover or backdraft.
- Heavy roof, attic, or ceiling equipment or fixtures, etc., shall be removed.
- All holes or openings leading to void or attic space will be covered with an appropriate material preventing hidden fires and undesired fire spread.
- Pre-training fire checklist shall be completed.

#### **118 Lost Person(s) Search & Rescue**

To provide assistance in all activities associated with Wilderness Search and Rescue operations and to coordinate the integration of personnel, equipment, and resources.

**Search:** All activities associated with the discovery of an individual(s) lost or reported lost.

**Rescue:** All activities directed towards and requiring the utilization of trained personnel to locate and extricate persons trapped in damaged buildings, vehicles, woodlands, waterways, and contaminated areas; and to provide emergency medical treatment of such persons.

Upon notification of an emergency requiring substantial resources and coordination to search for and locate lost or missing person(s), the following actions shall take place;

- Establish Incident Command.
- Interview bystanders and or family members of missing person(s).
- Request additional resources such as specialized teams/units that are properly training, equipped, and staffed to handle a wilderness search and rescue operation that may or may not last multiple operational periods.
- Assist throughout the incident as needed, or return in service.

#### 118.01 Specialized Teams/Units

Specialized teams/units should be mobilized in the early stages of a wilderness search and rescue incident. Requests for these resources are to be made through our communications dispatch center. Teams that are available upon request are;

- Yavapai County Sherriff's Office Back County Team
- DPS Ranger Helicopter
- Prescott Regional Response Team
- Yavapai County Division of Emergency Management

#### **119 Thermal Imaging Camera (TIC)**

The Mayer Fire Department will utilize the TIC in every structure fire and any situation as identified where it will enhance firefighter safety of all emergency workers and the general public. The purpose of this guideline is to facilitate the effective method for deploying the TIC.

### 119.01 Initial Deployment

Department TIC's shall be carried on Engine Companies unless otherwise directed by the Duty Chief. All Personnel shall become familiar with the operation and location of all TIC's. The Engine Company Officer, or Lead Firefighter, will be responsible for the initial deployment and operation of the TIC. It is the engine company officers responsibility to scan the fire structure using the TIC to facilitate deciding the best method of search and rescue and fire attack that shall be used. Once the initial size up and fire attack decision is made, the Officer may delegate the continued operation of the TIC to any interior crew member.

### 119.02 Initial Safety Considerations

Exposures should also be scanned to determine thermal load and probability of risk to adjacent structures.

Unprotected steel will expand 9 inches for every 100 feet when heated at 1000 degrees Fahrenheit. This temperature at ceiling level is an indicator that trusses may have expanded which more than likely will cause failure and possible roof collapse.

Firefighter should remember that they must stay low even if the majority of the heat is at ceiling level. The possibility of a flashover in the dynamic atmosphere of a structure fire is higher than ever before because of new materials, building construction methods, and a rapid response.

Interior firefighters using the TIC to assist in search and rescue and fire attack must remember to not become overconfident because this tool allows them to see in virtual zero visibility.

### 119.03 TIC Operation

The TIC shall go in with the attack crew on all incidents as described in section 119.05. The safest and efficient operation of the TIC occurs when its operators view is not obscured by other firefighters. TIC operators must be aware that they have a tendency to move faster than the rest of the team who are possibly operating in zero visibility. The TIC should be viewed as a tool to assist in accomplishing the tactical priorities of the incident action plan. When available a second TIC shall be given to and used by those in the IRIC / RIC assignment.

#### 119.04 Primary TIC Benefits

In moderate to heavy smoke conditions the TIC allows a crew to quickly check a smoke filled area to determine whether or not there is fire present.

The TIC has the potential to greatly speed the fire scene primary search operations. It is essential that the primary search be carried out as quickly and thoroughly as possible. The TIC allows for quick searches in marginal conditions.

#### 119.05 TIC Uses

- Provides safe navigation during times of limited or zero visibility.
- Allows for a faster, more effective, interior fire attack.
- Helps to reduce firefighter fatigue due to increase efficiency in operations.
- Helps identify potential obstacles to the operation; holes, shut doors, etc.
- Aids in locating the seat of the fire.
- Allows for RIC teams to locate down firefighters faster.
- Aids in the detection of fire extension.
- Provides for easier, and more efficient overhaul operations
- Aids in "odor" investigations.
- Can be used to determine fluid level within a container or fluid temperature.
- Can be used as a search tool for lost persons in open wilderness areas.

#### 119.06 TIC Limitations

- Only allows for a two dimensional view.
- Thermal imaging does not travel through objects; i.e., walls, furniture.
- It is a mechanical device, it can and will fail to operate.

### **120 Triage**

Triage, meaning, "to sort", is the process of prioritizing patients based on the severity of their condition. This process rations patient treatment efficiently when available resources are insufficient for all to be treated immediately. The triage process was originally developed for Mass Casualty Incidents, but works very well for all EMS incidents regardless of the number of patients.

#### 120.01 Elements of Triage

When performing triage the following elements need to be considered and accomplished.

- Determine the location, total number, and condition of patients.
- Determine the need for additional resources.
- Perform patient triage based on the AZ S.T.A.R.T. Triage System.
- Assure safety and accountability for all assigned personnel.
- Provide progress reports to IC or Dispatch until triage is completed.

## 120.02 Communication Benchmarks

Once triage has been completed and all patients have been assessed and tagged, the Triage Officer should notify the IC that all patients have been evaluated by using the radio report of;

*“Triage is Completed”*

This completion report should be immediately followed up with a triage report. The *“Triage Report”* should include the total number of patients and their condition (Immediate, Delayed, Minor, Dead and Dying).

Example:

*“IC, Triage, at this time Triage is Completed we have a total 6 patients: 2 Immediate, 1 Delayed, and 3 Minor.”*

*“All Immediates are transported”*

This benchmark is given once all the immediate patients have been transported from the scene.

*“All patients are transported”*

This benchmark is given once all the patients have been transported from the scene.

## 120.03 Triage Profile

The Mayer Fire Department will follow the State of Arizona adopted S.T.A.R.T. Triage System ( **S**imple **T**riage **A**nd **R**apid **T**reatment).

The Arizona START Triage System uses a patient assessment system that categorizes all patients into one of four types.

Immediate

Delayed

Minor

Dead and Dying

### 120.03a Immediate Patients

Immediate patients are those who are critical in nature and are those who may otherwise die if not treated first. These patients should not only get the first available resources for treatment, but should be considered and is the goal of the system to be transported to a medical facility prior to any other patients.

The S.T.A.R.T. system uses the acronym “**RPM**” in the patient assessment process to determine if a patient should be declared an Immediate. **RPM** stand for **R**espirations, **P**ulse, and **M**ental status. Patient should be declared Immediate, when they fall into one of the following categories.

**R**espirations- Over 30

**P**ulse- No Radial Pulse

**M**ental Status- Unable to follow simple commands

Remember, the patient only needs to fall into ONE (1) of the above **RPM** assessment categories to be declared an Immediate. In addition to a triage tag, these patients also are identified with a red “Immediate” sticker which is either placed directly on them, or on the outside of the vehicle identifying the location in which they are inside the vehicle.

### 120.03b Delayed Patients

Delayed patients are patients, that after assessment, are determined to have significant Mechanism Of Injury/Illness (MOI), but who's **RPM** does not fall into the Immediate guidelines. Delayed patients should be treated and transported second. The goal is to treat these patients as soon as possible after assuring all Immediate patients are being provided with care.

These patients should only be transported after all Immediate patients have been transported. There may be times, however, when an Immediate has not left the scene and the transportation of Delayed patients may have begun.

An example of this would be an Immediate being loaded into a helicopter with ground units loading and leaving the scene with Delayed patients. It is important not to delay transportation of patients if the means exist to transport them regardless of their priority.

### 120.03c Minor Patients

Minor patients are those patients who are typically referred to as “Walking Wounded”. This level of patient third (last) in the priority of treatment and



transportation. These patients typically have no or very minor medical issues, compared to the Immediate and Delayed patients. These patients can be directed to a designated area out of the way until the resources are available to treat them.

#### 120.03d Dead and Dying Patients

In Mass Casualty incidents, It is recognized that at the onset of an incident, there will be times that there will be more patients than emergency service providers. During these times it is important to concentrate the available resources where they can help provide the best outcome. When a patient is declared Dead or Dying, it is because these patients have injuries that will more than likely cause them to die despite our efforts. If during the triage process a patient has **NO Respirations** after opening their airway and inserting an OPA, They will be declared Dead and Dying. This victim will receive no further treatment efforts and will not be transported. The only exception to this would be an incident in which there were more rescuers than patients allowing for the patient to be worked as a medical CODE. Keep in mind that a patient's condition may change during the process which may require the patient to be upgraded.

#### 120.04 Triage Process

The following outlines the basic step to be taken in the S.T.A.R.T. triage process. The process will evaluate, prioritize and account for all patients.

1. Attach the "triage tag" to the patient using the nylon quick tie strap.
2. Determine the patients' priority using RPM.
3. Tear off patient priority tag, (bottom), to show the appropriate priority of the patient. Discard the tore off section.
4. Tear off the patient tracking tag, (one side only), and keep this tag until the triage process is completed.
5. If the patient is an "Immediate", affix the red "Immediate" sticker to the person, or vehicle.
6. Once triage is completed, the Triage Officer collects all triage tags and gives the IC, or Dispatch, a Triage report and then request reassignment.

7. The Triage Officer, prior to beginning a new assignment, then turns over all triage tags to the Transportation Officer, or person in charge of Transportation. This person uses the tags to account for and assure all patients are transported from the scene.
8. During treatment of the patient, the triage tag may also be used as an EMS chart to document patient information and treatment provided.
9. Once the patient is loaded in their mode of transportation, the Transportation Officer then tears off the second tracking tag, (the remaining side tag), and matches it with the tags received from the Triage Officer.
10. The Transportation Officer uses these tags to provide two transportation benchmarks, “*All Immediates are transported*” and “*All patients are transported*”.
11. Once all patients have been accounted for and transported, the Transportation Officer gives all tracking tags to the IC, who verifies that all patients were accounted for and transported.

#### 120.05 Radio Designation

The Triage Officer shall use the radio designation of “Triage Group”.

### **121 Treatment**

The general guiding principle of the Mayer Fire Department is to do no harm. Members shall always render whatever treatment is necessary, appropriate, and consistent with their level of training, and off-line protocols. *Mayer Fire members who provides pre-hospital care, treatment, or transportation for the sick and injured will abide by the following.*

The patient will be treated with care and respect regardless of their age, gender, race, sexual orientation, or medical condition.

The patient will receive a thorough evaluation to determine their condition.

Immediate concerns are:

1. Airway and respiratory management.
2. Circulation.
3. Control of bleeding.
4. Notice and manage any apparent life threats.

The patient will be stabilized and packaged for transportation to an appropriate medical facility.

The patient will continuously be monitored until they are turned over to an equal or higher level of care.

The patient's personal property shall not be removed from the patient unless it interferes with proper treatment.

Any search for identity shall be witnessed. All valuables removed from the patient shall be turned over to a family member, the police, or the ambulance crew.

A patient may refuse transportation, however, they will not be transported against their will unless they are incapable of making that decision due to their mental status, age, or medical condition.

#### 121.01 Treatment Group

When involved in incidents of small or large scale, it is important to establish organization early in the incident to utilize resources efficiently. Treatment Group most commonly associated with the AZ START Triage System on Mass Casualty Incidents. "Treatment Group" is a group function that renders care to patients in an organized fashion when resources are insufficient for all patients to be treated immediately. The following items represent the standard operations that will normally be performed by the Treatment Group.

Identify whether patient treatment will occur "in place" or in a designated treatment area. Treatment Group will coordinate with Triage and Extrication Group to determine where treatment will occur.

Determine resources needed.

Identify and establish a large treatment area. If the incident is large, establish separate "Immediate" and "Delayed" treatment areas. If this is the case color coded tarps may be used to identify immediate treatment areas and Delayed treatment areas.

Assign and supervise treatment groups.

Ensure that all patients have been triaged, assessed and re-triaged as needed.

Aggressive treatment and rapid packaging of patients.

Provide frequent progress report to Command.

Ensure safety and accountability of all patients and assigned personnel.

Verify transportation priorities with Transportation Group.

Coordinate with other Groups or Divisions.

Notify Command when all patients have been moved from treatment to their mode of transportation.

In small scale incidents where it is not practical to initiate the S.T.A.R.T. Triage Process do to the minimal number of patients and resources needed; it will be the Treatment Groups responsibility to assume the roll of *Triage*, *Treatment*, and *Transportation*.

#### 121.02 Treatment In Place

If treatment will occur “in place,” companies should be directed by the Treatment Group Officer to a specific patient or vehicle, example “R23, you have the patients in the red sedan”. Crews should initially focus their efforts on treating and transporting IMMEDIATE patients first. These patients can easily be spotted with night-reflective IMMEDIATE labels placed on or near their bodies by triage. The Treatment Officer should communicate with Command to obtain additional resources.

#### 121.03 Treatment In A Designated Treatment Area

If patient treatment will occur in a designated “treatment area”, then the Treatment Group Officer should establish a treatment area and prepare for the arrival of patients from Extrication. If the incident is large enough, Treatment should designate separate

"IMMEDIATE" and "DELAYED" treatment areas should use red and yellow (respectively) salvage covers to identify the IMMEDIATE care and DELAYED care areas. One salvage cover should provide ample working room for up to three patients.

If the incident scene is very large, it may be necessary to establish more than one treatment area in different locations. Geographic designations (Divisions) may be given to best utilize resources and effectively maintain span of control.

Of all the Groups / Divisions, treatment typically requires the heaviest commitment of personnel. During major incidents, the objective is to have one rescuer per patient. The ALS providers should focus on the more serious patients (IMMEDIATE), while the BLS providers concentrate on the less severe patients (DELAYED and MINOR) As resources permit, the overall goal is to provide all the resources necessary to treat all the patients.

#### 121.04 Treatment Organization

Patients in the treatment area should be arranged in an orderly manner with adequate space provided between patients to allow working room for treatment personnel. First arriving patients should be placed near the exit point. Rescuers should first fill from exit towards the entrance as patients are delivered to treatment. This will eliminate personnel from having to step over or move around patients as they are delivered or transported.

It is not uncommon for non-triaged patients to arrive at the treatment area. These patients must be triaged and tagged. As these new patients are tagged, the Treatment Group Officer should forward a "Triage Update" to Command to include these newly-discovered patients.

Treatment personnel must continue to assess all patients for changes in conditions, through an ongoing basis to maintain appropriate triage classifications. Once initial triage activities have been completed, triage group can be reassigned to Treatment to continuously re-evaluate patients and assist with treatment. ALS treatment will be given primarily in the "IMMEDIATE" treatment area. Less intensive patient monitoring and treatment will be given to the "DELAYED" treatment area with mostly BLS personnel assigned to this area. Medical information (vital signs, injuries, treatment rendered) should be documented on the appropriate side of the triage tag.

A variety of ALS personnel, BLS personnel, medical staff and others may be assigned to the Treatment Group/ Division. The Treatment Group Officer must have specific assignments for these varied personnel. Non-fire department medical personnel should be closely supervised by the Treatment Group Officer or others.

#### 121.05 Communication Benchmarks

The Treatment Group Officer should advise command once all IMMEDIATE patients have been treated and transported.

*“All immediate patients have been treated”*

This report is given to command upon completion of treating all immediate patients.

*“All patients have been treated”*

This report is given to command upon completing treatment of all remaining patients.

If the condition of a patient changes significantly (better or worse) it may be necessary to transfer the patient to a higher or lower priority area.

DELAYED patients who have significant mechanism of injury should be reevaluated and upgraded to IMMEDIATE as necessary.

#### 121.06 Treatment Objective

The Treatment Group must cause aggressive treatment and packaging of patients with an emphasis on rapid transport. The Treatment Group Officer must maintain an immediate awareness of which patients are ready for transport. The Group Officer must ensure treatment is rapid, adequate, and appropriate numbers of treatment personnel are assigned to each patient. The only time extended treatment should be considered is when immediate transportation is not available. Close coordination with Transportation Group must be maintained to ensure rapid transportation.

When transportation is immediately available, transportation of the patient becomes a priority over extended on-site treatment. Rapid transportation is of the essence.

The Treatment Group will consult with the Transportation Group on the allocation of patients to various medical facilities.

The Treatment Group Officer should forward progress reports and triage updates to Command as needed. The Treatment Group Officer is responsible for determining the need for additional resources and should request their delivery through Command.

#### 121.07 Radio Designation

The Treatment Officer shall use the radio designation of “Treatment Group”.

## **122 Transportation**

Transportation Group should be established anytime the need to manage patient transportation from the scene to an appropriate medical facility exceeds the capabilities of the Treatment Group officer due to the size and complexity of an incident.

Transportation Group is responsible for arranging all of the transportation needs for a multiple patient incident and for allocating those patients to appropriate medical facilities.

### **122.01 Transportation Group Responsibilities**

The following represent the standard operations that will be performed by the Transportation Group.

- Determine and request needed resources.

- Determine the rescue loading and helicopter landing zone areas.

- Determine receiving hospital availability status.

- Coordinate patient allocation and destination with Treatment Group.

- Supervise the movement of patients from treatment area to ambulance or helicopter loading areas.

- Maintain an accounting of all patients and their destination.

- Provide progress reports to IC.

- Ensure safety and accountability of all personnel assigned to group.

- Coordinate activities with Triage, Treatment and Extrication groups.

- Notify receiving medical facilities

### **122.02 Transportation Size-up**

The Transportation Group officer must “Size-up” the transportation needs, including ambulances, helicopters, and other transportation modes, as well as staffing needs and communicate those to IC. Additional personnel may be needed to assist with medical facility destinations communications (Hospital Coordinator), ground transportation loading (Loading

Coordinator), record keeping (Charting Officer), and helicopter coordination (LZ officer).

122.02a Hospital Coordinator

The Hospital Coordinator is responsible for maintaining communications with areas hospitals and assisting the Transportation Group Officer in determining the appropriate destination, and the tracking of, all patients being transported from the incident.

122.02b Loading Coordinator

The Loading Coordinator is responsible for assisting the Treatment Group in the coordination of moving patients from the treatment area into the appropriate transportation vehicle.

122.02c Charting Officer

The Charting Officer is responsible for maintaining all related transportation documents, tags, and hospital destinations for all patients.

122.02d Landing Zone Officer

The Landing Zone Officer (LZ) is responsible for coordinating all air transportation landing zone activities.

122.03 Communication Benchmarks

In addition to periodic progress reports, the Transportation Group officer is responsible to communicate to IC when patients have actually left the scene of the incident.

During multi-casualty incidents that requires the use of the S.T.A.R.T. triage system, the two most important communications benchmarks that should be reported to the IC,

are; *“All Immediates are transported”*

This benchmark is given once all the immediate patients have been transported from the scene.

and; *“All patients are transported”*

This benchmark is given once all the patients have been transported from the scene.



For incidents where the amount of patients does not require the use of the S.T.A.R.T. triage system, the person in charge of the transportation group responsibilities should report to IC or Dispatch the following information;

Patient #

Brief patient information (age, sex, and triage priority)

Unit doing the transport

Patient Destination

Example;

*“IC, E22, Patient # 3, a 36 year old female, is being transported to YRMC East by R21.”*

This information should then be relayed to Dispatch by the Incident Commander (IC).

#### 122.04 Medical Facility Selection

The Transportation Group Officer must ensure contact with the appropriate medical facilities is accomplished as soon as possible to determine individual hospital capabilities to receive patients. It should be determined the amount of each priority level patient a facility can handle.

