



Surviving the Firefighter Emergency

1.1 Introduction

Are you prepared for your own emergency? Are we prepared to rescue one of our own? Surviving the firefighter emergency will be the most dynamic and stressful situations on the fire ground. We must not only be prepare for our own emergency but prepare to be an integral part of a Firefighter Rescue Team.

This manual was created for all fire service professionals working within Kitsap County to ensure that:

- Every firefighter is receiving consistent firefighter emergency training
- Every firefighter is prepared for their own emergency
- Every firefighter is prepared to help their partner or an adjacent team
- Every firefighter is trained to participate in a firefighter intervention

It encompasses the Kitsap County Incident Management Procedures, and follows closely with Appendix C: "Managing the Fire Ground Emergency: A Supervisors perspective into how to manage a MAYDAY." This manual is divided into three sections:

- 1. Preventing your own Emergencies
- 2. Managing your own Emergency
- 3. Intervening in a Firefighter Emergency

2.1 Preventing your own Emergency

Preventing emergencies begins with recognizing the serious nature of the emergency scene and the lifelong commitment that is required to be prepared to intervene for a fellow firefighter or survive your own emergency. Our survival on an emergency is directly correlated with the time and effort we spend preparing.

<u>Risk Management</u> - The Incident Commander (IC) is responsible for Incident Action Planning (IAP), which includes determining the level of risk that personnel will be exposed to on an incident. Within the IAP, supervisors and team leaders are authorized to direct personnel to perform tasks that will expose them to risk. Responsibility for safety does not lie solely with the Incident Commander. From the IC to the team member, all are authorized and responsible for immediately stopping any unsafe act or condition, and communicating the situation through the chain of command. These team and individual Risk Management guidelines are intended to ensure that personnel are not exposed to unnecessary risk within their area of responsibility.

 You are responsible to: identify risk, manage your own risk using sound "Risk Management Principles" and to communicate your "Situational Awareness" effectively with your team/supervisor.

Case studies continually demonstrate that the most effective means to successfully provide for responder safety and survival is to operate within guidelines based on sound risk management principles and standard rules of engagement. These same studies demonstrate that the various methods to intervene in a Mayday situation vary in their degree of effectiveness.





Surviving the Firefighter Emergency

In order of proven effectiveness, these methods include:

- 1. <u>Prevention</u> The most effective way to protect firefighters is through prevention. Prevention is achieved through effective training of firefighters and officers, by mitigating hazards prior to assigning firefighters and/or by utilizing the rules of engagement to ensure personnel are not unnecessarily exposed to risk.
- 2. <u>Team Integrity</u> Anytime a firefighter enters a hazardous environment, they must do so in a team of at least two personnel with a designated team leader. Team integrity means that firefighters operate in partnership so they can directly account for each other's welfare. In the event of a "Mayday" situation, working in a team provides the firefighter in peril with a partner who can; call for help, go get help, or provide help,.
- Self Rescue When able, the ability to self-extricate from a position of peril is the most natural form of intervention. A trapped firefighter is highly motivated to selfmitigate their situation to survive.
- 4. <u>Back-up Teams</u> Back-up teams are strategically positioned near teams operating in areas with a high level of risk. A back-up team is the most familiar with the other team's location, situation, the hazards they are exposed to, and the immediate surroundings. A back-up team's placement also positions them to better recognize a potential or developing "Mayday" situation, enabling them to prevent the fire ground emergency or to immediately intervene to assist with the firefighter emergency.
- 5. Adjacent Teams When a team declares a "Mayday", intervention efforts initiated by other teams operating near-by may be as effective as a back-up team. The Incident Commander may re-assign adjacent team(s) to assist with rescue efforts, if their current assignment is not necessary to stabilize the incident or protect the intervention effort.
- 6. Stand-by & Rapid Intervention Teams (RIT) Used to provide for the initial response to a firefighter emergency. These teams are utilized to: locate the downed firefighter, stabilize the situation, and initiate rescue efforts. Due to the extreme nature of these scenarios, it is expected that the initial RIT may not be effective at removing the firefighter completely from the hazard zone, therefore, all teams should be monitoring for a RIT (Removal) assignment.

Despite proper risk management to prevent firefighter emergencies, emergency scenes are dangerous and uncontrolled environments in which firefighter emergency(s) can occur. The "Rules of Engagement" are a guiding principle you will use to manage risk.