It must be taken into consideration that during large multi-casualty incident, patients will leave the scene POV and drive themselves to the nearest hospital, which may cause the closest medical facilities to be overwhelmed. Keeping that in mind, less critical patients that can be ground transported to further facilities should be done. In addition, patients being flown by helicopters should be transported to, when practical, to the farthest medical facilities with the proper capabilities.

#### 122.05 S.T.A.R.T. Triage

In addition to the above communications benchmarks, the Transportation Group is responsible for making sure IMMEDIATE patients will receive priority transportation followed by DELAYED and then MINOR being the last to leave the scene. During mass-casualty incidents the Transportation Group officer should consider the use of buses and or vans for transporting minor patients.

As one of the final stages of the S.T.A.R.T. triage system, just prior to a patient being transported, the Transportation Group officer, Loading Coordinator, or LZ officer should remove the final tracking slip from the triage tag. The tracking tag should be collected by the Transportation Group officer for accountability and reporting purposes.

#### 122.06 Radio Designation

The Transportation officer shall use the radio designation of “Transportation Group”.

### **123 Extrication**

Extrication Group is utilized on incidents that require physical disentanglement and/or the removal of trapped victims. Extrication Group is responsible for removing and delivering patients to a treatment area. Extrication Group will assist triage with any patient treatment that is necessary prior to disentanglement.

Extrication and triage groups should be assigned separately. This clearly distinguishes between two important, though distinct functions; identifying patient number(s) and severity (triage), versus victim disentanglement and removal to a treatment area (extrication).

#### 123.01 Extrication Group Responsibilities

The following items represent the standard operations that will normally be performed by the Extrication Group:

1. Determine the location, number and condition of all patients (coordinate with Triage).
2. Determine if triage will be performed in place or at the entrance to the treatment area.
3. Determine resources.
4. Assign and supervise extrication team(s).
5. Extricate and deliver patients to the treatment area(s) or to a casualty collection point.
6. Provide frequent progress reports to Command.
7. Ensure safety and accountability of all patients and assigned personnel.
8. Coordinate activities with other groups.
9. Notify Command when all patients have been removed and that companies are available for reassignment.

The Extrication Officer should be positioned in a readily visible location that is accessible to arriving companies and maintain a view of the scene. Face-to-face communications should be used within the group. Company officers should use messengers to relay information to the group officer. The group officer shall provide frequent progress reports to Command.

As a general rule, patients should be triaged and tagged in the impact area. However, depending on the safety of the site and the arrangement of the patients, there may be instances when triage is performed at the entrance to the treatment area. Regardless of where triage is performed, the triage process requires close coordination between triage, extrication and treatment group officers.

All non-ambulatory patients should be moved on backboards, with cervical spine precautions if indicated. Full spine immobilization may not be possible during the early stages of an incident.

The Extrication Officer should assign personnel to help size-up the situation. An evaluation of the number of patients involved and the complexity of extrication requirements is an immediate priority.

This is reasonable for extending initial and immediate care when numerous patients are involved in a major incident. The goal, as resources and priorities permit, is to provide all resources necessary to extricate and move patients to the Treatment Group.

If the patients are spread over a large area, Extrication should assign companies to a specific area or group of patients. The company officer assigned will determine the immediate needs of those patients and request assistance if necessary. The Company Officer has responsibility for all those patients until they are delivered to a treatment area or assigned to another company.

If the incident site involves a large area, it may be necessary to create more than one Extrication Group. Responsibility should be divided geographically with appropriate group designations. (e.g. “North Extrication”). Branch operations may be required to coordinate this effort.

Most ALS personnel should be assigned to the Treatment Group. However, some paramedics may also need to be assigned to the Extrication Group to provide ALS treatment for critical patients undergoing extended extrication efforts.

The Extrication Officer is responsible for assuring the safety of the area where patients are being extricated. This will require the commitment of personnel with protective hose lines and extinguishing equipment where a fire risk exists. If fire is involved, coordination with firefighting groups will be required. The safety of patients and Fire Department personnel must be a primary concern.

To reduce confusion and congestion, Triage will initially direct all MINOR (ambulatory) patients using the *S.T.A.R.T.* criteria to a specific area. Extrication Group is later responsible to further assess these patients once more critical activities have taken place. Extrication may decide to remove these patients to an "Assembly Area." A school bus or other vehicle can be used to transport these people to a suitable location.

As patients are moved from the extrication area, fewer resources may be required. The Extrication Group should advise Command when companies or personnel are available for reassignment.

### 123.02 Special Hazards

#### 123.03 Communication Benchmarks

Patient accountability is an important function on any emergency scene. The Extrication Group officer is responsible to communicate to IC when patients have been extricated.

The two most important communications benchmarks that should be reported to the IC,

Are; *"Patient #1 has been extricated"*

This benchmark is given once a single patient has been extricated.

And; *"All patients have been extricated, ready for re-assignment"*

This benchmark is given once all the patients have been extricated.

#### 123.04 Radio Designation

Radio designation will be "Extrication Group."

## **124 Air Operations**

Air craft services are available for various purposes, including medical transportation, rescue from inaccessible locations, aerial reconnaissance of an incident, wildland firefighting, and transportation of personnel and/or equipment to and from a scene.

In any situation personnel believe air craft is necessary, the decision to request this resource will be at the discretion of the Incident Commander (IC). The IC should request the proper type of air craft needed for a particular situation.

It will be the Mayer Fire Departments obligation to mitigate and minimize potential dangerous situations during any incidents utilizing air operations, regardless of the type or size of incident.

A risk benefit analysis will be completed by the IC and the use of aircraft will continue if this analysis determines the need for aerial operations to continue for further mitigate of the incident/ hazard.

### **124.01 Emergency Medical Transportation**

Helicopter transportation is available for patients when time and distance affects ground transportation time. When ambulances are unavailable, or when patients are in locations inaccessible to ground units, helicopter transportation should be considered.

Helicopter medical transportation should be considered for Immediate trauma patients requiring urgent surgery, patients requiring specialized treatment (OB, pediatric, burns, neurological, amputations, etc.) or any other patient Medical Control deems necessary.

Keep in mind, Med-Evac helicopters are capable of carrying only one patient. These aircraft are not approved for Technical Rescue air operations.

### **124.02 Rescue**

Certain helicopters are suited for physical rescue of persons stranded in inaccessible locations. Depending on the location of the victim, a helicopter may be useful in removing the victim or placing rescue personnel in a position to reach the victim. Specially trained personnel, along with the proper helicopter agency, should be considered for access to particularly difficult locations.

When utilizing a helicopter for a rescue assignment, consider utilizing another resource for the transportation of the rescued patient. In this case,

Department of Public Safety (DPS) has both medical and rescue capabilities. However, it may cause a delay in treatment if the rescue helicopter performs both the rescue and the EMS transport.

#### 124.03 Transportation of Personnel and/or Equipment

Helicopters may be requested for transportation of personnel and/or equipment urgently needed at the scene of an emergency, particularly when distance or location is a factor. The request for assistance should include the number of personnel and the weight and volume of equipment to be transported.

#### 124.04 Aerial Reconnaissance

Aerial observation may be desirable to assist Command in complex situations. This has proven extremely effective in wildland firefighting, complex structural fires involving difficult access, and for tracking direction and distance of air contamination at hazmat incidents. Helicopters may be asked to place a fire department officer over the incident with communications to Command to better assist with stabilization of the incident.

#### 124.05 Wildland Firefighting

Air craft in the wildland setting is most commonly used for aerial recon, long line bucket drops, and retardant/ slurry operations. If the need for air craft occurs on a wildland fire, “A Request for Air Attack”, should be done by overhead with the USFS, BLM, or State Land. When operating around air craft in the wildland setting the Mayer Fire Department will refer to the aviation sections in the Incident Response Pocket Guide (IRPG) or Fireline Handbook.

#### 124.06 Communications

Dispatch will coordinate the establishment of air-to-ground communications by notifying each agency to switch to Mutual Aid frequency (NOTE: this is a SIMPLEX frequency and relies on line of sight transmission).

Direct air-to-ground communications shall then be established between the helicopter pilot and Landing Zone personnel. LZ Division should have direct communications with the pilot before landing to better assist with guiding or to inform air crews of potential hazards.

When requesting helicopter response, IC should be prepared to provide the following information:

- Name of Incident

- Specific location of incident
- Specific location of LZ w/ GPS coordinates
- Patients chief complaint, condition, and weight
- Weather conditions
- Identify landing hazards at LZ (overhead wires, utility poles, etc)
- Special needs, if any

#### 124.07 Landing Zones

In the event the incident requires the use of aircraft, the IC **WILL** establish a Landing Zone (LZ) Division. Whenever possible it preferred that a fire suppression vehicle be present at the LZ. Landing Zones may be predetermined, however, in some cases LZ Division may have to pick a suitable spot for aircraft to land safely if there is not a predetermined LZ near.

#### 124.07a Landing Surface Selection

1. Concrete
2. Asphalt
3. Grass
4. Compacted dirt (lightly moistened for dust abatement)
5. Dry, loose dirt/sand (heavily moistened for dust abatement)

The landing zone must be relatively flat and free of obstructions for an area of at least 100' x 100' for each helicopter. All spectators, vehicle traffic (including emergency vehicles) and animals must be kept a minimum of 200' away from the landing zone. A visual check should be made for overhead wires, poles, towers, and similar obstructions. Any obstructions noted must be communicated to the pilot before he/she is committed. The pilot can then assess the obstruction.

For heavily loaded helicopters (i.e., water drop), the Approach and Departure paths should extend at least 100 yards in each direction and must be free of obstructions. Approach and departure paths should not pass over a treatment area, Command Post, or other activity areas where noise and rotor wash will cause problems.

The landing zone should be located at least 100 yards from other activity areas. The landing zone and surrounding area must be free of small objects which can be blown around by rotor wash. Check for metal objects and secure loose clothing or blankets. Avoid dusty locations if possible. If the landing area is dusty, crews will perform dust abatement in the area with a hose line before landing. **AT NO TIME SHALL PERSONNEL PASS**

**BEHIND THE BODY OF THE HELICOPTER NEAR THE TAIL ROTOR.**

Radio contact and the landing zone shall be maintained for two to three minutes after departure of the helicopter in case an in-flight emergency is experienced and the helicopter needs to return to the landing zone.

124.08 Pre-determined Landing Zones

Mayer Elementary School	N 34 20 41	W 112 14 36
Olive M Elledge Fwy.	N 34 23 57	W 112 13 54
St. Joseph Catholic Church	N 34 23 14	W 112 13 07
Mayer High School	N 34 20 48	W 112 09 24
Cordes Lakes Park	N 34 19 27	W 112 07 02
Orme/ Dugas Exit, Mp.268	N 34 24 07	W 112 04 19
Bloody Basin Exit, Mp. 259	N 34 17 04	W 112 07 19
Badger Springs Exit, Mp. 256	N 34 14 11	W 112 09 24
Sunset Point Exit, Mp. 252	N 34 11 34	W 112 09 49

124.09 Helicopter & Fixed Wing Safety Factors

Address related concerns in conjunction with other related tabs in this manual. These concerns include, but are not limited to: command/communications, triage/treatment/transport, hazardous materials, and evacuation. Fire suppression of aircraft is similar to other structure fires, with an accelerated and unpredictable rate of fire spread due to large amounts of fuel and payload; and construction-related difficulties of gaining access.

There are two types of aircraft impacts, high-speed and low-speed. High-speed impacts include controlled or uncontrolled flight into terrain or objects; and low-speed impacts include take-off/landing incidents, and most small aircraft crashes (including all helicopters). High-speed impacts may scatter flammable materials, aircraft parts, and human remains over a large area.

After life safety and fire control, attempt to preserve as much of the crash site as possible. Be prepared to interface with investigative agencies such as the Federal Aviation Administration (FAA), the National Transportation Safety Board (NTSB), and various other government and military agencies as needed.

Never assume that there are no survivors of an aircraft crash. The immediate tactical priority is to assist escaping passengers by providing an



escape path with foam streams into the fire area. If foam is not available, use large amounts of water. Protect the aircraft fuselage from direct flame impingement, as fire can burn through the fuselage within 60 seconds, due to the high proportion of upholstery and other ordinary combustibles. The majority of passengers who survive an impact are killed by smoke inhalation. Be prepared to mitigate exposures, such as wildland interface, residential, and commercial structures.

Most commercial aircraft have common attic spaces, large open cargo areas in the belly, and multiple outer skin layers which can support hidden fire activity. Consider the use of penetrating nozzles. Use ladders at the aircraft at the wing or other accessible points. Large commercial aircraft may require aerial ladders to reach access points. Be extremely aware of the possibility of gear collapse if the landing gear is extended.

Work from the wing area when cutting into the fuselage of an aircraft, and consider use of an aerial platform for larger commercial aircraft. The best places to cut are around windows, doors and the roof area. Prying/spreading tools do not work well on aircraft metals due to a lack of solid supports to work against. If saws are used for extrication or ventilation, they will need to be supported by hand lines to prevent arcing and sparking. Consider any aircraft crash to be a flammable atmosphere.

Exits and Access: Entry to aircraft is gained through various door and hatches. Emergency egress is also facilitated by designated exits not used for ordinary aircraft operation. Most normal exits have some kind of emergency control or override accessible from the exterior. Nearly all normal exits operate outwards, while nearly all emergency exits operate inward since they are designed to be used by passengers or crew from the aircraft interior. Some emergency exits may not be accessible from the exterior, but instead will have 'cut zones' clearly marked for rescuers; where cutting into the aircraft will not be interfered with by the aircraft frame. Additionally, on larger commercial aircraft, inflatable slides may be deployed to aid passengers and crew to exit the aircraft.

Hazards include hydraulic, pneumatic, and occasionally pyrotechnic control of any of these exits. Some emergency exits use some compressed gas cylinders or a small pyrotechnic charge to open; these systems may unexpectedly and violently deploy. Some exits are dependent upon hydraulics, and may become non-functional if the system fails. Also, it is very difficult to force aircraft doors open; since, due to cabin pressurization

and aerodynamic design, these exits are almost always flush with the fuselage, and inset with no visible hinges or jambs.

## HELICOPTER EMERGENCIES

Helicopter emergencies are the highest probability of aviation emergency likely to be encountered by the Fire Department in this jurisdiction, due to the frequent use of helicopters for emergency medical transport. Also, occurring to a lesser extent, are the other listed on the first page of this tab.

All helicopter crashes are low-impact by definition, but terrain and angle of impact may scatter flammable wreckage over a sizeable area. If the crew is conscious and able to communicate, follow their direction to safely approach and secure the aircraft. If there is no communication with the crew, clear a path to the aircraft with water or foam as needed, approaching the helicopter from a front/corner angle as in normal operations.

Any time the engine is running, be extremely aware of the movement of main and tail rotors, and the likelihood of explosions or high-speed rotor impacts with the ground; all of which can cause large amounts of shrapnel damage away from the aircraft.

To shut down or smother the engine if it is still running, it is advised to spray straight stream water directly into the air intake, to flood the intake with as much water as possible to deny oxygen, and interrupt the combustion process of the engine. In most helicopters the air intakes are small enough that a straight stream will be sufficient to cover the intake aperture; but if the intake is larger than the stream, it may be helpful to open the nozzle pattern towards fog to match the intake aperture. This tactic is not to be confused with the use of a fog stream to cover the intake; but rather to run as much water in a short time as possible into the engine.

Address related concerns in conjunction with other related tabs in this manual. These concerns include, but are not limited to: command/communications, triage/treatment/transport, hazardous materials, and evacuation. Fire suppression of helicopters is similar to other structure fires, with an accelerated and unpredictable rate of fire spread due to large amounts of fuel and payload; and construction-related difficulties of gaining access.

After life safety and fire control, attempt to preserve as much of the crash site as possible. Be prepared to interface with investigative agencies such as

the Federal Aviation Administration (FAA), the National Transportation Safety Board (NTSB), and various other government and military agencies as needed.

### Safety Considerations

- Wear proper personal protective equipment (PPE) eye/ ear protection, pants, and boots.
- Establish eye contact with pilot before approaching the helicopter and receive permission to approach the aircraft.
- Approach and depart helicopter from the front or 45 degrees from the front, in a crouching position; remain in view of the pilot.
- At no time will personnel approach the tail area of any helicopter.
- Beware of rotor wash. Small objects and clothing (caps, jackets, etc.) can be blown around easily. Do not grab or chase articles blown off by the rotor wash.
- Do NOT use fusees, flares, or spotlights to illuminate the LZ, due to blinding the pilot. Use extreme caution when utilizing spotlights to illuminate the bottom of poles. Do not shine upward.
- Refer to the Mayer Fire Department Safety and Loss Prevention Manual, Section 144.1 for general information regarding Helicopter Safety.

**If Command has a concern about the ability of the pilot or the overall safety of the operation, Command should stop the operation immediately.**

### **125 After Action Review (AAR)**

After action reviews of major and significant incidents provides an opportunity to review the effectiveness of actions and procedures in their application during actual incidents. This review is extremely valuable in improving procedures and incidents operations, as well as identifying training needs.

#### 125.01 Determining Review Levels

Each incident may qualify for one of four levels of review.

- Individual review
- Company level review
- Duty Chief level review
- Departmental review

#### 125.01a Individual Review

This level of review is conducted as a one on one review that involves a single individual and is usually conducted by the Captain or Lead Firefighter. This type of review is typically held directly after the incident concludes and allows for immediate mentoring and feedback regarding a single individual's performance.

#### 125.01b Company Level Review

Commonly referred to as a *tailboard critique*, this type of review is conducted on site of the incident prior to departing the scene. This review involves one or more units and is typically conducted by the Duty Chief, Captain, or Lead FF. This type of review is informal and brief, but should allow for feedback and input from all members in attendance.

#### 125.01c Duty Chief Level Review

This level of review is a more formalized after action review involving all members on duty during the time of the incident. This review is initiated by the Duty Chief or Fire Chief and occurs as soon after the incident as possible. This review should be held in a classroom type environment and should follow a structured format.

This type of review should be used for larger incidents that occur within the district that did not require the need for assistance from outside agencies.

#### 125.01d Departmental Review

This level of review is utilized for large-scale or complex incidents that utilized resources from outside of the district or from other agencies. A Chief Officer should be selected to facilitate this type of review. This level of review should be scheduled within 10 days of the actual incident end date. It should include all members of any outside agencies that responded to the incident. All members of the department should be encouraged to attend, even those who did not respond to the incident. This is a formal review, should be conducting in a class or training room and is key to future successful safe operations.

#### 125.02 Review Tools

Depending on the level of the review, all of the following items should be utilized during the review process if available.

- Audio tapes from the dispatch center
- Tactical worksheets and other written documents from the incident
- Photographs

- Video footage
- Dry erase / Chalk boards
- Flip charts / large writing tablets
- Map book pages
- Department policy manuals (for reference)

### 125.03 AAR Process Steps

Using the following questions, the facilitator should review the incident with the participants encouraging comments and questions.

#### 125.03a *What was planned?* (What was the IAP?)

The facilitator should help to establish the facts. Determine the purpose of the mission or IAP. Then identify what the definition of success is by identifying key tasks involved, specifying conditions under which each task may need to be performed and then define acceptable standards for success.

#### 125.03b *What actually happened?* (What did we do?)

The facilitator should continue to establish the facts. Participants should come to agreement on what actually happened. Pool multiple perspectives to build a shared picture of what happened.

#### 125.03c *Why did it happen?* (Why did we do what we did?)

It is important for the group to analyze cause and effect. The participants should focus on what, not who. They should then provide progressive refinement for drawing out explanations of what occurred. This will lead into developing possible solutions.

#### 125.03d *What can we do next time?*

Solutions will arise naturally once problems are identified and understood. The facilitator should direct the participants to focus on items that can be fixed, rather than dwelling on external forces that are outside of our control. The facilitator should make sure to identify areas/tasks that went well and discuss how those areas can be sustained. During this time the group should discuss;

- Events that went well and should be repeated
- Events that went poorly and need to be improved
- Safety concerns and solutions

125.03e *Are there lessons learned that should be shared immediately?*  
Lessons learned, good and bad, should be identified and shared with the participants. You should determine and describe the most notable successes from the incident as well as, the most difficult challenges faced during the incident and how they were overcome.

125.03f What follow up is needed?  
Be specific about actions, timelines, and responsibilities. Define what changes, additions, or deletions are recommended to existing SOG's, plans, and training. Discuss what issues were not resolved to the group's satisfaction and the need for further review.

125.04 AAR Success Tips  
Schedule the AAR as soon after the incident as possible  
Keep it short and focused  
Focus on What and not Who  
Establish clear ground rules that encourage candor and openness  
Focus on items that can be fixed  
Keep all discussions confidential  
Use the AAR as a learning tool not a disciplinary one.

## **126 Mutual Aid Response**

This guideline describes response requests for the Mayer Fire District into other agency jurisdictions.

126.01 Purpose  
To establish staffing parameters so that when called upon to do so, the Mayer Fire District, can respond into other jurisdictions without leaving the Fire District without coverage.

126.02 Procedures  
In the event of a request from another agency for mutual aid, the Mayer Fire may comply with the requested resources so long as by doing so, the District staffing levels do not fall below two employees in order to assure that an engine can be staffed in district if needed.

Should sending a unit cause the staffing levels to be less than two, the request should be refused until such time as staffing levels can be arranged to allow for the mutual aid response.

If a request is turned down due to the inability to maintain staffing levels, the senior person will page out and/or make phone calls for staffing in order to staff the requested resource or maintain appropriate levels within the District's jurisdictional boundaries.

Once the appropriate staffing levels are achieved, the on duty senior employee shall contact the dispatch center and advise them that the resource is now available. They should then request that the dispatch center contact the requesting agency to confirm the need for the response still exists.

### **127 Emergency Call Back Staffing**

It is the intent of the Mayer Fire Department to maintain available resources to respond to emergency incidents during times of high call volume, and during times of large scale incidents that typically extend the normally staffed resources for prolonged time frames.

#### 127.01 Staffing Page

In order to do so, during these times, the Duty Chief will request through the dispatch center, a "*staffing page*". This benchmark request will prompt the dispatch center to send out, through the digital paging system, an all call page requesting off duty response to the district.

There are typically two types of staffing page requests. The first will be used to request available off duty personnel to respond to and staff the nearest fire station. The second will be used to request staffing for a specific type of resource need.

*"Battalion 2 to Alarm, Page out for station staffing for fire station 1 and 3"*

**or**

*"Battalion 2 to Alarm, Page out for staffing for Water Tender 23"*

#### 127.02 Staffing Priorities

The priority of the type of unit staffed shall be determined by the availability of units at each fire station and the certification level of the employees who arrive to staff those vehicles.

It is the intent of the Mayer Fire Department to maintain the staffing of a Type I engine with 2 personnel and ALS capabilities at fire station 2 whenever possible.

Equally important will be to have the availability to co-staff as many different types of units as possible in order to have the ability to take the most appropriate unit to the type of call next dispatched.

#### 127.03 Station Staffed Acknowledgement

When a firefighter who responds in from off duty arrives at a fire station due to receiving a staffing page, that firefighter should come up on the station mobile radio to dispatch and advised them that the station is now staffed. When doing so that firefighter should state the following.

1. The station that they are at, or specific unit they are staffing
2. Their medical certification level (ALS or BLS)
3. The number of personnel

*"Alarm, Fire Station 1 is staffed with one, BLS"*

or

*"Alarm, WT23 is staffed with one, BLS"*

or

*"Alarm, E23 is now staffed with two, ALS"*

In the event that an existing incident requires a specific type of unit, the personnel acknowledging station staffing may be ordered by the IC or Duty Chief to respond to another station POV to pick up the appropriate unit and respond it to the scene.

An employee arrives at fire station 1 after a staffing page is sent out due to a residential assignment confirmed as a working fire.

*"Alarm, Fire Station 1 is staffed with one, BLS"*

*"IC to FS1, respond to station 3, pick up Water Tender 23, and respond to the scene."*

In another scenario, shortly after a firefighter acknowledges staffing at Fire Station 1, another firefighter arrives at Fire Station 3.

*"Alarm, Fire Station 3 is staffed with one, ALS"*



*"IC to FS3, respond to Fire Station 2 and staff E2201 with the firefighter from FS1"*

and then,

*"IC to FS1, respond to Fire Station 2 and staff E2201 with the firefighter from FS3"*

By doing so, the IC has now staffed an available Type III engine with 2 firefighters in the center of the district. In addition, there is normally, unless they are tied up on other incidents, a water tender, the spare ambulance, and the support truck located at Fire Station 2, thus, making it possible to co-staff other vehicles.

Depending on the type of units being used on the existing incidents, a firefighter who staffs Fire Station 1 or 3, may be asked to take the Type I engine, or other unit, from one of those stations to fire station 2 in order to centrally locate it.

#### 127.04 Termination of Staffing

Once station staffing is no longer needed, the IC or Duty Chief should advise the station or units that they are no longer needed and may go available. If the unit from the station was staffed by off duty personnel, that personnel should contact the dispatch center and advise them that the unit or station is no longer staffed.

*"Alarm, Fire Station 1 is no longer staffed"*

or

*"Alarm, E23 is at Fire Station 3 un-manned"*

Once emergency call back staffing has ended, it is the responsibility of the employee to contact the on duty Captain and advised them of the hours worked for payroll and accountability purposes.

## **128 Technical Rescue Tactical Considerations**

The purpose of this SOG is to establish the operational guidelines for the department's activities at all victim rescues involving technically specific scenarios. Technical rescues are considered those in which the patient/victim

must be removed from an area where normal means of egress are not available or when entry into the space is considered dangerous for the rescuer. These areas may be, but are not limited to Rope Rescue, Confined Space Rescue, Open Trench Rescue, Structural Collapse Rescue, and Swiftwater Rescue.

While Mayer Fire Department does not have a Technical Rescue Team, some members have been identified as having completed specialized training outlined in NFPA 1670. Department members meeting specified disciplines in NFPA 1670 will be used on scene as needed to complete a technical rescue. Those designated by the department as being trained in technical skills may help set-up, perform rescues, and serve as consultants throughout the incident.

The department recognizes that not all calls will need a Technical Rescue Team to remove a victim; if the rescue can safely be conducted with units on scene, it would be possible to refrain from the use of a Technical Rescue Team.

The Incident Commander, with the assistance of the Safety Officer, will decide if the situation can be handled by Mayer Fire Department members or the need for a Technician Rescue Team is required to safely complete the rescue.

In the event a TRT is needed, the IC must request that YCSO Forest Patrol be notified of the incident.

It will be the primary goal of the Incident Commander to locate the patient/s and initiate ALS care. Along with the primary goal crews will package the patient for extrication, while maintaining contact with the patient until they have been extricated and relocated to a safer location for further treatment/transport. At no time shall a patient be abandoned once contact has been made.

#### 128.01 Limitations

All personnel should be familiar with the limitations associated with a Technical Rescue. All technical rescues shall be addressed at three levels of decision making:

Training- Do we have enough properly trained personnel on scene?

Equipment Availability- Do we have the right equipment to perform the rescue safely?

Number of Trained Team Members- Do we have enough trained members to safely carry out the assignment?

## 128.02 Arrive On Scene, Size-Up, Assume Command

Because of the infinite number of potential sites and situations that could be encountered, this procedure will not define a specific evolution to use, but will give guidelines to follow for conducting safe and effective operations. In most cases, the nature of “Technical Rescues” will require the Incident Commander, Safety Officer, and Rescuers to act outside of these guidelines. While this is understood, **the safety of our rescuers is paramount to every operation.**

Arrive On Scene- First arriving unit should assume IC and begin an immediate size-up of the situation/scene.

Spotting Apparatus- All units entering the scene should spot their apparatus in a safe position that will not hinder the scene in any way (reduce secondary collapse, establish collapse zones, blocking incoming units etc.). Consideration should also be given to traffic conditions and if they will be affected.

Assess the Need for Additional Resources- Information that will be helpful in determining the need for additional resources would be:

- Type of rescue needed
- Number of victims
- Location/ Condition/ Distance to the victims
- Estimated time of extraction
- Patients time exposed to hazard

Command should put in an early call for additional resources. If additional resources are not needed after a call has been put in, IC can cancel the balance of the assignment. The IC should assess the need for outside heavy equipment early.

Secure Responsible Party or Witness- Command should secure a witness as soon as possible after arriving on scene. This will help to determine:

- Exactly what happened
- Identifying the problem

- Locating the victim

If no witness is present, Command may have to look for clues on the scene that may indicate what has happened.

Staging- Command should initiate Level 1 and Level 2 staging procedures immediately. The management of emergency and civilian traffic is critical from the onset of a Technical Rescue.

Establish a Transportation Corridor- IC should ensure there will be roadways into and out of the scene of the accident. This may include establishing liaison with local agencies (ADOT, YCSO, etc) to re-route all traffic well around the incident.

Locate the Victim- In most cases, Command will have to send a recon group to the area of the victim to determine the exact location of victim and nature of injuries. Recon Group should have EMS equipment to begin treatment. If it is too dangerous to access the victim/s, Command may decide to wait until the TRT arrives with the proper equipment to reach the victim. Command may also choose to use a helicopter for aerial recon.

Assess the Hazards- Command may wish to designate a **Safety Officer** to identify all potential hazards to rescuers. The **Safety Officer** will be responsible for securing those hazards or making all members aware of those hazards. If it is not possible to secure all hazards, Command should notify all rescue personnel operating on scene of the hazards present. The **Safety Officer** will also be responsible for assuring that all safety procedures are adhered to.

Decide on Rescue or Recovery- Recon Group should advise Command whether the operation will be conducted in the rescue or recovery mode.

- Rescue Mode- personnel assigned to Recon Group will be reassigned by IC to assist in carrying out the IAP and Recon Group will be terminated.
- Recovery Mode- Command may wish to leave the victim and any related equipment in place for investigative purposes.

Command should determine how long the victims have been down, the mechanism of injury, and the survivability profile of the victim. *An early decision must be made as to whether the operation will be run in the rescue or recovery mode.*

Action Plan- With the recommendation from the *Recon Group*, Command will have to decide on an action plan. *Extrication Group* and *Safety Group*

shall be made aware of the specific action plan. *Extrication Group and Safety Assigned personnel shall work in close proximity to each other to provide the upmost safety during an extrication.*

Critical Rescue Mode- When the patient is in a situation in which time becomes an important factor in the patient's recovery, i.e., patient hanging from unstable/failing structures or submerged under water or any situation that can change fast. The Incident Commander must come up with a plan of action quickly that will include the most important aspect of the operation, the safety of the rescuer.

Non-Critical Rescue Mode- When the patient is not injured and in no immediate danger. The patient is in a position that he/she cannot self extricate without assistance.

Deployment of the TRT personnel in the Action Plan needs to be monitored by IC to ensure trained members are available to staff critical functions.

### 128.03 Pre-Rescue Operations

#### Make the General Area Safe

Command or his/her designee should begin to make the general area safe.

This may include:

- Establishing a perimeter (hot, warm, cold zones)
- Securing the area (above, below, and all sides)
- Not allowing civilian personnel into the area

#### Make the Rescue Area Safe

Command should make the immediate rescue area safe. This may include removing all civilian personnel and all non-essential rescue personnel from the area. If it is not possible to secure all the hazards in the immediate rescue area, all personnel operating in that area shall be made aware of those hazards.

#### Pre-Rescue/Recovery

Depending on the action plan established, Command may want to establish *Extrication Group*. *Extrication Group* will be responsible for gathering all equipment and personnel necessary to operate according to the action plan. *Extrication Group* will assign rescue personnel to conduct the rescue, and

support personnel to support the rescuers, during the actual rescue phase. *Extrication Group* should have an alternative action plan should the first choice plan fail. This alternate plan should be communicated to all personnel operating in the rescue area.

#### Consider Ambient Conditions

- Heat- Consider rotation of crews.
- Cold- Consider affects of hypothermia on victim and rescuers.
- Rain/Snow- Consider the affects of rain or snow on the hazard profile.
- Time of day- Is there sufficient lighting for operations extending into the night.
- Consider the affect on family and friends; keep family informed.
- Assign a P.I.O.- Consider news media
- Call for OSHA- Command should consider calling on OSHA representative to the scene if there has been a serious injury or death.
- C.I.S.D.

#### Groups Established

- Safety Group
- Staging Group
- Extrication Group
- Rehab Group
- Treatment Group
- Transportation Group
- Ventilation Group
- Rescue Group
- Hazard Group

### **129 Swift Water Rescue**

The purpose of this procedure is to provide a guideline for conducting all water rescue/recovery operations.

#### Tactical Considerations

- Phase I Arrive on scene. Take command. Size up.
- Phase II Pre-Rescue Operations
- Phase III Rescue Operations
- Phase IV Termination

## Phase I

### 129.01 Arrive On Scene, Take Command, Size Up

*Secure responsible party or witness.*

The IC should secure a witness as soon as possible after arriving on scene. This will help in identifying and locating the problem.

*Assess the need for additional resources.*

The IC should immediately begin assessing the need for additional resources. If additional resources are necessary, Command should put in an early call for them. If later, it is determined that they are not necessary, Command can always cancel the balance of the assignment.

*Assess the hazards.*

The IC should do an initial assessment of the present hazards.

#### Hazards Associated With Water Rescue Operations

- Volume, Velocity, and Depth of Water
- Temperature of Water
- Floating Debris
- Unusual Drop-Offs
- Hydraulic Effects
- Weather (Hot/ Cold and Rain/ Snow)
- Time of Day

The IC may want to assign an individual to be Safety Officer. The Safety Officer will be responsible for identifying the hazards present and notify Command so that an action plan can be established. Furthermore, the Safety Officer will over see the rescue attempts to assure scene safety.

*Decide on "Search, Rescue, or Recovery"*

Based on the conditions present and hazards to the rescuers, Command will have to make the decision to operate in the *Search Mode, Rescue Mode, or Recovery Mode.*

*Make an Incident Action Plan.*

The IC should establish an action plan as soon as possible. The step-by-step plan should be communicated to all personnel involved in the rescue.

## Phase II

### 129.02 Pre-Rescue Operations

*Make the general area safe.*

The IC should begin to make the general area safe by not allowing civilian personnel or emergency personnel without proper PPE near the water. In swift-water rescue incidents, Command should assign an Upstream Group to spot floating debris. Command may also want to assign a helicopter the task of aerial recon for spotting hazards upstream.

*Make the rescue area safe.*

**Personnel working within the rescue area (10 feet from waters edge) must have proper PPE**, including personal flotation device (PFD) and water rescue helmet. If at all possible, the hazards in the rescue area should be secured.

*Pre-rescue/Recovery.*

Depending on the action plan established, Command may want to establish an Extrication Group. Extrication Group will be responsible for gathering all equipment and personnel necessary to operate according to the action plan.

## Phase III

### 129.03 Rescue Operations

After pre-rescue operations are complete, Extrication Group *shall put forth the action plan for the removal of the victim(s)*. Rescue operations should be conducted from low risk to high risk order. Extrication Group *shall communicate with Command the Risk/Benefit of the operation*.

### Common Terminology Associated With Swift Water Incidents

- *River Right, River Left, and River Center*
- *Upstream and Downstream*

The terminology above will be in reference to the waters direction of flow, while facing down stream.

Command should assign downstream personnel, with back up lines and throw bags, and opposite *Bank-Side Groups* for incidents involving swift-water rescue.

### Low Risk Operation



TALK- Talk the victim into self-rescue when safe to do so. When possible, the victim can be given simple direction from the rescuers to assist with carrying out the rescue operation.

REACH- If possible, the rescuer should extend his/her hand or some other object, such as a pike pole, to remove the victim from the water.

THROW - If the victim is too far out in the water to reach, rescuer(s) should attempt to throw the victim a throw bag or some piece of positive flotation (PFD, Rescue Ring, etc.). *Downstream personnel should be in position prior to the actual rescue operation.*

HELO- At times the use of a helicopter is the most reasonable method of reaching the victim. Command should consult with Extrication Group and the pilot to determine the risk/benefit of the use of a HELO. If the pilot says they can do the operation, Command should consider it. Command will have the final say on the use of a helicopter for water rescue operations. The pilot will have the final say on how the helicopter will be used.

In some cases it may be safest for the victims to stay put and not attempt a rescue due to subsiding hazards associated with swift water.

First responders that have had operational level water rescue training should be able to conduct the above rescues without the help of the Technical Rescue Team (T.R.T). If the victim cannot be reached by either of these methods, Command should consider stopping the operation until units of the T.R.T. arrive. If the operation becomes a high risk operation, Command will want the equipment and experience of the T.R.T.

**AFTER THE TECHNICAL RESCUE TEAM ARRIVES, COMMAND SHOULD DISCUSS WITH THEM THE (IAP) INCIDENT ACTION PLAN. COMMAND SHOULD STRONGLY CONSIDER RE-ASSIGNING THE EXTRICATION GROUP TO A COMPANY OFFICER FROM THE T.R.T.**

High Risk Operation

HELO- Same as above.

ROW- If it is determined that a boat based operation shall be utilized, Command should assign a company to assist the TRT in establishing an anchor for a rope system.

GO- If it is not possible to ROW (boat base operation) to the victim, Extrication Group should consider putting a rescuer in the water to reach the victim. This is a very high risk operation, **ONLY RESCUERS WITH PROPER TRAINING AND EQUIPMENT SHOULD BE ABLE TO ENTER THE WATER.**

#### 129.04 Treatment/Transport

As soon as the victim is brought to safety, an assessment should be done by ALS personnel to determine treatment and transport needs per local protocol.

### Phase IV

#### 129.05 Termination

Command should begin termination as soon as possible after the victim has been removed from the water. This may also include witnesses, photo's, victim's personal affects or equipment used in the rescue. The IC should also consider initiating a C.I.S.D. for extraordinary or extended operations.

#### Termination Considerations

- Personnel accountability
- Equipment accountability. (If there has been a fatality, Extrication Group may consider leaving equipment in place for investigative purposes)
- Secure the scene
- Consider After Action Review (AAR)
- Consider the affect on family and friends; keep family informed
- Consider news media; assign a P.I.O.

### **130 Rope Assisted Rescues (Low, Steep, and High Angle)**

Rope rescue is defined as any rescue attempt that requires rope and related equipment to safely gain access to, and remove patients from, hazardous geographic areas with limited access. Rope rescues are divided into two general categories; non-technical and technical.

Non-technical evacuation are those of less than 40° inclination.

Technical evacuations are considered those from 40° to 90°. Technical evacuations require the dispatch of the Rope Rescue Team (R.R.T) and in some cases a fully equipped Technical Rescue Team (T.R.T).

Low Angle- 0°- 40° inclination, First Responder Required.

Steep Angle- 40°- 60° inclination, R.R.T. Required.

High Angle- 60°- 90° inclination, R.R.T. Required.

The skills that a RRT can be expected to do.

- Rappel, Ascend
- Raise and Lower by a rope system (rescue based pick off)
- Rigging and Simple Mechanical Advantages
- Anchoring techniques (Structural, Directional, Pretension Back-Tie)
- Patient Packaging
- Basic Life Safety Knots (Fig. 8 on bight, dbl. Fig. 8 on bight with equal/ unequal loops, directional Fig. 8, Fig. 8 bend, Fig. follow through, butterfly, water knot, 2/ 3 wrap prusik, load releasing hitch, munter hitch, dbl. longtail bowline, etc.)