Rules of Engagement – The Incident Commander is responsible for assessing risk by using a Risk Management tool for the entire incident. Supervisors are responsible for assessing risk by constantly updating their situational awareness for their assigned area or function of responsibility. Similarly, each team leader and firefighter is responsible for assessing the same risk management principles to their own operations. Within the incident, the rules of engagement apply from the IC to the team member to ensure that;

- <u>Significant Risk</u> We will take significant risk to our lives to save savable lives
- Minimal Risk We will take minimal risk to our lives to save savable property
- No Risk We will take no risk to save what has already been lost





Surviving the Firefighter Emergency

Sound Risk Management at the task level prevents responders from taking unnecessary risk to achieve their assignments. The team leader is responsible to complete the tasks assigned to them. However, team leaders are also responsible to determine how to complete the task in a manner, consistent with the incident's strategy, which provides for the safety of their personnel.

<u>Training</u> — Because fire ground emergencies are rare, becoming competent through experience alone cannot prepare a firefighter to competently react to a fire ground emergency. Firefighters at all levels must regularly train to be competent in performing their role in firefighter emergencies. Knowledge of emergency operations procedures as well as the practical skills testing is necessary to survive a fire ground emergency. Firefighters must train and demonstrate proficiency in handling their own emergency just as the incident commanders must at managing the 'Mayday'. The following written guidelines are supported by practical skill training evaluations, which create the basis of training for personnel to prepare for a fire ground emergency.

<u>Situational Awareness</u> - Situational Awareness (S.A.) is the ability to identify process and comprehend critical elements of information about what is happening to the individual/team with regards to the Incident Action Plan. Simply put, knowing what is going on around you. This is achieved by being observant and using critical thinking to ensure that your perception of a situation is based on fact rather than assumption. Situational Awareness is the counterbalance to 'tunnel vision'. Maintaining Situational Awareness at the team and personal level allows hazards and safety issues to be identified and communicated to make the scene safer for all personnel. This means both maintaining orientation to their entry, as well as nearby exits or escape routes as they proceed into the hazardous area. This will allow personnel to not only prevent an emergency but also to be better prepared to react to one.

Emergency Scene Awareness – Emergency Scene Awareness is the same concept as Situational Awareness but critical to understanding where you fit into the bigger picture. Even with proper scene size-up and risk management, conditions in an Immediately Dangerous to Life and Health Environment (IDLH) can change in an instant. This awareness is critical when the call to abandon the building is communicated. "Abandon the Building' is the call given to signal the immediate escape of all teams from a specific hazard area. Examples include: "Abandon the building", "Abandon Division Alpha", "Abandon the Hot Zone", "Abandon the Bravo Flank", etc. When directed to "Abandon . . ." affected teams are to immediately, without question or hesitation, drop everything (keep hose line only if necessary) and get out the quickest, safest way possible.

The call to "Abandon" is to be accompanied with an emergency alert signal broadcast by Cen-Com, using a high/low warble over the operating frequency. The Abandon signal is followed with the initiation of Emergency Traffic.

Example – Abandon the Building

<u>Command</u> - "Cen-Com from Sunset Command, initiate the Abandon Alert Signal and Emergency Traffic"

<u>Cen-Com</u> - (Abandon Alert Signal)..."All units at Sunset Command; Abandon the building...All units at Sunset Command; Abandon the building"

<u>Cen-Com</u> - (Emergency Traffic signal)..."Sunset Command has declared Emergency Traffic"... (Emergency Traffic marker tone)

<u>Command</u> - "All units from Sunset Command, standby for Roll Call to acknowledge abandoning the building, Break: E71 acknowledge abandon"





Surviving the Firefighter Emergency

When the call to "<u>Abandon</u>" is initiated, all units operating in the hazard area shall not wait for permission, they are to act immediately by abandoning the hazard area. Personnel should immediately begin abandoning the building, acknowledging the abandon call when they are able and then notify their supervisor after they have successfully exited the building and determined the status of all team members.

<u>Unsafe Acts and Conditions</u> - All personnel are both authorized and responsible for reporting unsafe acts or conditions. In the event of eminent life safety hazards, personnel are further authorized to immediately stop or intervene in an unsafe act or condition. The only limitation to this is in the event a team leader or supervisor is aware of the issue and specifically prohibits intervention.

Unsafe acts or conditions should be immediately reported to the individual's team leader, or from the team leader to the supervisor. If this cannot be completed face-to-face, the issue should be transmitted as a 'Priority Traffic'. Priority Traffic is the term used over the radio to request everyone momentarily clear the air of normal radio traffic, so that a message of greater importance may be transmitted. Once the message is transmitted and responded to, normal traffic may resume. Anyone can send a Priority Message.