### 130.01 Rescue Operations

After pre-rescue operations are complete, Extrication Group shall put forth the action plan removal of the victim(s). Rescue operations should be conducted from low risk to high risk. Rescues should be conducted with the least amount of risk to rescuers necessary to rescue the victim. Low risk operations are not always possible but should be considered first. If the rescue of the victim(s) is only possible by means of a high risk operation, Extrication Group shall communicate with IC the risk/benefit of the operation.

If the victim is not exposed to a life threatening situation, it may be possible to talk the victim into self-extrication. If the victim is exposed to a life threatening situation, it may be best to advise the victim to stay in place until a rope rescue system can be set up.

For terrain less than 40° inclination (non-technical), first responders should have the equipment and training to assist the victim to safety. If the victim is ambulatory, he/she can walk down with the assistance of rescuers. If the victim is injured or unable to assist in their own rescue, he/she should be packaged properly in a stokes basket and carried to safety.

The stokes extrication should be conducted with a minimum of 3 personnel on a litter team. The litter team should face the direction of travel during the extrication. If appropriate, a tag line should be attached to the litter for assistance through unstable areas.

For terrain of greater than 40° inclination, the RRT shall be called in to assist with the extrication. If the victim is ambulatory, he/she may be assisted down by rescuers with the use of a belay/tag line. If appropriate, rescuers should set up an anchor system for the belay.

If the victim is not ambulatory, rescuers shall build an anchor system and prepare for a steep angle evacuation. The patient shall be packaged properly in a litter and prepared for the extrication. There shall be at least 3 litter attendants assisting with the litter evacuation. Attendants should face the anchor during the evacuation and be tied into the litter. A separate raising/lowering line and belay line shall be set up for raising or lowering during steep angle evacuations.

For evacuations greater than 60°, the RRT shall conduct the evacuation. Evacuations greater than 60° are considered high angle operations. The Extrication Group Officer, in conjunction with the Safety Group, should decide the most appropriate method to extricate the victim. This may include putting the victim(s) in a harness and raising or lowering them, or packaging them in a stokes basket for the raising and/or lowering.

The Safety Officer should be part of the RRT team if possible and manage the edge point operations for on rope or off rope personnel working on the rescue. Furthermore, there should also be a safety scene leader for each working line.

In any case, a 15:1 safety factor shall be maintained and a double rope technique shall be used if at all possible.

For example: 1 rescue person pulls 100lbs. with a 3:1 mechanical advantage he/ she is actually pulling 300lbs. at the load. The maximum amount of personnel that can be on the 3:1 M.A. haul team is 5, not to exceed 1,500lbs.

2:1 MA, 7 personnel, 1,400lbs	3:1 MA, 5 personnel, 1,500lbs
4:1 MA, 3 personnel, 1,200lbs	5:1 MA, 3 personnel, 1,500lbs
6:1 MA, 2 personnel, 1,200lbs	8:1 MA, 1 personnel, 800lbs

If possible, a separate anchor should be used for the working line and the belay line. Proper care shall be taken to assure that the victim will not come out of the harness or litter used to extricate him/her. Which ever method of extrication is used, the Extrication Group Officer shall ensure the overall safety of the raising/lowering system and designate the tasks of individual

rescuers during the operation (Main Line, Belay Line, Rescuer/s, Edge Team, Haul Team etc.)

In the case of a High Angle or rope assisted rescue, the purpose of the Rope Rescue Team (RRT) is to relocate patients which cannot be reached by any piece of fire department equipment other than rope and rope accessories. Relocation is made to a place of safety, when first aid can be given or transportation to a medical facility initiated. At times our job will be to get to the patient start care and wait for a Rescue team.

Helicopter operations are considered high risk operations. Several factors must be considered before deciding on the use of a Helo for extrications. Some of these factors are: time of day, condition of victim, difficult access to the victim, and the qualifications of pilot and rescuers. If the IC, in conjunction with the RRT officer, decide to use a helicopter for extrication, a landing zone (L.Z.) shall be set up and a L.Z. Group shall be established. L.Z. Group should have communication directly with the pilot as well as IC.

Prior to conducting the operation, the IC should ensure that the pilot is qualified and completely understands the task about to be performed. The IC, or his/her designee, should ensure that a load calculation is performed prior to commencement of the operation. The IC will have the final say as to the use of the helicopter. The pilot will have the final say on how that helicopter will be used.

### 130.02 Rope Rescue Safety Considerations

- No member goes on a rope or starts an operation until he/she is checked by another member.
- Every part of the rescue system must be backed up with a safety.
- Each line shall have a safety person. The rescue person that is rappelling shall always get the attention of the safety personnel before they start their rappel.
- Rope shall not be deployed or hung over any height without being anchored off first. Each member that is going to work on a line shall check his/her anchor.
- Any person working within 5ft. of a ledge, greater than 5ft., must be attached to an edge line.
- All ropes and equipment shall be inspected before and after each training session and/ or rescue operation.

- Each team member (any firefighter on scene) is responsible for the safety of all other team members. Any team member observing an unsafe practice shall correct the situation immediately and report it ASAP.
- Proper PPE includes: climbing or fire helmet, leather gloves, work boots/ hiking boots or appropriate footwear, long pants or coveralls, minimum use of a Class II Harness or Class III Harness as needed, appropriate protective clothing for weather conditions.

## **131 STRUCTURAL COLLAPSE**

It is considered Structural Collapse when structural components yield to the force of gravity. This may be caused from fire damage, extreme weather conditions, structures age, earthquakes, explosions, or any other forces that cause a failure in the structural components.

The members of Mayer Fire Department will be responsible for initiating the proper steps to run a safe and effective operation. This guideline outlines the very basic knowledge associated with Structural Collapse Operations.

Early dispatch for additional resources (TRT, heavy equipment, cranes, etc.) is paramount in making sure the properly trained personnel and equipment are present to carry out the IAP.

### Arrive On Scene, Size Up, and Assume IC

Initial on scene companies should be directed in rescuing victims that can be seen on the surface or victims trapped by light debris, while recognizing the physical hazards present at the scene. The IC may designate a Recon Group to conduct a rapid assessment/ triage of the affected structures. The assessment should identify areas of the collapse for early search efforts.

### 131.01 Structural Assessment

During structural collapse a triage of the building should be completed. If the triage determines the building is structurally unstable, search and rescue teams shall not enter until appropriate shoring and stabilization has been accomplished.

The assessment at structural collapse incidents should be an on-going process noting the following conditions:

- Construction Type, Size, and Number of structures affected
- Integrity and stability of structure affected (Establish Collapse Zones 1 ½ times the height of the highest point of the collapse)

- Situation that caused the collapse
- Age and condition of building
- Number of Known/ Potential Victims and Possible Location

**All structures declared unstable should be labeled and communicated to all rescuers on scene.**

#### Presence of Voids

Voids created in the initial collapse are the single most important factor in determining the probable location of trapped victims and offer the greatest chance of survival. The majority of live victims will be located in the existing natural voids. Members shall be able to identify voids based on the following type of collapses:

- Pancake
- Supported lean-to/ Unsupported lean-to
- V-shape
- A-frame
- Cantilever

#### 131.02 Incident Action Plan

After initial surface victim removal has been completed, the IC should ensure that all personnel are removed from the Hot Zone. This will allow for the removal of all civilians and the re-grouping of rescue personnel so that a specific action plan can be instituted for the search and rescue of the remaining trapped victims. *This action plan shall be communicated to all personnel operating at the incident.* Prior to initiating the IAP Command should order a PAR from group leaders.

#### Locating Victims

The IC should designate a **Search Group** to perform a very basic search by using the hailing (call-out) method. If **Search Group** receives a "positive" find, the building should be verified again by another means if possible.

#### Treatment of Trapped Victims

Treatment of victims should start at the earliest possible time. In some cases, trapped patients may need to receive treatment in place until they can safely be extricated. This should only occur after a structure assessment has been completed. If the structural triage deems safe enough to do so, crews should proceed with extreme caution. In extreme situations a field amputation may be necessary to save the victims life. If this is the only possible way of

extricating the victim, medical control shall be contacted and the request for a qualified physician to perform the procedure must be made. This is an absolute last resort for emergency crews.

**Rescue Operations will be performed by those having Structural Collapse technician level training as define in by NFPA 1670. It is paramount that rescuers operate within their scope of practice.**

#### Rescue Group

If the building is known to have live victims trapped, rescue teams shall attempt to locate the victims. If the rescue team must support structural components of the building prior to entry, they shall do so and make the area as safe as possible. Rescue teams are not to attempt rescue in a building that has been determined to be unsafe. All spaces shall be monitored for flammable, toxic, and oxygen deficient atmospheres before entry. All members making entry shall be on SCBA with appropriate tender to rescuer ratio of 1:1.

If at all possible, rescue teams should attempt to gain access vertically. The horizontal breaching of walls should be done only if there is no other means to reach the void space that victims may be trapped in. Horizontal breaching of load bearing walls may precipitate a secondary collapse of the structure. The potential for secondary collapse is less if rescue teams breach structural members from above or below.

NOTE: All voids and structures must be monitored for atmospheric hazards prior to entering. If the atmospheric conditions are not known in the room of desired entry, a "pilot" hole shall be punched to monitor the atmosphere prior to entry.

#### 131.03 Debris Removal

The ultimate search for victims may require a systematic general removal of debris. General debris removal basically equates to a demolition operation. All other search methods should be attempted prior to removing debris from the collapse site. **This method should only be used after a conscious decision has been made by the IC that the probability of savable lives is non-existent.** As debris is removed, all operations should be stopped periodically to search for victims. After enough debris has been removed to reasonably ascertain there are no victims, then search and rescue operations can be suspended.



## 132 TRENCH RESCUE

Trench rescue is defined as any rescue requiring extrication of a victim from a man-made or natural ditch with steep sides of four feet or greater.

Although Mayer Fire Department is not equipped with a fully functional TRT (Technical Rescue Team), the members will still be responsible for initiating the proper steps to run a safe and effective operation. This guideline outlines the very basic knowledge associated with trench rescue operations.

It is understood that not every trench rescue will require a TRT, however the request for a TRT will be left at the discretion of the IC.

### 132.01 Arrive On Scene

The first arriving unit should spot their apparatus at least 50 feet from the location of the trench failure and establish IC. The IC will then begin an immediate size-up of the situation.

The IC should immediately control the perimeter by:

- Establishing a Hazard Zone Radius of at least 150ft either direction of the trench failure.
- Keeping non-essential rescue personnel 50ft from rescue site.
- Rerouting traffic at least 300ft from the rescue site.
- Shutting down all heavy equipment operating within 300 feet of the rescue site.
- If staging is required the IC should request staging be at least 150 feet from the scene.

Command Responsibilities:

Prior to performing the rescue operation the IC should assign a Safety Officer and Extrication Group. The Safety Officer shall be responsible for overseeing the rescue operation and monitoring the time workers are within the rescue site. The Extrication Group will perform the actual extraction of the victim(s).

### 132.02 Extrication Group Responsibilities:

Extrication group should assemble all available equipment in a formal staging area for easy access. Extrication group should recognize and request, through the IC, any resource needed to safely carry out the rescue.

Extrication Group Considerations:

- When approaching the trench for assessment, approach from the ends.
- All personnel operating in the hot zone must wearing steel-toed boots, helmet, eye protection and gloves.
- Place at least 2 ladders in the trench, no more than 12 feet apart, for ingress and egress.
- Secure all utilities, pipe, or any other obstruction in the trench.
- Operations begin at the patient and move out from there.

Trench rescue is broken up into two categories, accidents with cave-ins and accidents without cave-ins.

**Accidents without cave-ins** are when the structures that make up a trench are intact and unaltered by soil decay or collapse. These rescues usually require extrication of a victim who is injured and or a victim who is trapped by an object.

**Accidents with cave-ins** are usually more technical in nature due to instability of the trench. These incidents occur when the walls or floor of a trench collapse. These accidents may require the need for a TRT.

#### Accidents Without Cave-Ins

- Create a safe zone around the victim.
- Remove objects trapping the victim (i.e., pipes, lumber, and machinery).
- Assess victim's condition.
- Proper patient packaging.
- Remove victim from the trench (vertical haul, horizontal haul).

#### Accidents With Cave-Ins

- Request TRT
- Create a safe zone.
- Uncover victim to below the diaphragm if safe to do so.
- Begin patient assessment if possible (ABC's).
- Begin ventilation if possible.
- Proper patient packaging upon disentanglement.
- Remove the victim from the trench (vertical haul, horizontal haul).

#### 132.03 Safety Considerations

- Control all hazards in the area (utilities, electric, gas, water, traffic, vibration, etc).
- Remove water from trench if necessary.

- Monitor the atmosphere in the trench.
- Ventilate the trench if necessary.
- Identify soil type and condition (packed, loose sandy, wet, etc).
- Surface encumbrance such as power poles, walls structures, and heavy equipment.
- Look for unidentified hazards (i.e., fissures, unstable spoil pile).
- Assess spoil pile for improper angle of repose and general raveling.
- Remove any tripping hazards (i.e., shovels, shores, tree roots).
- Provide level area for ground pads.
- Place ground pads around lip of trench if available.

#### 132.04 Definitions

Fissures – Long narrow cracks in the earth’s surface.

Spoil Piles – Excavated materials consisting of topsoil or subsoils that have been removed and temporarily stored during the construction activity.

Raveling - Raveling sinkholes originate with bedrock formations containing openings or cavities at the upper surface of the formation. A raveling sinkhole initially develops slowly as soil from the overlying unconsolidated strata erodes into openings within the bedrock limestone. This continual erosion and raveling of the soil into the bedrock formation creates a dome shaped cavity.

Cave-ins and collapses generally occur because of unstable soil conditions combined with improper or inadequate shoring. The potential for additional collapse must always be considered as a primary hazard and personnel must be aware that any action may disrupt the temporary stability and cause an additional collapse. The temporary stability, at any point in an operation, may be disturbed by removing soil or debris, by adding weight near the edge of an open cut, by vibration (such as vehicle movement), rain, or simply by the passage of time.

### **133 LOSS CONTROL PRACTICES**

The purpose of this procedure is to describe the process to reduce certain losses experienced during incidents requiring salvage and overhaul operations. Performing loss control is a mark toward excellence in service delivery and a signature of professionalism in our craft.

### 133.01 WATER DAMAGE

Knowing that water will do significant damage to dry wall, furniture, and carpeting, means we have to control how much water is used. For loss control purposes, wipe off counter tops and table tops with a dry towel not allowing water to sit and penetrate the surface. The use of class A foam in firefighting is another method of reducing water damage.

Furniture sitting in puddles of water can be damaged. Water will migrate up the wooden legs of furniture or over stuffed material and cause it to soak, crack, and stain. Place blocks under legs of the furniture to raise it up and out of the water. If no blocks are available, canned goods from the home serve the same purpose. Cover exposed furniture and other materials with salvage covers or plastic.

When water has filled the attic space and is pooling on gypsum board (dry wall) use a screwdriver as a hole punch to allow the water to escape. Water sitting on gypsum board is very corrosive and will eventually seep through; by making a small hole we can possibly save the ceiling and the hole is easily patched.

### CARPETING/FLOOR COVERINGS

Water on carpeting in itself is damaging, therefore, hall runners should be used to avoid staining and further damage. When possible throw a carry-all over the glass under the window to prevent the grinding of glass shards by foot steps. If debris is covering relatively undamaged carpet or flooring, it should be shoveled out and swept off.

### 133.02 SMOKE DAMAGE

After fire control is achieved, positive pressure ventilation (PPV) should begin. Strategically opening and closing doors within the structure will help evacuate smoke, in thus, reduce smoke damage. Avoid blowing smoke throughout the structure and continue to ventilate during overhaul. Take smoldering materials outside for overhaul and ensure each room is completely ventilated prior to leaving the scene.

### DRYWALL

We can salvage the structure by cutting small inspection holes, preferably 6"x 6," to check attics. Access holes where ceiling was pulled, roof openings, or walls that were opened should be "squared up" on structural members except where special hazards are present (i.e., asbestos, etc.).

Communication Benchmark:

*“Loss Stopped” Is the benchmark given when all primary and secondary damage has ceased.*

The most significant thing we can do to reduce damage is put the fire out.

### **134 SALVAGE**

This procedure describes guidelines for conducting salvage operations. Salvage includes 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 smoke, water and firefighting efforts.

Virtually every fire, small or large, produces a need for some form of salvage operations. Command will provide for salvage at all fires or other incidents posing potential damage to property. Salvage operations should involve early smoke removal and the covering of building contents with salvage covers or plastic, beginning in the most severely threatened areas first.

An early request for manpower and salvage equipment can significantly reduce loss. The first company assigned to salvage should consider the size-factors and request sufficient resources to stabilize the situation.

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

Replacement price and value should be strongly considered when performing salvage operations. It is important for crews to weigh the (worth value) of items in addition to their dollar cost.

For Example: *Family photos, business documents, family mementos, etc. While they may be very inexpensive they hold great value with the owner.*

When removal of personal property is not practical, contents should be grouped in the center of the room, raised off the floor and covered to provide maximum protection from further damage.

### 134.01 Salvage Equipment

- Salvage covers and Hall runners (Arrange for pickup, if left on scene)
- Boxes
- Rolled plastic
- Brooms
- Squeegees

## **135 OVERHAUL**

This procedure establishes guidelines for conducting overhaul operations. The goal of overhaul is to reduce the incidence of secondary fires, control loss, and provide for firefighter safety while doing so.

### Overhaul Objectives:

- Preserving evidence
- Securing the fire scene.

### 135.01 Overhaul Considerations

- Ensure overhaul is conducted safely. Full PPE, SCBA and or N95 Respiratory Mask must be worn when air monitor readings indicate Carbon Monoxide (CO) levels to be in excess of 50ppm.
- Ensure allied equipment, such as, Thermal Imaging Camera (TIC) and portable foam applicator, are utilized when necessary.
- Insure all fire is extinguished, where possible.
- During rest breaks of fire crews, ensure at least two firefighters remain in the fire area to detect any possible hidden fire and re-ignition.
- Use early and continuing positive pressure ventilation to maintain an acceptable working environment and reduce loss.
- Meet with the property owner/occupant concerning overhaul operations.
- Schedule fire companies to conduct post-incident drive-by/walk-through of fire building to check for potential re-ignition sources.
- Closely coordinate overhaul with fire investigator.
- Have utility companies pull the electrical meter and ensure other utilities are secured.
- Consider a fire watch if necessary.

- Meet with the owner/occupant and the fire investigator to advise the owner/occupant that they should not occupy the structure.
- Rotation of crews on extended and large campaign incidents.

### 135.02 Customer Relations

When/ where it is safe to do so, the Incident Commander, or company officer, may escort the property owner/occupant through the fire area to explain the need for overhaul operations. Proper loss control operations shall be completed prior to any walk-through. Providing the property owner/occupant the opportunity to remove personal possessions/valuables, or assisting them in boxing and removing these items is excellent customer service and a loss control opportunity.

### 135.03 Hidden Fires

Overhaul activities include thoroughly searching the fire scene to detect and extinguish hidden fires or "hot spots". Within our standard Risk Management profile – “Risk a little and in a calculated manner to protect savable property”.

Floor, wall or ceiling areas showing evidence of extensive decomposition due to fire should be thoroughly examined during overhaul. Additional areas to check include wooden door jambs, air conditioning vents, baseboards, door and window casings, metal to wood connections, ties, straps, conduits, and areas around light fixtures and electrical outlets, suppression crews should open as many of these construction voids as reasonably possible.