Example – Priority Message

Engine 1 - "Sunset Command from Engine 1, Priority Message"

Command - "Command; go ahead with your Priority Message Engine 1"

Engine 1 - "Engine 1; we have discovered heavy fire extension to the third floor"

<u>Challenge Statement -</u> In situations in which the individual receiving an assignment or direction believes it will result in unnecessarily exposing personnel or civilians to significant risk, they are responsible for challenging the decision. This is done in a respectful manner that identifies the hazard and provides an alternative to the direction. The formal nature of the challenge statement reduces the risk of personnel ineffectively stating their concern and to ensure that the supervisor is aware of the seriousness of the challenge. The challenge statement will be conducted in five parts;

- Gain the individual's attention: "Lieutenant Martinez"
- State your observation of the hazard: "There is heavy smoke coming from the Basement stairwell"
- State your concern: "The fire is beneath us"
- State your recommendation: "I recommend we withdraw immediately"
- Ask for Agreement: "Do you agree or Disagree"

This Challenge Statement provides the supervisor with the information needed to reconsider their decision, in a manner that challenges the decision and not their authority. The decision of the supervisor is to be followed, except for situations that warrant the refusal of risk.

<u>Refusal of Risk</u> - The refusal of risk is intended to prevent personnel from being inappropriately or unnecessarily placed in a position of imminent risk of serious injury or death. This refusal to accept an assignment or to complete an assignment as directed will be limited to situations in which there is imminent risk of serious injury or death to the firefighter and a clear violation of safe work practices or risk management, such as:

- Adopted Rules of Engagement or not adhered to
- Violation of 2in /2 out or 2 in /1 out requirements
- Personnel are not trained for or lack the PPE required for the IDLH environment





Surviving the Firefighter Emergency

When this is done, the Incident Commander and Safety Officer shall be notified and any subsequent crew given the assignment or direction must be made aware of the refusal of risk. The refusal of risk is not to be used to challenge a lawful order based on the individual's opinion or preferences regarding how the incident should be managed, but rather to prevent an unnecessary line of duty death or serious injury.

2.1 Managing your own Emergency

<u>Calling the Mayday</u> – "Mayday" is the nationally adopted "Call for Help" term used to indicate that an emergency responder is in peril, regardless of the type of incident they are operating on. Specifically, this means a responder is in peril, needing immediate help. One of the most common failures of firefighters experiencing a fire ground emergency is to both recognize that they need help and to make the decision to make the 'Mayday' call. Therefore, parameters have been established for which a firefighter is required to declare a 'Mayday'.

The adopted 'Mayday' parameters are;

- If you are lost, disoriented, or lose your means of egress
- If you become trapped, stuck, or entangled
- If you become injured or exhausted and are unable to exit
- If you become separated from your crew
- If you fall or are caught in a collapse
- If you have any SCBA or PPE failure
- If your partner, or another firefighter, experiences a 'Mayday' and cannot make the call

Firefighters calling a 'MAYDAY' will be in extreme duress; however, it is important to their survival that they make the 'MAYDAY' call. When making the 'MAYDAY' call, the firefighter must make every effort to clearly communicate the 'MAYDAY' to their supervisor. "Mayday" is to be repeated THREE times over the radio followed by announcing WHO is calling the 'MAYDAY' from, and WHAT the problem is.

Call; Mayday, Mayday, Mayday Who: Engine 1 FF Anderson Where: On the second floor

What: I am lost

Example – How to call the MAYDAY

Engine 1 - "Mayday, Mayday, Mayday! Engine 1, Wallace, second floor, lost

<u>Command</u> - "Engine 1, Command copies your Mayday: Wallace, second floor, lost. Break, Sunset Command to Cen-Com Initiate Emergency Traffic"

The most critical piece of information to communicate is WHO is having the emergency. A supervisor, maintaining appropriate accountability, will be able to determine your location, assignment, and the team member's identities. With that information, the supervisor or incident commander can begin their procedures in 'Managing the 'Mayday'.





Surviving the Firefighter Emergency

'Managing the Mayday' is the supervisory responsibility assigned to:

- Communicate with the 'Mayday' firefighter,
- Manage the teams assigned to the rescue,
- Coordinate rescue teams with the firefighter's self-survival actions.

When a firefighter declares a 'Mayday' all other personnel should initiate emergency traffic radio discipline, in which only incident critical information and/or information related to the 'Mayday' are transmitted. When the Incident Commander requests emergency traffic, Cen-Com will initiate an emergency traffic marker tone.