When searching for hidden fires in insulated areas, it is understood there is no possible way for firefighters to completely remove all insulation; especially “cellulose insulation”. Removing insulation in many cases means removal of large sections of ceiling. If possible, a risk/benefit discussion should be conducted with the owner/occupant to discuss the extent of insulation removal. The department cannot be held responsible for secondary fires if owner/occupants understand the risks associated with limited insulation removal.

In the event a fire is declared defensive, the overhaul activities as described above will not be conducted.

### 135.04 Post Incident Inspection

The IC is responsible for scheduling post-incident drive-by/walk-through inspections of the fire building as needed. Post-incident inspections include a walk through of the building or areas that are safe to enter. A post incident

inspection will be performed prior to the last fire department unit leaving the scene. The IC may waive post incident inspections if a fire watch is in place.

#### 135.05 Evidence Preservation

Companies performing overhaul should continuously weigh the importance of preserving evidence with the need to immediately remove debris and completely extinguish all traces of fire. In some cases, it may be necessary to monitor spot fires until investigators arrive on the scene. In these instances, evidence should remain untouched, undisturbed and in its original location. Where circumstances prohibit this, evidence should be removed under the direction and supervision of a fire investigator or company officer.

#### 135.06 Securing the Fire Scene

Securing the fire scene is also a function of overhaul. Securing refers to actions required to protect the structure and contents from any further loss after fire suppression companies have left the scene.

Once a hazard zone is established during firefighting operations, it must not be abandoned prior to removing or stabilizing the hazard. Overhaul companies must provide a means of identifying and guarding hazards that cannot be removed or stabilized. Barricades, hazard tape, and the posting of guards are all suitable methods depending upon its severity. Securing the scene also includes the actions required to insure the safety of all persons likely to visit the incident scene.

The most common hazards associated with fire scenes are windows, vent holes, doors, etc.

- Remaining glass shards should always be removed from the frames of broken windows.
- Ventilation holes, broken windows, and any other means of egress should be covered to reduce weather damage and deter vandalism (Rolled plastic is ideal for this purpose).

### **136 ARSON INVESTIGATIONS**

The Mayer Fire Department, being the authority having jurisdiction for the Mayer Fire District, shall use an established guideline to conduct fire investigations, to determine the origin and cause, within the jurisdiction of the fire district; or when requested by other agencies or jurisdictions, as determined by any current or future mutual aid agreements or memorandums of understanding (MOU). This guideline pertains to personnel responsible



for the investigation of the cause of fire, incident commanders responsible for requesting these investigators, and suppression personnel responsible for recognizing an early need for an investigation during operations at a fire.

#### 136.01 Determining Need for Investigation

If the incident commander (IC) determines that a fire investigator is needed, the duty chief or his/her representative shall use the designated district arson investigator. All requests for an investigator shall be processed between the IC and duty chief; in most instances the duty chief and incident commander will/may be one and the same. If more expedient, the IC may direct the alarm room to directly contact the arson investigator via cell phone or alpha-numeric paging/text-messaging.

The district arson investigator shall be called to perform a origin and cause investigation under the following circumstances:

- Any fire declared as a working structure fire, as determined by the IC.
- Any fire of suspected criminal origin; or fire in conjunction with any suspected criminal act.
- Any fire with an injury, including civilian or personnel from any agency involved with the fire.
- Any fire resulting in a human fatality.
- Any fire in which law enforcement initiates the need for investigation.
- Any other fires as determined by the IC, duty chief or other outside agencies involved.

Yavapai County Sheriff's Office (YCSO) is the agency having criminal jurisdiction for the Mayer Fire District. A YCSO investigator shall be required to participate in any investigation of a suspected or established crime scene.

The district arson investigator shall conduct the investigation paired with one other person; either a YCSO investigator, an investigator from another agency as determined by agreement or MOU, or a designated assistant at the investigator's discretion. The purpose for this is two-fold; for safety in a potentially hazardous environment and for liability protection during the investigation of a potential crime scene.

#### 136.02 IC and Company Officer in Charge Responsibilities

The IC shall make every possible effort to preserve the scene and gather preliminary information before the arrival of investigators.

- The scene shall be secured, and evidence preserved, maintaining a documented chain of custody; until the investigator completes the investigation and releases the scene for overhaul, if needed.
- If necessary, the scene shall be secured by YCSO until appropriate warrants are issued to re-enter the structure for the purposes of investigation.
- If scene security has been compromised, the investigator shall be notified upon arrival at the scene.
- All non-essential personnel shall be kept out of the investigation area.
- The IC shall attempt to keep witnesses at the scene, or obtain reliable contact information for the investigator.

If the IC or officer-in-charge determines an obvious cause of the fire, an investigator may not be needed at the scene. If an investigator is not called, it is the responsibility of the IC or officer-in-charge to accurately document the following information in the narrative portion of the report:

- Describe the scene, including initial actions taken by suppression personnel in the control and extinguishment of the fire. Include names and contact information of all initial crew, and any other pertinent information as needed.
- Describe the exterior and interior of the property, including area(s) and point(s) of origin, fire cause and travel, and burn patterns. Take photos to support the report as necessary.
- Describe any other structures or property exposed to the fire, and document the amount of damage sustained.
- Describe the presence of hazards or fire code violations which may have contributed to the cause of the fire.
- Record all contact information for occupants and owners (may be different persons) of all property affected by the fire; and identify which parties were present during the fire.
- Preserve and report all items of evidence, as found. If evidence needs to be collected, an investigator shall be utilized by the IC or officer-in-charge. If an investigator is needed by a company officer, the duty chief shall be notified.

If an investigator is not utilized by the IC or officer-in-charge, all reports and supporting documentation (interviews, statements, photographs) shall be forwarded to the district fire investigator for review.

### 136.03 Fire Investigator Responsibilities

- The responding fire investigator shall report to the IC before beginning the investigation
- Investigators working in hazardous environments shall wear appropriate PPE as stated in Tab 120 of the Mayer Fire District Safety and Loss Prevention Manual.
- The investigator shall conduct a thorough and comprehensive investigation using the approved scientific method, as described in NFPA 921 “Guide for Fire and Explosion Investigators”; to include direct scene assessment, interviews of individuals, coordination of evidence collection, and interaction with other involved agencies.
- The investigator shall document all findings pertaining to each incident; whether personally investigated, or by review of IC/officer-in-charge assessment; and submit a final written report to the Fire Chief, utilizing an approved format.

## **137 ANIMAL EMERGENCIES**

The objective of this procedure is to provide field personnel with guidance in handling animals both domesticated and wild that are encountered as a result of an EMS, fire or other response. These animals may require medical attention and the RP is unknown or unable to care for the animal, or the animal presents a danger to the general public. The pets or animals we encounter might also be trapped or injured.

The pets that we encounter are often times considered by the owners a part of the family. While our primary mission is for the protection and care of people, we should attempt to provide some level of care to animals in distress whenever feasible and safe to do so as a part of our commitment to customer service. We should display an open, caring concern for pets and animals when we deal with the public in these types of situations.

### 137.01 Bee Emergencies

This guideline shall serve to aid fire department personnel in the safe use of bee equipment, personal protective equipment (PPE), and response tactics while managing aggressive and non-aggressive bee incidents. Mayer Fire is not a bee removal service. If there is no emergency, assist the RP with the bee removal list.

#### 137.01a Response

When Mayer Fire receives a call for a bee attack, two fire department apparatus, one ambulance and one engine company with foam capabilities

shall respond. Proceed to the scene and arrive being careful not to commit into the path of the source of bees – remain approximately 100 yards from the incident. Protective clothing shall be donned prior to entering the scene and exiting the apparatus, if possible.

#### 137.01b Protective Clothing

- IC – duty uniform and radios, located inside vehicle or building safe from attack.
- Firefighters – full structure gear, with firefighter helmet bee veil. Ankles, wrists, collar, and waist shall be taped tight to prevent bees from crawling up the chest, arms, neck, or legs.
- Options – Level B chemical hazmat suit with SCBA mask (bottle optional), and rubber or structure gloves. Tape all openings with duct tape.

#### 137.01c On-Scene Tactics & Strategies

Upon initial arrival at a bee incident, a rapid scene size-up should be made and transmitted. Determine if there are any victims who will require rescue and/or medical treatment.

Firefighters shall pull a 1-3/4" hose line that is connected to the apparatus foam system. The hose line shall be pulled by the firefighters at a quick pace toward the patient, with a full fog pattern on the nozzle. Once the firefighter sees, or senses bee activity, he/she should begin sweeping the air surrounding the firefighters and patient, thus creating an “umbrella” effect with the foam. The patient should be removed quickly, while continuing to sweep the surrounding air with the hose stream. The foam shall continue to be sprayed into the air and on the firefighters and patient while the firefighters retreat to a minimum safe distance of 150 feet from the swarm. At that time, members should re-evaluate whether the area is far enough away to begin more definitive treatment of the patient.

EMS crews, in PPE, should be ready to receive the patient and begin treatment in the back of the ambulance. It is important to open and close the doors quickly to prohibit bees from entering. Leave the scene code 2, to avoid creating noise that may attract the attacking swarm, and start EMS treatments en-route.

#### 137.01d Securing the Area

The foam will kill the bees within approximately 60 seconds of contact. The foam or exterminator should be used to kill the swarm after patients have been removed.

If the use of foam is chosen, the same sweeping motion should be used to approach the bee colony, completely flooding the hive with the hose line. This is an acceptable action to prevent further exposure to bee attacks.

If an exterminator is chosen, keep the bees contained by foaming the entrance and fogging the air until the exterminator has completed the removal or extermination.

### 137.02 Snake Removals

Due to the nature of our surroundings, we often receive special duty service calls for snake removals. Each station has a snake tong and 5 gallon vented bucket used for the control and capture of the snake. When called upon to remove, these following steps are to be followed;

**Treat every snake as venomous.**

- Proper PPE for capturing a snake includes bunker pants, bunker boots, and leather gloves.
- Be sure to have an escape route should you need it.
- Keep others away from the area (an assistant is very helpful for this).
- Approach the snake cautiously, preferably at an angle rather than head on.
- Maintain a safe distance. A snake may be able to strike a distance of up to two-thirds or more of its body length. If you stay more than one body length away you will be quite safe.
- Set up the container.
- Gently put the tongs around the animal. It is best to grasp the snake somewhere slightly before or at mid-body. Farther forward or backward risks injury to the snake and makes the creature more difficult to manipulate, which increases the risk to you.
- Gently apply enough pressure to slow or stop the animal from moving through the tongs. Too little pressure and the animal escapes, too much and it may be injured.
- Put the lid on the container without putting your fingers, or any other part of your body, on the underside of the lid or in a place where the animal can strike them. Utilizing the snake tongs to place the lid onto the bucket works the best.
- Secure the lid.

- Relocate the animal, preferably a short distance from where it was captured, in an area where the snake doesn't pose a threat to people or their pets.
- Never attempt to handle a snake even if it appears deceased as it may still bite reflexively and envenomate.
- At no time shall an employee pursue a snake that is difficult to retrieve, i.e. crawl spaces, tight quarters, or any area that increases their risk of injury.
- In the event, the snake(s) cannot be safely relocated during retrieval, it maybe necessary to terminate the snake and or efforts due to the associated risk to personnel. This should only be used as a last resort.

### 137.03 Handling Domesticated & Exotic Animals

For incidents involving domesticated and exotic animals, refer to the Yavapai County Sherriff's Office division of Animal Control. A request should be made through our dispatch center.

Caution should be used in approaching any animal, especially one that is injured. At no time is the safety of our members or that of the public to be compromised by attempting to capture an animal. When dealing with pet or animal rescues, they should be handled similar to "property" when evaluating the risk/gain profile of the incident.

### **TAB 200 MINIMUM COMPANY STANDARDS (MCS)**

All Mayer Fire Department MCS's techniques are based on the IAFC and NFPA approved firefighter skills defined in the *Fundamentals of Fire Fighter Skills* by Jones and Bartlett.

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## **201 Fire Hydrant Operation**

### **201.01 Purpose**

While wearing full personal protective clothing (no SCBA), the firefighter will demonstrate the skills and abilities to safely and efficiently make a fire hydrant connection for the purpose of charging a large diameter hose line with water in order to supply a fire apparatus.

**Clock start:** When vehicle parking brake is set.

**Clock Stop:** When Firefighter is prepared to charge supply hose, (hands on hydrant wrench on hydrant).

**Total time allowed:** 1 minute 35 seconds

### **201.02 Procedures**

1. At the set of the apparatus parking brake, the firefighter steps off the truck.
2. The firefighter pulls enough hose off truck to wrap hydrant.
3. The firefighter wraps the hydrant 360 degrees with the supply line crossing over itself.
4. The firefighter gives order/signal to driver to begin driving.
5. The firefighter waits until one coupling drops to ground, or vehicle stops, whichever is first.
6. The firefighter un-wraps the hydrant.
7. The firefighter flushes the hydrant, (3-5 seconds or clean water flows).
8. The firefighter straightens out the supply hose and connects it to the hydrant.
9. The firefighter waits for signal to open hydrant.

### **201.03 Critical criteria**

If any of the following occur the evolution is considered failed.

1. The firefighter does not fully wrap hydrant 360 degrees.
2. The firefighter does not flush hydrant prior to connecting hose.
3. The firefighter performs an unsafe act.
4. The evolution is not completed in allotted time.

## **202 Single Person Extension Ladder Raise 24'**

### **202.01 Purpose**

While wearing full protective clothing including SCBA, the firefighter will demonstrate the skills and abilities to safely and efficiently place and raise an extension ladder using a single person evolution.

**Clock start:** When vehicle parking brake is set.

**Clock stop:** Upon completion of tying the halyard with ladder in correct climbing angle.

**Total time allowed:** 1 minute 45 seconds

### **202.02 Procedures**

**The apparatus will be parked approximately 50 feet from the ladder deployment area.**

1. At the set of the apparatus parking brake, the firefighter steps off the truck.
2. The firefighter will remove the extension ladder from the apparatus.
  - 2a. If a roof or straight ladder must be removed first to access an extension ladder, the ladder must be placed in a safe location.
3. The firefighter will carry the ladder from the apparatus to the structure being laddered.
  - 3a. The firefighter may use either the shoulder or straight arm (suitcase) carrying method.
  - 3b. The ladder must be placed against the structure from a position of being flat on the ground with the fly up or by using butt plant method.
4. The firefighter will raise the ladder to the side of the building.
  - 4a. The firefighter should do this by performing the rung raise.
5. The firefighter will extend the ladder to the correct height.
6. The firefighter will pull the heel of ladder away from building to approximate climbing angle.
7. The firefighter will flip the ladder so that the fly is out.
8. The firefighter will set the correct climbing angle.
9. The firefighter will tie off the halyard



**202.03 Critical criteria**

If any of the following occur the evolution is considered failed.

1. Roof or straight ladder left in an unsafe location or position.
2. The use of improper carrying techniques, or butt of ladder is not first.
3. Ladder not 3 to 5 rungs above roof line.
4. Fly of ladder is not out.
5. The correct climbing angle is not set.
6. The halyard is not tied off.
7. The firefighter performs an unsafe act.
8. The evolution is not completed in allotted time.

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## **203 Self Contained Breathing Apparatus (SCBA)**

### **203.01 Purpose**

While wearing full personal protective clothing, with the exception of gloves, the firefighter will demonstrate the skills and abilities to safely and efficiently don a SCBA from the ground level, off apparatus tailboard, or from compartment.

**Clock start:** Upon opening the tank valve.

**Clock stop:** When firefighter gloves are on.

**Total time allowed:** 45 seconds

### **203.02 Procedures**

**The firefighter will not be required to breathe SCBA air during this evolution.**

1. The firefighter will turn on and don his/her SCBA completely.
  - 1a. The firefighter may use either the over the head, or coat method donning techniques.
  - 1b. The chest strap being connected is optional
2. Once the SCBA is donned, all PPE must be on including gloves.

### **203.03 Critical criteria**

If any of the following occur the evolution is considered failed.

1. SCBA tank valve not opened completely.
2. Helmet not in place during over the head donning method.
3. Skin is showing around nomex hood.
4. Helmet chin strap in not secured.
5. Shoulder straps are not tightened sufficiently.
6. Waist belt is not connected.
7. The firefighter performs an unsafe act.
8. The evolution is not completed in allotted time.

## **204 Water Tender Operation**

### **204.01 Purpose**

While wearing helmet and gloves, the Firefighter will demonstrate the skills and abilities to safely and efficiently support an engine company with a water supply from a water tender, and then perform a change over evolution at the engine (unit being supplied).

**Clock start:** Water tender sets parking brake

**Clock stop:** Completion of change over, with engine at proper pump discharge and booster tank top off occurring.

**Total time allowed:** 2 minutes 15 seconds

### **204.02 Procedures**

1. Place water tender behind unit to be supplied.
2. Set water tender parking brake.
3. Engage water tender pump.
4. Set wheel chocks.
5. Connect 50 feet (minimum) of 2 ½ inch hose to both vehicles.
6. Charge supply line (50 psi).
7. Perform change over evolution (at unit being supplied).
8. Re-set proper pump discharge pressure.
9. Top off engines booster tank.

### **204.03 Critical criteria**

If any of the following occur the evolution is considered failed.

1. Does not set water tender parking brake.
2. Does not chock water tender's wheels.
3. Fails to set pump discharge pressures at proper PSI.
4. Does not perform change over evolution.
5. Does not begin topping off engine's booster tank.
6. Creates water hammer.
7. Causes a fluctuation in water pressure either greater than or less than 30 PSI of the operating pump discharge pressure.
8. The firefighter performs an unsafe act.
9. The evolution is not completed in allotted time.

## **205 Initial Attack Line with 2-person crew and no water supply**

### **205.01 Purpose**

While wearing full protective clothing including SCBA, (mask in place, no air) a two person crew will demonstrate the skills and abilities to safely and efficiently deploy an initial, 200 foot, 1 3/4 inch, attack hand-line .

**Clock start:** Engine parking brake is set

**Clock stop:** Both crew members are at the nozzle of a charged hand-line

**Total time allowed:** 3 minutes 20 seconds

### **205.02 Procedures**

205.02a Captain's position:

1. Step's off the truck and Don's SCBA.
2. Perform a hot lap, with tool of choice.
  - 2a. For this MCS, a hot lap will consist of 4 walked laps around the apparatus.
3. Meet crew member at nozzle.

205.02b Driver/Operator's position:

1. Sets parking brake.
2. Engages pump.
3. Sets wheel chocks.
4. Deploys hand-line until fully extended.
5. Charges hand-line.
  - 5a. Pump Discharge Pressure should be between 115 -156 PSI
6. Don's SCBA
7. Meets crew member at nozzle

### **205.03 Critical criteria**

If any of the following occur the evolution is considered failed.

1. Parking brake not set.
2. Wheel chocks not in place.
3. Hand-line not fully extended.
4. No tool at nozzle.
5. Pump discharge pressure not set properly.
6. An unsafe act is performed.
7. The evolution is not completed in the allotted time.

## **206 Defensive Hand line with 2-person crew and no water supply (Keenan Loop)**

### **206.01 Purpose**

While wearing full protective clothing including SCBA, (with no mask) a two person crew will demonstrate the skills and abilities to safely and efficiently deploy a 200 foot, 2 1/2 inch, defensive attack hand-line.

**Clock start:** Engine parking brake is set

**Clock stop:** Keenan loop set with water flowing from a fog nozzle

**Total time allowed:** 2 minutes 30 seconds

### **206.02 Procedures**

206.02a Captain's position:

1. Step's off the truck and Don's SCBA.
2. Fully extends 200 feet of 2 ½ inch hose with large caliber fog nozzle
3. Places hose in Keenan loop with nozzle end of hose crossing under the hose, within 2 feet, of the last coupling connection.
4. Operates nozzle

206.02b Driver/Operator's position:

1. Sets parking brake.
2. Engages pump.
3. Sets wheel chocks.
4. Connects and/or charges hose-line.
  - 4a. Pump Discharge Pressure is set at between 106-130 PSI

Note: The Driver/Operator may assist in the deployment of the hose.

### **206.03 Critical criteria**

If any of the following occur the evolution is considered failed.

1. Parking brake not set.
2. Wheel chocks not in place.
3. Keenan loop not in place.
4. Pump discharge pressure not set properly.
5. An unsafe act is performed.
6. The evolution is not completed in the allotted time.

## **207 Horizontal Standpipe with 2-person crew and no water supply**

### **207.01 Purpose**

While wearing full protective clothing including SCBA, (with mask, no air) a two person crew will demonstrate the skills and abilities to safely and efficiently deploy a 100 foot 1 ¾ attack line connected to a 200 foot, 2 1/2 inch line with a gated-wye.

**Clock start:** Engine parking brake is set

**Clock stop:** Both Crew members are at the nozzle of a charged handline.

**Total time allowed:** 4 minutes 25 seconds

### **207.02 Procedures**

207.02a Captain's position:

1. Step's off the truck and Don's SCBA.
2. Takes one 100 foot highrise pack and tool (of choice) to gated-wye
3. Hooks up and fully extends the 1 ¾ inch handline
4. Operates nozzle

207.02b Driver/Operator's position:

1. Sets parking brake.
2. Engages pump.
3. Sets wheel chocks.
4. Deploys 200 feet of 2 ½ inch hose with gated-wye.
5. Connects and/or charges 2 ½ inch line to gated-wye.
  - 5a. Pump Discharge Pressure is set at between 122-130 PSI.
6. Dons full PPE and SCBA.
7. Meets firefighter at nozzle.

### **207.03 Critical criteria**

If any of the following occur the evolution is considered failed.

1. Parking brake not set.
2. Wheel chocks not in place.
3. 200 feet of 2 ½ inch and 100 feet of 1 ¾ inch line not fully deployed
4. Pump discharge pressure not set properly.
5. An unsafe act is performed.
6. The evolution is not completed in the allotted time.

## **208 Drafting**

### **208.01 Purpose**

While wearing the appropriate personal protective clothing the firefighter, with the assistance of one other firefighter, shall demonstrate the skills and abilities to safely and efficiently create and maintain a water supply by drafting from a static water source.

**Clock start:** When vehicle parking brake is set.

**Clock stop:** When water is flowing and a draft is maintained.

**Total time allowed:** 10 minutes

### **208.02 Procedures**

Driver/Operator's position:

1. Set's parking brake
2. Set's wheel chocks.
3. Removes main steamer cap or valve and connects appropriate length of large diameter hard suction with strainer.
4. Engages pump.
5. Pulls draft. (Do not activate primer pump for more than 45 seconds)
6. Charges a 2.5 inch line with no less than 50 feet of hose with nozzle.
7. Maintains draft while water is flowing.

### **208.03 Critical criteria**

If any of the following occur the evolution s considered failed.

1. Parking brake is not set.
2. Wheel chocks are not in place.
3. Does not pull or maintain draft while water is flowing.
4. Engages primer pump for more than 45 seconds at a time.
5. The firefighter performs an unsafe act.
6. The evolution is not completed in the allotted time.

## **209 Progressive hose lay (Wildland Hose Pack)**

### **209.01 Purpose**

While wearing full personal protective equipment, the Firefighter will demonstrate the skills and abilities to safely and efficiently deploy a progressive hose lay while safely and aggressively performing a direct wildland fire attack.

**Clock start:** Firefighter sets parking brake/places transmission in park.

**Clock stop:** Firefighter fully extends a single hose pack and charges lateral.

**Total time allowed: 3:00**

### **209.02 Procedures**

1. Dons Travis Pack upside down.
2. Remove approximately 5 feet of 1.5" trunk line from the pack.
3. Connects 1.5" trunk line to a discharge.
4. Starts/engages pump.
5. Charge a secondary attack line for a direct attack at 100psi.
6. Deploys Travis Pack until full extended in tandem with secondary attack line.
7. Remove gated-wye and 100' of 1" lateral hose line from hose pack.
8. Request 1.5" trunk line to be charged with water at 100psi.
9. Open gated-wye and allow for the 1" lateral hose line to fully charge.

### **209.03 Critical criteria**

If any of the following occur the evolution is considered failed.

1. Does not set apparatus parking brake/place transmission in park.
2. Does not chock apparatus wheels.
3. Fails to don proper PPE.
4. Fails to set pump discharge pressure at proper PSI.
5. Does not deploy a secondary attack line.
6. Creates water hammer.
7. Lateral 1" hose line becomes entangled while charging.
8. The firefighter performs an unsafe act.
9. The evolution is not completed in allotted time.



## **TAB 300 COMMUNICATIONS**

### **301 Radio Procedures**

In order to acknowledge, respond to, and manage emergency incidents in a proficient manner the Mayer Fire Department shall follow a standard set of radio procedures using clear text language under the Sedona Fire District dispatching policy.

### **302 Communication Order Model**

In order to assure information is transmitted and received correctly, the Mayer Fire Department should use the following order model guidelines.

The Sender will give the unit ID of who they are contacting followed by their unit ID.

The Receiver will then give the sender unit ID followed by their unit ID, and then announce that they are ready to receive.

The Sender will then state their message or order.

The Receiver will then acknowledge receiving the message by restating it.

*Example 1: "Alarm, E22."*

*"E22, Alarm, Go ahead."*

*"Alarm, E22 is Available on Radio."*

*"E22, Alarm copies, E22 is Available on Radio."*

*Example 2: "E22, IC."*

*"IC, E22, Go ahead."*

*"E22, IC, I need you to assume Treatment Group."*

*"IC, E22 copies, E22 will be Treatment Group."*

### **303 Dispatch Acknowledgement and Response**

Upon being dispatched to an emergency incident, the appropriate units will acknowledge receipt of the dispatch and advise the Dispatch Center of their response by stating their unit designation and repeating the incident address.

*Example: "Alarm, Battalion 2 is responding to 11975 S. Highway 69."*

Should a unit begin their response from a location other than their first due, they should announce the general area that they are responding from, after restating the incident address.

*Example: "Alarm, Engine 22 is responding to 17300 E. Mule Deer from Mayer".*

### **304 Additional Information**

Anytime additional information is given by the Dispatch center to units either responding to, or already on the scene of an incident, it must be acknowledged that it was received. In the event more than one unit is responding, the first due unit should acknowledge the additional information.

### **305 Radio Reports**

#### **305.01 On Scene Reporting**

For incidents that do not require the formal establishment of command, units arriving on the scene shall be required to report their status of being on scene.

*Example: "Alarm, R21 is on scene."*

For incidents that will require the formal establishment of command, the first arriving unit arriving on scene shall report their status of being on scene followed by a brief "size-up" report. All units arriving after the first unit shall report their status of being on scene by following the guidelines under section 103, Approaching the Scene.

#### **305.02 Size-up reports**

Size-up reports should answer the following questions.

1. Who you are, or what your unit ID is?
2. What you have or what did you find?
3. What you are doing or what actions are being taken?
4. What is your mode of operation or Strategy, Offensive / Defensive?
5. Who is Command (IC)? Are you Assuming IC or Passing IC?

## 305.02A Residential or Commercial

For Residential and Commercial assignments the initial on scene size-up report should include or use the following information when warranted.

### Identify the unit on scene

#### Structure Type

- Occupancy
- Size (small, medium, large)
- Height (single story, two story, multi-story)

#### Apparent Conditions

- Nothing showing
- Smoke showing
- Working Fire
- Fully involved, etc.

#### Actions Being Taken

- Laying a line
- Search and Rescue
- Fire Control
- Attacking with a hand-line
- Evacuation, etc.

#### Define the Strategy

- Offensive
- Defensive

#### Establishment or Identify Command (IC)

- Assume Command
- Pass Command

### 305.02B Rescue or Mass casualty Assignments

For incidents that involve transportation vehicles and or have multiple patients, the size-up report will require information regarding medical driven tasks. The following is recommended information that should be provided. This information may also be given in a follow up report.

#### The number and type of vehicles involved.

- Passenger Car
- Tractor Trailer
- Bus
- Planes, etc.

#### Apparent damage or type of accident to the vehicles

- Roll-over
- T-bone
- Head-on
- Heavy
- Light
- Fuel leak
- Hazmat spill, etc.

#### If extrication is needed

- Which vehicles require extrication
- Number of trapped patients

#### Triage report

- Number of Patients
- Type of Injuries
- Medical Priorities, etc.

When possible, size-up reports should be done as a part of the initial on scene report. It is understood that there are times that a better investigation of the incident is required in order to provide an accurate description of the scene. As much information as possible should be relayed in the initial size-up. Follow-up reports should be provided as soon as possible and should include all pertinent information, including the need for additional resources.

### 305.03 Follow-up reports

During “Working Fire” incidents in order to keep on scene reports as brief as possible, follow-up reports should be used to include additional information that should be announced. Examples of the type of information that may be relayed in follow-up reports include but is not limited to;

- Establishing I-RIC or RIC teams
- Identifying Accountability locations
- Identifying the A, B, C, or D side of the incident
- Identifying Safety problems, etc.

### 305.04 Progress reports

Anytime the need to obtain information regarding a specific area of an incident is needed, the IC should request a progress report. Likewise, when a Group or Division Supervisor needs to relay information, request additional resources, or needs an issue addressed they can provide a progress report to the IC. Progress reports may also be directed to Dispatch based on the circumstances.

The best way to request a progress report would be the use of the “CAN” report. A “CAN” report is a request of Conditions, Actions, and Needs.

#### Conditions:

What the current conditions are in your area of responsibility?

*Fire Example: light smoke, heavy fire, fire in the attic, etc.*

*Medical Example: 2 additional patients, upgrading a patient, etc.*

#### Actions:

What you are currently doing?

*Fire Example: pulling ceiling, attacking the seat of the fire, etc.*

*Medical Example: working a medical code, securing vehicle, etc.*

#### Needs:

What additional resources do you need to assist you, if any?

*Fire Example: ventilation, pike poles, another hand line, etc.*

*Medical Example: 2 ALS personnel, another Rescue, etc.*

### 305.05 Triage Reports

Triage reports should be provided to Command and Dispatch on all incidents with multiple patients. Triage reports can be broken into initial triage reports and Follow-up Triage reports.

#### Initial Triage Report

An initial triage report should be included with the initial size-up report and should provide the total number of patients and their medical priorities.

#### Follow-up Triage Report

The Follow-up Triage Report should be done as soon as more time permits and allows for a more detailed accounting of all patients and their pertinent information. A Follow-up Triage Report should include the following information.

- Patient number
- Patient's age
- Patient's sex
- Patient's medical priority, or triage assignment  
(901-H, Immediate, Delayed or Minor)
- The unit transporting the patient, if any
- The Patient' hospital destination

### **306 Radio Language and Benchmark Terminology**

The following phrases and terms are the most commonly used Mayer Fire Department radio communications languages.

#### **“Available on Radio”**

Used to advise that a unit is available but not in their assigned station.

#### **“Available in District”**

Used to advise that a unit is available back in District after being out of it.

#### **“Returning to District”**

Used to advise that a unit is in the process of returning to the District.

#### **“Clearing the Scene”**

Used to advise that a unit is leaving a scene, but may or may not be available.

#### **“Available in Quarters”**

Used to advise that a unit is now back in their assigned station available.

**“Approaching the Scene”**

Used to advise that a unit is nearing the scene of an incident and is ready for assignment.

**“On Scene”**

Used to advise that a unit is on the scene of an incident.

**“Enroute to Hospital”**

Used to advise when a Rescue or Ambulance has left an emergency scene and is responding to a hospital. Hospital destination should also be announced.

**“Arriving at Hospital”**

Used to advise that a Rescue or Ambulance is on scene at a hospital with a patient. Hospital destination should also be announced.

**“Primary All Clear”**

This is the initial benchmark report given at an incident declaring that a hot zone has been quickly searched and no life safety issues exist.

**“Secondary All Clear”**

This is the benchmark report used after a more comprehensive search of a hot zone has been performed and no life safety issues exist.

**“Under Control”**

This is the benchmark given when the incident has been brought under control or stabilized and will not extend further.

**“Loss Stopped”**

This is the benchmark used to report that property conservation has been completed

**“PARS”**

These are Personnel Accountability Reports which are given throughout an incident.

**“Ventilation Complete”**

This is the benchmark given after the ventilation operation has been completed.

**“Utilities Secured”**

This is the benchmark given once all utilities including electric, natural gas and propane have been shut off.

**“I-RIC in place”**

This is the benchmark given once an I-RIC had been established as required by OSHA law.

**“Command is Terminated”**

This is the term used to advise that the Formal Command process has been discontinued.

**“All Immediates are Transported”**

This is the medical benchmark used to advise that all immediate patients have been transported from the emergency scene.

**“All Patients are Transported”**

This is the medical benchmark used to advise that all patients have been transported from the emergency scene.

**“Triage is Complete”**

This is the medical benchmark used to advise that the triage process has been completed. This should be followed by either an initial or follow-up triage report.

**“Extrication is Complete”**

This is the medical benchmark used to advise that all patients have been extricated or disentangled from a vehicle or other restricting structure.

**“Emergency Traffic”**

Used to gain control of the radio channel traffic in order to provide announcement that is detrimental to the safety of all personnel on an emergency scene.

**“MAYDAY”**

Used ONLY to announce a missing, trapped, or distressed Firefighter.



# Mayer Fire Department



## Staff Functions

New: April 2013

## **Table of Contents**

This manual is designed to establish a basic guide for any member to be able to follow in order to perform many of the Mayer Fire Department's assigned tasks. They are not intended to be inclusive, only a basic guide.

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01

Mayer Fire Department  
Staff Function

## **PERSONNEL ACCOUNTABILITY REPORTING SYSTEM**

### **Definition:**

The employee assigned to oversee the Personnel Accountability Reporting System is responsible for the distribution of PAR tags and vehicle passport boards.

### **Tasks:**

- Ensure each department operational member has a minimum of 6 accountability tags.
- Ensure each appropriate emergency vehicle has an accountability passport.
- Keep a detailed log of all personnel and vehicle accountability systems.
- Ensure each command vehicle and engine has an accountability status board.
- Be the direct contact for the department PAR tag vendor.

### **Qualifications:**

Must be able to maintain detailed records including but not limited to; in service par tags, vendor contact information, and budgetary costs.

02

Mayer Fire Department  
Staff Function

## **ALPHA-NUMERIC PAGER / PHONE LIST**

### **Definition:**

The employee assigned to oversee the Alpha-Numeric Pager / Phone List is responsible for the care, maintenance, and distribution of fire department personnel and vehicle pagers. In addition, this employee is responsible to update and maintain the department pager and phone list.

### **Tasks:**

- Ensure each department member has a functional pager.
- Ensure each appropriate emergency vehicle has a functional pager.
- Keep a detailed log of all pagers in service.
- Be the direct contact for the Dispatching agencies pager technician.
- Be the direct contact for the pager vendor service.
- Be the direct contact for the computer paging system software.
- Return out of service pagers to the proper vendor.
- Ensure all paging system contacts are current.
- Update all vital paging software systems.
- Ensure all contact and vendor information is current.
- Ensure the department phone and pager contact list is accurate.
- Distribute the phone list electronically when updated.

### **Qualifications:**

Must be able to maintain all current alpha-numeric records, vendor contacts, and pertinent related documents, software, and programs. Must also have a working knowledge of budgetary cost and restraints.

03

Mayer Fire Department  
Staff Function

## **FIRE SERVICE GROUND LADDERS**

### **Definition:**

The employee assigned to oversee the Fire Service Ground Ladders is responsible for ensuring the NFPA compliance of all department ladders. This includes assuring they are maintained and functional and that they are cleaned as needed and inspected and tested according to NFPA standards.

### **Tasks:**

- Ensure the monthly ladder inspection, cleaning, and lubrication is completed.
- Ensure the ladder inspection paperwork is being updated monthly.
- Ensure that the annual NFPA ladder testing be performed and documented.
- Provide updates, when applicable, to the vehicle and equipment maintenance policy.
- Be the direct contact for the department ground ladder vendor.
- Recommend repair and or replacement as needed.

### **Qualifications:**

- Must be knowledgeable of NFPA 1932, *Standard on Fire Department Ground Ladders*.
- Must be able to maintain detailed records on all ladders, vendor contact information, and any pertinent documents related to this function.

04

Mayer Fire Department  
Staff Function

## **IDENTIFICATION CARDS**

### **Definition:**

The employee assigned to oversee the ID Cards is responsible for the creation and distribution of Mayer Fire Department employee identification cards

### **Tasks:**

- Competency in use of computer desktop publishing (MS Office) to create templates for ID cards.
- Collection of employee information to be used for ID cards.
- Production (printing and lamination) of ID cards.
- Distribution of ID cards to members or supervisors as needed.

### **Qualifications:**

- Must have knowledge in digital camera and related computer software.

05

Mayer Fire Department  
Staff Function

## **RESOURCE BOOK**

### **Definition:**

The employee assigned to oversee the Resource Book is responsible to insure that all apparatus have a Resource book for phone numbers that may be needed that are not readily available by normal means.

### **Tasks:**

-To add and update any phone numbers for situations that may need to be used for unusual circumstances.

### **Qualification:**

-Must have basic computer skills.

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Mayer Fire Department  
Staff Functions

## **FIRE PREVENTION AND PUBLIC EDUCATION**

### **Definition:**

The employee assigned to oversee this area is under general supervision and should be able to coordinate fire prevention and public safety education to all age groups.

### **Tasks:**

- Follow Administrative and Operating procedures.
- Set up a Fire Prevention week education day with the Mayer Jr/Sr High, Mayer Elementary, Sequoia Ranch, Mayer Day Care, and Spring Ridge Academy.
  - Contact the institutions and coordinate the day, times, number of students and needed supplies.
  - Print schedule and deliver to the institution and Mayer Fire personnel to coordinate shifts and apparatus.
- Recommend annual prevention budget to the Fire Chief, order and maintain prevention supplies.
- Keep records of expenditures from the program.
- Coordinate Junior Fire Stop Program.
- Coordinate the Mayer Firefighters as role models (FARM) program with participating Schools.
- Coordinate Fire Station visits with members of the public.
- Schedule CPR classes, order supplies, and schedule instructors.
- Fulfill all the responsibilities of the ASHI Training Center Coordinator.
- Write and submit Public education and prevention articles for local newspapers.
- Coordinate Crews to attend Fire Drills at local schools.

### **Qualifications:**

- CPR / Instructor certified.
- Knowledge in fire prevention practices.
- Ability to speak in a public forum.



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Mayer Fire Department  
Staff Function

## **GEOGRAPHIC INFORMATION SYSTEMS (GIS) (Mapping)**

### **Definition:**

Establish a mapping system usable by Mayer Fire District and its surrounding agencies; and to update maps as needed.

### **Tasks:**

- Become competent with current mapping software (ArcGIS v9.2); and seek training updates as they are available to maintain competency.
- Generate maps and create map books for use by the department, or through electronic distribution to other agencies as needed.
- Work in conjunction with Yavapai County GIS and Sedona FD Alarm to ensure that maps are concurrent and up-to-date.
- Physically update map books or distribute map updates as needed.
- Conduct training on map use, as needed, for the department.

### **Qualifications:**

- Must have knowledge in computer and mapping software.