Example – Partner Discover's Mayday

"MAYDAY". Command from E84

- <u>Partner</u> "Mayday, Mayday, Mayday", E84 Driver declaring a 'Mayday' for E84 Officer, on the 2nd floor side Bravo, they're unconscious and not responding, I am assessing...'
- <u>Supervisor</u> 'E84 from BN81 acknowledging your 'Mayday' for E84 Officer, on the 2nd Floor side Bravo, unconscious, you are assessing, Break, E81 from BN81 move up from Back-up to protect and assist E84 on the 2nd Floor side Bravo'

Example – Adjacent Team Discover's Mayday

"Priority Message". Div A from E72

- Assisting Team 'Division Alpha from E72, priority message'
- Supervisor 'Go ahead E72'
- Assisting Team 'We hear someone calling for help on the second floor,
- <u>Division Alpha -</u> 'Division Alpha Received, E72 you are reassigned to search of the second floor. Break, M71 from Division Alpha transition from Back-up to Fire Attack on Floor 2."
- Adjacent Team 'M71 receive move up to Fire Attack on Floor 2'
- <u>Assisting Team</u> 'Mayday, Mayday, Mayday; E72 has found a downed firefighter on Floor 2 Delta Side, E84 Helmet shield, we are assessing'
- <u>Supervisor</u> 'Division Alpha acknowledging E72's Mayday for E84, 2nd Floor, firefighter down, performing assessment"

Remember – WHO, WHERE, WHAT





Surviving the Firefighter Emergency

Emergency Button (EMER) - Portable and mobile radios are equipped with emergency buttons which, when depressed, send an electronic signal to Cen-Com identifying the unit and position of the radio sending the signal. The Emergency Button is a supplement to a 'Mayday' or 'Code Blue' call, and is not intended to replace the verbal call for help. Following a 'Mayday' call that is not immediately acknowledged, firefighters should depress the EMER button, to better ensure that the 'Mayday' is recognized.

<u>Push-to-Talk Identifier (PTT-ID)</u> - Portable and mobile radios are equipped with PTT-ID, which at the end of each transmission sends an electronic signal to Cen-Com, allowing the dispatcher to identify which radio transmitted the message. While this capability provides the Incident Commander with a secondary means to identify the 'Mayday' caller, the time necessary to obtain this information from Cen-Com may make a significant difference in the outcome of the emergency.

Communicating with the 'Mayday Manager' - Following the 'Mayday' call, the supervisor is responsible for acknowledging the 'Mayday' call. If you do not hear the acknowledgement, repeat your 'Mayday' call, activate your emergency button, contact your partner, and then initiate self-rescue. However, it is the responsibility of the Incident Commander and each supervisor to ensure no radio call goes unheard, and any call on the correct frequency should be immediately acknowledged. After receiving and acknowledging the 'Mayday' call, the supervisor may request clarification or additional information. The supervisor will only request this information when necessary, understanding that the 'Mayday' caller will be under duress and need to initiate self-survival techniques. With the 'Mayday' information, the Incident Commander and/or Supervisor will initiate "emergency traffic," communicate the 'Mayday' to all personnel on scene, and clearly identify who is responsible for 'Managing the Mayday'. The Incident Commander will attempt to keep the 'Mayday' firefighter on the same frequency and communicating to the same supervisor during the initial stages of the firefighter emergency.

The 'Mayday' firefighter, or their partner, must continue to communicate with the 'Mayday' manager. This communication allows the 'Mayday Manager' to coordinate the actions of the teams assigned to rescue with those of the 'Mayday' firefighter/team, or to give the 'Mayday' firefighter direction that may assist with their survival.

Example –Communications with FF with Emergency and Mayday Manager

- <u>Mayday Firefighter</u> "Division Alpha from FF Jones, I've found a window on the Bravo side, and am breaking it out"
- <u>Mayday Manager</u> "Division Alpha Received, E-2 Firefighter Jones, you are at a window on the Bravo Side, RIT will be laddering the window". Break "RIT from Division Alpha, Deploy a ladder to the second-floor Division Bravo for Rescue of E-2 Firefighter Jones"

Intervention –vs- Recovery is a very real possibility and something that needs to be discussed. Incident Commanders are responsible for making the decision to attempt a rescue effort or pull everyone out and make the ultimate decision of a body recovery. It is vital you maintain tactical accountability at all times.

<u>Go/No-Go Decision</u> - Following the 'Rules of Engagement', 'Mayday' situations allow for the greatest level of risk to be taken to save a fire fighter's life. However, there may be situations in which the risk to other firefighters is too great or the 'Mayday' firefighter is no longer viable to be rescued. For that reason, a risk/benefit evaluation must be performed by the Incident Commander, prior to initiating firefighter rescue operations. This risk/benefit result is a 'Go / No-Go' decision





Surviving the Firefighter Emergency

being made by the Incident Commander. If the decision is a 'Go', the Incident Commander may designate a supervisor to 'Manage the Mayday' who will assign teams to rescue the firefighter. If the decision is a 'No-Go', the Incident Commander may call for all firefighters to 'Abandon' the building or take other action to stabilize the incident prior to the 'Go' decision. Due to the intensity and risk associated with a firefighter emergency it is critical that firefighters maintain tactical accountability, and when necessary adhere to the decision to stop the firefighter rescue operations. In the event of an unsuccessful 'Mayday', the Incident Commander will be responsible for reevaluating the scene and implementing a new incident action plan while also dealing with the necessary notifications, investigation, and rehabilitation related to a firefighter fatality.

A fire ground emergency may also end in a positive manner, with the successful rescue of a downed firefighter. When the 'Mayday' situation is resolved, either with the rescue of the firefighter or resolution of the 'Mayday' parameter, it must be thoroughly communicated to the supervisor and Incident Commander.

A team/member that resolve's their own 'Mayday' will need to communicate to their supervisor that all members of the team are accounted for and whether or not they can continue their assigned task. The Supervisor will likely withdraw the team as soon as possible to confirm their safety.

A Team/Member who exits on their own will need to communicate their status to their supervisor. If their team is not fully accounted for, they should notify the Supervisor of who is missing.

A Firefighter Safety team who rescues a firefighter will need to communicate the status of the rescued firefighter, with emphasizing the identity of the firefighter they have rescued and if known the status of their partner(s). Crews should expect multiple 'Mayday' calls during a fire ground emergency, and it is critical that the Supervisor and/or Incident Commander account for all personnel. For that reason, after any 'Mayday' call, as well as an 'Abandon' the building call, all personnel should be prepared for a 'Roll Call' to be performed of all personnel on the scene.

<u>Self Survival</u> - Firefighters should be well trained with self-survival techniques in the event of a fire ground emergency. Every emergency-situation will require the firefighter to take different actions to save their own life. In most situations, the firefighter should take every action available to solve their problem and attempt to exit the hazard environment on their own, or with the assistance of their partner, after calling the 'Mayday'. However, there will be some situations in which the firefighter cannot escape and will be best served by conserving their air supply and waiting for assistance. This re-emphasizes the necessity to communicate with the 'Mayday Manager' to coordinate their actions with the safety teams.

As a recommended standard, firefighters should implement the G.R.A.B.L.I.V.E.S. mnemonic for self-survival, which is;

- Gauge; Check Air Pressure
- Radio; Call the 'Mayday'; Who, Where, What
- Activate: PASS
- Breathe; Control and slow your breathing to conserve air
- Low; Stay low to the ground
- Illuminate: Turn on your flashlight
- Volume: Make Noise
- Exit; Search for an exit
- Shield; Find a safe area, close doors, protect your airway with PPE





Surviving the Firefighter Emergency

Firefighters must regularly train, in a safe and controlled manner, the self-survival techniques that may be necessary to survive a fire-ground emergency. In addition to standard SCBA emergency procedures, the standard self-survival techniques that personnel are expected to be able to perform are:

- Disentanglement
- Low Profile (vertical)
- Low Profile (horizontal)
- SCBA (shift, roll, removal)
- · Breaking and Breaching
- Ladder Bailout
- Rope Bailout
- Hose Slide

<u>Air Management</u> - At the core of the Rules of Air Management (ROAM) are tracking and managing SCBA air levels to safely exit the hazardous environment before SCBA low-air warning bells sound. The reserve air in an SCBA is intended solely for use during an emergency. Maintaining this reserve air supply is a critical component of being prepared for a fire ground emergency. Team Members, Team Leaders, Supervisors/Command have critical parts to play in Air Management practices.