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Mayer Fire Department  
Staff Function

## **FIRE EXTINGUISHERS**

### **Definition:**

The employee assigned to oversee Fire Department owned fire extinguishers is responsible to insure that all apparatus and Mayer Fire Department buildings have up to date fire extinguishers.

### **Tasks:**

-To add, update, and insure that all fire extinguishers are inspected on a yearly basis.

### **Qualifications:**

- Must have basic computer and report writing skills.
- Must maintain all related records.
- Must maintain all vendor contact information.

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Mayer Fire Department  
Staff Function

## **FACILITIES MAINTENANCE**

### **Definition:**

The employee assigned to oversee facilities maintenance will be responsible for maintaining the functionality of stations, with regard to repairs, improvements, and landscaping.

### **Tasks:**

- Coordinates on-going station maintenance projects.
- Outlines future department facilities projects.
- Works within the annual maintenance budget.
- Coordinates and follows up on contractors' and warranty work.
- Delegates projects as needed.
- Maintains building maintenance records.

### **Qualifications:**

- Must have a general knowledge of building construction and repair.
- Good records keeping skills.

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Mayer Fire Department  
Staff Function

## **HAZARDOUS MATERIALS COORDINATOR**

### **Definition:**

The employee assigned to oversee this area is under general supervision and is responsible to coordinate all monthly and annual hazardous materials refresher training for Mayer Fire Department.

### **Tasks:**

- Follows Administrative and Operating procedures.
- Sets up training as outlined in the MFD policies.
- Creates Monthly Hazardous Materials training outlines.
- Sets up yearly refresher for all employees.
- Coordinates and maintains all Hazardous Materials related equipment and records.
- Maintains contact information for related vendors

### **Qualifications:**

- Must have 40 hour Hazardous Materials certification (Tech. level preferred).
- Knowledge or Certification as a Fire Service Instructor I.

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Mayer Fire Department  
Staff Function

## **VOLUNTEER COORDINATOR**

### **Definition:**

The employee assigned to oversee the Volunteers is responsible for coordinating and supervising all Mayer Fire Department Volunteers.

### **Tasks:**

- Follows Administrative and Operating procedures.
- Sets up training as outlined in the MFD Fire-Corps-Policy.
- Keep records of Volunteers' time.
- Supervise and handle disciplinary actions as outlined in policy.
- Initiate task books and supervise training.
- Keep all FEMA Fire-Corps information up to date.

### **Qualifications:**

None

## **VEHICLE DRIVER EDUCATOR**

### **Definition:**

The employee assigned to oversee Driver's training is responsible for establishing equal standards of training, within the department, on the operation of emergency and non-emergency department vehicles; in accordance with NFPA guidelines, ARS Title 28 driving laws; VFIS recommendations, and Mayer Fire policies and procedures.

### **Tasks:**

- Develop training material, to include classroom instruction, evaluation materials, and field driver competency training.
- Conduct classroom and field instruction of department members as needed, with minimum annual training hours per training resource recommendations.
- Maintain records of training, through personnel records and issuance of certificates to members.
- Consult with officer core, to periodically update department policies and procedures as needed.

### **Qualifications:**

- Must have passed an approved VFIS drivers training trainer program.
- Fire Service I Instructor (preferred).
- Knowledge of NFPA Guidelines
- Knowledge of Arizona Revised Statutes

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Mayer Fire Department  
Staff Function

## **FACILITY JANITORIAL SUPPLY**

### **Definition:**

The employee assigned to oversee facility supplies is responsible for providing and monitoring all general supplies at all District owned facilities to ensure normal operations during shifts.

### **Tasks:**

- Delegate weekly inventory of station supplies to shifts.
- Review and order supplies from weekly inventory list.
- Coordinate delivery of station supplies.
- Work within the annual station supply budget.
- Research vendors to optimize costs.

### **Qualifications:**

None

## **DHS LIAISON**

### **Definition:**

The employee assigned to oversee the relationship between DHS and the Mayer Fire Department is responsible for providing accountability to the Department of Health Services Bureau of EMS, through annual inspections of ambulances and DHS-issued equipment.

### **Tasks:**

- Ensures that DHS-issued equipment (gurneys, monitors, radios) are maintained in proper functioning order; and if no longer needed, that these items are turned back over to DHS to clear them from our inventory.
- Coordinates with EMS supply and department maintenance, to prep ambulances for DHS inspection in accordance with DHS Title 9 guidelines; and to stand these inspections or delegate other department personnel to stand inspections as needed.
- Makes recommendations as needed to EMS coordinator, for updates to EMS policies and procedures as needed.
- Maintains all related records and documents.

### **Qualifications**

- Should be an Arizona State certified Paramedic.
- Must have knowledge in Arizona DHS policies, ordinances, and laws.



## **COMPUTERS**

**Definition:** The computer technician is responsible for the programming, minor maintenance, specifications and troubleshooting computer and network problems within the department.

### **Tasks:**

- Set up computer software as needed
- Troubleshoot and correct computer problems when needed
- Liaison with IT specialists regarding computer problems that cannot be corrected in-house
- Change out computers when needed
- Maintain spare parts supply for common problems
- Develop specifications as needed
- Provide computer training as needed

### **Qualifications:**

- Knowledge of computer technology
- Knowledge of FCC requirements
- Familiarity with computer programs and computer networks

## **FIREHOUSE SOFTWARE**

**Definition:** The Firehouse software technician is responsible for the programming, minor maintenance, set up of access to Firehouse modules, correction of mistakes on reports, QA, NFIRS interface and troubleshooting problems with the software department.

### **Tasks:**

- Set up Firehouse software
- Insure that all stations and personnel are able to access Firehouse
- Design drop down lists and security levels
- Liaison with Firehouse IT specialists regarding problems that cannot be corrected in-house
- Install upgrades as they become available
- Provide computer training as needed
- Research new modules of the software
- Train others to utilize the various components of the software

### **Qualifications:**

- Knowledge of computer technology
- Knowledge of NFIRS requirements and procedures
- Familiarity with computer programs and computer networks

## **RADIO MAINTENANCE**

**Definition:** The radio technician is responsible for the programming, maintenance, specifications and distribution of fire radios within the department.

### **Tasks:**

- Set up computer software needed to program mobile and portable radios
- Create programming lists
- Troubleshoot radio problems
- Refer radio problems that cannot be corrected in-house to the contracted communications vendor
- Change out radios when needed
- Maintain spare parts supply for common problems
- Develop specifications as needed
- Coordinate bi-annual radio maintenance with communications vendor

### **Qualifications:**

- Knowledge of radio technology
- Knowledge of FCC requirements
- Familiarity with radio programming software and computer interface

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Mayer Fire Department  
Staff Function

### **CPR / FIRST AID**

**Definition:** The CPR/First Aid Coordinator is responsible for the logistics of Mayer Fire Department's CPR courses.

#### **Tasks:**

- Maintain prompt communication with students requesting a course.
- Notify Instructors when, where, and which course they will be conducting.
- Keep the CPR Schedule updated for accuracy.
- Order and equipment and or supplies pertinent to the CPR program.

#### **Qualifications:**

- There are no qualifications for this job function. The current CPR/First Aid Coordinator has detailed records of all Instructors, vendor contact information and any pertinent documents related to this job description.

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Mayer Fire Department  
Job Description

### **WEB SITE DEVELOPMENT/MAINTENCE**

**Definition:** The web site manager is tasked with updating and developing new areas of the Mayer Fire Department web site as needed and or requested by senior officers.

**Tasks:**

- Place updated phone listings on members only page
- Place updated scheduling on members only page
- Take multimedia of department equipment, incidents, and functions when possible
- Assist with creation of any multimedia for department use i.e.: PowerPoint presentations, videos, brochures, etc.

**Qualifications:**

- Above average computer skills, including knowledge in: HTML, Web design, Photography, Video Creation, Editing, Publishing, Microsoft word, excel, and PowerPoint.

### **SCBA – Self Contained Breathing Apparatus**

**Definition:** The SCBA Program Director is responsible for overseeing the care, maintenance, of fire department self contained breathing apparatus.

**Tasks:**

- Ensure all fire department SCBA are functioning properly.
- Ensure yearly scheduled maintenance takes place on all SCBA
- Ensure all SCBA are being checked daily, weekly, and monthly for proper operation
- Be the direct contact for FDC Rescue Products.
- Be the direct contact for Thunderbird Cylinders.
- Ensure all SCBA bottles are being hydrostat tested every five years.
- Ensure detailed maintenance records are being kept on all SCBA.
- Ensure all members are being trained on the proper donning and doffing procedure.
- Ensure all members are being trained on the fundamentals of SCBA operation.

**Qualifications:**

- SCBA Program Director must be at least a level one SCBA technical. The current SCBA Program Director has detailed records of all SCBA in service, vender contact information, and any pertinent documents related to this job description.

## **SCHEDULER**

**Definition:** The scheduler is responsible for the monthly work shift calendar.

### **Tasks:**

- Ensure each department member has received a monthly shift calendar.
- Ensure all full time members time off request is approved, by Scheduling Chief.
- Ensure all full time members time off request is applied to calendar after approval.
- Ensure all part time members (reserves) have turned in availability.
- Ensure all part time members have turned in availability by 15<sup>th</sup> of month.
- Be in direct contact with shift Captains on any department member changes.
- Ensure all department members are advised on any changes affecting them.
- Update any changes on calendar as soon as possible.
- Ensure department members receive updated calendar.

### **Qualifications:**

- Computer skills.

## **TURNOUT MAINTENANCE**

**Definition:** The turnout maintenance officer is responsible for the care, maintenance, distribution, and tracking of fire department personal protective equipment. This includes all structural personal protective equipment, with the exception of SCBA's.

### **Tasks:**

- Ensure each firefighter has the proper type, and amount of structural PPE
- Ensure non-functioning or damaged PPE is repaired or replaced
- Keep a detailed log of all PPE and which member is using it.
- Be the direct contact to current vendor supplying our PPE.
- Ensure all PPE is cleaned and inspected at least twice a year.
- Ensure all members have training on donning and doffing their PPE properly.
- Ensure all OSHA standards for structural PPE are being met by the fire department
- Updating records for all structural PPE.

### **Qualifications:**

- Turnout Maintenance Officer must be certified NFPA 1971 and NFPA 1851. The current Turnout Maintenance Officer has detailed records of all PPE in service, vender contact information, and any pertinent documents related to this job description.



### **TURNOUT EXPOSURE TRACKER**

**Definition:** The PPE Tracker manager is responsible for the documentation and computer log of each emergency incident where an operational employee's personal protective turnout gear was exposed to some type of hazardous material.

**Tasks:**

- Ensure every department operational member is in the PPE Tracker data base.
- Ensure the PPE Tracker data base is being updated monthly.
- Ensure each shift has a designated person inputting data into the system.
- Provide PPE Tracker system updates when available.
- Be the direct contact for the department PPE Tracker vender.

**Qualifications:**

- There are no qualifications for this job function. The current PPE Tracker manager has detailed records of all systems, vender contact information, and any pertinent documents related to this job description.

**EMS COORDINATOR**

**Definition:** The EMS Coordinator is responsible for coordinating EMS activities in order to maintain compliance with all Federal, State and local requirements, while providing the highest quality of care possible.

**Tasks:**

- Coordinates training activities for the department
- Responsible for the coordination and scheduling of classes, continuing education, lectures and exams
- Responsible for drafting EMS SOG's
- Oversees the department's QA program
- Develops the EMS budget, develops short, medium and long term plans for the EMS
- Orders necessary medications and works closely with EMS supply officer
- Drafts and negotiates contracts and other legal agreements as needed
- Represents the department on regional, State and National councils and committees
- Assists with the development and implementation of departmental training policies and procedures to assure performance standards and quality assurance
- Prioritizes and coordinates repair requests for EMS equipment
- Liaison with base hospital and receiving facilities
- Investigates and reports on problem calls
- Serves as OSHA Exposure Control Officer
- Records and follows up on exposures to department members
- Insures that engineering and PPE controls are in place and available
- Prepares a variety of reports and records.

**Qualifications:**

- Graduate from a community college with an Associate's Degree in Fire Science, EMS, Public Administration, or other related field (combination of education and experience may be substituted)
- Special teaching certificate from an accredited university or community college in EMS
- Five years of field experience as certified paramedic, with a current Arizona certification
- Five years of supervisory experience as a Career firefighter
- Twenty hours of educational methodology
- Graduate of the National Fire Academy Management of Emergency Medical Services course or an equivalent
- CPR Instructor
- Thorough knowledge of:
  1. State and national EMS laws, standards and regulations.
  2. Certificate of Necessity statutes, rules and regulation.
  3. State and national quality assurance standards.
  4. Teaching techniques and skills related to EMS activities.
- Ability to evaluate EMS data for statistical analysis.
- Extensive knowledge of educational materials, equipment and facilities.

-Thorough knowledge of:

1. Training techniques, drills and testing.
2. Department policies and procedures.
3. Motivational skills.
4. EMS techniques, equipment, practices and standards.
5. Operations, procedures and department goals and standards.
6. OSHA standards as they pertain to the EMS and the fire service in general.
7. Bloodborne pathogens, infection control, reporting requirements, recordkeeping, confidentiality requirements and follow up procedures for personnel who have been exposed to bloodborne pathogens.

## **EMS SUPPLY PURCHASER**

### **Definition:**

The EMS Supply Purchaser is responsible for all medical supplies, oxygen, and bio-hazard disposal. The EMS Supply Purchaser will maintain an EMS supply cache of medical supplies for restock as described in section 625.3 of the Administrative Policy and Procedures.

Order Oxygen through established vendors prior to running short by determining the quantities needed, coordinate drop off sites, and expected times of delivery.

Make sure biohazard is picked up as scheduled throughout the year. Also, insuring there is adequate bio containers for proper disposal of contaminated material as described in section 183 of the Safety and Loss Prevention Manual.

### **Tasks:**

- Determines purchasing needs and product specifications.
- Organize and prioritize the purchasing of supplies, materials, and equipment.
- Use purchase orders (PO Numbers) to insure clarity.
- Acquire the appropriate documentation and billing slips and deliver to the administrative office for filing.
- Ensure all ordered items arrive.
- Coordinate delivery date, time, and locations.
- Share costs, product availability, current and new technologies.
- Researches prices, reviews bids, and negotiate with vendors.
- Gather and analyze data; make recommendations and get the opinion of the members within the organization.
- Evaluate and modify the purchasing of items to adapt to the departments needs.
- Resolve complaints from vendors, and or the membership who use the products.
- Inventory the main cache weekly and place orders monthly or as needed.
- Stay within budget.

### **Qualifications:**

Should have ALS certification

Mayer Fire Department  
Staff Function

## **WILDLAND COORDINATOR**

### **Definition:**

Oversee the Wildland Division and be accountable for the tasks to be undertaken. Responsible for Chairing the Wildland Committee and making sure annual refresher is completed and red cards are issued.

### **Tasks:**

- Assure all members attend annual wildland refresher.
- Coordinates annual "pack test".
- Assure all Department issued "red card" are issued and current for all members.
- Maintains state contract and assures an up to date copy is in all vehicles.
- Responsible for making sure all wildland vehicles have proper equipment and are inventoried.
- Assures all vehicles have proper wildland related paperwork, CTR's. etc.
- Establishes and helps to maintain the wildland rotation list.
- Liaison with State Fire, BLM, the Prescott Basin Operations Committee and others.
- Maintains and hires seasonal wildland employees.
- Chair for the Wildland Committee.

### **Qualifications:**

Must be an Engine Boss.

Mayer Fire Department  
Staff Function

## **INSPECTION and PREPLANS**

### **Definition:**

Responsible for coordinating all engine company occupancy safety inspections and emergency pre-emergency planning activities for all commercial and business occupancies.

### **Tasks:**

- Works with Yavapai County to assure all new businesses are entered into the system.
- Assigns inspections and preplans to all three shifts.
- Makes sure all occupancy's are inspected once a year, those with kitchen hood systems, twice a year.
- Makes sure all occupancies have a current preplan.
- Makes sure all required forms are available.
- Responsible for maintain appropriate files on all occupancies.
- Responsible for updating all preplan information, drawings, and preplan books.
- Assures all department vehicles have a preplan book.
- Assure all computer data in entered into firehouse software system.

### **Qualifications:**

This position should be held by a Captain. Should have knowledge and experience with computer software programs, fire and building codes, and fire prevention practices.

Mayer Fire Department  
Staff Function

## **POWER/HAND TOOLS**

### **Definition:**

Responsible for the maintenance, records, and replacement of all firefighting power and hand tools.

### **Tasks:**

- Responsible to assure the maintenance of all tools.
- Assures power tools are serviced and tested annually.
- Orders new and / or replaces tools as needed.
- Keeps required parts and or lubricants in stock at each station.
- Maintains all records and files.
- Is the liaison for all tool related Vendors.
- Assures all vehicles are equipped with required tools.

### **Qualifications:**

General tool knowledge and computer skills are highly recommended.

Mayer Fire Department  
Staff Function

## **FIRE HOSE**

### **Definition:**

Is responsible for the ordering, maintaining, inventorying and testing of all fire hose.

### **Tasks:**

- Orders new or replaces existing hose as needed.
- Assures compliancy with NFPA 1961, 1962, and 1963.
- Organizes, assigns, and completes annual hose testing.
- Inspects hose as needed of serviceability.
- Inventories hose and maintains all records.
- Is Liaison to all hose related Vendors.

### **Qualifications:**

Knowledge in NFPA 1961, 1962, and 1963.



Mayer Fire Department  
Staff Function

## **VEHICLE MAINTENANCE**

### **Definition:**

Responsible to assure all department vehicles are maintained properly and all required paperwork is filed and maintained.

### **Tasks:**

- Schedules vehicles for needed repairs and or preventative maintenance.
- Schedules required vehicles for annual pump tests.
- Develops and maintains required paperwork and fleet maintenance documentation.
- Works within an annual budget.
- Is Liaison between related maintenance Vendors.
- Develops vehicle specifications as needed.
- Recommends maintenance procedures to Senior Staff.
- Compiles cost estimates and / or purchasing bids as requested.
- Assures vehicles are in a safe operating condition.
- Assures compliancy with all required laws and / or standards.

### **Qualifications:**

A strong knowledge of vehicle maintenance is recommended.

Mayer Fire Department  
Staff Function

## **JUNIOR FIREFIGHTER PROGRAM**

**Definition:** The JR. Firefighter Advisor is responsible for recruiting, training, mentoring, and performing community service with in the community.

**Tasks:**

- Make flyers to attract new Jr. Firefighters
- Getting permission slips and ride-along forms signed
- Emphasizing safety
- Preparing lessons and PowerPoint presentations on IFSTA Essentials
- Preparing and implementing hands on drills and training
- Keeping records of attendance
- Sets up ride-a-long's with Captains
- Assists Jr. Firefighter's prepare for a career in the fire service

**Qualifications:**

- Knowledge of IFSTA Essentials
- Training in Safety precautions
- Interact well with young adults

Mayer Fire Department  
Job Description

**RESERVE COORDINATOR**

**Definition:** The Reserve Coordinator is responsible for all operations within the Reserve Program.

**Tasks:**

- Be proactive in recruitment and accusation of new Reserve Firefighters.
- Coordinate and perform the Reserve Firefighter hiring process.
- Create and maintain the annual Reserve Firefighter training calendar.
- Ensure every Reserve Firefighter applies for a minimum of two shifts monthly.
- Be the direct contact between the Senior Staff and Reserve Firefighters.

**Qualifications:**

- The current Reserve Coordinator has detailed records of all Reserve Firefighters, and any pertinent documents related to this job description.