<u>Team Members</u> - Each team member proactively manages their air-supply by actively controlling their rate of breathing and air consumption rate during work periods. There are different methods and theories on the best practices for firefighters conserving air supplies:

- The Reilly-Emergency Breathing Technique (R-EBT) is a proven and recommended practice during normal operations and air emergencies. Simply, inhale as you normally would. While exhaling, "hum" your breath out in a slow, consistent manner. The hum is low and usually cannot be heard over the low-air alarm. In situations where you need to disentangle your SCBA or rapidly move around obstacles, it may be difficult to continuously hum after each breath. Breathe as you normally would and intermittently use the R-EBT. The more you use the R-EBT, the more it will increase your survival time. Best practices for self-survival and rescue during an air emergency include SCBA Emergency Procedures as outlined in SCBA Skill Guides. The goal is to utilize these methods, when possible, to better conserve your air supply.
- Heads-Up displays or remote pressure gauges being utilized in your face-piece or field of vision. This allows for your air supply to be constantly in your field of vision. When team are operating inside an IDLH environment, it is normal for those teams to experience temporal disintegration (time distortion) and therefore, lose track of air supply until some type of prompt catches their attention and they look at their air level. Teams should practice to not solely rely on those prompts to actively monitor air levels. Instead, training should include making team members responsible for monitoring and managing their consumption rate of their own air supply at regular intervals on their own.
- Exercising regularly to be in the best shape possible for the type of work you are expected to perform also helps breathing rates slow during vigorous work.





Surviving the Firefighter Emergency

<u>Team leaders</u>- Prompting all team members for their air status at regular intervals (i.e. before entering the IDLH, when making the floor of operation for that team, and when any benchmark has been completed like; e.g. fire controlled, search completed, or vent completed) also helps keep members air supply's well managed.

<u>Command</u>- Asking for Personal Accountability Report (PAR) reports from teams is another verbal cue for teams to proactively manage their air supply. When asking for a Conditions-Actions-Needs (CAN) report, teams are not expected to give their air supply amount to command but it is good practice for each team member to stop working and check their air supply.

If a team is inside the IDLH and any one of the team members Low-Air Alarm alerts, an immediate status update from that team to command is required. This can be done in the form of Priority Traffic. Should a team hear an audible Low-Air alarm and not hear an immediate announcement of ownership, they should announce to their supervisor in a priority message that they hear a low air alarm.

Example- Low air alarm sounding inside the IDLH

<u>E11</u> - "Command from E11 priority traffic, we have a low-air alarm and will be withdrawing Bravo side."

<u>Command</u> - E11 from Command, received, E11 has a low-air alarm and will be immediately withdrawing Bravo side."

- Command will confirm that the RIT leader has received the radio traffic
- The RIT will evaluate the need to reposition
- The team will immediately notify command when they've withdrawn from the building

Example- Low Air Alarm Heard inside the IDLH

M51 - "Command from M51, priority message. Low- Air alarm heard coming from above us, and no verbal report of who it is.

<u>Command -</u> M51 from command, received your message, Low- Air alarm heard, possibly from floor "3". Command all units operating at Main Street Fire, Unit with the Low-Air Alarm acknowledge."

Command will conduct a roll call from all units.





Surviving the Firefighter Emergency

3.1 Intervening in a Firefighter Emergency

When to Intervene? - If a firefighter/team discovers or becomes aware of another firefighter(s) experiencing a 'Mayday' parameter, they should notify command immediately and refocus their attention to saving that firefighter's life. The exception would be instances in which abandoning incident stabilization roles would place the firefighter(s) in greater peril. Perform an assessment of the firefighter emergency and attempt to intervene ("one chance") to solve the mayday parameter. The 'Mayday' call should not be delayed while an assessment is being made, rather the emergency situation should be communicated as soon as possible. Similar to a firefighter calling their 'Mayday', the most important piece of information is the identity of the downed firefighter.

<u>Team/Partner Assistance</u> – In the case of a firefighter emergency, team members/partners provide the best chance of surviving the fire ground emergency. The member/partner must determine if they are experiencing an emergency, communicate the situation as soon as possible, and perform an assessment of the 'Mayday' firefighter without putting themselves in a position of unreasonable risk. This information is critical to the Supervisor in developing a plan for intervening in the emergency and ensuring RIT is properly equipped. The Supervisor must ensure that each team monitors their air and maintains situational awareness, avoiding tunnel vision on assisting the downed firefighter.

Back-up and Adjacent Teams - The Supervisor managing the 'Mayday' can re-assign adjacent crews to assist the 'Mayday' firefighter, adjusting their tactical assignments to meet the new life safety hazard. This must be done in a controlled manner, one that does not put the crews in further jeopardy by abandoning critical incident stabilizing activities (Confine & Extinguishment). Following the team/partner intervention, most often the pre-positioned Back-up Team will be most capable of immediately assisting the firefighter experiencing the fire ground emergency. The Supervisor will assign them to locate and evaluate the condition of the downed firefighter and begin efforts to intervene in the firefighter(s) emergency. If the Back-up Team is re-assigned to the emergency, the Back-up Team assignment should be assigned to another crew as soon as possible.

In addition to the 'Back-up' team, other teams may be re-assigned to assist the downed firefighter. Teams with assignments that are not required to stabilize the incident (e.g. Salvage) or have a lower life safety priority (e.g. Primary Search) may be reassigned to the imminent life safety situation (i.e. the 'Mayday'). If tasked to intervene in the firefighter emergency, those teams will be assigned a supervisor or "Mayday manager'. The "Mayday manager" may initially be the Incident Commander or a Division/Group supervisor; however, if a Rescue Branch or RIT Group is assigned to "manage the 'Mayday'" they will transfer to that director/supervisor.

<u>Stand-by Team</u> - The purpose of the Stand-by team is to be prepared to assist firefighters assigned within the IDLH environment in the event of a fire ground emergency. When the decision is made to deploy the Stand-by team to intervene in an emergency, their actions are no different than that of a rapid intervention team other than their ancillary tasks (if assigned) prior to assembling to intervene. However, the Incident Commander should consider the nature of the fire ground emergency and utilize the Stand-by team in the manner that most effectively provides for the safety of the Mayday response. That may include continuing their assigned activities or perform other assignments (e.g. Fire Control) to stabilize the incident until additional personnel are on scene to assist the Mayday response.

Rapid Intervention Teams - While other teams may be re-assigned to assist with the fire ground emergency, the Rapid Intervention Team is the only team dedicated to preparing for and responding to a fire ground emergency. RIT member(s) will be gathering equipment congruent with





Surviving the Firefighter Emergency

the nature of the emergency scene, type of building involved, number of stories, construction type, and type/location of access points based on the "what if" scenarios the RIT identifies. It is understood that no one person or team can come up with every possible type of Firefighter Emergency; however, an intimate understanding of the effects of the modern fire on buildings, and the types of emergencies that may arise will give RIT a fundamental start when reacting to a Firefighter Emergency in a pre-planned way.

The RIT Leader/Supervisor shall develop a plan for intervention of a firefighter emergency. Based on the nature of the emergency, RIT shall utilize the pre-incident plan they developed. Rapid Intervention Team's prioritized objectives are:

- 1. Deploy to entry location within one minute
- 2. Search for and locate the firefighter(s) in peril
- 3. Confirm the person(s) via helmet shield, name on helmet/coat
- 4. Evaluate the firefighter's condition and rescue requirement

Perform rapid removal if capable, if not;

- 5. Request additional team(s) and equipment needed.
- 6. Provide for emergency air management needs
- 7. Protect the firefighter from further harm
- 8. Develop and communicate a plan to remove the firefighter
- 9. Remove the firefighter(s) in peril to a safe area

The RIT leader is expected to stay near the ICP to track fireground units on their own status board and develop Incident Action Plans to "what if" scenarios based on the strategy and tactics assigned by the incident commander. Examples of information need to establish a response plan during RIT staging:

- Identifying type of access doors and construction to better determine what types of
 force entry equipment may be needed. For example, a roll up door on side Charlie is
 locked. A circular saw may be acquired and set in the RIT cache to force the door.
 All exterior Solid-Core doors are in metal frames and outward swinging. The set of
 "Irons" may be acquired to set in staging. A rear glass slider is identified on Charlie
 side.
- Identifying building construction which will help identify fire behavior, breaching points, potential Collapse type and potential void spaces to search first based on crew locations if a collapse were to occur.
- Recognizing which teams are working where in the building: The RIT leader should have a thorough understanding of where teams are located, so that in the event of a MAYDAY, the RIT can quickly deploy to that general location.
- · Weather, fire behavior, fuels.

<u>RIT Deployment</u> - A limitation of RIT is that despite their responsibility to be prepared for a fire ground emergency to occur, the reaction time necessary to deploy to the 'Mayday' reduces their effectiveness. A benchmark for RIT to deploy for any Firefighter Emergency is <60 seconds to enter the IDLH environment. This requires a proactive approach from RIT while the team is staged. During assignment, the Incident Commander/supervisor must evaluate the fire ground emergency





Surviving the Firefighter Emergency

and purposefully use the Rapid Intervention Team in the most effective manner possible. That may include providing specific direction on;

- Point of entry to make access to the firefighter's location
- Method of orientation and whether a hose line is needed for protection
- Specific tools/equipment to take in based on the cause of the 'Mayday'

<u>Assessment and Protection</u> - Following the 'Mayday' call, the partner or intervening team will assess the situation. The assessment will allow for the determination of whether the firefighter can be rapidly removed from the situation or if they will require protection and/or advanced removal. After determining who the firefighter is by their helmet shield, name on the back of their helmet and/or coat, the assessment of the firefighter will include;