## **RESERVE SHIFT SUPERVISOR**

**Definiton:** Each reserve supervisor is responsible for reserves assigned to him/her.

### **Tasks:**

- Maintain communications with assigned reserves.
- Maintain communications with reserve program coordinator.
- Ensure monthly training is being accomplished.
- Maintain documentation whenever needed and forward to reserve coordinator.
- Ensure reserve requirements are accomplished with documentation.

### **Qualifications:**

- Full-time firefighter or above.
- Interest in maintaining quality reserve program.

Mayer Fire Department  
Job Description

**SAFETY OFFICER**

**Definition:** The Safety Officer is responsible to assure all aspects of fire department safety both in and out of fire stations, during training functions and on emergency incidents. This Position is typically the Duty Chief Officer, unless otherwise assigned by a Chief Officer or an Incident Commander.

**Tasks:**

- Assures safety of all personnel
- Completes all required documentation and reports
- Investigates employee injuries and accidents as assigned by the Fire Chief
- Attends safety committee meetings
- Assures fire ground accountability
- Inspects station, apparatus and emergency scenes for safety violations and corrects them as needed

**Qualifications:**

- Basic understanding of worker compensation rules and regulations
- Knowledge in OSHA and departmental policies
- Knowledge in fire ground safety
- Knowledge in building construction
- Knowledge in the Incident Command System
- Ability to perform a hazardous analysis
- Ability to conduct routine investigations
- Certification as an Incident Safety Officer (ISO) desired

## **SPECIAL OPERATIONS COORDINATOR**

**Definition:** The Special Operations Coordinator is responsible for coordinating activities needed to maintain compliance with the AHJ for Rope and Swiftwater operations.

**Tasks:**

- Ensure that technicians maintain training requirements set by the AHJ and Chief Officers.
- Submit pre-plans or trainings for high probability rescue scenarios to Chief Officers.
- Maintain training records.
- Be the direct contact between technicians and Chief Officers and/or qualified instructors.
- Provide annual training for awareness and operations level rope/water technicians

**Qualifications:**

- This position must be filled by a qualified Rope and Swiftwater Advanced Rescue Technician.

Further Definitions:

**Swiftwater Awareness Level:** This person must have first obtained an awareness level certification through an accredited agency. This employee must then maintain 2 hours of continuing education annually which is overseen by the Special Operations Coordinator and the Chief Officer of Special Operations.

**Swiftwater Operations Level:** This person must have first obtained an awareness level certification through an accredited agency. This employee must then maintain 4 hours of continuing education annually which is overseen by the Special Operations Coordinator and the Chief Officer of Special Operations.

**Swiftwater Technician Level:** This person must have first obtained an awareness level certification through an accredited agency. This employee must then maintain 8 hours of continuing education annually which is overseen by the Prescott Area Regional Team or an accredited agency and the Chief Officer of Special Operations.

**Rope Rescue Operation Level:** This person must have first obtained an awareness level certification through an accredited agency. This employee must then maintain 8 hours of continuing education annually which is overseen by the Special Operations Coordinator and the Chief Officer of Special Operations.

**Rope Rescue Technician Level:** This person must have first obtained an awareness level certification through an accredited agency. This employee must then maintain 14 hours of continuing education annually which is overseen by the Prescott Area Regional Team or an accredited agency and the Chief Officer of Special Operations.

## **TAB 500 - JOB DESCRIPTIONS**

Mayer Fire Department  
Job Description 501

### **FIRE CHIEF**

**Definition:** Under direction of the Fire Board, The Fire Chief is to plan, organize, and direct the overall operation of the Mayer Fire Department through subordinate officers who coordinate and provide fire, disaster, and emergency management services to protect lives and property.

**Essential Functions:** (Essential functions, as defined under the Americans with Disabilities Act, may include the following tasks, knowledge, skills, and other characteristics. This list of tasks is ILLUSTRATIVE ONLY, and is not a comprehensive listing of all functions and tasks performed by positions in this class.)

#### **Tasks:**

Direct and coordinate overall Fire Department activities; plan and develop departmental annual budget; administer and monitor budget for fire and emergency management programs; provide work direction and supervision to subordinate staff, including planning, prioritization, review of work and evaluation; recruit and make hiring recommendations for positions; oversee the training, organization and discipline of all personnel.

Develop specifications for major purchases (e.g., fire apparatus, ambulance, communications equipment); establish policies/procedures, make recommendations to the Fire Board concerning Fire Code issues; develop and direct tactical and strategic plans; analyze/report overall departmental effectiveness; assume command as necessary at fire scene, prescribe proper response of equipment and company units.

Make presentations to civic clubs or other groups regarding departmental activities to promote public awareness and understanding; hear complaints and attempt to resolve any problems the public may have; maintain the Emergency/Disaster Management Plan and readiness; coordinate efforts with other District, County, State, and Federal disaster response agencies

**Knowledge, Skills, and Other Characteristics:**

Knowledge of fire suppression principles, methods, techniques, and practices. Knowledge of the principles, methods, techniques, and practices of hazardous material control/clean-up. Knowledge of the streets, addresses, and locations throughout the District and local area and area geography and water systems and the location of hydrants or other water sources.

Knowledge of the use and purpose of a variety of specialized equipment, tools, and apparatus used in fire suppression, rescue, emergency medical assistance, hazardous materials and tactical rescue situations.

Knowledge of the Mayer Fire District's governmental organization, policies, and procedures. Knowledge of administrative procedures, practices, and principles. Knowledge of budget preparation, monitoring, and administration. Skill in managing the overall operations of a fire district.

Skill in remaining calm under adverse conditions, and making sound judgments concerning life and property under pressure. Skill in planning, organizing, and directing the work of employees performing varied operations connected with fire, emergency, and disaster management activities and developing proper training and instructional procedures for those employees. Skill in understanding and interpreting complex laws, rules, regulations, policies, and guidelines. Skill in supervising, evaluating, training, and motivating employees. Skill in written communications for administrative and technical purposes. Skill in oral communication in one-on-one and group situations. Skill in utilizing public relations techniques in responding to inquiries and complaints. Skill in establishing and maintaining effective working relationships with State, Federal, and other local fire and emergency management officials, elected officials, subordinate staff, and District residents.

**Qualifications:** An Associate's Degree in Fire Science or closely related area and ten (10) years full time supervisory/managerial level fire department operations or closely related work required. (Certification as NFPA Fire Officer and NWCG Strike Team Leader or above is desired.) Certification as an EMT Basic. Must possess a valid Arizona driver's license. Any combination of education and experience that meets the intent of the qualifications listed may be substituted by the approval of the Fire District Board.

**FLSA Status:** Exempt



Mayer Fire Department  
Job Description 502

## **BATTALION CHIEF**

**Definition:** Under limited supervision, command and control day-to-day firefighting, emergency medical and disaster response operations for an assigned geographic area of the Mayer Fire District and its environs; may be assigned to lead a specialized administrative unit.

**Essential Functions:** (Essential functions, as defined under the Americans with Disabilities Act, may include the following tasks, knowledge, skills, and other characteristics. This list of tasks is ILLUSTRATIVE ONLY, and is not a comprehensive listing of all functions and tasks performed by positions in this class.)

**Tasks:**

Direct and oversee emergency response activities by Fire Captains and other personnel for assigned geographic areas of Mayer; uses the Incident Command System to coordinate and control appropriate response to a broad range of emergency incidents (e.g., wildland or structure fire, aircraft or vehicle fire, hazardous materials response, rescue coordination, and emergency medical intervention).

Ensure a continual and high level of emergency response readiness; coordinate or provide all minimum required training for suppression personnel according to NFPA mandates and ISO guidelines for structural firefighting skills, wildland firefighting skills, and Emergency Medical Services certification requirements; collaborate with other Battalion Chiefs to initiate regular single and multi-company drills; conduct and critique classes.

Plan and assign work, review and evaluate performance of subordinate fire/emergency response personnel and office staff; direct and administer the hiring and selection process; assess work load, the administrative support system and internal reporting relationships to identify opportunities for improvement; recommend and implement changes; prepare various administrative monthly, quarterly, and annual reports.

**Knowledge, Skills, and Other Characteristics:**

Knowledge of fire suppression principles, methods, techniques, and practices.

Knowledge of the principles, methods, techniques, and practices of hazardous material control/clean-up.

Knowledge of first aid, CPR, and other basic emergency medical care techniques and methods.

Knowledge of the streets, addresses, and locations throughout the District and local area and area geography and water systems and the location of hydrants or other water sources. Knowledge of the use and purpose of a variety of specialized equipment, tools, and apparatus used in fire suppression, rescue, emergency medical assistance, hazardous materials, and tactical rescue situations.

Knowledge of supervisory methods and techniques.

Skill in motivating, communicating with, and instructing/training others, using both technical and non-technical language to explain complex subjects and processes.

Skill in operating fire apparatus and pumps, and in fire suppression techniques.

Skill in applying basic emergency medical assistance, including CPR and first aid.

Skill in the safe and proper operation of equipment and tools.

Skill in remaining calm under adverse conditions, and making sound judgments concerning life and property under pressure.

Skill in writing legal documentation of incidents and responding to questions before legal counsel.

Skill in supervising, evaluating, training, and motivating employees.

Skill in written communications for administrative and technical purposes.

Skill in oral communication in one-on-one and group situations.

Skill in utilizing public relations techniques in responding to inquiries and complaints.

Skill in establishing and maintaining effective working relationships with State, Federal, and other local fire and emergency management officials, elected officials, subordinate staff, and District residents.

**Qualifications:** Education and/or experience equivalent to an Associate's Degree in Fire Science or closely related area and five (5) years full time supervisory/managerial level fire suppression and emergency management work required. (Certification as NFPA Fire Officer II, Wildland Strike Team Leader, and EMS Basic and Instructor / or equivalent is desired.) Must possess a valid Arizona driver's license. Any combination of education and experience that meets the intent of the qualifications listed may be approved by the Fire Chief.

**FLSA Status:** Exempt

Mayer Fire Department  
Job Description 503

**FIRE CAPTAIN**

**Definition:** Under limited supervision, plan, organize, and oversee the work of firefighting and emergency response personnel at an assigned station to ensure immediate and appropriate response capability at all times.

**Essential Functions:** (Essential functions, as defined under the Americans with Disabilities Act, may include the following tasks, knowledge, skills, and other characteristics. This list of tasks is ILLUSTRATIVE ONLY, and is not a comprehensive listing of all functions and tasks performed by positions in this class.)

**Tasks:**

Oversee all activities for assigned station, including supervision and work direction of subordinate staff; make decisions regarding proper firefighting methods; direct suppression activities; inspect assigned station for compliance with departmental rules and regulations; maintain various personnel files, conduct performance evaluations of staff; prepare various fire reports, schedules, equipment reports, and records.

Ensure that all subordinates receive proper training; submit requests for equipment repair or replacement; order supplies necessary to keep the station operational; communicate with other officers regarding problems that arise and investigate complaints from members of the public; attend various training programs in the areas of fire, emergency/disaster management, and hazardous materials response.

**Knowledge, Skills, and Other Characteristics:**

Knowledge of fire suppression principles, methods, techniques, and practices.

Knowledge of the principles, methods, techniques, and practices of hazardous material control/clean-up.

Knowledge of first aid, CPR, and other basic emergency medical care techniques and methods.

Knowledge of the streets, addresses, and locations throughout the District and local area and area geography and water systems and the location of hydrants or other water sources.

Knowledge of the use and purpose of a variety of specialized equipment, tools, and apparatus used in fire suppression, rescue, emergency medical assistance, hazardous materials, and tactical rescue situations.

Knowledge of basic supervisory methods and techniques.

Skill in commanding and coordinating emergency, disaster, and firefighting response teams.

Skill in motivating, communicating with, and instructing/training others, using both technical and non-technical language, to explain complex subjects and processes.

Skill in operating fire apparatus and pumps, and in fire suppression techniques.

Skill in applying basic emergency medical assistance, including CPR and first aid.

Skill in the safe and proper operation of fire suppression and emergency medical services equipment and tools.

Skill in remaining calm under adverse conditions and making sound judgments concerning life and property under pressure.

Skill in writing documentation of incidents and responding to questions before legal counsel.

Skill in supervising, evaluating, training, and motivating employees.

Skill in written communications for administrative and technical purposes.

Skill in oral communication in one-on-one and group situations.

Skill in utilizing public relations techniques in responding to inquiries and complaints.

Skill in establishing and maintaining effective working relationships with State, Federal, and other local fire and emergency management officials, elected officials, subordinate staff, and District residents.

**Qualifications:** Education and/or experience equivalent to seven (7) years full-time professional level fire suppression/emergency response work; **or** an Associate's Degree in Fire Science or closely related area may substitute for one (1) year of the required experience. Must be certified as an Emergency Medical Technician and Firefighter I/II by the State of Arizona. College level supervisors training for Firefighter's is required. Must meet the requirements of the Engineer's job description. Must possess a valid Arizona driver's license. Any combination of education and experience that meets the intent of the qualifications listed may be approved by the Fire Chief.

**FLSA Status:** Non-Exempt

## **FIRE ENGINEER**

**Definition:** Assigned to Rescue, Engine or Ladder Companies. Assume the responsibility for the safe and efficient operation of assigned apparatus. Shall be skilled in the application of the principals of hydraulics for the provision of adequate water supplies at appropriate pressures at the fire scene and shall maintain proficiency in the operation of all fire department apparatus. Responsible for maintaining the operating condition of all assigned apparatus and equipment. Work requires the exercise of initiative and independent judgment in the operation and care of equipment and in the performance of firefighting and rescue activities. Employees of this class may be required to assume the roles and responsibilities of a Fire Captain or Firefighter.

**Essential Functions:** (Essential functions, as defined under the Americans with Disabilities Act, may include the following tasks, knowledge, skills, and other characteristics. This list of tasks is ILLUSTRATIVE ONLY, and is not a comprehensive listing of all functions and tasks performed by positions in this class.)

### **Tasks:**

Follow Administrative and Operating Procedures.  
Effectively operate apparatus at an emergency scene.  
Inspect assigned apparatus and equipment for proper operation.  
Assist in the cleaning of the station, grounds and equipment.  
Keep own assigned apparatus clean and maintained in good operating order.  
Make minor repairs to equipment on apparatus as needed.  
Help in any specific projects in and around the station.  
Keep records and logs as required; record in logbook appropriate information as described by Fire Department procedures.  
Perform annual EVOC, VFIS, driver training for department staff.  
Under emergency response conditions, demonstrate the legal and safe driving, positioning and operation of assigned fire apparatus.  
Interact with the public in a positive manner that exemplifies the Fire Department's mission.  
Perform the duties of a Firefighter or Fire Captain when necessary.  
Provide Fire Engineer training to other personnel.

Maintain a "Meets Standards" on personnel evaluations in the "Core Values" areas of Customer Service, Attitude, Teamwork, Job Competency and Interpersonal Skills.

**Knowledge, Skills, and Other Characteristics:**

Must fulfill the requirements for the position of Firefighter.

Meet the qualifications of N.F.P.A. 1002 and 1901.

Comprehensive knowledge of fire service hydraulics and pump theory.

Knowledge of the size of mains, hydrant locations and available fire flows.

Skill in making minor repairs and adjustments to equipment.

Skill in identifying the common causes of routine vehicle and engine failure and to demonstrate preventive measures for such failures.

Skill in operating all apparatus in a safe and efficient manner

Thorough knowledge of the geography of the District and Fire District streets, hydrants and other alternative water supplies.

Thorough knowledge of all equipment carried on apparatus in the department. Thorough knowledge of all state laws pertaining to the operation of emergency vehicles. Skill in reading and interpreting documents such as safety rules, operating and maintenance instructions, and procedure manuals. Skill in writing routine reports and correspondence.

Skill in speaking effectively before groups of customers or employees of organizations. Skill in calculating figures and amounts such as proportions, area, circumference and volume. Skill in applying concepts of basic algebra and geometry. Skill in applying common sense understanding to carry out instructions furnished in written, oral or diagram form. Skill in dealing with problems involving several concrete variables in standardized situations.

**Qualifications:** High school graduate or GED required. College level Fire Hydraulics and Fire Apparatus classes are required. Must meet the requirements of the Firefighters job description. Three years fulltime fire department experience, one of which must be with MFD. Must possess a valid Arizona driver's license; must be certified as a Basic Emergency Medical Technician or higher by the State of Arizona. Must be Arizona State Firefighter I&II certified. Any combination of education and experience that meets the intent of the qualifications listed may be approved by the Fire Chief.

**FLSA Status:** Non-Exempt

Mayer Fire Department  
Job Description 505

**FIREFIGHTER**

**Definition:** Under general supervision, respond to emergency service calls, including fire suppression, accident, medical emergency, and/or rescue situations to protect life and property.

**Essential Functions:** (Essential functions, as defined under the Americans with Disabilities Act, may include the following tasks, knowledge, skills, and other characteristics. This list of tasks is ILLUSTRATIVE ONLY, and is not a comprehensive listing of all functions and tasks performed by positions in this class.)

**Tasks:**

Respond to all fire and emergency medical calls on designated shift; operate apparatus en route to and at fire scene; locate water supply, deploy and operate hoses, monitor pressure on hoses and nozzles, calculate friction loss and establish fire stream; extricate victims from vehicles and various emergency situations (e.g., high angle, water/river, confined space, airplane) and may operate jaws of life in rescue.

Provide basic life support, and if qualified, advanced life support and/or paramedic services to patients including CPR and monitoring of vital signs; communicate with hospitals to provide emergency care; control transfer of patients to medical facilities; write incident reports for calls attended; maintain appropriate logs; may provide instruction to general public on first aid, CPR, or fire prevention.

Inspect the apparatus daily to ensure equipment is functioning properly; check condition of truck including all compartments to ensure supplies are fully stocked and water levels are adequate; clean equipment; report problems to Captain; receive instruction and continuing education; learn new streets, buildings and subdivisions; maintain cleanliness of station and surroundings.

**Knowledge, Skills, and Other Characteristics:**

Knowledge of professional firefighting methods, practices and procedures. Knowledge of fire suppression and prevention methods, fire behavior and fire chemistry.

Knowledge of the principles, methods, techniques, and practices of hazardous material control/clean-up.

Knowledge of first aid, CPR and other basic and/or advanced emergency medical care techniques and methods.

Knowledge of the streets, addresses, and locations throughout the District and local area and area geography and water systems and the location of hydrants or other water sources.

Knowledge of the use and purpose of a variety of specialized equipment, tools, and apparatus used in fire suppression, rescue, emergency medical assistance, hazardous materials and tactical rescue situations.

Knowledge of principles of fluid hydraulics and maintaining nozzle pressure.

Knowledge of proper documentation practices for medical emergency supplies, equipment and apparatus.

Knowledge of the duties and responsibilities of each fire fighter on shift.

Knowledge of mechanics, hydraulics, and repair of all equipment.

Knowledge of trauma and medical emergency.

Knowledge of drug administration and drug calculations.

Skill in responding rapidly and appropriately to emergency situations.

Skill in operating fire apparatus, pumps, and related equipment used in fire suppression operations.

Skill in applying emergency medical assistance, including CPR and first aid.

Skill in performing strenuous work under adverse conditions for an extended period of time.

Skill in the safe and proper operation of equipment and tools.

Skill in remaining calm under adverse conditions, and making sound judgments concerning life and property under pressure.

Skill in establishing and maintaining effective working relationships with business owners/managers, other Fire Department staff, and the public.

**Qualifications:** Must be certified as an Emergency Medical Technician and Firefighter I/II by the State of Arizona. Must possess a valid Arizona driver's license. Any combination of education and experience that meets the intent of the qualifications listed may be approved by the Fire Chief.

**FLSA Status:** Non-Exempt