- Turning off PASS Device
- Identify the downed FF via Helmet shield/Name on helmet or name on coat.
- · Their level of consciousness and whether they are breathing
- Their level and integrity of their air supply
- The status of their partner/team
- Cause of the 'Mayday' and/or barriers to performing a rescue

The results of the assessment must be communicated to the Supervisor or Incident Commander who is managing the 'Mayday'. This will allow the 'Mayday Manager' to coordinate additional firefighter safety teams in support of the intervention and to better protect the rescue effort. If feasible, it is preferred that the Mayday firefighter be removed from the hazardous environment as soon as possible through the nearest or easiest exit point, however this will be dependent on the situation. A firefighter in high heat/smoke with a malfunctioning SCBA mask must be rapidly removed, while an injured firefighter with an intact air supply and stable conditions may be best served by a well-planned removal. If a rapid removal is not feasible, it may be necessary to protect the firefighter in place and prepare them for removal. It is critical that this be communicated to the 'Mayday Manager' so a secondary "Extraction Team" may be deployed. Without an additional air supply (RIT Pack), which will be brought in by a Stand-by Team or RIT, the ability to protect the firefighter will be limited but will still include;

- Protect them from heat/smoke (hose-line protection or movement to a closed room)
- Assist them in staying calm / controlling breathing
- Prepare them for removal (DRD device access, SCBA strap adjustment/Conversion)

Teams with a RIT pack will further protection the downed firefighter by providing them with a sufficient air supply. This may be performed by;

- Transfill of air from the RIT pack to their SCBA
- Replacing their regulator with the RIT pack regulator and air supply
- Swapping their SCBA Mask for the RIT pack SCBA mask and air supply

Concurrent with the protection of the firefighter the team leader should be developing a plan, in coordination with the Mayday manager to remove the downed firefighter.

Additional Teams to Support RIT - Managing the 'Mayday' requires the Incident Commander and/or supervisor assign resources, coordinate efforts, and anticipate what resources will be needed to support them. Specifically, a 2-4 person RIT is unlikely to be able to remove a firefighter from a





Surviving the Firefighter Emergency

building without assistance. The Supervisor should ensure that additional teams are assembled to support or replace the initial rapid intervention team. As the scope of the rescue effort grows, it will be increasingly important to the tactical assignment of "RIT Group" and allow the Incident Commander to manage ongoing operations. Due to the complexity and stress of a fire ground emergency, basic incident management principles such as Risk Management, span of control, accountability, and radio discipline become increasing important and should not be abandoned due to the emotional stress of the situation.

The supervisor managing the 'Mayday' should communicate their anticipated resource needs, allowing the incident commander to ensure adequate resources are available or requested to handle the firefighter rescue and medical care, as well as ongoing operations. Generally the incident commander should request additional alarms and EMS resources as soon as possible after a 'Mayday' call is required.

Preparedness for Additional Maydays - A fire ground emergency presents and imminent life safety situation, one for which personnel will assume the greatest amount of risk. Inherent with taking this level of risk, there is a greater chance of additional fire ground emergencies. The Incident Commander and/or Supervisor managing the 'Mayday' must be prepared for additional 'Mayday' calls from those assigned to the 'Mayday' efforts. The Incident Commander must be diligent to rotate intervention teams. Supervisors must continue to maintain accountability of all crews assigned to the IDLH environment. Additionally, the Incident Commander must maintain situational awareness and continuously weigh the risk/benefit of continuing rescue efforts. One of the most difficult decisions an Incident Commander may have to make is to order the abandonment of a building during an ongoing firefighter rescue, however that must be a decision that they are capable of making.

Returning to normal operations

Upon mitigation of the fire ground emergency, the Incident Commander will be responsible for returning to normal operations. Prior to returning to normal operations, including cancelling emergency traffic, the Incident Commander should;

- Conduct a Roll Call of all personnel on scene
- Announce the conclusion of the 'Mayday' and return to normal operations
- Restate the Incident; Strategy, Objectives, Hazards, and Assignments

These steps should be taken even for 'Mayday' calls that are quickly resolved, however they are not required for accidental 'EMER' activations which are appropriately cleared.

Fire ground emergencies which results in the serious injury or death of a firefighter will require the Incident Commander to provide for or facilitate:

- Medical care for the injured firefighter(s)
- Notification of the Department's command staff (Chief, Health and Safety Officer)
- Debriefing and psychological support of personnel
- Notification of Washington State Labor and Industries (1-800-423-7233)
- Securing the scene and any equipment (ppe) involved in the incident.